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ABSTRACT

This 2-volume set contains 10 papers, 5 in each volume, that review and evaluate findings from the Youth Research and Technical Assistance Project, whose purpose was not only to explore studies and evaluations related to youth training and employment programs but also to provide a broader synthesis of evidence, findings, and research from related fields and disciplines. The first volume contains the five papers on program services and techniques. The second contains the papers on program governance and management, and youth and the labor market. The 10 papers and their authors are as follows: (1) "Effectiveness of Federally Funded Employment Training Strategies for Youth" (Thomas J. Smith and Michelle Alberti Gambone); (2) "Supportive Services for Youth" (Demetra Smith Nightingale, Barbara Cohen, and Pamela Holcomb); (3) "Structure and Sequence: Motivational Aspects of Programmatic Structure in Employment and Training Interventions for Disadvantaged Youth" (Catherine Higgins); (4) "Critical Skills for Labor Market Success: What Are They and How Can At-Risk Youth Acquire Them?" (Amy W. Johnson and Michelle Alberti Gambone); (5) "Schools-to-Work Transition: Failings, Dilemmas and Policy Options" (Richard H. de Lone); (6) "Coordination, Collaboration and Linkages" (Lawrence Neil Bailis); (7) "Performance Standards and Performance Management" (Alan Melchior); (8) "The Mission and Structure of National Human Resource Policy for Disadvantaged Youth: A Synthesis with Recommendations" (Andrew Hahn, Evelyn Ganzglass, and Gloria Nagle); (9) "Youth in the Nineties: Recent Trends and Expected Patterns" (Robert I. Lerman); and (10) "Youth and the Labor Market in the Nineties" (Harry J. Holzer). Each paper offers its own extensive references in some cases also appendixes. In addition, both volumes include a substantial bibliography that lists the extensive literature reviewed in the course of the project. (JB)

Dilemmas in Youth Employment Programming: Findings from the Youth Research and Technical Assistance Project

Volume I

Volume II



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U.S. Department of Labor
Employment and Training Administration
1992

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Dilemmas in Youth Employment Programming: Findings from the Youth Research and Technical Assistance Project

Volume I



Research and Evaluation Report Series 92-C

U.S. Department of Labor
Lynn Martin, Secretary

Employment and Training Administration
Roberts T. Jones, Assistant Secretary
For Employment and Training

Office of Strategic Planning and Policy Development
Raymond J. Uhalde, Administrator

1992

Research and Evaluation Report Series

The Research and Evaluation Report Series presents information about and results of projects funded by the Office of Strategic Planning and Policy Development (OSPPD) of the U.S. Department of Labor's Employment and Training Administration. OSPPD's research and evaluation program deals with a wide range of training, employment, workplace literacy, labor market and related issues.

The papers presented in both Volume I and Volume II of this series were prepared under Department of Labor Contract No. 99-0-1879-75-053-01, by Brandeis University, Waltham, Massachusetts, and Public/Private Ventures (P/PV), Philadelphia, Pennsylvania.

P/PV oversaw the production of the 10 papers in the series and had responsibility for developing paper topics, assigning and reviewing papers and preparing the final publication versions for the Department. The project was managed by Thomas J. Smith and Michelle Alberti Gambone of P/PV, who worked closely with Susan P. Curnan (principal investigator for the overall contract) and Alan Melchior, both of Brandeis University, throughout the project.

Each volume contains five issue papers. The full table of contents for the series, the introduction to the series and the bibliography are contained in both volumes.

Contractors conducting research and evaluation projects under federal sponsorship are encouraged to express their own judgment freely. Therefore, this report does not necessarily represent the official opinion or policy of the Department of Labor.

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Michael A. Bailin and Gary Walker of P/PV, and Susan Curnan, Andrew Hahn and Alan Melchior of Brandeis University reviewed drafts of the papers and also provided overall suggestions regarding the project along the way; Jennifer Sidler synthesized the paper findings and wrote portions of the introduction; and Lloyd Feldman and Mary Ridge worked on early stages of two of the papers.

Victoria Evalds, P/PV's librarian, Nicholas Kourgialis and Adam Sherer provided research and bibliographic support for all the papers; Natalie Jaffe, Michael Callaghan, Maxine Sherman and Robert Henry of P/PV's communications department all helped make the papers more readable and useful; and Carol Eresian copy edited and proofread many of the papers and also helped coordinate production of the final versions.

CONTENTS

VOLUME I

INTRODUCTION	1
--------------------	---

1. EFFECTIVENESS OF FEDERALLY FUNDED EMPLOYMENT TRAINING STRATEGIES FOR YOUTH

Thomas J. Smith and Michelle Alberti Gambone

I. THE PROBLEM	15
The Strategies: A Brief History	15
Issues to be Investigated	20
II. PROGRAM EFFECTIVENESS	22
The Findings	23
The Major Strategies	29
III. WORK EXPERIENCE	35
IV. DEVELOPMENTAL NEEDS OF DISADVANTAGED YOUTH ...	40
V. CONCLUSIONS AND RECOMMENDATIONS	49

APPENDIX

Table A-1: Major Sources of Evidence Regarding Youth Employment Program Effects	56
Table A-2: Subgroup Analyses Reported by Selected Youth Program Evaluations	57

2. SUPPORTIVE SERVICES FOR YOUTH

Demetra Smith Nightingale, Barbara Cohen and Pamela Holcomb

I. INTRODUCTION	69
II. CHARACTERISTICS OF THE POPULATION	71
Family Structure and Geographic Distribution	71
Education	72
Health	73
Multiproblem Youth	73

III.	SUPPORTIVE SERVICES IN EMPLOYMENT AND TRAINING PROGRAMS	75
	The Role of Supportive Services	75
	Inventory of Supportive Services	76
	Objectives of Supportive Services	80
	Summary of Supportive Services	84
IV.	PROVISION OF SUPPORTIVE SERVICES	85
	Effectiveness of Supportive Services	87
	Summary	89
V.	SUPPORTIVE SERVICES IN OTHER PROGRAMS	91
	Role of Supportive Services	91
	Types of Supportive Services	93
	Delivering Supportive Services: Case Management	97
	Summary	100
VI.	CONCLUSIONS AND RECOMMENDATIONS	102
	Conclusions	102
	Policy Recommendations	103
	Research Recommendations	103
3.	STRUCTURE AND SEQUENCE: MOTIVATIONAL ASPECTS OF PROGRAMMATIC STRUCTURE IN EMPLOYMENT AND TRAINING INTERVENTIONS FOR DISADVANTAGED YOUTH	
	<i>Catherine Higgins</i>	
I.	INTRODUCTION	113
II.	STRUCTURE AND OUTCOMES	119
	Participants and Structure	120
	Length of Stay, Educational Attainment and Employment	
	Impacts	127
	Conclusion and Implications	136
III.	ACHIEVEMENT MOTIVATION: PROCESS AND STRUCTURE	139
	Background	139
	Theory and Experimental Findings	140
	Summary	146
IV.	CONCLUSIONS AND RECOMMENDATIONS	148
	Review of Findings	148

Motivational Aspects of Existing Programs	150
Recommendations	152
Concluding Remarks	154

APPENDIX: PROGRAM AND SITE DESCRIPTIONS

Supported Work	155
The Minority Female Single Parent (MFSP) Demonstration	155
JOBSTART	156
Urban and Conservation Corps	158
The Summer Training and Education Program (STEP)	159

4. CRITICAL SKILLS FOR LABOR MARKET SUCCESS: WHAT ARE THEY AND HOW CAN AT-RISK YOUTH ACQUIRE THEM?
Amy W. Johnson and Michelle Alberti Gambone

I. THE PROBLEM	167
II. IDENTIFYING CRITICAL SKILLS	171
Lack of Agreement	173
Hierarchy	175
National Standards for Skills Attainment	176
Conclusions	179
III. SHORTCOMINGS OF THE TRADITIONAL SCHOOL SYSTEM	181
IV. EVIDENCE FROM IN-SCHOOL EFFORTS	185
Current Approaches	185
Single-Component Strategies	186
Comprehensive Programs	194
V. COMPREHENSIVE NEEDS CALL FOR COMPREHENSIVE PROGRAMS	202
Instruction	206
Development	206
Leadership	207
School Ethos	207
Notes of Caution	207
VI. CONCLUSIONS AND RECOMMENDATIONS	209

5.	SCHOOL-TO-WORK TRANSITION: FAILINGS, DILEMMAS AND POLICY OPTIONS	
	<i>Richard H. de Lone</i>	
I.	INTRODUCTION	223
II.	THE PROBLEM	226
	The Limits of Postsecondary Options	227
	What the Data Show	228
	Implications of the Data	239
III.	RECENT HISTORY OF THE SCHOOL-TO-WORK TRANSITION AS A POLICY ISSUE: INITIATIVES AND RESEARCH FINDINGS	240
	The Sixties	241
	The Seventies	243
	The Eighties	247
	The Importance of Implementation: A Cross-Cutting Issue	259
	Summary	261
IV.	DEVELOPING AN AGENDA FOR THE FUTURE	262
	Research Shortcomings	262
	Defining the Issues	263
	Developing an Effective System	267
	Summary of Findings	274
	Recommendations to the Department of Labor	276
	 BIBLIOGRAPHY	 293

CONTENTS

VOLUME II

INTRODUCTION	1
6. COORDINATION, COLLABORATION AND LINKAGES <i>Lawrence Neil Bailis</i>	
I. INTRODUCTION: THE SEARCH FOR PRACTICAL GUIDANCE	15
The Scope of the Paper	16
Youth-Specific and Generic Issues Pertaining to Collaboration, Coordination and Linkages	16
Sources of Information	17
Organization and Content of the Paper	17
II. FRAMEWORK FOR ANALYSIS: UNDERSTANDING, DEFINING AND MEASURING COORDINATION, COLLABORATION AND LINKAGES	19
The Old and the New Conventional Wisdom	19
Defining the Terms Coordination, Collaboration and Linkage	26
Issues in Measuring Coordination	27
Special Issues in Measuring Coordination in Youth-Serving Programs	31
III. THE DYNAMICS AND OUTCOMES OF THE COORDINATION PROCESS AMONG FEDERAL, STATE AND LOCAL AGENCIES	32
The Barriers to Coordination	33
Promising Strategies	37
Assessment of Coordination Strategies Among Federal Agencies	42
Issues in Assessing the Effectiveness of Given Strategies to Promote Coordination in Given Contexts	43
Issues in Assessing the Effectiveness of Coordination in Promoting Improvements in Service Delivery	44
Special Issues Pertaining to the Youth Employment	45
IV. DYNAMICS AND OUTCOMES OF EFFORTS TO PROMOTE "TOP DOWN" COORDINATION	48
Overview of Federal Efforts to Promote Coordination at the State and Local Levels	48

	Overview of State Efforts to Promote Coordination at the	
	Local Level	50
	Assessment of Specific Strategies	52
	Conclusion	59
V.	SUMMARY OF CONCLUSIONS AND PRELIMINARY RESEARCH	
	AGENDA	60
	The Prevalence of Examples of Coordination	60
	The Need for Empirical Data on Coordinated Activities,	
	Outcomes and Contexts	61
	The Central Role of Organizational Dynamics	62
	The Importance of Voluntary Coordination as Opposed to	
	Mandates	63
	The Overarching Importance of Context	63
	Keeping Coordination in Perspective	65
	Priority Topics for Future Research	66
7.	PERFORMANCE STANDARDS AND PERFORMANCE MANAGEMENT	
	<i>Alan Melchior</i>	
I.	INTRODUCTION	77
II.	FROM ACCOUNTABILITY TO PERFORMANCE MANAGEMENT:	
	JTPA's EVOLVING PERFORMANCE STANDARDS SYSTEM	79
	CETA Origins of Performance Standards	79
	The JTPA Performance Standards System	80
	Moving Toward Performance Management	85
	Performance Standards in the 1990s	89
III.	THE EFFECTIVENESS OF THE JTPA PERFORMANCE	
	STANDARDS SYSTEM AS AN ACCOUNTABILITY SYSTEM	91
	Measuring JPTA's Goals	92
	Accuracy and Problems of Measurement	94
	Unintended Effects	97
	Validity	105
IV.	THE EFFECTIVENESS OF THE JTPA PERFORMANCE	
	STANDARDS AS A PERFORMANCE MANAGEMENT	
	SYSTEM	108
	Incentives for State and Local Decision-Making	108
	Provider Involvement	114
	The Influence of Local Factors	115
	Performance Standards and Performance Management	117

V.	INVESTING IN QUALITY: LESSONS FROM ALLIED FIELDS ..	118
	Total Quality Management (TQM)	118
	Performance Management in Health Care	121
	Measuring "Higher-Order" Skills in Education	125
	Moving From Performance to Quality	126
VI.	SUMMARY OF RECOMMENDATIONS	128
	Evaluation of the Performance Standards System and	
	Alternatives	128
	Improving the Quality of Data	129
	Strengthening Skills Measures and Competency Systems	129
	Refining the Performance Standards Model	130

APPENDIX

	Table A-1: Summary of Estimated Impacts of State Performance	
	Standards Policies on Percentage of JTPA Terminees with	
	Various Characteristics	131
	Table A-2: Summary of Estimated Impacts of State Performance	
	Standards Policies on Percentage of JTPA Services in Various	
	Program Activities	133

8. THE MISSION AND STRUCTURE OF NATIONAL HUMAN RESOURCE
POLICY FOR DISADVANTAGED YOUTH: A SYNTHESIS WITH
RECOMMENDATIONS

Andrew Hahn, Evelyn Ganzglass and Gloria Nagle

I.	INTRODUCTION	145
II.	YOUTH EMPLOYMENT AND TRAINING IN THE MODERN	
	ERA	147
III.	UNDERSTANDING AMERICAN YOUTH EMPLOYMENT AND	
	TRAINING POLICY: A FRAMEWORK	155
	Choices of Scope	156
	Choices of Distribution	160
	Choices of Policy Instruments	164
	The Choice Between Restraint and Innovation	167
IV.	CAPACITY-BUILDING ACTIVITIES AND SYSTEM-CHANGING	
	INITIATIVES	172
V.	RESEARCH AND DEMONSTRATION IMPLICATIONS: THE	
	NEED FOR A COMPARATIVE FRAMEWORK	176

VI.	CONCLUSION AND RECOMMENDATIONS	180
9.	YOUTH IN THE NINETIES: RECENT TRENDS AND EXPECTED PATTERNS <i>Robert I. Lerman</i>	
I.	INTRODUCTION	193
II.	A PROFILE OF THE YOUTH COHORT	196
	Population Patterns	196
	Living Arrangements of Youth	201
	Education and Employment Status of Parents	205
	Education Levels and Basic Skills of Today's Youth	207
	Marriage, Sexual Activity and Early Parenthood	212
	Criminal Activity	215
	Drug and Alcohol Usage	217
	Employment and Earnings	217
	Concentration of Youth Problems	220
III.	CAUSES AND CONSEQUENCES OF PROBLEM BEHAVIORS ...	223
	Consequences	223
	Causes	224
IV.	JOBS AND YOUTH DEVELOPMENT	226
V.	CONCLUSIONS AND RECOMMENDATIONS	233
	Conclusions	233
	Policy Recommendations	233
	Research Recommendations	235
10.	YOUTH AND THE LABOR MARKET IN THE NINETIES <i>Harry J. Holzer</i>	
I.	INTRODUCTION	245
II.	LABOR MARKET OUTCOMES FOR YOUTH AND THEIR CAUSES	247
	Recent Outcomes	247
	Projected Outcomes for the 1990s	254
	Other Data on Employers and Skill Requirements	255
	Conclusion: A Skill Mismatch for the Disadvantaged?	259

III.	MINORITY AND DISADVANTAGED YOUTH: OTHER	
	SOURCES OF PROBLEMS	264
	Suburbanization and Spatial Mismatch	264
	Early Work Experience and Contacts	265
	Neighborhood Effects and Crime	266
IV.	CONCLUSIONS AND RECOMMENDATIONS	269
	BIBLIOGRAPHY	287

INTRODUCTION

Since the 1960s, the U.S. Department of Labor has underwritten a variety of programs and strategies designed to help youth make firm connections with the labor market. These programs have been enacted under a succession of policy mandates, administrative structures, funding levels and political philosophies. Thus, their focus, scope and results have shifted, often dramatically, over the years.

In the sixties, the programs were, in many ways, experiments; their impetus ranged from labor market concerns to interest in poverty reduction. In the mid-seventies, widespread youth unemployment emerged as a full-fledged policy issue, and major resources were expended through the Youth Employment and Demonstration Projects Act (YEDPA) to explore systematically the potential of federal/local programming to combat youth employment problems.

In the late eighties and early nineties, the focus shifted to issues of international competitiveness and the capacity of the nation to produce new workers capable of meeting the challenges of the workplace.

Attempts to develop useful knowledge about how well youth employment programming has succeeded reflect the relative newness of the field and the varied environments in which such programming has grown up. Although the field has benefitted from research efforts of varying intensity and quality, the base of knowledge on which policy, legislative and program decisions are built remains incomplete, and is often not well known among decision-makers and practitioners.

The nineties will see continued and, indeed, heightened interest in finding effective ways to connect youth to the labor market--particularly the economically disadvantaged youth who are the major target of federally funded employment training efforts. Thus, it is essential to take stock of what we know, to view our current knowledge clearly and realistically, and to use it to forge better policies for the future.

This was the aim of the U.S. Department of Labor's Employment and Training Administration when it undertook a project to conduct a broad review of what is known in the field, and contracted with Brandeis University's Center for Human Resources and Public/Private Ventures (P/PV) to design and carry out the work. Within this joint contract, P/PV assumed responsibility for organizing and overseeing the production of this review.

The Department sought not only an exploration of studies and evaluations related to youth training and employment programs, but a broader synthesis of evidence, findings and research from related fields and disciplines, including sociology, education and

Dilemmas in Youth Employment Programming

psychology, as well as from the numerous reports and studies that have been commissioned by foundations and interest groups in the field. This wider examination was to identify research and evidence in other disciplines that would enrich the youth employment training findings and help us interpret them more fully and realistically; and to produce ideas and guidance for both future research and future programming.

A secondary aim of the review was to identify findings of interest not just to policy and research analysts but to practitioners as well. Wherever possible, the work was to crystallize recommendations, based on research findings, that practitioners might adopt in their day-to-day design and management decisions. This latter aim was somewhat more difficult to attain than the first. Due to limitations in information on specific program practices, the review tended to focus more on theory and policy than on practice, though a number of papers recommend specific improvements or modifications in programming.

Finally, the Department wanted the review to identify areas where future research should concentrate. One product of the review was a multiyear research strategy paper, prepared for the Department's use, identifying major policy areas that might be the focus of research efforts in future years.

The Department gave P/PV latitude in how the review was to be carried out, within agreed-upon parameters. The work was cast in a manner that would produce pragmatic findings relevant to program planning and policy considerations. Thus, the history and the major legislative and programmatic structures of employment training programs in the United States were a starting point and focus for the review.

To carry out the retrospective research review effectively, it was necessary to be selective. "Youth" is a complex subject, one that is treated extensively (and not always with complete agreement) in a number of different disciplines. With limited time and resources, it was impossible to be exhaustive. Rather, the aim was to frame the most critical questions in a manner that would permit them to be addressed thoroughly, and to summarize the major findings in a pragmatic fashion that would produce insights and directions that could be used in a "live" policy and programming context.

An Advisory Group, composed of both research experts and practitioners in the youth employment field, aided the project and was periodically consulted about the research agenda and the actual work of the project.

The organizing framework for the research and the products to be delivered rested on three broad questions:

- What programs, services and techniques best prepare youth for jobs and careers?
- What strategies of governance and management offer greatest opportunity for effective delivery of these services?
- What factors regarding youth, their environment and the labor market must be addressed in providing these services?

RESEARCH PAPERS

Under each of these broad questions, the key issues were identified. The issues in turn generated additional questions of concern to both research and practice in youth employment and training. Most of the issues and questions were organized to form the basis for ten research syntheses, which are presented in these two volumes. The following topics were selected:

Programs, Services and Techniques

1. Effectiveness of youth employment training strategies
2. Supportive services in youth employment programs
3. Program length and sequence
4. Educational skills
5. The school-to-work transition

Governance and Management

6. Program coordination and collaboration
7. Performance measures and standards
8. National laws and local programs

Youth, Their Environment and the Labor Market

9. Youth in the nineties
10. Youth and the labor market

As part of the process leading to the development of the individual papers, P/PV worked with Brandeis University in defining their broad parameters. Experts in the relevant fields were identified, consulted and hired as needed for specific papers. Early attention to the organization of individual papers by the contract staff minimized overlap (a

critical consideration, for the topics tend to be fairly closely related),¹ and provided individual authors with a well-defined area to study and analyze. Such an approach also permitted authors flexibility in interpreting and presenting conclusions.

Each paper was prepared using the same guidelines, which called for the issue to be identified and elaborated on, then analyzed; evidence and research from allied fields to be incorporated; and conclusions and recommendations to be presented. The papers largely adhere to this design. There are exceptions--reflecting the complexity of the subject and the variety of authorship--which make summarization of the major findings difficult, especially where the papers' findings and conclusions reflect multiple perspectives and varying emphases. The diversity of ideas in the papers highlights the complex nature of youth employment and the scarcity of easy, unambiguous answers to basic problems.

It should then come as no surprise that the review uncovered no "magic bullets"--no unequivocal guideposts to following "these" rather than "those" strategies. But the ten papers together reflect one theme: we have much yet to learn about the task of building a resilient and effective youth employment system in the United States.

MAJOR FINDINGS

Most of the papers contain summary sections that draw together their major findings. These sections should be reviewed to gain a full understanding of the scope of the findings and recommendations made by the authors. This introduction is intended only to present several key findings echoed in many of the papers, in order to give readers a sense of the cross-cutting themes affecting youth research.

1. The Current State of Knowledge. The point most consistently raised in the papers concerns the limitations of our current knowledge. Eight of the ten papers report a scarcity of data and reliable research on which to base firm conclusions about the best directions for future policy and programming.

Smith and Gambone, and Nightingale, Cohen and Holcomb are perhaps the most sobering in this regard. They review the specifics of programs for youth and the evidence regarding their effectiveness. They conclude that evidence is sparse, generally focused on short-term effects and sometimes inconsistent. Even reliable descriptive

¹ The intention was to minimize redundancy in the major areas of research. There is, however, overlap in certain areas--such as the history of employment training, the multiple problems of at-risk youth, etc.--that form the critical context in which the issues are considered.

information about participants and actual program services is often missing. Similar conclusions are echoed in most of the other papers.

In part, the limitations in knowledge stem from limitations inherent in evaluation methodology. Net impact evaluation is expensive and deals with relatively few issues in depth; thus, comparatively few programs benefit from the results. But several papers also note that research and data on disadvantaged youth populations (especially ages 14 to 21) are also scarce. Existing research on topics of concern to this project (e.g., education and adolescent psychology) is often limited to populations that are primarily middle-class and white, and thus provides little solid evidence or guidance in thinking about the economically disadvantaged and often minority youth who receive federally sponsored services.

2. Program Effectiveness. The existing research on the training strategies, program structures and supportive services tried in the past leads to sobering conclusions. Smith and Gambone, in their review of employment training programs, conclude that "excluding findings from the Job Corps, there is no evidence that any of the programs [evaluated in the 1980s had] more than a modest and short-term effect" on young participants. These findings are amplified in Higgins, who reviews a variety of well-researched programs and concludes that different program structures have comparatively little effect on youth's length of stay in programs, or on the impacts programs produce.

3. Reasons for Limited Program Effectiveness. The most commonly cited reasons for the limited results, a number of papers argue, are the serious problems of the youth who come to them. Lerman provides a detailed portrait of at-risk youth in the nineties (as do Holzer, Nightingale, et al., and Smith and Gambone), and he places special emphasis on youth with multiple problems.

These authors conclude that the intersecting problems of poverty, inadequate housing, dysfunctional families and poor education have powerfully negative effects on youngsters drawn to employment training programs, effects the programs often cannot overcome or simply do not seek to address. Limitations in our knowledge about which programs work, and for whom, make it difficult to determine how programs might better respond to multiproblem youth and foster sound development in such participants.

4. Strengthening Program Effectiveness. Many authors argue that multicomponent programs, programs that combine a range of strategies and services, represent the best hope for enhancing the effectiveness of program offerings for youth. Because of the limited information on combining training strategies and support services, the authors are not able to offer firm recommendations about what particular combinations should be tried. However, Nightingale, et al., argue for both wider inclusion and careful testing of

Dilemmas in Youth Employment Programming

"supportive" services in the employment training regimen. The papers by de Lone, by Johnson and Gambone, and by Smith and Gambone explore the issue of multiple-strategy interventions and how they might be tested.

A major obstacle to such approaches has been cost. Thus, one approach to enriched services may be through coordination of service agencies--particularly, closer linkages with programs sponsored by the U.S. Department of Education. Bailis reviews the historical difficulties government agencies have had in finding common ground on which to collaborate. He recognizes a critical need for interagency coordination but also notes that, beyond common assumptions, there is little evidence to support conclusions about whether or not such coordination produces tangible benefits.

Finally, the potential of performance incentives for boosting performance (discussed in Melchior), as well as the lessons to be gleaned from closer scrutiny of how other countries approach the youth employment problem (a major theme of Hahn, Ganzglass and Nagle) represent other directions worthy of further pursuit.

5. The Potential of Work Experience. The U.S. approach to employment training has mainly centered on the notion of training--skills training and instruction on how to fill out resumes, seek jobs and behave properly in the workplace. Work experience has a reputation that is at best mixed, and often negative. This clouded reputation has extended to work experience programs for youth.

The evidence from youth employment program evaluations, reported in Smith and Gambone, indeed is generally negative. Yet they, as well as Lerman, summarize social science research from the past decade that paints a far more complex picture and underscores the need to examine the quality, quantity and developmental potential of work experience more carefully.

These authors (joined by de Lone) cite the potential of work experience in the school-to-work transition and in the "apprenticeship" schemes now being discussed as tools for building more capable workers in the future. Together, the papers reflect the controversies that continue to reign in considering the issue; and they reflect, too, a belief that work experience for youth may merit reconsideration in employment training policy in the future.

6. Funding Needs and Availability. Although none of the papers addresses the issue directly, a number touch on the question of whether the limited funding now available for youth employment training efforts is sufficient to meet the needs the papers identify, particularly to undertake the costly, multicomponent programming approaches recommended for youth with multiple needs. No clear evidence is presented; indeed, the issue

is a political as much as a research question, and hence the authors stop short of clear-cut recommendations. Nonetheless, several papers imply that, if more intensive programs and more research to understand them are to be undertaken, the current funding base will have to be expanded.

In short, the papers as a group focus more on needs than solutions, though none shies away from offering recommendations about new directions or initiatives the authors regard as promising and worthwhile. Two broad conclusions arise from reading all the papers together.

The first is that this young field has much yet to learn. Its base of findings is substantial and impressive, in view of the varied political and administrative contexts in which programs have been launched and scrutinized. Yet there remain significant gaps in our capacity to answer the question that has dominated the field since its inception: What works best for whom? Thus far, the available evidence provides only limited encouragement. Few programs seem to have marked and enduring effects. There remain many unanswered questions about how to serve youth effectively.

The second conclusion is that we must continue searching in a variety of different areas. We need to find ways of enriching current employment training efforts with better theory--about how poverty affects young people and how it can be addressed; how programs can shape youth into resilient adults, not just better-trained workers; and how employment training programs can be better integrated into schooling and other services that most authors argue are needed--even if the precise form and nature of those services is not yet understood.

In short, both research and program efforts must be viewed as part of a larger, unfinished agenda to strengthen all youth-serving institutions and to provide them with better tools for enabling youth to grow as individuals, as learners, as workers and as citizens in our society.

The remainder of this introduction presents brief descriptions of each of the papers, which are published in two volumes. The first volume contains the five papers on program services and techniques. The second contains the papers on program governance and management, and youth and the labor market. Both volumes include a bibliography that lists the extensive literature reviewed in the course of this project. Anyone interested in further reading on any of the topics covered here will find this a valuable resource, since it represents the best and most recent work published on many of these issues.

PAPER SUMMARIES

In Paper No. 1, "Effectiveness of Federally Funded Employment Training Strategies for Youth," Thomas J. Smith and Michelle Alberti Gambone examine the findings from multiple program sources: a comprehensive review conducted by the National Research Council of 28 YEDPA research projects; an analysis by the Urban Institute of the Continuous Longitudinal Manpower Survey; and research on the California Conservation Corps (CCC), JOBSTART and the Summer Training and Education Program (STEP).

They conclude that the knowledge of program effectiveness produced from these research and demonstration projects is of limited value to either the policy or the practice of youth employment training. The findings are often highly qualified, provide evidence of only short-term outcomes and seldom offer insight into program implementation.

The authors suggest that programs providing a combination of employment and training strategies--work experience, on-the-job training, labor market preparation, job placement and occupational training--may be more effective in producing results. Multiple strategies are seen as necessary if programs are to address the multiple problems faced by minority and disadvantaged youth.

Smith and Gambone argue that, due to their adult focus, federally funded employment and training programs have ignored the developmental needs of youth. Evidence from social science research (sociology and psychology) provides support for the authors' argument that impeded cognitive and socioemotional growth results from the psychological and emotional deprivation often associated with negative environmental influences in the family, neighborhood and school.

Smith and Gambone maintain that such negative influences inhibit the ability of minority and disadvantaged youth to derive maximum benefit from employment and training programs. The authors assert, therefore, that to be effective, youth interventions must develop a broader range of services to better address the full range of developmental and social needs of program participants.

The paper makes a strong argument--one that foreshadows the findings and conclusions of several of the papers that follow--concerning the need for long-term research efforts in order to expand current knowledge about the effectiveness of federally funded youth employment training programs. For example, while the number of hours worked has been considered important for program effectiveness, the quality of the work has yet to be entered into the equation. The work experience debate is one area that could benefit from further study.

In Paper No. 2, "Supportive Services for Youth," Demetra Smith Nightingale, Barbara Cohen and Pamela Holcomb provide a useful discussion of the purposes of, need for and possible impact of supportive services on youth in employment and training programs. They review 14 employment and training programs or projects from the Manpower Development and Training Act, the Comprehensive Employment and Training Act and the Job Training Partnership Act (JTPA). The authors are critical of the paucity of detailed information and evaluation findings necessary to measure the need for, receipt of and potential effectiveness of such services for producing positive program outcomes.

Despite this lack of empirical evidence, however, many employment and training practitioners argue that such services are needed if programs for youth with multiple problems are to be effective. The authors call for further investigation of this critical link. Their analysis supports a movement away from limited supportive services, such as child care and transportation, toward a more comprehensive model that includes postprogram services.

A comprehensive model of supportive services is viewed as a response to the growing awareness that youth entering employment and training programs bring with them multiple problems related to family and neighborhood structure, education and health. Nightingale, et al., echoing Smith and Gambone, provide a good discussion of the multiple problems facing minority and disadvantaged youth and argue that such problems, if not addressed, constitute formidable barriers to positive program outcomes.

Perhaps the most significant contribution of this paper is its comparison of the objective and content of supportive services found in employment and training programs with those in non-employment and training programs, i.e., juvenile justice and delinquency programs, homeless and runaway youth programs and adolescent pregnancy programs. The authors argue that the role of supportive services in employment and training programs has been supplementary; non-employment and training programs are more likely to view supportive services as essential.

Finally, Nightingale, et al., discuss the use of case management, an approach to service delivery widely used in non-employment and training programs dealing with the most disadvantaged or multiple-problem youth. Increasingly viewed by practitioners in allied fields as an effective way of delivering supportive services to this population, this approach--characterized by needs assessment, coordination of services, and monitoring of client progress by a supportive advocate--is proposed as an option to be pursued by youth employment and training programs. The authors also advocate interagency dialogue to address the multiple supportive service needs of disadvantaged youth.

Dilemmas in Youth Employment Programming

Paper No. 3, "Structure and Sequence: Motivational Aspects of Programmatic Structure in Employment and Training Interventions for Disadvantaged Youth," by Catherine Higgins, probes the problem of attrition from youth employment and training programs by examining the structural variation of such programs. She surveys the findings from 15 sites in four employment and training demonstrations--Minority Female Single Parent, Supported Work, JOBSTART and STEP--and two independent programs--CCC and the New York City Volunteer Corps--and concludes that there exists no clear successful alternative to the traditional high school model, a didactic training model that has already been rejected by, or proven unsuccessful with, disadvantaged youth.

The solution to the problem of attrition, the author maintains, does not lie in issues of program structure and sequence. Despite diversity, programs have produced a narrow range of outcomes--a six-month average length of stay, a 30 percent attainment rate for participants undergoing GED preparation, and impacts limited to education or training. Practitioners are urged, therefore, to investigate the lessons from academic psychology on achievement motivation.

Higgins' review of recent literature from this field provides important insights into both the maladaptive thinking patterns of low achievers, which often compromise the motivation of such students to address new and challenging tasks, and the strategies that have been used to revise such patterns. By way of example, Higgins analyzes a particular program, the Center for Employment and Training. While success has usually been attributed to the program's practical orientation (i.e., the guarantee of a job motivates a program participant to learn a skill), the author argues that emphasis on the process of mastering a skill may increase participants' belief that their efforts can help them achieve their goals.

The author thus joins with others in this series who argue for broadening the range of professional disciplines involved in program planning. She concludes that knowledge from academic psychology should be considered in the design of second-chance programs for its potential to reduce attrition rates for disadvantaged youth facing multiple problems.

Paper No. 4 seeks answers to two central questions: "Critical Skills for Labor Market Success: What Are They and How Can At-Risk Youth Acquire Them?" While a review of the literature reveals a serious lack of consensus among educators and employers regarding the skills required to enter productive employment (core academic skills and a broader range of competencies, respectively), Amy W. Johnson and Michelle Alberti Gambone echo the findings of Higgins regarding the failure of the traditional approach to educating at-risk youth. Similarly, the authors encourage the employment and training

field to learn from and avoid mistakes made by the traditional school structure--segregation of the lowest achievers, low expectations and inadequate resources, among others.

Instead, comprehensive program models are needed to address the multiple developmental needs of disadvantaged youth. The current school restructuring movement--emphasizing instruction, development, leadership and school ethos--provides a systemwide model that incorporates components rarely addressed by employment and training programs but which have proven effective with at-risk youth.

The authors conclude that policy efforts should be directed toward a preventive rather than a remediation approach, i.e., the focus should be on school retention now, rather than remediation later. They also argue that, when remediation is needed, more effective strategies for providing it should be identified.

In Paper No. 5, "School-to-Work Transition: Failings, Dilemmas and Policy Options," Richard H. de Lone presents a critical, in-depth historical analysis of the past three decades of school-to-work transition as a policy issue. He provides ample evidence of the bias of basic education toward college preparation and the lack of coherent policy and program attention paid to the school-to-work transition system, more accurately dubbed a "non-system" by the author. In addition to more effective basic education, de Lone argues that an effective school-to-work transition system requires transitional assistance, increased employer involvement and an expanded system of post-high school training opportunities for non-college youth.

Opportunities for education beyond high school are essential for young workers, and ways must be found to provide such opportunities. Apprenticeship systems in other industrialized nations are discussed as examples of school-to-work systems that provide non-college-going youth with such opportunities.

The author outlines the three major approaches to improving the school-to-work transition that have characterized the period--reform of basic education, reform of vocational education, and the development of employment and training programs for youth. While questioning the value of research findings associated with the three major approaches that constitute this "non-system," de Lone concludes that lessons to guide program development can be extracted from the maze. For example, multiple-strategy approaches combining work and other activities are again recommended, following a review of the debate over the benefits of work experience. Like others in the series, de Lone calls for further exploration and development of the school-work link.

The author also makes a strong case for effective program implementation, noting that positive effects are found more often among programs characterized by fidelity to

Dilemmas in Youth Employment Programming

coherent program models, implemented by strong leadership and with dedicated staff involvement. The current school restructuring movement is again identified as a model based on such concepts. The model is seen as a resource for the school-to-work transition system to tap.

In Paper No. 6, "Coordination, Collaboration and Linkages," Lawrence Neil Bailis reviews the literature on the dynamics and outcomes of coordination. While maintaining that fragmentation and duplication of services are not always equally harmful, the author offers an analytic framework by which to organize what is known about the dynamics and outcomes of the coordination process.

Federal, state and local agencies seeking to coordinate services must gain an understanding of (a) the technical and nontechnical barriers that retard entry into collaborative relations; (b) the strategies employed to overcome these barriers; and (c) the extent to which efforts to promote coordination succeed in changing organizational relationships and lead to improved quality, accessibility and/or cost-effectiveness of services to young people.

Bailis's paper represents a useful resource for agencies seeking to build collaborative programs and research projects. Stressing the importance of context, the author cautions against mandating a given approach. While "top down" mandates have proven useful in creating opportunities for collaboration, they are atypical. Financial incentives are one strategy that has been used successfully to encourage community agencies with turf concerns to work together. Voluntary efforts forged out of self-interest appear to be the best approach.

In Paper No. 7, "Performance Standards and Performance Management," Alan Melchior provides an overview of the history of the JTPA performance standards system. He outlines its key elements and argues that the role of the system has shifted from accountability to performance management, reflecting a change in policy goals that has occurred at the national level.

Melchior reviews the limited research on the current JTPA performance standards system as an accountability tool, addressing issues of the accuracy, validity and impact of the system. He concludes that performance standards have "unintended effects," i.e., that they encourage less-intensive services as well as reduced services to the hard-to-serve population.

The author also discusses the effectiveness of the system as a performance management tool aimed at shaping local behavior. He determines that incentive grants designed to

reward the performance of local service delivery areas (SDAs) are too small and that the sanctions designed to punish SDAs are weak and ineffective.

In addition to a review of the 1988 national evaluation of the performance standards system, the paper provides a brief examination and assessment of recent changes to performance management systems in the business, health care and education fields.

For example, Melchior argues that JTPA could benefit from peer-review organizations (PROs) similar to those mandated by Congress to ensure that publicly funded health care services are medically necessary and meet quality standards. PROs in JTPA could review enrollments to prevent creaming; review placements to ensure provision of appropriate services; and review pre- and posttest data to ensure that competency deficiencies are real and certifications valid.

Similarly, the growing recognition of the importance of accurate data as a basis for effective performance management is a consistent theme across all three allied fields and has resulted in attempts to address data inadequacies. These and other changes are designed to address many of the same concerns raised about JTPA and may suggest ways for correcting flaws in the current JTPA performance standards system.

In Paper No. 8, "The Mission and Structure of National Human Resource Policy for Disadvantaged Youth: A Synthesis with Recommendations," Andrew Hahn, Evelyn Ganzglass and Gloria Nagle present a historical overview of American youth manpower policy. They use a political science framework to elaborate on the way in which choices--choices of scope, distribution, policy instruments, and restraint and innovation--made by national governments affect their youth manpower systems. The authors' intent is to frame the issues for future discussion and to demonstrate the need for additional research in the area of human resource policy for disadvantaged youth.

Hahn, et al., offer insights into the youth manpower systems of other industrial nations and call on the federal government to assume a greater role in system oversight by investigating and implementing innovative strategies--developed both in alternative service delivery fields at home as well as in the employment and training systems of other countries--directed toward capacity-building and system change.

In Paper No. 9, "Youth in the Nineties: Recent Trends and Expected Patterns," Robert I. Lerman examines the social and demographic characteristics of the current youth population and the implications of these characteristics for future employment and training policy. He draws from the literature to describe and explain the concentration of problem behaviors among certain groups. The field of sociology provides Lerman with important insights into the importance of negative influences--family and neighbor-

Dilemmas in Youth Employment Programming

hood instability, early parenthood, criminal activity, drug and alcohol abuse, and the absence of role models--on the development of young people.

Like other authors in the series, Lerman examines the mixed evidence regarding the merits of part-time work for in-school youth. His review of the research leads him to conclude that the weight of the evidence points to benefits for in-school youth who work a maximum of 20 hours a week. He advocates, therefore, second-chance programs built on the school-work link but cautions that, in order to be effective, such programs must address the multitude of family and other environmental influences that affect youth at an early age.

In Paper No. 10, Harry J. Holzer examines the changes in supply and demand that have occurred in the labor market over the past two decades and evaluates the effects of these changes on the employment prospects of young people. "Youth and the Labor Market in the Nineties" builds a strong case for the evolution of a serious skill mismatch: high school dropouts and inner-city blacks from low-income neighborhoods lack the necessary skills for today's labor market. Spatial mismatch, discrimination, lack of work experience and networking opportunities, negative family and neighborhood influences, and the availability of alternative income sources, especially crime, are also discussed as forces contributing to the disadvantaged employment status of minority youth.

Reviewing the literature on growing wage inequality among young workers, Holzer presents a number of possible explanations for the sharp deterioration in income and labor force activity for high school dropouts and black youth overall. Contributing factors include demographic changes, which have led to shifts in labor supply; occupational and industrial shifts, which have led to shifts in labor demand; and declining growth in productivity.

Thus, while shifts in the economy are in part responsible for the deterioration of employment opportunities for young black males, Holzer offers support for the position, taken in earlier papers, that expresses concern about deleterious neighborhood and other environmental influences on the motivation of at-risk youth.

Holzer concurs with de Lone, Hahn, et al., and Lerman in criticizing the limited apprenticeship and on-the-job training opportunities available in this country compared with those in other industrial countries. In the absence of such opportunities, the author argues, improving the high school dropout rate must be a priority; a high school diploma may be the only predictor of job performance and trainability available to an employer evaluating job candidates who lack referrals and previous job experience.

EFFECTIVENESS OF FEDERALLY FUNDED EMPLOYMENT TRAINING STRATEGIES FOR YOUTH

Thomas J. Smith and Michelle Alberti Gambone
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I. THE PROBLEM

Public policy with regard to youth employment has developed fitfully over the past 30 years, as federal commitment has changed with successive administrations and shifting political emphases. The result has been a succession, rather than an evolution, of youth employment policies.

The major programming strategies used to implement these policies--work experience, labor market preparation, job placement, on-the-job training and occupational training--have accumulated as products of this fitful process. These "core strategies" now represent the backbone of most federally supported youth programs. To understand youth policy, it is essential to understand how these strategies have been developed, how well they work (and do not work) and why, and what perspectives and rationales should inform thinking about how they might be improved. Reviewing these issues is the purpose of this paper.

THE STRATEGIES: A BRIEF HISTORY

The establishment of employment programs in the early 60s, with passage of the Manpower Development and Training Act (MDTA) of 1962, was largely a response to the unemployment problems of adults. MDTA originated amid concerns about plant closings, skill obsolescence, automation and technological competition in the international market--concerns that, in retrospect, may have been excessive (Ginzberg, 1980:4). Its target population was, in fact, what today would be called "dislocated workers"--i.e., workers displaced from declining industries and in need of transition to new occupations.

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Thus, it is not surprising that the earliest strategies developed were narrowly focused on training--occupational training and (always on a more modest scale) on-the-job training (OJT). Such approaches, directed toward unemployed, willing workers who typically had experience in the labor market and suffered only from obsolescent skills, were appropriate. They also made sense when job placement could be used as the sole criterion for judging the value of these programs.

MDTA's youth dimension emerged just one year later. The original legislation, which did not have specific provisions for youth (except to limit to 5 percent the number of young participants), was almost immediately revised to accommodate the growing and increasingly recognized needs of youth. As Mangum (1982:104) has written, "1963 was a very different year than 1962." The first of the baby boom generation turned 16, greatly increasing the number of dropouts and teenagers in the labor force. The unemployment rate of teens rose two percentage points between 1962 and 1963. As a result, MDTA was amended to increase its youth participation limit to 25 percent and add 20 weeks to its remedial education provision.

Another and more fundamental shift in policy thinking began to unfold at the same time. Ginzberg argues that MDTA's first efforts had uncovered "the existence of a considerable number of poorly educated, low-skilled workers with an erratic employment history. MDTA had discovered the hard-to-employ" (1980:4). The policy focus widened beyond filling the skill needs of the labor market; a broader mandate now included meeting the training needs of non-college-bound youth.

MDTA's change in emphasis was but one part of the War on Poverty, a major social thrust of the Johnson administration. An antipoverty theme thus was added to (though not integrated with) the employment training objective that was MDTA's basic rationale. The Job Corps and the Neighborhood Youth Corps (NYC) legislation, enacted during that period, are legacies of depression-era initiatives (the Civilian Conservation Corps and the Neighborhood Youth Administration, in particular); indeed the Job Corps, along with other antipoverty efforts, was initially administered not by the Labor Department but by the newly established Office of Economic Opportunity (Bullock, 1985:78-79).

From 1964 to 1971, the emphasis of federally funded programs was alleviation of poverty and inequality in the labor market. Political concern about the economic well-being of disadvantaged groups was heightened by fears that poverty and unemployment were feeding urban unrest and sparking riots, such as those that occurred in Detroit. Increased attention to at-risk youth was motivated more by the social and political concerns of the era than by demographic or economic pressure.

As the focus on youth and disadvantaged populations broadened, so too did the program mix, which increasingly included ancillary functions, such as outreach, counseling, pre-occupational programs and job development. But even as these new functions were added toward the end of Johnson's presidency, the political impetus for alleviating poverty began to slow and change course with the change in national leadership.

The Nixon administration took office, Levitan and Gallo write, "with only one positive commitment in the employment and training field: to consolidate and . . . decentralize the diverse programs that had emerged during the 1960s" (1988:7). The existing employment and training "system," composed of programs developed under MDTA and the Equal Opportunity Act (EOA), was judged fragmented, redundant and wasteful. Policy-makers set about streamlining these programs and devolving decision-making, program design and implementation to the state and local levels.

The Comprehensive Employment and Training Act (CETA) of 1973 replaced MDTA and EOA as the legislative instrument to achieve these goals. Numerous federally operated categorical programs of the 1960s were replaced with block grants that permitted local prime sponsors to tailor employment and training programs to the needs of the local population. Decategorization meant that, with the exception of the Job Corps, there no longer was a national mandate for youth programs; each prime sponsor decided what proportion of available resources to allocate to youth and whether to serve them in separate programs (Mangum, 1982:107).

Initially, the program mix changed little from that which had evolved in the late 60s. The focus continued to be on classroom training and OJT, along with ancillary outreach, remediation and supportive services. Especially in the early days, CETA programs "largely continued old practices in a new administrative setting" (Anderson, 1980:49). Other than in the Job Corps, the highest youth participation rate was in Title I training programs, which provided mostly short-term work experience and few job-related skills (Bullock, 1985:168). CETA's major innovation, public service employment (PSE), was a countercyclical economic device; an "employment strategy" seldom used for employability development, PSE was mainly for unemployed adults.

The Youth Employment and Demonstration Projects Act (YEDPA) of 1978 represented a major expansion of interest in youth. It increased authorizations for the Job Corps and the Summer Youth Employment and Training Program (SYETP), and created four new programs targeting disadvantaged youth--the Young Adult Conservation Corps, the Youth Community Conservation and Improvement Projects, the Youth Employment and Training Programs and the Youth Incentive Entitlement Pilot Projects (Entitlement).

A call for a major research effort to learn more about the causes and cures for youth unemployment was contained in the Act. However, innovation was not really the hallmark of YEDPA. Mangum and Walsh point out that, "with the exception of the Act's provisions which are strictly research in nature,¹ every type of program called for by the Act . . . has been tried before" (1980:1). Providing services ultimately became the major thrust of the Act. Two million youth, in addition to those served in the Job Corps and SYETP, were served by YEDPA programs between 1978 and 1981.

The programs themselves and the research that accompanied them, however, turned out to be short-lived; YEDPA was terminated by the incoming Reagan administration in 1981. The National Research Council's retrospective study of the results of YEDPA, commissioned by the Department of Labor in 1983, found that YEDPA was implemented under conditions that severely constrained both program effectiveness and research findings (Betsey, et al., 1985). The study concluded that the tremendous fluctuations in policy and funding levels from one administration to the next, perhaps more than any other factor, undermined the employment and training system for youth:

Such fluctuations precluded a more stable and orderly development and institutionalization of the youth employment system. Given the instability of the employment and training system, together with the implementation requirements of YEDPA, it was somewhat unrealistic to expect that within three years these programs would be fully operational and ready to prove their effectiveness (Betsey, et al., 1985:5).

By the end of the 1970s, CETA had lost political support. The Reagan administration argued that since job creation was the responsibility of the market, employment training activity should be shaped by the private sector. It therefore devised an altered system in which business would play a major decision-making role. In 1982, CETA was replaced with the Job Training Partnership Act (JTPA), which redesignated local prime sponsors as service delivery areas (SDAs) and gave ultimate control over job development and training to Private Industry Councils (PICs).

Although it sharply cut back overall expenditure levels for programs, JTPA did make provisions for youth activities. It stipulated that 40 percent of Title II-A funds be spent on youth, retained the politically popular SYETP and instituted a system of youth competencies (which included basic skills enhancement) to direct and measure youth employability attainment. JTPA also explicitly recognized that private sector placements fre-

¹ One such provision was significant: the Youth Incentive Entitlement Pilot Projects, which indeed was a departure from what had been previously tried.

quently were not the most appropriate outcome for disadvantaged youth in employability development programs.

At the same time, however, JTPA eliminated public sector work experience (private sector-based work experience for youth is allowed, but its use is limited) and instituted a system of performance measures that, many observers feel, tended to drive the decentralized system to operate shorter-term programs for better-prepared participants. The remaining strategies for youth under JTPA, however, are the same as those under CETA.

In reviewing this history, several points stand out. First, the most consistent emphasis of youth employment policy has been training (Grubb, 1989:35); work experience and employment--equally plausible approaches in preparing youth for jobs--have never been primary policy aims. The cluster of program elements provided to youth has grown and evolved somewhat from its original orientation to adults. Yet that evolution has narrowly served the aim of employment preparation. The youth competency approach promulgated under JTPA, slowly implemented at the local level and refined during the past seven years, has developmental elements but is still merely "preparatory" for jobs or for transition to OJT or skills training.

With a training focus has come a stress on outcome measures that pertain to the labor market: employment and wages. Since they underlie the performance measures that are applied to programs, they drive programs and their operators to focus on services that seem most directly to contribute to those employment outcomes.

Second, those work experience strategies that have been tried with youth always have had mixed purposes: poverty alleviation and income transfer (NYC, SYETP), economic recovery (PSE) and school retention (Entitlement). Try-out employment, the form now available to youth under JTPA, is limited to the private sector, has received little emphasis from the federal level, seems not to be widely used at the local level and is often limited to in-school youth. The large-scale, nationally available work experience programs seldom have been used in a strategic, development-oriented way. Nor, in the main, has such use been encouraged.

Third, the program strategies, considered as a group, still reflect their genesis as remedies for adult employment problems. In many communities, youth and adults are enrolled in the same labor market preparation, OJT or occupational training programs with no provision for potential differences between the two groups (Berkeley Planning Associates and Public/Private Ventures, 1992).

Finally, youth employment efforts have been part of legislation whose level of funding and breadth of coverage have always been relatively modest. They have never served more than 10 percent of the eligible population and now probably serve no more than 4 percent (Sawhill, 1989:24-25). Other estimates suggest that only about 5 percent of the eligible youth population is served (National Commission for Employment Policy, 1987). The scale of youth employment and training programs in most communities has been small relative both to the problem and to other institutions--particularly schools--that serve youth.

Thus, the field's knowledge and thinking about the effectiveness of its programs is circumscribed by a preference for training over work experience; by reliance on a traditional set of strategies (that in fact relate more to adults than youth) around which knowledge is organized; and by a narrow focus on employment outcomes that excludes attention to developmental and other youth needs.

From a policy standpoint, this employment focus is reasonable: the ultimate outcome of employment programs should be employment. Yet the complex problems and needs of disadvantaged youth may warrant a fuller set of strategies, or changes in the way traditional strategies are shaped and carried out in the field.

ISSUES TO BE INVESTIGATED

In the review that follows, this paper addresses the following issues:

- What does program research tell us, and teach us, about the effectiveness and value of traditional employment strategies--work experience, labor market preparation, OJT and occupational training--for youth?
- What are the findings regarding combinations of these strategies, or enrichment of individual strategies (e.g., work experience with education)?
- Does research in related fields--psychology, sociology, economics and education--complement or dispute these findings? For instance, does it provide developmental grounds for employment strategies that might not be supported by program research alone?
- Are there modifications to the core strategies that should be made to make them more effective for a youth population?
- Are there specific policy steps that can be taken to enhance the effectiveness of these strategies for youth populations?

- What additional research questions are most important to investigate to expand our knowledge of key employment strategies in a useful way?

The next section of this paper summarizes our current knowledge about the core employment training strategies. Section III discusses program findings and other research on work experience. In Section IV, information about adolescent development is explored. And finally, Section V presents a set of recommendations for policy, practice and research.

II. PROGRAM EFFECTIVENESS

The clearest evidence currently available about the effects on youth of the core employment strategies has been produced over the past 15 years. It is based on analysis of results produced under the Comprehensive Employment and Training Act (CETA), particularly those produced by the Youth Employment and Demonstration Projects Act (YEDPA), one of the largest demonstration and research efforts undertaken in the social policy field.

Definitive evidence regarding current programs, those conducted under JTPA, is not yet available. The national JTPA evaluation, now being conducted jointly by the Manpower Demonstration Research Corporation (MDRC) and Abt Associates, is expected to produce systematic, detailed findings about the effects of employment training programs on various subgroups, including youth. Until those findings are published, prior evaluation work remains the best measure of program effectiveness available.

To summarize this prior work, this review presents findings from three main sources. The first is a comprehensive review conducted by the National Research Council (NRC) (Betsey, et al., 1985) of 28 YEDPA research projects. This in many ways is a canon of findings for the field, despite unevenness in the "quality of the available evidence" in reviews.

The second source is an analysis of the Continuous Longitudinal Manpower Survey (CLMS) conducted by the Urban Institute (Bassi, et al., 1984). This analysis is not derived from individual program evaluations. Instead, it is a net impact analysis comparing outcomes for CETA participants in the CLMS sample with those for a comparison group of participants in the Current Population Survey. Its findings are far less clear-cut than those from either YEDPA or more recent demonstration research; issues regarding its methodology have been raised;² and, as noted below, the program elements it analyzes differ from those in the NRC report.

The third source is findings from one research and two demonstration research projects conducted since 1984. The reason for their inclusion is that the research these projects

² Using data from the Supported Work demonstration, Mathematica Policy Research compared results from an authentic control group with those obtained with derived comparison groups, such as those used in the CLMS analyses by the Urban Institute (Bassi, et al., 1984, reported here) and Westat (Fraker, et al., 1984). They conclude that comparison group impact findings differ markedly from those for control groups and are highly dependent on the manner in which the comparison sample is framed (Fraker, et al., 1984:119-123).

have produced meets the criteria established by the NRC's Committee on Youth Employment for its review (Betsey, et al., 1985:100).³

The three projects are the California Conservation Corps, JOBSTART and the Summer Training and Education Program (STEP). Findings presented here are from the most recently published reports on these projects (Wolf, et al., 1987; Auspos, et al., 1989; and Sipe, et al., 1988, respectively). It should also be noted that continuing research on all three projects is expected to produce findings within the next several years that could either change or reinforce the pattern of findings presented here.

The findings are discussed first as a whole, then in terms of the individual employment and training strategies to which they pertain. Finally, some general conclusions regarding the current state of knowledge are presented.

THE FINDINGS

The presentation format adopted here is intended to display findings in a broad pattern and to summarize some of the detail that the sources listed above present. The findings presented concern five major employment and training activities or strategies:

- Work Experience: employment and general work experience in temporary subsidized jobs, full- or part-time;
- On-the-Job Training (OJT): occupation-related training on the job;⁴
- Labor Market Preparation: improvement of attitudes, knowledge and basic skills as preparation for employment;
- Job Placement: activities, such as job search assistance, placement and follow-up, intended to place youth in unsubsidized jobs; and
- Occupational Training: provision of occupational skills and knowledge as a prerequisite to either further training or job placement.

³ Findings from the current work-welfare demonstrations, researched by MDRC, are not included in this review because the major focus of most programs is not youth.

⁴ Tables 1 through 3 do not present findings from the Summer Training and Education Program (STEP) because the program does not fall conveniently into the strategies for which impacts are reported. This definition is highly simplified even though, as the discussion below makes clear, OJT rarely occurs in "pure" form, and existing research accordingly can shed little light on its effects.

These categories span the major functions of employment and training programs as they have evolved through the 80s; they are generally consistent with the framework of the CLMS and NRC findings presented by Bassi, et al., and Betsey, et al., respectively; and they also are consonant with the categories under which Hahn and Lerman (1985) reviewed the results of YEDPA programs and research.⁵

Despite its strengths, such a simplified presentation risks interpretation problems of three kinds, which should be borne in mind:

- The typology of "strategies" for which findings are reported masks the significant fact that most programs combine elements--e.g., occupational training and labor market preparation.⁶
- The nature of impacts varies from program to program. Although, for the most part, employment and earnings are the variables of greatest importance, for some interventions educational impacts or school retention were deemed critical; so impacts presented in the tables that follow, whether positive or negative, are not always comparable.⁷
- The results shown here are average effects, which ignore substantial amounts of detail about subgroups.

The aim of the following tables is to direct attention to the major contours of what we know about youth employment, and to use that as a framework for discussion. A "+" sign indicates findings of positive impact, a "-" means findings of no impact or (in several cases) negative impact, and "NA" means not available. Table 1 presents a summary of overall results for youth.

Table 2 summarizes short-term and long-term findings for each program strategy. "Long-term" here is defined as two or more years postprogram. As the notes to the table

⁵ Bassi, et al., do not report results for either labor market preparation or job placement (though they report, separately from work experience, impacts of public service employment); Betsey, et al., lump OJT under occupational training, though the subjects of their findings are mainly classroom training programs. Hahn and Lerman use categories similar to those adopted by the NRC, though they discuss summer youth programs separately from work experience.

⁶ See Betsey, et al., (1985:103-105) for a more extended discussion of "program types" and the difficulties inherent in classifying programs or findings.

⁷ However, all of the CLMS findings presented here pertain to income increases; for further detail, see Bassi, et al., 1984.

Table 1
SUMMARY OF EVIDENCE REGARDING PROGRAM STRATEGY EFFECTIVENESS

Strategy	National Research Council	Continuous Longitudinal Manpower Survey	Research Since 1984
Work Experience	-	-	-
On-the-Job Training	NA	NA	NA
Labor Market Preparation	+	NA	NA
Job Placement	+	NA	NA
Occupational Training	+	-	+ ^a

Sources: Betsey, et al., 1985; Bassi, et al., 1984; Wolf, et al., 1987; Auspos, et al., 1989.

^a Short-term educational gains only from JOBSTART findings.

Table 2
SUMMARY OF EVIDENCE REGARDING PROGRAM STRATEGY
SHORT-TERM AND LONG-TERM EFFECTIVENESS

Strategy	National Research Council		Continuous Longitudinal Manpower Survey		Research Since 1985	
	Short-Term	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term
Work Experience	+ ^a	-	-	-	-	NA
On-the-Job Training	NA	NA	+	-	NA	NA
Labor Market Preparation	+	-	NA	NA	NA	NA
Job Placement	+	-	NA	NA	NA	NA
Occupational Training	+	+	-	-	+ ^b	NA

Sources: Betsey, et al., 1985; Bassi, et al., 1984; Wolf, et al., 1987; Auspos, et al., 1989.

^a Youth Incentive Entitlement Pilot Projects findings, which are heavily affected by participants in just two sites; the follow-up sample for the analysis was mostly black.

^b Short-term educational gains from the JOBSTART demonstration.

indicate, certain findings are highly qualified, and few generalizations should be drawn from them. The one positive finding regarding work experience, for example, appears to depend entirely on findings from one atypical site (Maynard, 1980). Evidence of long-term effects is available only for occupational training;⁸ there is no evidence of long-term benefit from any other program strategy.

Table 3 summarizes findings about program effects and school status. Here, our knowledge derives mostly from the NRC review; CLMS findings are not reported by school status, and post-YEDPA demonstrations have focused on out-of-school youth, with the exception of STEP.⁹ The NRC, it should be noted, is more guarded about findings for in-school programs than about findings for out-of-school programs (Betsey, et al., 1985:117,135-6,172-4).

From these summary data, a number of general conclusions emerge:

1. Our knowledge of "what works" is fragmentary, and in fact depends on results from just a handful of programs.¹⁰ Most findings are only short-term, and impacts differ in quality and in the segments of the youth population to which they apply. Findings can seldom be generalized or compared because of differences among the programs and service elements upon which they are based (Taggart, 1981:20). And the quality of program implementation, undoubtedly a determinant of effectiveness, is seldom measured, thus limiting the value of research findings.

It is tempting, for example, to conclude that occupational training works, based on Job Corps findings. Yet Job Corps programs have important specialized features (a residential dimension and strong basic skills component) that limit the validity of such a conclusion (see Betsey, et al., 1985:115; Hahn and Lerman, 1985:66). It is clear, moreover, that even current demonstration research, however valuable it proves, will not greatly expand our knowledge and understanding of what works.

2. The results thus far are soberingly modest. Hahn and Lerman, from their review of CETA impact findings, conclude that "CETA programs, taken as a whole, failed to improve the early labor market experiences of participants" (1985:36). Bassi, et al., reach

⁸ The long-term results are based solely on the Job Corps evaluation.

⁹ STEP has produced positive short-term educational impacts for its participants, who are 14- to 15-years-old and in school at entry (Sipe, et al., 1988:113).

¹⁰ A table of programs including their key services and effectiveness findings is presented in the appendix.

Table 3
NET EARNINGS IMPACT OF PROGRAM STRATEGIES, BY SCHOOL STATUS

Strategy	National Research Council		Continuous Longitudinal Manpower Survey		Research Since 1985	
	In	Out	In	Out	In	Out
Work Experience	+	-	NA	NA	NA	-
On-the-Job Training	NA	NA	NA	NA	NA	NA
Labor Market Preparation	+	+	NA	NA	NA	NA
Job Placement	+	+	NA	NA	NA	NA
Occupational Training	-	+	NA	NA	NA	+

Sources: Betsey, et al., 1985; Bassi, et al., 1984; Wolf, et al., 1987; Auspos, et al., 1989.

similar conclusions (1984:64). Only the Job Corps among the programs reviewed by Betsey, et al., produces moderate earnings gains, while research since 1985 has found only small positive (and short-term) results or no effects.

3. Evidence of what works for whom is limited. No systematic investigation of program effectiveness by participant age group has been made. Reporting of program effects on racial subgroups is usually limited by the small samples and differing measures used in the evaluations.¹¹

The CLMS analysis did, in fact, disaggregate effects by sex and racial subgroup; these long-term impacts are summarized in Table 4. With only one exception (OJT for black females), the available findings are negative. In particular, the results for minority males are negative, a dispiriting finding in view of the fact that youth unemployment is very largely experienced by minority males.

THE MAJOR STRATEGIES

Examining the findings for each of the major employment training strategies in greater detail yields further insights into our current state of knowledge and some indications for future research.

On-the-Job Training

Definitive knowledge regarding the effects of on-the-job training for youth is virtually nonexistent (Bassi, et al., 1984:44). This may in part be due to the fact that OJT was not used extensively for youth in CETA (Bassi, et al., 1984, point out that, in the CLMS data they analyzed, fewer than 5 percent of youth were in OJT). Earlier research of OJT programs under MDTA indicates positive benefits for adults (Northrup, 1976:114). Taggart argues the benefits of OJT forcefully, and his OJT results (based on CLMS analyses conducted by Westat) show positive impacts for youth (1981:79).

The only YEDPA research that provides any indication of OJT effectiveness is from the Ventures in Community Improvement program, which combined work experience and OJT. Research from the program, which focused on a largely minority dropout population, shows positive short-term results, whose reliability, however, has been questioned (Betsey, et al., 1985).

¹¹ Appendix Table A-2, which presents subgroup findings from the reports in Table A-1, illustrates well the fragmentary quality of our knowledge.

Table 4
LONG-TERM NET EARNINGS IMPACTS OF PROGRAM STRATEGIES,
BY RACE AND SEX

Strategy	White		Black		Hispanic	
	Male	Female	Male	Female	Male	Female
Work Experience	-	-	-	-	-	-
On-the-Job Training	-	-	-	+	-	-
Labor Market Preparation	NA	NA	NA	NA	NA	NA
Job Placement	NA	NA	NA	NA	NA	NA
Occupational Training	-	-	-	-	-	-

Source: Bassi, et al., 1984.

These overall findings provide little clear guidance about how OJT could be more effectively used for youth. This is an area that appears ripe for further research.

Labor Market Preparation and Job Placement

The research here seems clearer and more consistent. These programs produce short-term benefits (stronger for job placement programs), for both in-school and out-of-school youth.¹² It is unclear from the research how sustained the effects of labor market preparation programs are; in the case of job placement programs, benefits appear to decay by two years postprogram. Program length and structure vary widely (Betsey, et al., 1985:11), and the Alternative Youth Employment Strategies program, a YEDPA demonstration, included work experience as a strategy.

In short, these programs as a group appear to provide limited but worthwhile benefits, based on research findings to date. Butler and Mangum argue that such approaches "are of sufficiently universal value that [they] should be available to all youth" (1983:66). It is unclear, though, which design features (mix of services, curriculum and program length) have most to do with producing positive effects.

One of the few non-JTPA labor market preparation programs for youth that has been evaluated is the Experience-Based Career Exploration (EBCE) program. This program does not emphasize vocational skills per se, but rather focuses on broad career, personal and intellectual skills. Activities included earning credits for work at multiple community work sites, goal-setting and personalized education regimens (Bucknam and Brand, 1983:68). A meta-analysis of 80 third-party evaluations of EBCE programs showed that, in contrast to comparison groups, EBCE students showed large gains not only in career skills and life attitudes, but also in academic skills. However, there have been no longer-term studies of employment or wage impacts.

Occupational Training

The most frequently cited evidence regarding the efficacy of occupational training for youth comes from the Job Corps. Yet, in the final analysis, it remains unclear whether it is the program's residential nature or its occupational focus that most contributes to its effects (Betsey, et al., 1985:118; Hahn and Lerman, 1985:66).

¹² This latter point needs to be tempered by the realization that "out-of-school" in the context of these programs typically includes high school graduates as well as dropouts.

Burbridge notes that "though young people participated extensively in occupational training programs under MDTA and CETA, these programs were not specifically targeted on youth" (1983:65). Moreover, some analysts believe that, under CETA, participants may have been attracted to classroom training for the stipends rather than the skills (Butler and Mangum, 1983:61).

Taggart estimates positive but small net earnings gains for youth 17 to 21 using CLMS data (1981:77). Hahn and Lerman, analyzing results for dropouts in YEDPA discretionary projects, conclude that training and apprenticeship projects produced better short-term earnings gains for this population than other strategies (1985:68-70). They conclude that "nonresidential training appears to help disadvantaged youth become employed," though questions remain about both the costs and "which specific training approaches are most beneficial" (1985:71).

Research on vocational education seems to have concluded that the only real wage and employment gains derive from career-specific courses of training (such as secretarial or administrative). Students most often take a disjointed set of courses and, as a result, do not benefit from participation in this type of program (Rumberger and Daymont, 1984). A significant number of vocational education students take less than three credits in their specific area of training, though positive effects occur only with a concentration of three or more courses.

Commercial training for females seems to have a significant positive impact on earnings: wages are 16 to 17 percent higher for females with this vocational training than for those without it. However, technical training or a course of home economics showed zero or negative effects on wages (Mangum, 1988).

The evidence on labor market impacts is less conclusive for males. If employment matches the training received (most likely in the area of agriculture), graduates have higher labor market participation rates, lower unemployment and 7 to 8 percent higher earnings than the comparison group (Mangum, 1988).

Basic Skills

Most reviews of employment training programs for youth arrive at a recommendation that programs focus more or better attention on basic skills. Yet hard evidence about the ultimate effect on employment and earnings is scarce. Barnow concludes: "The role of basic education in training programs has not been well addressed in the national evaluations of CETA. While there is little doubt that a great deal of basic education took place under CETA and is continuing to some extent under JTPA, the Department

of Labor did not collect data on basic education in its primary evaluation data base under CETA" (1989:129).

Available evidence indicates that programs can successfully improve basic skills, at least in the short term (Auspos, et al., 1989; Sipe, et al., 1988). Yet the experience of these programs suggests that many out-of-school youth regard basic skills instruction as a deterrent to participation.

The approach of the Center for Employment Training suggests the effectiveness of careful integration of basic skills instruction into an overall training regimen (Gordon and Burghardt, 1990). Sticht, et al., also make a strong case (in a different context) for this approach, based on their review of training results from the military (1987:239). Still, the paucity of evidence regarding the long-term effectiveness of basic skills instruction remains a significant deficiency and supports the recommendation of Betsey, et al., for research on basic skills programs, particularly programs for out-of-school youth (1985:25).

Combining the Strategies

As noted earlier, there are relatively few program efforts that do not combine employment strategies. Yet systematic or definitive evidence regarding the effectiveness of combinations is nonexistent. One is left to draw inferences from particular programs.

Table 5 presents the available evidence regarding combinations of strategies, based on program evaluations. The general impression one forms from this table is that strategies in combination produce results. All the basic strategies are represented, though there is no authentic private sector example of OJT for which research is available. Results seem strongest for combining basic skills with other components, especially occupational training; and work experience, the table suggests, may combine effectively with other strategies in well-planned programs, a conclusion also reached by Hahn and Lerman (1985:96). As is true of the findings generally, though, one can draw only general inferences; more systematic examination of the potential benefits of combined strategies is clearly required.

Table 5
EVIDENCE REGARDING PROGRAM EFFECTS
FOR COMBINATIONS OF STRATEGIES

Strategies	Program	Impacts
Basic Skills Occupational Training (Residential)	Job Corps	Positive
Basic Skills Occupational Training (Nonresidential)	JOBSTART	Positive (short-term) edu- cational effects
Work Experience Basic Skills	Summer Training and Education Program	Positive (short-term) edu- cational effects
Work Experience Labor Market Preparation	Opportunities Industrial- ization Center Career Exploration Program	Positive (short-term) school retention
Work Experience Labor Market Preparation Occupational Training	Alternative Youth Employ- ment Strategies	Inconclusive
Work Experience On-the-Job Training	Ventures in Community Improvement	Positive (short-term)
Labor Market Preparation Job Placement	Project Steady	Positive (short-term)

Sources: Betsey, et al., 1985; Auspos, et al., 1989; Sipe, et al., 1988.

III. WORK EXPERIENCE

Although it has become a commonplace in employment and training policy that work experience fails to produce results, the pattern of evidence is more complex. Moreover, findings from social science raise further doubts about the conclusion reached in employment and training policy.

PROGRAM FINDINGS

Particularly in the case of older, out-of-school youth, the findings of no impact from Supported Work seem clear (Maynard, 1980). These findings are generally reinforced by those from the Entitlement demonstration (Betsey, et al., 1985), by short-term findings from the evaluation of the California Conservation Corps (Wolf, et al., 1987) and by the CLMS findings (Bassi, et al., 1984). Burbidge relates the Supported Work findings to those of earlier evaluations of the Neighborhood Youth Corps and concludes that "for out-of-school and older youth for whom schooling is no longer an issue, work experience alone does not appear to benefit program participants" (1983:65), a conclusion also reached by Hahn and Lerman (1985:38).

Hahn and Lerman argue, however, that enriched work experience--work experience combined with other components, such as occupational training or basic skills instruction--offers significant potential for youth (1985:38) and that further experiments with such programs should be made (1985:100).

Moreover, the Entitlement findings suggest postprogram earnings gains for in-school youth. These findings are qualified in that they are short-term, occur in a sample of largely black youth and are driven by results in only two sites. Nonetheless, in their review, Betsey, et al., recommend: "Programs should be designed to test whether increased in-school employment leads to greater post-school employment," with an experiment designed to test impacts over a longer term (1985:27).

Evidence regarding the Summer Youth Employment and Training Program (SYETP), the major work experience component of current employment programs, is generally weak and inconclusive (Betsey, et al., 1985:149; Hahn and Lerman, 1985:46). Given SYETP's long history and steady popularity, and the strong likelihood of its continuation in some form, it is striking that there has been no systematic examination of its impacts, nor investigation of its potential in combination with program elements.

Finally, it should be noted that while CLMS findings regarding work experience were uniformly negative, postprogram earnings for participants in Public Service Employment (PSE) showed large but typically short-term gains for young women, particularly blacks

and Hispanics (the findings were consistently negative for males) (Bassi, et al., 1984:66). These findings are far from conclusive.¹³ They do suggest, though, that public sector work experience may have real (if limited) value when appropriately used, and that it may not entirely deserve its negative reputation as an employment and training strategy.

OTHER FINDINGS

In the social sciences, the dominant view of work experience has come full circle in the last decade. Ten years ago, there were very few assessments of how working during the teen years affects socialization, career choices or work attitudes, even though the number of high school students working during the school year grew steadily between 1950 and 1980 (Greenberger and Steinberg, 1986). In the absence of research showing positive effects from working, developmental researchers became concerned that working would retard some of the necessary psychological growth (identity development, self-esteem, etc.) that should occur during adolescence.

At this point, Greenberger and Steinberg began publishing a series of studies comparing high school workers and nonworkers, which showed that there were modest benefits associated with working: psychosocial growth in the areas of self-reliance, work habits, values and financial decision-making (Greenberger and Steinberg, 1981). However, these gains were accompanied by a drop in school performance, fewer hours spent on homework, school absences, a decrease in closeness to a parent, more cynical attitudes about work and increased drug and alcohol use (Greenberger and Steinberg, 1981; Ruggiero, et al., 1982; Steinberg, et al., 1982). The most important findings in this research were that the largest number of students were working in jobs that required the least use of cognitive skills and little contact with adults. It also found increases in deviance to be associated with stressful work conditions, and negative effects on schooling to be associated with working more than 20 hours a week.

At the same time, other researchers began reporting findings that showed consistent economic benefits in post-high school years associated with having been employed while in school. This led to a flurry of research and controversy which has lasted for a number of years, but which yielded a body of research that more carefully links specific characteristics of work experience with outcomes for high school-aged youth and shows that, under the right circumstances, work experience can be both developmentally and economically advantageous.

¹³ Taggart (1981:130-132) contends that PSE participants were typically older and more job-ready than other CETA participants, which partly explains their superior outcomes. He also contends that "[t]he major explanation for the differing earnings impacts of PSE and work experience lies in their relative effects on transition rates into unsubsidized public sector employment."

According to this research, adolescents are expected to benefit from early experience in the world of work in three ways: (1) contact with adults leading to socialization in adult attitudes, values and behavior (particularly independence and responsibility); (2) gaining information about career possibilities and educational requirements that facilitates more realistic career decisions; and (3) learning job-related attitudes, behaviors and skills (e.g., punctuality and good work habits) (Hamilton and Crouter, 1980). Research shows, however, that these benefits can be expected only under certain conditions: the amount of time spent working each week and the quality of the job appear to be important factors in how working affects the developmental process of leaving school and becoming a worker.

Hours of Work

Further research supports the finding that the number of hours teenagers work is a pivotal factor in how the experience affects development. Greenberger and Steinberg's studies were done with a relatively small, homogeneous sample of white middle-class youth in California. Studies of larger, more representative samples show that, controlling for social class, students who work more than 20 hours a week have lower grades and academic aspirations, spend less time on homework, report less commitment to education, and have higher dropout rates and lower levels of life-satisfaction than students who work fewer hours or not at all (Steinberg and Dornbusch, 1991; Yamoor and Mortimer, 1990; Mortimer and Finch, 1986; D'Amico, 1984).

However, adolescents who work a moderate number of hours (10 to 15 hours per week) actually have lower dropout rates than those who work more hours or who do not work (D'Amico, 1984). Moderate work schedules do not show negative effects on grades, class rank or commitment to education (D'Amico, 1984; Mortimer and Finch, 1986); and this type of experience is associated with higher levels of self-esteem. Students who work up to 10 hours a week do not show the significant increases in deviance associated with more intensive work experience (Steinberg and Dornbusch, 1991).

The other significant finding regarding work intensity is that work experience in high school is related to favorable economic outcomes after high school. Specifically, the more students work while in school, the fewer number of weeks they are likely to spend unemployed after leaving school and, on average, the higher their wages are likely to be (Stern and Nakata, 1989; Mortimer and Finch, 1986; D'Amico and Baker, 1984; Meyer and Wise, 1982). This has been demonstrated for up to five years following high school and seems to be true whether or not students go on to any postsecondary education.

Overall, the findings of negative impacts of working while in school, which set off so many alarms, are associated with long work weeks but seem not to occur when the

number of hours worked is moderated; and the more quality work experience a youth has while in high school, the better he/she is likely to do in making the school-to-work transition.

Quality of Work

For adults, the amount of complexity and autonomy involved in a job is associated with the capacity to learn on the job and a sense of self-competence, work involvement and job satisfaction (Kohn and Schooler, 1978; Mortimer and Lorence, 1979, 1981; Mortimer and Finch, 1986). If complexity and autonomy are important for adults, then these same characteristics (challenging and interesting work, capacity to use skills with some independence) should also be associated with positive developmental outcomes for youth. Most of the students in Greenberger and Steinberg's sample were working in low-skilled, repetitive, short-term jobs, but most other research does not include information on job characteristics that might affect whether the impact on development is positive or negative.

The limited amount of research that does include some measure of job content shows that the use of cognitive skills and the perceived opportunity to learn significantly increase teens' commitment to high standards at work and decrease cynicism about the world of work (Stern, et al., 1990). These skills are the ones likely to be associated with success in the adult role of worker. In fact, a national study shows that the opportunity to use and develop skills on the job and the complexity of the work are associated with higher hourly wages and lower unemployment up to three years after high school (Stern and Nakata, 1989).

A study with a small sample of females from rural upstate New York showed that those who experienced high quality work experiences while in school were more likely to make a successful school-to-work transition. It also seems that stressful conditions (routinization, lack of autonomy, impersonal organization, low wages) associated with low-complexity jobs are significantly related to deviance inside and outside work (e.g., substance abuse and theft) (Ruggiero, 1984, in Greenberger and Steinberg, 1986). This may, in part, explain the association found between work and deviance, since most teens work in this type of job.

The "naturally" occurring jobs that teenagers hold are mostly low in complexity and autonomy--service worker and retail trade jobs (Hamilton and Hamilton, 1989). There is some evidence that jobs secured through formal training programs can provide a higher quality work experience than non-sponsored jobs. Stern, et al., (1990) compared high school students working in "natural settings" with those working through a school-supervised program. The school-supervised workers rated their jobs higher than the non-

supervised workers in the areas of using skills and abilities, learning new skills and getting to know adults. These were the same elements associated with economic benefits from working.

In the Entitlement demonstration, trained assessors made field visits to 520 worksites and found that the program work settings provided good quality work experiences in regard to job content, supervisor-youth relationships, job satisfaction and the value of the work (Ball, et al., 1980). Again, these were the anticipated benefits to be gained by working while in school. Unfortunately, the impact study did not separate groups by the quality of their work setting when examining program effects.

IV. DEVELOPMENTAL NEEDS OF DISADVANTAGED YOUTH

The preceding sections have presented a picture of interventions for youth that have, to date, been largely unsuccessful in producing the significant impacts that are the goals of the employment and training system. The inability to produce the intended results for disadvantaged youth is tied to the history of how youth programming has been developed over the last two decades. In particular, it is critical to stress that interventions have evolved as variations on the types of strategies used in employment programs for adults. However, there is a fundamental, and critical, difference between the needs of unemployed adults and those of youth (particularly the disadvantaged) having difficulties making the transition into the labor force.

Unlike adults, youth coming to second-chance programs are undergoing the psychological, emotional and social development that is an inherent part of the passage through adolescence. Negotiating the transition from school to the labor market requires more than the acquisition of skills specific to any occupation. It is also necessary for youth to master the developmental tasks associated with achieving the cognitive, emotional and social maturity that is critical to long-term stable employment.

So, unlike programs that serve adults, youth interventions must address the full range of developmental needs associated with this stage of life. For example, youth served by training programs need to establish an independent identity, develop a self-concept and fill the needs for affiliation, acceptance, affection, approval and competence.¹⁴

At the stage when employment programs try to intervene, adolescents are also trying to reason more abstractly, think less egocentrically, see things from others' perspectives, and develop a more sophisticated style of moral reasoning. They must learn to evaluate new situations and make decisions about courses of action based on the potential consequences of their behavior. And they will be absorbing their successes and failures in their roles as son or daughter and student, exploring their new roles as friend or lover, and trying to move into the role of adult worker (and sometimes, parent).

The function of second-chance youth programs is to intervene in the lives of at-risk adolescents and improve their chances for becoming independent, self-sufficient adults--specifically, to socialize them into the role of "worker." But the process of becoming an independent adult starts long before these youth reach training programs and significant-

¹⁴ The critical areas of development listed here represent decades of theoretical work in psychoanalytic, cognitive developmental, social learning and symbolic interactionist theory. Full treatments can be found in the works of S. Freud, A. Maslow, E. Erikson, J. Piaget, L. Kohlberg, B.F. Skinner, G.H. Mead and R. Turner.

ly affects the likelihood that any given strategy will be successful with this population. For the disadvantaged youth who are served by these programs, the process of becoming self-sufficient is further impeded by the circumstances under which it occurs--the severe and persistent poverty in which many of them live.

As a first step to understanding how to design more effective interventions for disadvantaged youth, it is necessary to review the major influences on the overall process of development and to assess the difficulties that are likely to be experienced by the population employment and training programs are serving. This section of the paper reviews what is known about the opportunities for development available to disadvantaged youth.

MAJOR DEVELOPMENTAL INFLUENCES

This section examines some of the areas of life, such as the family, peer groups and school, that are the primary settings where adolescents mature. The goal is to begin to understand the ways in which the life circumstances of disadvantaged youth affect their opportunities for growth, since any shortcomings in the social environment early in the developmental process will need to be addressed by the intervention strategies used to promote growth into self-sufficient adulthood.

The Family

The role of the family in the developmental process of the child is to provide the basic necessities of food, shelter, clothing and protection while fostering the growth of an identity, motivation and values that are necessary to become a self-sufficient adult. Poverty has a clear, direct effect on a family's ability to meet a child's basic needs; poverty also indirectly affects a child's psychological development through its impact on the social and emotional environment in the home.

Over 50 percent of all children will spend at least some portion of their early years very near to, or in, poverty (Duncan and Rodgers, 1988:1009). Many of these children will remain in poverty for between one and four years, but 41 percent of the children experiencing poverty live under these conditions for extended periods of time (5 to 15 years). "Persistent poverty is a way of life for over 2.5 million children under the age of 15," (Duncan and Rodgers, 1988:1018) and a disproportionate number of these children are black.

One of the most fundamental needs--housing--is unmet for a large number of children. An estimated 100,000 to 300,000 children were homeless during a one-week period in 1987 (Burt and Cohen, 1989). This, of course, does not include the children who live in substandard, inadequate housing. Without a safe and stable place to live, physical well-

being is threatened and development is handicapped through a shortage of family and social support networks.

Even when housing is available, the poor in many cities are becoming increasingly concentrated in ghetto areas (Jargowsky and Bane, 1990) and isolated from the mainstream culture. For example, a study of 17- to 24-year-olds in high-poverty neighborhoods in Boston shows that these youth are isolated from both support structures and middle-class role models. Over 50 percent of the youth reported that they did not know anyone in "business, accounting, engineering, science or law," but they did know people in jail or in trouble with the police (Case and Katz, 1990:11). Half of these disadvantaged youth also believed there was no support in their neighborhood or community for people who try to get ahead through schooling or employment (Case and Katz, 1990:12).

Lack of adequate nutrition impedes development through its effects on both physical and cognitive growth. In 1988, an estimated 16 percent of children in low-income families experienced retardation in physical growth due to inadequate nutrition (Children's Defense Fund, 1991). Malnourishment early in childhood is also linked with later IQ deficits (Galler, et al., 1983a), attention deficits, reduced social skills and emotional instability (Galler, et al., 1983b). In the classroom, casualties of early malnourishment exhibit poor attention, impaired memory, easy distractibility, poor performance and restlessness (Galler, et al., 1983b). Children whose nutritional needs for normal growth are not met will undoubtedly be less able to take advantage of any other opportunities for maturation that might be present at home or school.

The deprivation associated with poverty--poor and crowded living conditions, unstable family structures, chronic unemployment, low wages, job insecurity, dependence on welfare, lack of savings and constant shortages of cash--also affects the psychological characteristics of parents (Gecas, 1979). Adults who are poor have more mental health problems than those with higher incomes (see McLoyd, 1990, for a good review of the literature). The chronic, ongoing stressful conditions of inadequate housing, dangerous neighborhoods and shortfalls of money are more debilitating than one-time acute events (Belle, 1984). For example, chronic economic stress (difficulty paying bills, worrying about money, not having money for health care) was found to be the strongest predictor of depression in a southern black community (Dressler, 1985).

Poor children are also more likely to live in single-parent households. In 1985, 54 percent of black and 29 percent of Hispanic children lived in single-parent households (U.S. Bureau of the Census, 1985), and 70 percent of these children lived in poverty. Single parents (mostly female) are particularly vulnerable to psychological distress. They are at greater risk for anxiety, depression, health problems and drug abuse (McLoyd, 1990).

Clearly, the physical deprivations associated with poverty and the psychological distress that accompanies these conditions will affect a parent's ability to provide the support and nurturance necessary to socialize a child into the role of a self-sufficient adult. Disparity in the conditions experienced by families at different socioeconomic levels also leads to different conceptions of social reality, priorities, values and expectations of children (Peterson and Rollins, 1987).

Two areas of parental behavior that affect social and emotional growth have received the most research attention: (1) the amount and kind of control parents exert over children; and (2) the amount of affection and support they show (Gecas and Seff, 1990; Gecas, 1981; Gecas, 1979). Parental control and support are important because these dimensions have been shown, fairly consistently over the last 30 years, to be linked to children's self-esteem, work orientation, achievement motivation, school achievement and delinquency.¹⁵ However, it is also important to note that while these parental factors do influence a child's development, they do not wholly determine it.

Successful socialization--becoming an autonomous, motivated, healthy individual who is successful in school and work--tends to be associated with a style of parenting characterized by support, physical affection, companionship and involvement, coupled with consistent discipline based on clear rules, supervision and protectiveness (for reviews and critiques of this literature, see Gecas and Seff, 1990; Peterson and Rollins, 1987; and Maccoby and Martin, 1983). This style of parenting seems to be less prevalent among families with low incomes than either permissive or authoritarian parenting (based on force, threats or physical punishment) (Lempers, et al., 1989; Dornbusch, et al., 1987; Peterson and Rollins, 1987).

Supportive parenting seems to satisfy the developmental need for close identification with adults in an environment where independent thought, decision-making and roles can be practiced and consequences learned. A longitudinal study of adolescents has shown that parental praise, affection and communication leads to higher self-esteem in children (Felson and Zielinski, 1989). This type of parenting is also associated with higher grades among high school students (Dornbusch, et al., 1987). But, more important for our purposes, research shows that such parenting facilitates academic success through its

¹⁵ As in most areas of research, the work in this area is fraught with shortcomings--some of which are serious. Most of the early studies of the effects of social class on parenting and socialization were done with restricted samples of white middle-class boys. Many of the studies are cross-sectional in design when they should be longitudinal to capture the essence of a process. Social class is often operationalized with weak measures, and some of the measures of socialization outcomes are highly questionable. The findings cited in this section are supported by studies that have large heterogeneous samples, measure social class, preferably are longitudinal and are specifically based on work with adolescents.

effect on the development of a healthy sense of autonomy and a positive orientation toward work (Steinberg, et al., 1989). When the social environment provides the support and opportunities for growth necessary for adolescent development, it appears that the characteristics demanded of an individual who can successfully carry out the role of worker can be promoted.

Unfortunately, disadvantaged youth are less likely to be exposed to this type of environment. Economic hardship has been shown to be associated with less parental nurturance and more inconsistent discipline practices, which directly and indirectly lead to depression, loneliness, delinquency and drug use among adolescents (Lempers, et al., 1989). Rates of problems with substance abuse in school and with the law are also higher among children raised in single-parent (female-headed) households (Garbarino and Sherman, 1980), where children are more likely to make decisions without parental input (Dornbusch, et al., 1985)--the type of family in which many disadvantaged youth reside. Therefore, any strategy to increase the probability that adolescents will be successfully socialized as workers must be developed in a manner that takes into account the necessity of support and democratic discipline in nurturing autonomy and healthy work orientations.

One further area of parental behavior relevant here has been identified by the research of Kohn and others on social class and work. Kohn's general position is that a worker's socioeconomic status influences values and personality traits through the characteristics of tasks performed on the job. Those in blue-collar jobs will tend to value conformity, orderliness, neatness and obedience, while white-collar workers will value self-direction and internalized standards of behavior. Parents in lower socioeconomic positions will tend to stress conformity and discipline their children on the basis of an action's consequences (external factors), while parents in higher socioeconomic positions will tend to stress self-direction and discipline their children on the basis of their interpretation of the child's motives or intentions (internal factors) (Kohn, 1977; Kohn and Schooler, 1973, 1978). So, lower socioeconomic status adults may come to use a more controlling, authoritarian style of parenting not only as a result of the deprivations associated with poverty, but also because they treat their children in the manner demanded for success in their own social environment.

If an individual is expected to be successful in a role, he/she must first develop the characteristics required to succeed. If the family environment does not promote self-esteem, autonomy and a healthy orientation to work, the adolescents who participate in employment and training programs will benefit from strategies that further the developmental process by incorporating the elements of support, affection, involvement, firm but not harsh discipline, praise and communication, all of which are linked to developing these traits.

Other Influential Adults

A growing number of researchers interested in development are beginning to explore the relative importance of nonparental adults in the lives of adolescents. Along with parents, other adults can serve as role models, teachers, sources of social support, and helpers with decision-making (Galbo, 1989, 1986; Garbarino, et al., 1980). Unfortunately, much of the research currently available is limited in its coverage of these potential areas of effect and in the type of samples used; therefore, it is possible to draw only a few conclusions about the importance of nonparental adults in the development of youth.

Research consistently shows that youth are most likely to seek social support and advice from their parents (Galbo, 1989, 1986; Benson and Mangen, 1986a). When asked whom they talk to about problems and turn to for advice, the majority of adolescents mention their parent(s). However, older adolescents also consider their peers to be a significant source of social support, followed by other adults (Galbo, 1986; Benson and Mangen, 1986a).

For our purposes, two of the most interesting findings in this research are: (1) minority youth are more likely than white youth to turn to other adults as providers of support--especially nonparental family members (aunts, uncles, grandparents, siblings, etc.); and (2) higher-income youth are more likely than middle- or lower-income youth to turn to parents for support, while other adults and peers are more important for lower-income youth. Minority and low-income youth used nonparental adults as important sources of support and information in making decisions about life and sex, and in coping with problems or making decisions about drug and alcohol use (Benson and Mangen, 1986a, 1986b, 1986c).

While these results have not yet been widely replicated, they suggest that nonparental adults have a very important role to play in the development of disadvantaged youth; in fact, they seem to be used as an alternate source of social support for these adolescents in areas that can have serious consequences in regard to labor market success. Researchers are also beginning to explore the notion that limited contact with significant adults other than parents can actually slow cognitive as well as social or emotional growth (Galbo, 1986, 1989). If this is shown to be the case, it would be even more critical to ensure that at-risk youth are given as many opportunities as possible to interact and form relationships with adults other than their parents.

Peer Groups

Peer groups are an important context for socialization because they differ from the family setting in critical ways. First, associations with peers are made on a voluntary

basis. Peer groups are independent of adult control, allowing children to exercise independence and autonomy. Second, these groups are based on interactions among individuals who are equal in status. Any hierarchy that evolves in peer groups is not based on age or position (as it is in families) but on expertise or achievement in an area valued by the group.

As children age, they increasingly spend more of their time with peers. High school students spend twice as much of their time with peers (29%) as they do with parents or other adults (15%) (Brown, 1990). Interactions with peers are important in the developmental process primarily because they provide adolescents the opportunity to practice the skills needed in adult roles. Peer groups facilitate development of an independent identity, allow adolescents to practice different styles of social competence and impression management, and serve as an arena for the transmission of values and information in areas omitted by parents. Peer groups are also important in the process of forming a self-concept, specifically self-esteem, because they provide adolescents with a framework for learning how others perceive them and a source of standards against which to measure themselves.

Social science research on different peer group influences among adolescents of different socioeconomic backgrounds is meager.¹⁶ Most research in this area has focused on status within peer groups, formation of cliques and other characteristics of the group, rather than environmental influences on group formation and effects. In this area, we can only relate the general characteristics of the social environment inhabited by disadvantaged youth to their opportunities to practice social roles and develop social skills and values in peer interactions.

The social and geographic isolation associated with poverty inevitably limit the types of individuals youth find available for day-to-day interaction. Lower-income youth have been shown in some studies to be less likely to belong to peer groups oriented toward high achievement and more likely to belong to groups formed around drug or other deviant cultures (for example, see Shrum and Cheek, 1987). Higher drug use rates and crime rates in low-income areas make it more likely that disadvantaged youth will associate with peers who have drug use or criminal histories.

Lower school achievement rates and higher unemployment rates in poverty areas make it less likely that adolescents from low-income families will have the opportunity to interact with individuals who exhibit the characteristics associated with adult success. While

¹⁶ Again, very few studies use heterogeneous samples in which social class is measured. Therefore, it is not possible at this time to reach conclusions about the effects of poverty on peer group processes.

parental influence can be stronger in the areas of achievement, values and goals, peer influence can be stronger in social and recreational behaviors (Kandel, 1986), sometimes leading to what might be competing sources of influence or support.

Schools

Schools are an important context for development because of the effect they have on cognitive growth. Much of the cognitive skills development necessary for success in adult roles, particularly the role of worker, occurs in the school setting.

In the last three decades, research on poverty neighborhoods' effects on schooling has been uneven and plagued by methodological shortcomings that make it difficult to draw conclusions (for a good review and critique of this literature, see Entwisle, 1990; Jencks and Meyer, 1990). As Jencks and Meyer note, 25 years of research in this area has yielded a "thin harvest" (1990:154) with little that informs notions of development or that can be used to guide second-chance programs. What is clear is that there is a severe disparity between education and employment outcomes for adolescents who attend schools in low-income neighborhoods and outcomes for youth in high-income neighborhoods. For example, in 1984, students age 9 to 17 attending schools in disadvantaged metropolitan areas (a high proportion of the population on welfare or not regularly employed) had lower levels of reading proficiency than rural or advantaged metropolitan area students (U.S. Department of Education, 1989:108). In 1988, over 40 percent of eighth-graders from low socioeconomic backgrounds were in the lowest quartile on achievement test scores in history, math, reading and science, compared with about 10 percent of students from high socioeconomic backgrounds (U.S. Department of Education, 1989:118). Dropout rates are also higher among minority and disadvantaged populations than they are among other groups.

But even when disadvantaged youth complete high school, they do not fare as well as their advantaged counterparts. In 1986, only 50 percent of 1972 high school graduates from low-income backgrounds had some post-high school education, compared with 91 percent of graduates from high socioeconomic backgrounds; and graduates from disadvantaged backgrounds were earning, on average, only \$6.48 an hour compared with \$8.02 an hour for graduates from more advantaged backgrounds (U.S. Department of Education, 1989:364). There are many competing explanations for these racial and socioeconomic differences in educational success.¹⁷

¹⁷ This is an extremely complex area that cannot be given full treatment here. However, this topic is more fully explored in a separate paper devoted to educational issues for this population. See Johnson and Gambone, this volume.

One prevalent theory is articulated by Ogbu (1985). He argues that, as a result of discrimination, minority youth do not invest much effort in schooling because it is clear to them, from observing their circumstances, that their opportunities are restricted whether or not they finish school. Ogbu argues that a rational response to the job ceiling that exists for minority youth is to stop working hard in school and settle for low-status jobs that do not require much education, because there is no evidence to show that they could otherwise do any better.

Others suggest that such factors as teachers' lower expectations for minority and disadvantaged youth affect their achievements. In a study of five junior high schools, Hall, et al., (1986) found that differences in minority and white students' achievements in reading and math were related to teachers' misperceptions of differences in the groups' abilities. Trained observers found no differences in behavior or attention in the classroom, and students reported the same attitudes toward success in school. Nevertheless, teachers believed that black males exerted the least effort in the classroom and rated the ability of white students higher than that of black students with similar achievement scores.

Regardless of the cause, in the current educational structure, disadvantaged youth are not benefitting from a key process used to promote cognitive growth. When they reach second-chance programs, these adolescents are burdened by the physical deprivations of poverty and may have developed in an environment handicapped by some of the forces mentioned above--parents burdened by poor mental health, risk of substance abuse, unsupportive psychological environments, isolated social environments with limited access to groups exhibiting mainstream norms and successes, and a school system ineffective in educating them. It is not surprising, therefore, that these youth often seem to be unaffected by the short-term strategies used in employment and training programs to enhance the school-to-work transition for this population.

V. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

1. The findings about youth employment programs derive from no systematic framework, seldom build coherently or effectively on one another, pertain as much to specific programs as they do to generic "strategies," and thus have only limited value to policy-makers.
2. Our knowledge of the quality of program design and implementation, and of how variations in these factors might affect the impacts of programs, is likewise limited.
3. The available findings suggest that employment training programs have generally had small average impacts on youth. Excluding findings from the Job Corps, there is no evidence that any of the programs has more than a modest and short-term effect. In particular, few of the programs show strong (or any) effects for minorities, particularly minority males. Given the fact that youth unemployment problems are experienced disproportionately by minority youth, this is a particularly sobering finding.
4. Our knowledge regarding program effectiveness for youth in particular age groups is fragmentary at best. Since youth experience a series of different and significant changes over the 14 to 22 age period, the lack of age-specific findings is particularly limiting.
5. Although work experience has been relegated to the category of strategies that do not work, the available evidence is mixed. Particularly for in-school youth, there is evidence that work experience may pay off, and there seems to be a valid basis for arguing--as a number of analysts do--for further work and experimentation with this strategy.
6. There are particular gaps in knowledge that call for focused investigation:
 - There is virtually no solid evidence about the effectiveness of on-the-job training for youth;
 - The Summer Youth Employment and Training Program (SYETP)--incidentally, the largest work experience component in JTPA--remains a program of unknown effectiveness or potential; and
 - Basic skills instruction, universally acknowledged to be a critical area in youth employability development, has been little investigated.

7. Finally, it should be noted that most appraisals of program effectiveness reduce the issue to generic youth problems and generic employment and training programs. Usually lacking are an appreciation of either the particular problems youth may have, or the distinguishing (potentially significant) features of programs designed to serve them. As Mangum and Walsh observe: "the problem has been that all employment and training programs have been prescribed for all disadvantaged youth regardless of the external or personal barriers that prevent them from either labor market success or success in others aspects of life" (1980:14).

A fair general conclusion is that knowledge regarding the effectiveness of employment training programs is sparse and often inconclusive; that it is based on results from a comparatively few studies; and that the measured impacts for the most part are small.

It is important to place these conclusions in perspective. Training and employment programs are positioned to serve important functions and needs. For many youth, they provide opportunities: connections to the workplace, training and education, career exposure, enrichment of school curriculum, income and work experience. For many, there have indeed been benefits, and in some cases these benefits have been substantial.

We must be cautious in assessing these programs, or their potential. Their scale has been modest for most of their history, and the research findings are both uneven and unimpressive, hardly points that support expansion. Yet the fitful nature of programming and its limited scale may explain much of the research. Offered at a resource level broadly commensurate with the problems they seek to address, and scrupulously assessed, employment and training efforts might produce a far more positive record of effectiveness.

Indeed, in concept, the programs serve an important gap in the lives of disadvantaged youth. Outside of custodial or emergency services, or the schools, employment training programs represent perhaps the only publicly funded youth assistance program available. Many youth would have few other avenues to obtain the needed services and workplace connections these programs provide, or the benefits, long- or short-term, that such services and connections can confer. The question then is how their value can be increased and extended. Two points should be stressed:

First, these programs have focused far too little on the developmental and social needs of their participants--the set of issues reviewed in Section IV of this paper. Adolescent years are critical in the growth and maturation of young people. Youth clearly need opportunities for psychosocial development if they are to succeed as workers and citizens. The disadvantaged youth targeted by JTPA are likely to arrive in programs with

few such opportunities in their home, peer or school environments. The programs that serve them must, therefore, seek to provide more of those opportunities.

Work experience--politically unpopular at present, and with a mixed record of results--appears to represent one such opportunity in terms of both employability and psychosocial development. Its correlation to later employment gains, its experiential and motivational potential and its capacity to serve employment preparation aims all argue for its wider adoption in public programs, with the aim of intensifying the developmental impact those programs can have.

Most second-chance programs make few provisions for development; it is thus probably not surprising that they have for the most part produced few significant impacts. The programs are usually short-term and limited--a poor medium for fostering growth and opportunities for maturation. Employment and training strategies, narrowly focused on just one aspect of youth's lives, cannot address broader needs. And, further, the core strategies, conceived purely in employment-based terms and concepts, may have only limited value even in terms of achieving their stated goals.

Second, the multiple needs of many youth outstrip resources currently available to address them. These needs are both extensive and intensive. They are displayed by many youth and by youth with many needs. JTPA now serves only about 5 percent of the eligible youth population. Were its strategies revamped to provide longer-term, more intensive services, it would serve even fewer youth. Only a substantial increase in the funds available for these programs can begin to extend the reach of programs while also reshaping them so that they address youth development needs in a broader context.

In seeking to frame recommendations in light of these conclusions, it is necessary also to consider these facts: current knowledge regarding employment and training programs remains meager; and knowledge concerning how broader youth development principles might effectively be translated into programmatic terms is limited even more. In only a few cases, therefore, can fairly specific recommendations be made. More often, the recommendation is for knowledge development or for general changes in practice. Over time, the development of knowledge will make possible further improvements and enhancements of the current strategies for addressing employability development and concomitant psychosocial development as well.

RECOMMENDATIONS

The recommendations presented here are of three kinds: for policy development, for practice in the field and for research.

Recommendations for Policy

1. The Department of Labor should consider liberalizing the kinds and extent of allowable support services in JTPA. The purpose would be to make such activities not a marginal aspect of employment programs, but their major and integral feature. The Department would certainly want to promulgate criteria and aims for such services, but--consistent with JTPA's structure and local emphasis--should keep these broad enough to encourage local variation and experimentation.
2. The Department should develop collaborative ties and projects with other federal agencies, aimed at making available a broader range of support and developmental services in employment training programs. Such collaborations are needed to develop knowledge about how to program and implement intervention strategies for participants with multiple needs.¹⁸ Models should be systematically tried on a demonstration basis (possibly tied into the research recommendations listed below) with the aim of adopting successful multiservice strategies permanently throughout the JTPA system.
3. The Department should seek to expand the use and variety of workplace connected strategies for youth--in particular, on-the-job training and work experience. As an immediate measure, the Department could encourage more widespread use of try-out employment, and explore the possibility of funding public sector work experience on a limited and judicious basis. Some additional programming options the Department might consider are described below in connection with research recommendations.
4. The Department's efforts to establish a separate youth title within the current JTPA should be vigorously pursued to provide a distinct emphasis on youth issues and services. However, the Department should recognize that pursuit of the recommendations proposed here will require additional funding. In particular, as it seeks to develop regulations for youth programs under a separate youth title, the Department should consider raising the current caps on administrative and support services for youth programs.

Recommendations for Practice

5. Practitioners should make wider use of try-out employment as a strategy for both in-school and out-of-school youth. In the case of in-school youth, combining such employment with labor market or career preparation appears to hold potential. For out-of-school youth, dropouts particularly, there may be value in combining work experience

¹⁸ A later paper is devoted to this topic. Specific recommendations for the types of services and research needed for a more holistic approach to serving youth are listed in that paper. See Nightingale, et al., this volume.

with OJT or skills training. In any case, it is essential to maintain high quality standards in the work experience provided.

6. Practitioners should seek ways to combine summer employment (SYETP) for out-of-school youth with additional services, particularly workplace-connected services (OJT and/or permanent job placement).
7. Practitioners should aim to build formal, multisummer work experience programs for youth in school, connected during the intervening school year by career exploration and/or labor market preparation programs.
8. Practitioners should seek collaborative funding or programming arrangements that provide a broader range of services, particularly those that address, in a systematic way, the developmental needs of youth. It seems particularly important to focus on younger participants, whose needs may be more readily addressed through judicious addition of such services. But it seems clear that most participants are likely to benefit from a more supportive program environment, one that recognizes and can respond to their needs for development and maturation. One specific approach that should be used is to incorporate relationships with adults (mentoring) into work-based interventions.

Recommendations for Research

The Department should view investments in soundly conceived, long-term research efforts as an essential part of its employment and training policy generally, and its youth employment policy and initiatives in particular. The current base of knowledge rests on a small number of unconnected studies conducted in the early 1980s that, in general, are inconclusive in regard to which program strategies are most effective for the at-risk youth population. This research supports policy formulation of only the most general kind and this base must be measurably enlarged if it is to better guide policy and program development in the future. Both an increase in the levels of effort and funding for such research, and a commitment to carry out careful long-term efforts, are essential.

9. The Department should develop a long-term, stable and coherent youth research program for at least the next five years that is not disrupted by legislative or political changes. A multiyear strategic program of research, whose projects emanate from a coherent framework and build toward answering well-specified questions, should be initiated. The program should be systematically developed, using background papers, carefully assessed pilot programs and well-designed demonstrations and research. Some general characteristics of such a program are:

- Development and maintenance of a national longitudinal data set that compiles basic information about background and social characteristics (family, peers, schooling) of at-risk youth and about their social-psychological development;
- Analyses and studies that develop usable knowledge about how these characteristics interact with youth decisions about participating in existing institutions and programs, and how they affect the outcomes and results of such participation;
- Continuing work to identify strategies and services that will be effective in producing the employment-related outcomes sought for youth, building on the basic information described above; and
- Refinement of knowledge regarding the most effective management and implementation strategies for delivering these services to the targeted population.

10. The Department of Labor should consider revising federal reporting requirements to enhance the flow of information that can inform major policy issues regarding youth. Most data currently collected cannot be used to address the major questions about the usefulness of particular employment strategies for youth. For example, we now have general information about the generic employment service(s) participants receive but no information about the characteristics of a program, such as sequencing or length of the program, or the support services included in a program. Without regularly collecting such information, we cannot sort out the important elements in programming for youth.

11. Based on the findings of this paper, the following issues seem most important for longer-term investigation:

- How can work experience (both public and private) be most effectively used for the school-connected youth population to achieve stronger labor market results? Can it achieve results if offered alone? Should it be systematically offered, in tandem with career exploration and/or labor market preparation? How should it be combined with current summer employment programs? Are there threshold amounts of work experience that may prove optimal?
- How can developmental or support services be added to existing employment and training strategies to enhance their usefulness?¹⁹ Which services seem to produce the best results? For which populations and ages? In combination with which services? Does their addition increase employment/training impacts?

¹⁹ This topic is treated in Nightingale, et al., this volume.

Must program experiences be lengthened (or participants be moved through an extensive sequence of programs) in order to produce results? Does addition of such services produce other changes in youth that might later contribute to stronger labor market results?

- What combinations of employment and training strategies--particularly workplace-connected strategies, such as work experience and on-the-job training--can be used to produce positive employment outcomes for out-of-school youth?
- How can basic skills remediation programs be successfully incorporated into core strategies? Can their use significantly enhance the impacts these programs have on long-term employment and earnings? Can experience-based or career-specific curricula significantly enhance learning as well as long-term employment outcomes?

APPENDIX

Table A-1
**MAJOR SOURCES OF EVIDENCE REGARDING
 YOUTH EMPLOYMENT PROGRAM EFFECTS**

Program	Services	Target Population	Extent of Findings	Effects
Job Corps	Occupational Training, Basic Skills, Support Services	Out-of-School	Long-Term	+
Youth Incentive Entitlement Pilot Projects	Work Experience	In-School Out-of-School	Short-Term	-
Supported Work	Work Experience	Out-of-School	Long-Term	-
Alternative Youth Employment Strategies	Labor Market Preparation	Out-of-School	Short-Term	+
70001	Job Placement	Out-of-School	Long-Term	-
JOBSTART	Occupational Training, Basic Skills, Support Services	Out-of-School	Short-Term	+
California Conservation Corps	Work Experience	Out-of-School	Short-Term	-
Summer Training and Education Program	Basic Skills, Work Experience	In-School	Short-Term	+

Sources: Betsey, et al., 1985; Auspos, et al., 1989; Wolf, et al., 1987; Sipe, et al., 1988.

Table A-2
SUBGROUP ANALYSES REPORTED
BY SELECTED YOUTH PROGRAM EVALUATIONS

Program	Subgroups Examined			
	Sex	Race/Ethnicity	Age	Education
Job Corps	Yes	No	No	No
Youth Incentive Entitlement Pilot Projects	Yes	White/Black/Hispanic	Yes ^a	High School Graduate/ Non-High School Graduate
Supported Work	Yes	White/Black/Hispanic	Under 19/19+	Up to 8th Grade /9th Grade +
Alternative Youth Employment Strategies	Yes	No	No	No
70001	Yes	No	No	No
JOBSTART	Yes	Hispanic/Black/White/Other	19 or Under/ 20-21	No
California Conservation Corps	Yes	White/Black/Hispanic	No	High School Graduate/ Non-High School Graduate
Summer Training and Education Program	Yes	Asian/Black/Hispanic/White	No	No

Sources: Betsey, et al., 1985; Auspos, et al., 1989; Wolf, et al., 1987; Sipe, et al., 1988.

^a The analysis of outcomes is presented primarily for the 15- to 16-year-old black youth cohort.

REFERENCES

- Anderson, Bernard E.
1980 "How Much Did the Program Help Minorities and Youth" in Ginzberg, Eli (ed.) Employing the Unemployed. New York: Basic Books.
- Auspos, Patricia; Cave, George; Doolittle, Fred; Hoerz, Gregory
1989 Implementing JORSTART: A Demonstration for School Dropouts in the JTPA System. New York City: Manpower Demonstration Research Corporation.
- Ball, Joseph; Gerould, David M.; Burstein, P.
1980 The Quality of Work in the Youth Entitlement Demonstration. New York: Manpower Demonstration Research Corporation.
- Barnow, Burt S.
1989 "Government Training as a Means of Reducing Unemployment" in Bawden, Lee D. and Skidmore, Felicity (eds.) Rethinking Employment Policy. Washington, D.C.: Urban Institute Press.
- Bassi, Laurie J.; Simms, Margaret C.; Burbridge, Lynn C.; Betsey, Charles L.
1984 Measuring the Effect of CETA on Youth and the Economically Disadvantaged. Washington, D.C.: Urban Institute Press.
- Belle, D.
1984 "Inequality and Mental Health: Low-Income and Minority Women" in Walker, L. (ed.) Women and Mental Health Policy. Newbury Park, CA: Sage Publications.
- Benson, Peter L. and Mangen, David J.
1986(a) "Sources of Support for Young Adolescents" in Benson, P.L.; Mangen, D.J.; Williams, D.L. (eds.) Adults Who Influence Youth: Perspectives from 5th-12th Grade Students. Minneapolis, MN: Search Institute.
- Benson, Peter L. and Mangen, David J.
1986(b) "Young Adolescents' Concerns about Sexuality: Sources of Social Support" in Benson, P.L.; Mangen, D.J.; Williams, D.L. (eds.) Adults Who Influence Youth: Perspectives from 5th-12th Grade Students. Minneapolis, MN: Search Institute.

- Benson, Peter L. and Mangen, David J.
1986(c) "Help-Seeking for Alcohol and Drug Problems: To Whom Do Adolescents Turn?" in Benson, P.L.; Mangen, D.J.; Williams, D.L. (eds.) Adults Who Influence Youth: Perspectives from 5th-12th Grade Students. Minneapolis, MN: Search Institute.
- Berkeley Planning Associates and Public/Private Ventures
1992 Youth in JTPA: The Final Report. Berkeley, CA: Berkeley Planning Associates. Forthcoming.
- Betsey, Charles; Hollister, Robinson; Papageorgiou, Mary (eds.)
1985 Youth Employment and Training Programs: The YEDPA Years. Washington, D.C.: National Academy Press.
- Brown, Bradford B.
1990 "Peer Groups and Peer Cultures" in Feldman, S.S. and Elliott, G.R. (eds.) At the Threshold: The Developing Adolescent. Cambridge, MA: Harvard University Press.
- Bucknam, R.B. and Brand, S.G.
1983 "EBCE Really Works: A Meta-Analysis on Experience-Based Career Education." Educational Leadership, 40(6):66-71.
- Bullock, Paul
1985 Youth Training and Employment: From New Deal to New Federalism. Los Angeles, CA: Institute of Industrial Relations.
- Burbridge, Lynn C.
1983 Employment and Training Programs for Youth: An Interpretation and Synthesis of Measured Outcomes. Washington, D.C: Urban Institute.
- Burt, Martha R. and Cohen, Barbara E.
1989 America's Homeless: Numbers, Characteristics and Programs That Serve Them. Washington, D.C.: Urban Institute Press.
- Butler, Erik P. and Mangum, Garth L.
1983 Applying the Lessons of Youth Programs: Introduction to a Monograph Series. Salt Lake City, UT: Olympus Publishing Company.

Paper No. 1

Case, Anne C. and Katz, Laurence F.

- 1990 "The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youth." Preliminary paper, Harvard University.

Children's Defense Fund

- 1991 The State of America's Children 1991. Washington, D.C.: Children's Defense Fund.

D'Amico, R.

- 1984 "Does Employment During High School Impair Academic Progress?" Sociology of Education, 57:157-164.

D'Amico, R. and Baker, P.

- 1984 "The Nature and Consequences of High School Employment" in Pathways to the Future: A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982, Vol. IV. Columbus, OH: Ohio State University, Center for Human Resources Research.

Dornbusch, M.; Ritter, P.L.; Liederman, H.; Roberts, D.F.; Fraleigh, M.J.

- 1987 "The Relation of Parenting Style to Adolescent School Performance." Child Development, 58:1244-1257.

Dornbusch, M.; Carlsmith, J.M.; Bushwall, P.L.; Liederman, H.; Hastorf, A.H.; Gross, R.T.

- 1985 "Single Parents, Extended Households, and the Control of Adolescents." Child Development, 56:326-341.

Dressler, William M.

- 1985 "Extended Family Relationships, Social Support, and Mental Health in a Southern Black Community." Journal of Health and Social Behavior, 26:39-48.

Duncan, Greg J. and Rodgers, Willard L.

- 1988 "Longitudinal Aspects of Childhood Poverty." Journal of Marriage and the Family, 50:1007-1021.

Entwisle, Doris R.

- 1990 "Schools and the Adolescent" in Feldman, S.S. and Elliott, G.R. (eds.) At the Threshold: The Developing Adolescent. Cambridge, MA: Harvard University Press.

Felson, Richard B. and Zielinski, Mary A.

1989 "Children's Self-Esteem and Parental Support." Journal of Marriage and the Family, 51:727-735.

Fraker, Thomas; Maynard, Rebecca; Nelson, Lyle

1984 An Assessment of Alternative Comparison Group Methodologies for Evaluating Employment and Training Programs. Princeton, NJ: Mathematica Policy Research.

Galbo, Joseph J.

1989 "Nonparental Significant Adults in Adolescents' Lives: Literature Overview, Theory and Issues." Paper presented at the biennial meeting of the Society for Research in Child Development, Kansas City.

Galbo, Joseph J.

1986 "Adolescents' Perceptions of Significant Adults: Implications for the Family, the School and Youth Serving Agencies." Children and Youth Services Review, 8:37-51.

Galler, J.R.; Ramsey, F.; Solimano, G.; Lowell, W.; Mason E.

1983(a) "The Influence of Early Malnutrition on Subsequent Behavioral Development: Degree of Impairment in Intellectual Performance." Journal of the American Academy of Child Psychiatry, 22(1):8-15.

Galler, J.R.; Ramsey, F.; Solimano, G.; Lowell, W.; Mason, E.

1983(b) "The Influence of Early Malnutrition on Subsequent Behavioral Development: Degree of Impairment in Classroom Behavior." Journal of the American Academy of Child Psychiatry, 22(1):16-22.

Garbarino, James and Sherman, Deborah

1980 "High-Risk Neighborhoods and High-Risk Families: The Human Ecology of Child Maltreatment." Child Development, 51:188-198.

Gecas, Viktor

1981 "Contexts of Socialization" in Rosenberg, M. and Turner, R.H. (eds.) Social Psychology: Sociological Perspectives. New York: Basic Books.

Gecas, Viktor

1979 "The Influence of Social Class on Socialization" in Burr, W.R. (ed.) Contemporary Theories About the Family (Vol. 1). New York: Free Press.

Paper No. 1

Gecas, Viktor and Seff, Monica A.

1990 "Families and Adolescents: A Review of the 1980s." Journal of Marriage and the Family, 52:941-958.

Ginzberg, Eli

1980 "Overview: The \$64 Billion Innovation" in Ginzberg, Eli (ed.) Employing the Unemployed. New York: Basic Books.

Gordon, Anne and Burghardt, John

1990 The Minority Female Single Parent Demonstration: Short-Term Economic Impacts. New York: Rockefeller Foundation.

Greenberger, E. and Steinberg, L.

1986 When Teenagers Work: The Psychological and Social Costs of Adolescent Employment. New York: Basic Books.

Greenberger, E. and Steinberg, L.

1981 "The Workplace as a Context for the Socialization of Youth." Journal of Youth and Adolescence, 10(3):185-209.

Grubb, W. Norton

1989 "Preparing Youth for Work: The Dilemmas of Education and Training Programs" in Stern, David and Eichorn, Dorothy (eds.) Adolescence and Work: Influences of Social Structure, Labor Markets and Culture. Hillsdale, NJ: Lawrence Erlbaum Associates.

Hahn, Andrew and Lerman, Robert

1985 What Works in Youth Employment Policy? Washington, D.C.: National Planning Association.

Hall, V.C.; Howe, A.; Markel, S.; Lederman, N.

1986 "Behavior, Motivation, and Achievement in Desegregated Junior High School Science Classes." Journal of Educational Psychology, 78(2):108-

Hamilton, Stephen F. and Crouter, Ann C.

1980 "Work and Growth: A Review of Research on the Impact of Work Experience on Adolescent Development." Journal of Youth and Adolescence, 9(4):323-338.

Hamilton, S.F. and Hamilton, M.A.

- 1989 "Teaching and Learning on the Job: A Framework for Assessing Workplaces as Learning Environments." Paper prepared for the Bureau of Apprenticeship and Training, U.S. Department of Labor. Ithaca, NY: Cornell University, College of Human Ecology.

Jargowsky, Paul A. and Bane, Mary Jo

- 1990 "Ghetto Poverty: Basic Questions" in Lynn, L.E. and McGeary, M.G. (eds.) Inner-City Poverty in the United States. Washington, D.C.: National Academy Press.

Jencks, C. and Meyer, S.E.

- 1990 "The Social Consequences of Growing Up in a Poor Neighborhood" in Lynn, L.E. and McGeary, M.G. (eds.) Inner-City Poverty in the United States. Washington, D.C.: National Academy Press.

Kandel, D.B.

- 1986 "Processes of Peer Influences in Adolescence" in Silbereisen, R.K.; Eyferth, K.; Rudinger, G. (eds.) Development as Action in Context. Berlin: Springer-Verlag.

Kohn, M.

- 1977 Class and Conformity: A Study in Values. Chicago: University of Chicago Press.

Kohn, M. and Schooler, C.

- 1978 "The Reciprocal Effects of the Substantive Complexity of Work and Intellectual Flexibility: A Longitudinal Assessment." American Journal of Sociology, 84(1):24-52.

Kohn, M. and Schooler, C.

- 1973 "Occupational Experience and Psychological Functioning: An Assessment of Reciprocal Effects." American Sociological Review, 38:97-118.

Lempers, J.D.; Clark-Lempers, D.; Simons, R.L.

- 1989 "Economic Hardship, Parenting, and Distress in Adolescence." Child Development, 60:25-39.

Levitan, Sar and Gallo, Frank

- 1988 A Second Chance: Training for Jobs. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Paper No. 1

Maccoby, Eleanor E. and Martin, John A.

1983 "Socialization in the Context of the Family: Parent-Child Interaction" in Mussen, P.H. (ed.) Handbook of Child Psychology (Vol. 4). New York: Wiley.

Mangum, Garth

1988 Youth Transition from Adolescence to the World of Work. Washington, D.C.: William T. Grant Foundation.

Mangum, Garth

1982 "CETA as a 'Second Chance' System for Disadvantaged Youth" in Taylor, Robert; Rosen, Howard; Pratzner, Frank (eds.) Job Training for Youth. Columbus, OH: National Center for Research in Vocational Education.

Mangum, Garth and Walsh, John

1980 Employment and Training Programs for Youth: What Works Best for Whom. Washington, D.C.: U.S. Department of Labor.

Maynard, Rebecca

1980 The Impact of Supported Work on Young School Dropouts. New York: Manpower Demonstration Research Corporation.

McLoyd, Vonnie C.

1990 "The Impact of Economic Hardship on Black Families and Children: Psychological Distress, Parenting and Socioemotional Development." Child Development, 61:311-346.

Meyer, Robert and Wise, David

1982 "High School Preparation and Early Labor Force Experience" in Freeman, R. and Wise, D. (eds.) The Youth Labor Market Problem: Its Nature, Causes and Consequences. Chicago: University of Chicago Press.

Mortimer, J.T. and Finch, M.D.

1986 "The Effects of Part-Time Work on Adolescent Self-Concept and Achievement" in Borman, K.M. and Reisman, J. (eds.) Becoming a Worker. Norwood, NJ: Ablex Publishing Corporation.

Mortimer, J.T. and Lorence, J.

1981 "Work Experience and Work Involvement." Sociology of Work and Occupations, 8:297-326.

Mortimer, J.T. and Lorence, J.

1979 "Work Experience and Occupational Value Socialization: A Longitudinal Study." American Journal of Sociology, 84:1361-1385.

National Commission for Employment Policy

1987 The Job Training Partnership Act. Washington, D.C.: National Commission on Employment Policy.

Northrup, Herbert R.; Perry, Charles R.; Anderson, Bernard E.; Rowan, Richard L.

1976 The Impact of Government Manpower Programs: In General, and on Minorities and Women. Philadelphia: University of Pennsylvania, Wharton School.

Ogbu, John

1985 "A Cultural Ecology of Competence Among Inner-City Blacks" in Spencer, M.; Brookins, G.; Allen, W. (eds.) Beginnings: The Social and Affective Development of Black Children. Hillsdale, NJ: Lawrence Erlbaum Associates.

Peterson, Gary W. and Rollins, Boyd C.

1987 "Parent-Child Socialization" in Sussman, M.B. and Steinmetz, S.K. (eds.) Handbook of Marriage and the Family. New York: Plenum Press.

Ruggiero, M.

1984 "Work as an Impetus to Delinquency: An Examination of Theoretical and Empirical Connections." Ph.D. dissertation, University of California.

Ruggiero, M.; Greenberger, E.; Steinberg, L.

1982 "Occupational Deviance Among First-Time Workers." Youth and Society, 13:423-448.

Rumberger, R.W. and Daymont, T.N.

1984 "The Economic Value of Academic and Vocational Training Acquired in High School" in Borus, M.E. (ed.) Youth and the Labor Market: Analyses of the National Longitudinal Survey. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Sawhill, Isabel V.

1989 "Rethinking Employment Policy" in Bowden, Lee D. and Skidmore, Felicity (eds.) Rethinking Employment Policy. Washington, D.C.: Urban Institute Press.

Paper No. 1

Shrum, Wesley and Cheek, Neil H.

- 1987 "Social Structure During the School Years: Onset of the Degrouping Process." American Sociological Review, 52:218-223.

Sipe, Cynthia; Grossman, Jean Baldwin; Milliner, Julita A.

- 1988 Summer Training and Education Program (STEP): Report on the 1987 Experience. Philadelphia: Public/Private Ventures.

Steinberg, Laurence and Dornbusch, Sanford M.

- 1991 "Negative Correlates of Part-Time Employment During Adolescence: Replication and Elaboration." Developmental Psychology, 27(2):304-313.

Steinberg, L.; Elmen, J.D.; Mounts, N.S.

- 1989 "Authoritative Parenting, Psychosocial Maturity and Academic Success Among Adolescents." Child Development, 60:1424-1436.

Steinberg, L.; Greenberger, E.; Garduque, L.; Ruggiero, M.; Vaux, A.

- 1982 "Effects of Working on Adolescent Development." Developmental Psychology, 18:385-395.

Stern, David and Nakata, Yoshi-fumi

- 1989 "Characteristics of High School Students' Paid Jobs and Employment Experience after Graduation" in Stern, David and Eichorn, Dorothy (eds.) Adolescence and Work: Influences of Social Structure, Labor Markets, and Culture. Hillsdale, NJ: Lawrence Erlbaum Associates.

Stern, D.; Stone, J.R.; Hopkins, C.

- 1990 "Quality of Students' Work Experience and Orientation Toward Work." Youth and Society, 22(2):263-282.

Sticht, Thomas; Armstrong, William; Hickey, Daniel; Caylor, John

- 1987 Cast-Off Youth: Policy and Training Methods from the Military Experience. New York: Praeger.

Taggart, Robert

- 1981 A Fisherman's Guide: An Assessment of Training and Remediation Strategies. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

U.S. Bureau of the Census

1985 "Marital Status and Living Arrangements" in Current Population Reports, Series P-20. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education

1989 Digest of Education Statistics: 1989. Washington, D.C.: U.S. Government Printing Office.

Wolf, Wendy; Liederman, Sally; Voith, Richard

1987 The California Conservation Corps: An Analysis of Short-Term Impacts on Participants. Philadelphia: Public/Private Ventures.

Yamoor, C.M. and Mortimer, J.T.

1990 "Age and Gender Differences in the Effects of Employment on Adolescent Achievement and Well-Being." Youth and Society, 22(2):225-240.

SUPPORTIVE SERVICES FOR YOUTH

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I. INTRODUCTION

Many programs for disadvantaged youth include supportive services intended to help individuals overcome social and personal barriers that might prevent them from (a) participating in a program's core activities, (b) achieving desired outcomes and/or (c) maintaining the outcomes over time (e.g., remaining employed, drug-free and self-sufficient). This paper addresses the role of supportive services in the context of employment and training for disadvantaged youth, primarily those between the ages of 1 and 22 who would be eligible for programs funded under the Job Training Partnership Act (JTPA), especially Title II-A (youth and adult training) and Title II-B (summer youth programs). Other relevant federal employment and training programs targeting the economically disadvantaged include the Job Corps and the Job Opportunities and Basic Skills (JOBS) training program for recipients of Aid to Families with Dependent Children (AFDC). The paper also examines the use of supportive services in these programs and in related non-employment youth programs (such as juvenile justice and mental health programs).

The intent is to document (a) the types of supportive services provided; (b) the way they are most commonly delivered; and (c) evidence of their effect on youth outcomes. It must be emphasized that our ability to address these issues is greatly limited by the lack of empirical study of supportive services and how they contribute to overall program outcomes for disadvantaged youth. The existing literature on employment and training programs, including those that serve disadvantaged youth, typically treats supportive services as an ancillary program component and does not go much beyond describing

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their presence. As there has been no attempt to separate the effects of core employment and training services from the effects of supportive services, any conclusions about the possible impact of supportive services on youth program participation and overall program effectiveness must only be tentative.

Beyond categorizing supportive services as a secondary program component that seeks to reduce barriers to program participation and ultimately self-sufficiency, supportive services encompass a wide and sometimes overlapping range of activities and, thus, defy easy definition. Within the context of employment and training, assistance with transportation and child care are probably the most well-defined and well-known supportive services because these are so clearly connected to an individual's ability to participate in training, education and work activities. However, supportive services also address other problems--such as physical abuse, depression, lack of self-esteem, and alcohol or substance abuse--that may indirectly affect program participation and client outcomes. The definition, range and particular mix of supportive services offered by a program depend on the characteristics and assessed needs of the participating youth, the program's objectives and resources, and the organization providing the services.

II. CHARACTERISTICS OF THE POPULATION

The disadvantaged youth population generally shares characteristics that lead to a range of problems and indicate a role for different types of supportive services. The most important characteristics relate to family structure, education level, health status and involvement in criminal activities.

FAMILY STRUCTURE AND GEOGRAPHIC DISTRIBUTION

Growing up in poverty has a major impact on the social, psychological and economic well-being of children, and poverty is often associated with particular family and neighborhood patterns. In general, poor youth, especially minorities, are likely to live in female-headed families. In 1989, 12 million children, or 19 percent of all children, were poor. Of these children, more than half (57%) lived in female-headed families. The poverty rate for children was especially high for those in minority female-headed families--63 percent of black children, 64 percent of Hispanic children and 43 percent of white children in female-headed families were poor. The incidence of poverty is also pronounced for families headed by a teenager. In 1985, 3.1 million family households were headed by a person under 20 years of age and almost one-third (30%) of these families lived below the poverty line. The rate was 60 percent for families headed by a black teenager (Wetzel, 1987; U.S. Congress, Committee on Ways and Means, 1991).

High rates of teenage childbearing among poor families is one important reason childhood poverty is so prevalent in female-headed households. The extent of teenage sexual activity has increased over the past two decades, with the overall increase attributed to white, nonpoor young persons. However, the rate of sexual activity among poor youth has remained consistently higher than for all teenagers (U.S. Congress, Committee on Ways and Means, 1991). Regardless of race, disadvantaged young women are three to four times more likely to become unwed mothers than their more advantaged counterparts, perpetuating the cycle of poverty into the next generation (Wetzel, 1987).

Between 60 and 70 percent of poor minority children live in metropolitan areas, compared with about 30 percent of poor white children. Inner-city neighborhoods with concentrated poverty represent environments in which youth face numerous barriers as they grow to adulthood. Much research on so-called underclass areas of persistent poverty describes the problems of youth in various dysfunctional life situations (e.g., temptation of drugs and the underground economy, exposure to criminal activity, lack of middle-class role models, inferior schools, and poor housing) (Wilson, 1988; Sawhill and Ricketts, 1986).

Lerman¹ suggests that the combination of growing up without fathers, on welfare and in smaller families may contribute to employment difficulties for youth. For example, many black youth who have trouble obtaining jobs may find their situation worsened because they do not have an informal network of family and friends who could provide job information. In particular, the lack of stable adult black males to serve as role models for youth is of growing concern among policymakers and black citizens (Mincy and Wiener, 1990; and Ferguson, 1990).

EDUCATION

Educational attainment is highly associated with lifetime earnings and economic well-being. For example, high school dropouts (age 20 to 24) experience unemployment rates 10 to 14 percentage points higher than those of graduates, and minority youth have higher dropout rates than white youth (Wetzel, 1987; U.S. Department of Education, 1989). Low-income youth are often educationally as well as economically disadvantaged.

In the 1970s and 1980s, some progress was made in improving the educational attainment of minorities, but the aggregate statistics mask the continuing severity of the problem. Black dropout rates declined from about 38 percent to about 15 percent, but white and Hispanic dropout rates remained almost unchanged--13 percent for whites and a very high 41 percent for Hispanics. In addition, minority youth are more likely than whites to be behind in school.¹

However, simply remaining in school (or even graduating from high school) does not necessarily mean youth are adequately educated. Recent reports from the National Assessment of Education Progress have raised concerns about the low competency levels of today's youth and the fact that overall ability levels are not improving. Although the test scores of minority youth show some recent improvement, they still are considerably lower than the scores of white youth on reading, math and science tests.¹

Disadvantaged youth are also more likely than other youth to be labeled as having learning disabilities that constrain their success in regular educational and work environments. There is considerable controversy about what constitutes a learning disability and how children are identified, screened, diagnosed and treated. However, there is growing evidence that biogenetic and environmental conditions contribute to some learning disabilities, and that poor children are at a higher risk because of prenatal conditions (e.g., mother's poor nutrition or use of drugs, cigarettes or alcohol) and living conditions (e.g., exposure to lead or poor nutrition). Although only about 4 percent of the general

¹ See Lerman, second volume of this series.

population is thought to have learning disabilities, about 25 percent of JTPA participants, 40 percent of AFDC recipients and 60 percent of adult education students may be classified as learning disabled (Nightingale, et al., 1990b).

HEALTH

In general, teenagers (aside from those who become pregnant) have fewer health care needs than do older persons and younger children. Nevertheless, there is some evidence that even though very few youth have health problems that prohibit them from participating in employment and training programs, many have health care needs that program staff feel must be addressed.

The most serious health problems experienced by Job Corps participants, for example, relate to mental health (which is generally not immediately obvious), dental problems, substance abuse, obesity, venereal disease, pregnancy (as high as 10 to 12 percent of all female enrollees in some centers), diabetes, and poor vision or hearing (Richardson, et al., 1985). Although few Job Corps participants have problems with "hard drugs," there is a "significant problem of substance abuse among new enrollees . . . typically involving alcohol or marijuana use and, at some centers, amphetamine use" (Richardson, et al., 1985:xi).

Criminal justice data also suggest that drug abuse is a serious problem among at-risk youth. In 1985, 350,000 youth were arrested and in jail, prison, or juvenile correction facilities for drug-related offenses (Wetzel, 1987).

Young adults are less likely to be covered by health insurance than are older adults. In 1985, 21 percent of 16- to 24-year-olds were not covered by health insurance or Medicaid compared with about 13 percent of the overall civilian population. Health care coverage ratios are also much lower for minority youth than for white youth (Wetzel, 1987). This may be one reason that many health care problems go unattended.

MULTIPROBLEM YOUTH

As this brief discussion indicates, disadvantaged youth may face several barriers to participating in employment and training programs and achieving self-sufficiency. Of particular importance are (a) dropping out of school, (b) health problems, (c) early sexual activity and pregnancy, (d) living in or growing up in poor female-headed families, (e) residing in urban areas of concentrated poverty and (f) involvement with the criminal justice system.

Of even greater importance, some youth have a combination of problems that negatively affect their prospects for future employment and stability. There are no studies that clearly define the population with overlapping problems. However, Lerman,² in discussing the problems of youth with multiple problems, cites Dryfoos (1990), who estimates that about 10 percent of all 10- to 17-year-olds may be "very high-risk"--"over 50 percent of this group have been arrested, 70 percent have engaged in unprotected sex, 75 percent have dropped out or are two years behind in school, and most smoke cigarettes, drink and/or use marijuana." Another 15 percent are in the "high-risk" category, and 25 percent are at "moderate risk." Only about half of all youth are estimated to be in the "low-risk" group. Although the majority of very high and high-risk youth (and all youth) are white, the high-risk categories include disproportionate numbers of black and Hispanic youth.

These risk factors are compounded by the continuing presence of sex and race discrimination in society. Early literature on youth employment documents the unique discrimination faced by minority male youth in particular (Stromsdorfer, 1980). Although it is probably true that discrimination in general has abated, it is still a problem. For example, recent reports by the U.S. General Accounting Office (GAO) suggest that JTPA programs provide higher-level skills training to adult males than they provide to females and youth (GAO, 1991).

The characteristics of participants in youth employment and training programs reflect some of the general patterns described above. According to a GAO report on youth participating in JTPA Title II-A programs, 64 percent of 15- to 21-year-olds were not enrolled in school and 27 percent of all youth participants were high school dropouts. About one-third of the youth were 15 to 17 years of age; the other two-thirds were between 18 and 21. Only about 20 percent had any recent work experience, about 25 percent were on welfare and 11 percent had a dependent child (GAO, 1985).

Thus, while it is still not possible to disaggregate the causes and effects of problems facing youth, there is fairly strong evidence that poor, minority youth are more likely to have difficulties and multiple problems that negatively affect their chances of making successful transitions into adulthood. JTPA and other employment-related programs targeting disadvantaged youth must recognize and address the multiple problems facing many of their clients. Supportive services--in addition to training, education and work experience--are one way local service deliverers attempt to do this. The following sections summarize the experiences of employment and training programs as well as related non-employment and training programs in providing supportive services to youth.

² See Lerman, second volume of this series.

III. SUPPORTIVE SERVICES IN EMPLOYMENT AND TRAINING PROGRAMS

Much has been written about employment and training programs for economically disadvantaged youth and adults, and some have been rigorously evaluated. In addition to employment-related services to clients (e.g., vocational training, classroom remedial education, on-the-job training, job search assistance and work experience), many programs have also provided supportive services. Although there is considerable information about the nature and impact of these programs' employment, education and training services, there is much less detailed information, and virtually no evaluation findings, about supportive services. This section summarizes the little that is known about supportive services in employment and training programs.

THE ROLE OF SUPPORTIVE SERVICES

In their 1978 report on supportive services in the Comprehensive Employment and Training Act (CETA), which preceded JTPA, Turner and Conradus (1978) describe them as controversial. Such services could be relatively costly (in dollars and in time), there was no evidence about whether they were critical to success and they were generally considered supplemental.

Throughout the history of employment and training programs, the role and functioning of supportive or ancillary services have been continuously questioned. The general scaling down of such services which has occurred under CETA could be attributed to their costs in relation to results, or to the recession, which did not allow for the support of these services no matter how worthy their objectives, or to the feeling that the government cannot and should not do everything because individuals should take responsibility for their own lives (Turner and Conradus, 1978:5).

Turner and Conradus note that there was no source of information about the level of supportive services being provided in CETA programs, the extent of need among CETA clients or the effect of such services on employment-related outcomes (1978:23).

In many ways, current discussion has changed little since then. There is still very little statistical information about the number of clients receiving supportive services, the intensity of the services or the impact of the services. There is some evidence, though, of growing recognition in the employment and training field that effective programs should include comprehensive services to address multiple problems. As discussed in the following sections, the most recent "generation" of youth programs often includes a broad range of supportive services. However, there is also growing recognition that not all youth need the same services, and staff are increasingly called upon to determine who

needs which services (assessment) and how those services are provided (case management).

INVENTORY OF SUPPORTIVE SERVICES

The changing role of supportive services is evident from a review of reports about employment and training programs. Table 1 summarizes the services offered through selected programs on which reports or evaluations were readily available. With few exceptions, the reports on which the table is based note only that supportive services were available, not how many clients received them. The inventory is useful, though, in showing that supportive services have been included in many employment and training programs and that more recent programs appear to use more comprehensive program models.

In the 1960s, local programs under the Manpower Development and Training Act (MDTA) of 1962 allowed funds to be used for services that would support the core employment and training activities. Supportive services included transportation assistance, child care assistance and such educational activities as tutoring in basic skills. Local MDTA programs reportedly made "extensive use of supportive services," but there are no summary statistics on the number of persons they served or the types of services they received. Since MDTA funded thousands of local programs, there was variation in the types of services offered and how they were provided. The most typical manner of providing services involved informal interagency agreements, such as brokering or bartering; in many instances no funds were exchanged (Turner and Conradus, 1978).

Under CETA, which replaced MDTA in 1973, the informal role of supportive services continued, and the working definition of supportive services used by the U.S. Department of Labor was "services that do not have employment as their direct goal" (Turner and Conradus, 1978:1). A long-term implementation study of CETA (Mirengoff, et al., 1982) found that of the 22 CETA prime sponsor areas examined, about 80 percent had resources available to pay for supportive services. In that study, local officials reported child care and transportation were the services most needed and most used by participants: transportation especially in rural areas, child care and basic education in urban areas. Despite the recognized need, the provision of services was reportedly very "limited," presumably compared to MDTA (Mirengoff, et al., 1982).

Unlike MDTA and CETA, supportive services were more formalized under the Job Corps program and the Work Incentive (WIN) program for AFDC recipients, which both operated in the 1970s. WIN, enacted in 1967, allowed funds to be used to pay for child care, transportation and any other services that could be construed as "training-related expenses" or "work-related expenses." Both the Job Corps and WIN allowed the

Table 1
SUPPORTIVE SERVICES IN SELECTED
EMPLOYMENT AND TRAINING PROGRAMS

Program or Project	Supportive Services Provided	Percent (%) of Participants Receiving Supportive Services	Information Source
Manpower Development and Training Act (MDTA) 1962-1973	Transportation, child care, education	Not available	Turner and Conradus, 1978
Comprehensive Employment and Training Act (CETA) 1973-1982	Health care, child care, counseling, transportation, educational services, family planning, legal services	Not available	Turner and Conradus, 1978; Mirengoff, et al., 1982
Job Training Partnership Act (JTPA) 1983-present	Cash payments, transportation, child care, handicapped services, health care, financial counseling, meals, temporary shelter	Not available	U.S. General Accounting Office, 1985
Youth Incentive Entitlement Pilot Projects (YIEPP) 1977-1980	None reported	Not available	F. Kas, et al., 1982; Diaz, et al., 1982
Project Redirection 1980-1983	Parenting classes, recreation, birth control and other counseling, mentors	Parenting 49% Recreation 29% Birth control counseling 35% Other counseling 33% Mentors 100%	Polit, et al., 1985
Supported Work Experience Demonstration 1975-1980	Peer-group support, work orientation, job readiness and placement	Not available	Manpower Demonstration Research Corporation, 1980a, 1980b
Teen Parent Employability Demonstration (TPED) Projects 1987-1989	Child care, transportation, life skills training, mentors, housing assistance, parenting skills training, meals, counseling, follow-up services	Mentors 87% Parenting skills 97% Child care 67% Transportation 28% Counseling 98% Meals 70%	Cohen, 1991

Table 1 (continued)
SUPPORTIVE SERVICES IN SELECTED
EMPLOYMENT AND TRAINING PROGRAMS

Program or Project	Supportive Services Provided	Percent (%) of Participants Receiving Supportive Services	Information Source
Work Incentive Program (WIN), 1968-1988	Counseling, transportation, child care, health services, legal services, allowances, emergency cash, clothing	Not available	Turner and Conradus, 1978; Mitchell, et al., 1980
Job Opportunities and Basic Skills (JOBS) Training Program 1989-present	Child care, transportation; post-program Medicaid and child care	Not available	U.S. Congress, 1988
Job Corps 1965-present	Counseling, work orientation, residential living, allowances, health and dental care, education, recreation	All services 100%	Maller, et al., 1982; Turner and Conradus, 1978
JOBSTART Demonstration Program 1988-1989	Child care, transportation, counseling, life skills training, cash payments	Supportive services 43%	Auspos, et al., 1989
Summer Training and Education Program (STEP) Demonstration 1985-present	Life skills training: decision making, family planning, substance abuse, health, etc.	All services 100%	Sipe, et al., 1988
Youth Opportunities Unlimited (YOU) Demonstration Projects 1990-present	Counseling, mentoring, substance abuse treatment, recreational health services, housing, tutoring, child care, parenting skills training	Not available	U.S. Department of Labor ^a
Career Beginnings 1987-1989	Counseling, mentoring, family planning, workshops	Counseling 75% Mentoring 64% Workshops 24%	Cave and Quint, 1990

^a Information on YOU was obtained from various materials, including the "Youth Opportunities Unlimited Advisory Board Briefing Book" (undated), and from personal conversations with David Lah of the Employment and Training Administration.

following types of supportive services: (1) counseling; (2) program and employment orientation; (3) educational services, such as general equivalency diploma (GED) preparation; (4) transportation; (5) child care; (6) physical and mental health services; (7) legal and bonding services; and (8) use of petty cash funds for emergencies (Turner and Conradus, 1978).

JTPA, enacted in 1982 to replace CETA, recognized the need for supportive services but officially limited its support to about 15 percent of total funding for adult and youth training in each service delivery area (SDA).

By the late 1980s and early 1990s, the role of supportive services in employment and training programs had expanded. As noted in Table 1, many programs and demonstration projects incorporated a range of activities and services to address the multiple problems facing disadvantaged youth. Counseling and workshops, which in earlier employment and training programs focused on job search skills, career planning and vocational interests, now also address health and nutrition, parenting skills and responsible sexual behavior. Mentoring has also been included in programs that serve youth, recognizing that many youth do not have stable adult role models in their families or neighborhoods.

For example, the JOBSTART demonstration for high school dropouts included, by design, an emphasis on supportive services, drawing from the Job Corps experience (Auspos, et al., 1989). Similarly, Career Beginnings provides a coordinated package of supportive services, combined with summer jobs, to high school juniors and seniors (half of whom are from low-income families) to encourage postsecondary schooling. The Career Beginnings services, provided on college campuses, include mentoring, counseling and information about college (Cave and Quint, 1990). The Summer Training and Education Program (STEP) formalizes the provision of supportive activities in an 18-hour Life Skills and Opportunities component, in which all STEP students participate (Sipe, et al., 1988).

The Youth Opportunities Unlimited (YOU) projects represent potentially one of the more comprehensive efforts to serve poor youth and have incorporated extensive supportive services. The Department of Labor (DOL) initiated YOU in seven high-poverty communities in 1990. All the projects are encouraged to be innovative and to draw on the resources of many different programs. The array of services includes education and training as well as counseling, mentoring, drug prevention, recreational and cultural activities, health care, housing assistance, and special services to teen parents, such as child care and classes in parenting skills. There are no reports yet about

the operations or results of the YOU demonstrations, but all of the project plans include a broad range of supportive services to be used to the "maximum extent possible."³

Finally, in the welfare policy area, the new Family Support Act (FSA) makes separate provision for supportive services (child care and health care) both while a welfare recipient is in training or education and for 12 months after leaving AFDC due to employment. In addition, the Job Opportunities and Basic Skills (JOBS) training program component under FSA (like WIN before it) continues to fund transportation and other training-related services.

Thus, employment and training programs have historically offered some supportive services, primarily transportation and child care assistance. The Job Corps and several of the more recent youth projects include a comprehensive range of services to meet the multiple needs of clients. Periodically, the role of supportive services has resurfaced in policy debates around employment and training, but they have not played a central role. There is clear recognition that supportive services should be included in employment and training programs, but no real understanding of how many youth (or adults) need which supportive services and how important such services are in terms of core program outcomes like employment.

OBJECTIVES OF SUPPORTIVE SERVICES

A useful way to discuss supportive services in current employment and training programs (e.g., JTPA, the Job Corps, JOBS and YOU) is to consider the reasons they are included and the objectives they are intended to meet. Supportive services have at least four purposes in youth programs. For descriptive ease in this section, services are categorized as follows:

- incentive services,
- enabling services,
- compensatory services, and
- intensive or therapeutic services.

³ Information on YOU was obtained from various DOL materials, including the "Youth Opportunities Unlimited Advisory Board Briefing Book" (undated), and from personal conversations with David Lah of the Employment and Training Administration.

Any service listed in Table 1 might fit into one or more of these categories, depending on the purposes and objectives of a particular program. Youth entering or participating in programs may receive one or more of the four types. In addition, services in employment and training programs are sometimes provided to participants both while they are active in core components and after they technically leave a program. The categorizations presented below represent one way to conceptualize the role of supportive services based on the reports reviewed.⁴

Incentive Services

Some youth programs have had difficulty attracting participants and keeping them in programs once enrolled (Betsey, et al., 1985). Supportive services, in the form of cash or in-kind services, are sometimes provided as incentives to attract youth to programs.

Cash stipends and allowances are one type of incentive helping to offset participation costs (e.g., transportation and meals) or providing income supplementation. Stipends have ranged from about \$3 a day to hourly compensation equal to the minimum wage. In a review of JTPA Title II-A programs, the GAO (1985) found that about 40 percent of SDAs offered participants needs-based cash payments to offset the costs of participation. In the SDAs that provided such payments, between 13 and 25 percent of enrollees received an average of \$34 to \$44 a week (in 1985 dollars). Similarly, the WIN program and some new JOBS programs provide a cash incentive of \$35 a week during participation in training, education or job search activities.

The effect of cash stipends has not been extensively analyzed. Taggart (1981:ix) cautions that cash incentives sometimes "attract and hold some participants . . . and [discourage] transition into unsubsidized employment." Presumably he is referring to the larger cash payments (such as minimum wage), since it is unlikely that \$30 to \$40 a week would provide much incentive. In fact, there is some evidence that stipends and allowances alone are not sufficient to maintain participation if the reason youth drop out is related to pregnancy or other personal problems. For example, a primary reason Youth Employment and Demonstration Projects Act (YEDPA) programs in the 1970s had difficulty maintaining participation was the high incidence of teenage pregnancy and childbearing among women participants (Betsey, et al., 1985).

In-kind supportive services may also act as an incentive for some individuals to participate in employment and training programs. The availability of child care--an essential

⁴ An alternative way to discuss the various types of services would be to address each type of service separately (e.g., transportation, child care and counseling). But since not all youth need the same services, this section considers the role of supportive services within the overall context of program objectives and client needs.

service for mothers who work or attend school--can be a primary incentive that attracts young mothers to employment-oriented programs (Nightingale, et al., 1991). Some of the DOL-funded teen parent employability demonstration programs provided baby clothes, formula, toys and diapers to encourage teen mothers to continue in the programs (Cohen, 1991:17).

However, there is no clear evidence that supportive services per se motivate individuals to participate in employment and training. For example, one of the lessons gleaned from the recent JOBSTART demonstrations is that teen dropouts need "extensive supportive services such as assistance with child care and transportation, counseling, [and] life skills training." Despite the inclusion of such services in JOBSTART, about one-third of the participants still dropped out. The evaluators suggest that it is not enough to simply provide the services, but programs must also create a "supportive environment" that includes case management and client advocacy (Auspos, et al., 1989:17).

Enabling Services

Supportive services may enable clients to participate in a program. Some youth require certain services in order to be able to participate--for example, transportation, child care, meals, work clothes, or books and supplies. Although cash allowances, as noted above, might be used for these services, many programs provide this support in kind (e.g., bus tokens, child care vouchers, legal services or training supplies).

These enabling services appear to be among the most commonly provided supportive services in youth and adult employment and training programs, as noted in Table 1. The WIN and JOBS programs for AFDC recipients essentially have viewed supportive services in this way, and JOBS includes child care as an entitlement, not just an ancillary service.

There is very little information, though, on the number or proportion of participants in JTPA or other programs who need or receive such services. (This is discussed in the next section.) In part, the lack of statistical information is exacerbated by the fact that different programs and agencies follow different conventions for reporting provision of services and client outcomes.

Compensatory Services

Some youth employment and training programs include a range of supportive services intended to compensate for social disadvantages. The compensatory services include mentoring, recreation activities, and instruction in personal hygiene, financial management, and responsible work and sexual behavior. Berlin (1984) stresses the importance

of other supportive services offered to disadvantaged youth, especially child care for those who have children. The design of the Job Corps incorporates such compensatory services, as do several of the recent youth demonstration projects, such as JOBSTART, Career Beginnings and YOU.

Mentoring activities (i.e., sustained personal relationships between stable, caring adults and at-risk youth) also fit into this category, in that they are intended to provide positive and supportive role models for disadvantaged youth. Ferguson (1990) explains that mentors often assume "regular supplemental parenting roles." In fact, Ferguson eloquently argues that disadvantaged youth often need someone outside the immediate family, school and social service organizations to help the youth learn to "manipulate his environment in a positive way." Mincy and Wiener (1990) have designed a mentoring program model for young adolescent black males, based on Ferguson's theories, that emphasizes sex education, family planning and parental responsibility through a combination of teaching, nurturing and motivating. The DOL Teen Parent Employability Development (TPED) programs and the YOU demonstrations, among others, include mentoring components for teenagers.

Therapeutic Services

Some youth need fairly intensive supportive services in order to overcome serious, potentially serious or multiple problems, including those related to physical or mental health, housing, substance abuse or physical abuse. Intervention services (which can be either short-term or long-term) are provided either sequentially or in conjunction with other program components. Therapeutic services include, for example, professional counseling, emergency dental or medical services, and emergency housing assistance. The extent to which youth employment and training programs provide these intensive services depends on whether severely disadvantaged clients are a target population. The Job Corps program, which is perhaps the most intensive (and serves the most disadvantaged), screens all entrants for problems that require intervention, then provides needed treatment and services.

Postprogram Services

In addition to supportive services that might be provided to youth during employment, education or training programs, postprogram services are becoming more common, as is evident in JOBS and TPED. These are sometimes referred to as follow-up, transitional or after-care services. Postprogram supportive services range from periodic peer-group support activities and counseling, to access to information and referral centers, to resources for child care, health care and transportation.

In the employment and training area, postprogram services appear to be more prevalent in those programs serving teenage parents. Until recently, JTPA programs formally limited postprogram activity to contacting individuals at a specified period after termination. Most JTPA-funded programs did not allow JTPA resources to be used for such postprogram services as counseling. However, there are some JTPA-funded programs that also have other funding sources (e.g., TPED) and maintain ongoing contact with youth for extended periods after they complete formal components (Cohen, 1991).

FSA and its JOBS program for AFDC recipients formalize postprogram services, drawing on the experiences of several state-initiated work-welfare programs in the 1980s. Under FSA, one year of extended child care and Medicaid coverage is provided to families that leave AFDC as a result of employment. These formal transitional services are important work-related supportive services for families seeking to become self-sufficient. As noted below, there is some evidence that these postprogram services help young families.

SUMMARY OF SUPPORTIVE SERVICES

Employment and training programs for youth have traditionally included supportive services, primarily transportation and life skills counseling. The life skills components of some programs have been expanded to address a range of issues intended to help youth make successful transitions to adulthood, including instruction on responsible work and sexual behavior, and mentoring. However, some youth need additional supportive services (e.g., child care and counseling) due to their circumstances. Employment and training programs that serve the most disadvantaged youth have incorporated a broader range of supportive services.

IV. PROVISION OF SUPPORTIVE SERVICES

The way supportive services are provided depends on (a) the type of program or agency, (b) the backgrounds and qualifications of staff, and (c) community resources. For example, many JTPA programs refer clients to other agencies for child care or counseling since JTPA money for supportive services is limited. Some SDAs and many work-welfare programs, though, contract with other agencies or institutions for specific services. And many programs, as noted, provide participants with cash or vouchers for services provided elsewhere.

As early as 1978, four supportive service models were being used in CETA programs (Turner and Conradus, 1978:19-21), though no information is available about how many programs fit into each model. The topology is still relevant for categorizing how services are delivered in employment and training programs today:

- Model 1: No provision for supportive services;
- Model 2: Provision of supportive services through interagency agreements;
- Model 3: Subcontracting for supportive services, separate from employment and training functions; and
- Model 4: Provision of supportive services by deliverers of employment and training (either under subcontract or through in-house service delivery operations).

The GAO (1985) reports that 95 percent of SDAs in 1985 were providing some supportive services, with transportation and child care being the most common (in 85 and 77 percent of all SDAs, respectively). Other reported common services include special services for handicapped persons (57%), health care (53%), financial counseling (43%), meals (41%) and temporary shelter (34%).

Corresponding to the program models listed above, the GAO (1985) reports that 60 percent of the SDAs had nonfinancial agreements with other agencies to provide supportive services to JTPA participants (Model 2). Fifty-seven percent (57%) contracted with outside vendors to provide supportive services (Model 3); and 30 percent provided supportive services directly (Model 4). In addition, 65 percent of SDAs in 1985 provided cash to participants to pay for needed services.

There are obvious benefits and risks associated with either providing services directly or contracting and referring clients out. For example, if programs have substantial resources (or few clients), it could be beneficial to the client to have all services available in-

house, delivered by regular program staff. However, if resources are limited or if a client has special problems, it is usually necessary to involve other agencies. This leads to difficulties of coordination, but to the extent that programs can easily use the services of other agencies, the clients will benefit.

Thus, most SDAs have provisions for supportive services through a variety of program models. The majority of SDAs have at least some arrangement with other agencies to provide supportive services. However, the GAO does not indicate the number or proportion of JTPA program participants who actually receive supportive services, whether funded by JTPA or by other programs.

There is increasing recognition in the employment and training field that many disadvantaged persons require multiple services, both direct and supportive (Porter, 1990; Public/Private Ventures, 1988). One way to assess client needs and to arrange and coordinate provision of services is case management. Although the concept of case management is not new--it dates back to the earliest years of social work practice--it is enjoying a resurgence of interest. In part, the increased attention to case management is related to the welfare reform programs that emerged in many states in the 1980s. It also has figured importantly in programs serving teenage parents and high-risk youth. As JTPA has moved to provide more services to the most disadvantaged, there is increasing interest in case management among JTPA administrators.

In the 1970s, state and local social service agencies administering Title XX Social Services programs and the WIN program described case management as "a set of interrelated activities performed by agency staff and clients to help sort out the complex array of bureaucratic regulations, policies and service providers" (Regional Institute of Social Welfare Research, 1977). By the mid-1980s, many state-initiated work-welfare programs (e.g., in Massachusetts, California and New York) used case management (Nightingale and Burbridge, 1987).

Despite the purported use of case management, there is no single set of activities and no one program model to describe it in employment and training programs. In some of the more bureaucratic programs (e.g., large work-welfare programs in welfare offices), case management essentially means agency staff carry a caseload and are responsible for tracking all activities and completing all required paperwork for their clients (National Governors' Association, 1991). In contrast, in many programs serving teen parents, case management means staff interact closely with clients, often over an extended period, and serve as advocates for their clients (Cohen, 1990).

Regardless of one's perspective on case management, it is generally recognized that an effective case management system begins with some form of assessment of the needs,

situation, goals and skills of individual clients. Because case management has its roots in traditional social work and in programs other than those directly involved with employment and training, it is discussed in Section V.

EFFECTIVENESS OF SUPPORTIVE SERVICES

As the previous sections indicate, supportive services are clearly a part of employment and training programs. But there is very little information about the extent to which supportive services are provided and even less empirical information about the need and the effectiveness of such services within the overall objectives of these programs. The policy and research controversy around supportive services described earlier continues: it is not clear whether supportive services are an essential activity or an enrichment activity; and if they are essential, it is not clear how many employment and training clients "need" services to successfully participate in programs and/or achieve self-sufficiency.

The ambiguity surrounding supportive services is evident in the experience of JTPA. The JTPA legislation recognized the need for some supportive services, but limits an SDA's expenditure for them to 15 percent of its funds, without special federal waivers. The objective was to provide supportive services to persons who otherwise would not be able to participate in JTPA programs. To date, SDAs have not requested approval to exceed the 15 percent limit, suggesting that the limit on supportive services has not negatively affected program activity or client service. However, Levitan and Gallo (1988) caution that the lack of supportive services makes it difficult for SDAs to target services to the most needy. Since JTPA can serve only a small portion of the eligible population, the supportive services limitation may influence who gets served.

Child care provides an example of the controversy about supportive services. Polit and O'Hara (1989) note that very few low-income teen mothers report child care as a serious need. There is also other research that suggests child care may not be an essential service for all employment and training participants with children. In the Supported Work Experience demonstration, fewer persons in the control group than in the treatment group cited child care as a barrier to employment and training (Masters and Maynard, 1981). Similarly, in an implementation study of WIN, many local staff reported that motivated clients could find their own child care if a job was available (Mitchell, et al., 1980). And when child care is provided by employment and training programs, only a small proportion of welfare mothers use it. In Massachusetts, for example, only about 14 percent of AFDC mothers in the Employment and Training Choices program used the subsidized child care available (Nightingale, et al., 1990a).

There is also mixed evidence about the effect of child care on the employment outcomes of mothers. In the evaluation of the Massachusetts program, child care was significantly related to whether or not mothers of young children under six remained employed, but there was no such positive effect for mothers of children over six years of age (Nightingale, et al., 1990a).

Despite the limited research evidence about the effect of child care and other supportive services on employment outcomes, it appears that some supportive services are important for at least some programs and some clients. Program operators have claimed since the 1960s that transportation and child care are among the most serious problems employment and training participants have (Mitchell, et al., 1980; Polit and O'Hara, 1989).

The importance of supportive services may help explain why evaluations of such demonstrations as the Youth Incentive Entitlement Pilot Projects (YIEPP) and Supported Work Experience have shown less positive impacts than designers expected. The YIEPP evaluation report suggests that one of the reasons the guaranteed job program was not more successful, especially with youth who had dropped out of school, was that those individuals needed supportive services that were not integrated into YIEPP (Diaz, et al., 1982). At least one local YIEPP administrator was quoted as saying that transportation problems were a serious impediment to participation.

It is also possible that supportive services have played an important role in the reported success of the Job Corps. Of the major youth employment and training programs reviewed for this paper, the Job Corps provides the most comprehensive set of supportive services, including allowances, physical and mental health treatment, and routine instruction in basic hygiene, health and pregnancy prevention. The residential character of most Job Corps sites may make it easier and more efficient to incorporate supportive services into the basic education and training activities.

The Job Corps has been carefully evaluated and has proven to be effective over a range of economic and noneconomic outcomes. At first, some observers attributed its success to the education components. However, Taggart (1981) implies that economic outcomes may be due to (a) the residential component and/or (b) supportive services, such as health care, counseling, recreation and motivation. That is, the program's effectiveness is probably due to more than just the education and training components.

Employment and training programs also have noneconomic objectives, for which supportive services may be particularly important. Burbridge (1983:55) notes that noneconomic outcomes for youth employment and training programs include (1) "improvements in job awareness, satisfaction, aspirations and work-related attitudes;" (2) "increases in self-esteem;" and (3) "improvements in health, education, family formation,

and responsible citizenship." The current DOL youth employment competencies also recognize the importance of non-employment outcomes by including such factors as work maturity in the JTPA performance standards system.

Achieving noneconomic outcomes may require supportive services beyond the traditional transportation allowances and child care, including counseling, mentoring, workshops, and postprogram support and advocacy. The Summer Training and Education Program (STEP), serving 14- and 15-year-olds at risk of dropping out of school, shows evidence of the importance of supportive services. In the original demonstration, youth participated for two summers of half-time work and half-time basic skills and life skills, plus one school year of supportive services. The life skills component was an important part of the program and included instruction on sexual decision-making, job equality, teenage pregnancy, AIDS prevention, substance abuse, family planning and general health issues. Early evaluation findings indicate that participants showed increased knowledge in these areas, though the effect on behavior was less obvious (Sipe, et al., 1988).

Thus, while there have been very few efforts to evaluate the independent effects of supportive services, their inclusion in employment and training programs suggests that they may contribute to program impacts.

SUMMARY

Since the 1960s, employment and training programs have included supportive services. Over time, the emphasis on such services has varied, at least in part because there is no consensus or evidence about whether they are essential to or simply enhance the core employment and training program. Neither is there much information about the extent to which participants have received them nor any indication that policymakers have been particularly interested in investigating this issue. Major evaluations have not included analysis of the effects of supportive services separate from those of core education or training activities or the program as a whole.⁵

Despite the lack of empirical evidence, experience among program operators suggests that supportive services are an important ingredient in employment and training programs. Some evaluations also suggest that supportive services contribute to program effectiveness. For example, the positive results of the Job Corps may be partly attributable to comprehensive supportive services and residential living, not just to the education

⁵ Evaluations of recent and ongoing demonstrations and programs (e.g., YOU, JTPA and JOBS) may provide new empirical findings on the effects of supportive services.

and training components. Similarly, such demonstrations as YIEPP may have had more significant impacts if they had included more supportive services.

Several of the more recent and visible youth employment and training programs operate comprehensive service delivery systems, with strong assessment components, case management, and a number of supportive services, including mentoring and life skills instruction as well as child care and transportation. This suggests that some program operators are aware of the value of supportive services and are concerned with determining who needs which services and how they should be delivered. The next section discusses these issues by drawing on the experiences of programs outside the employment and training field, particularly those that have traditionally provided comprehensive services to youth.

V. SUPPORTIVE SERVICES IN OTHER PROGRAMS

The previous section describes supportive services in employment and training programs. This section considers supportive services in other programs that serve disadvantaged youth, including developmental disabilities programs, mental health programs, juvenile justice programs, substance abuse treatment programs, runaway and homeless programs, and programs for pregnant and parenting teens.

Like employment and training programs, many other youth programs provide services designed to supplement core services. Primary supplemental services are transportation assistance, meals, health care referrals, child care and housing assistance--services designed to help a youth deal with immediate barriers to program attendance or personal stability. In contrast to the previous section, this section does not include a comprehensive literature review. The discussion is focused particularly on how the services are delivered in programs where they appear to be most prevalent. The intent is to provide employment and training policymakers and practitioners with an understanding of supportive services in other programs.

The section begins with a brief overview of the role of supportive services in youth programs, followed by a discussion of the range of services provided in selected programs and models for delivering the services, particularly case management approaches.

ROLE OF SUPPORTIVE SERVICES

Before describing the services and service delivery approaches used in non-employment and training youth programs, it is important to note the nature of these programs. Three types are relevant to this report: (a) programs serving the general population that include substantial numbers of disadvantaged youth (such as adult basic education and vocational education programs); (b) programs serving youth who are in crisis for one or more reasons (e.g., programs for homeless youth or teenage parents); and (c) programs serving youth with particular ongoing problems (such as those for ex-offenders or the developmentally disabled). These distinctions are important for understanding the philosophical bases of the various programs.

First, like employment and training programs, it seems that staff in education programs (for the general population) perceive the need for supportive services to enable individuals to effectively participate, though this perception is not based on empirical evidence. For example, a survey of directors of adult basic education (ABE) programs found that transportation and child care were the most serious needs among their students, "even though there is no research evidence to support this position" (Kutner, et al., 1990:24). That study explains that ABE programs were hard pressed to use their limited resources

for supportive services because their primary objective was education. The authors report that local teachers and administrators feel that if more supportive services were provided, their students would show better attendance and better outcomes.

In contrast to most employment and training and education programs are programs designed to serve youth in crisis. The objective of such programs is to help these youth meet their immediate needs by providing housing, food, clothing and short-term counseling. Once the crisis is dealt with, some programs offer services that meet other, perhaps related, needs. One of the major differences between employment and training programs and crisis-intervention programs is that employment and training programs are intended to help youth deal with crises, but to help them become self-sufficient.

Finally, there are non-employment and training programs that focus on providing participants (e.g., disabled or ex-offenders) with the skills necessary for achieving economic and/or social independence. In these programs, supportive services are services that help clients participate in the program and achieve the general and specific program goals. Employment-focused activities (for example, job placement) may be included among other supportive services offered to help youth achieve self-sufficiency. However, self-sufficiency may or may not be defined by the employment status of a youth. The inclusion of "employment services" as a supportive service in non-employment and training programs parallels the inclusion of "education" as a supportive service in employment and training programs of the 1970s.

Thus, the term "supportive services" defines activities ancillary to a program's basic mission. Many non-employment and training programs have as their core components those services that are considered supportive in employment and training programs, and vice versa.

Operationally, and of particular relevance for this paper, many non-employment and training programs use case management approaches. As discussed below, it seems that programs that deal with the most disadvantaged youth or with youth experiencing multiple problems (e.g., developmental disabilities programs, mental health programs, and programs serving pregnant and parenting teens) are most likely to use case management.

Regardless of whether a program uses a case management approach or a simpler model of service delivery, many youth programs are designed with the belief that youth require guidance, support and positive reinforcement in order to make successful transitions into adulthood. However, a few take an opposite approach sometimes called "tough love." The nature of the interactions between staff and youth differs by program type (case management or direct service) and by program philosophy. In general, as discussed

below, programs serving pregnant and parenting teens or runaway youth appear to be more nurturing in nature, while some juvenile justice and substance abuse treatment programs use the "tough love" approach.

The range of supportive services in selected non-employment and training programs and some of the issues relevant to case management are discussed below.

TYPES OF SUPPORTIVE SERVICES

In its technical assistance guide for practitioners, Public/Private Ventures (P/PV) summarizes the numerous federally funded programs that serve disadvantaged youth (P/PV, 1988). The message to local program administrators is that employment and training resources alone may not be enough to adequately address the problems of disadvantaged youth and that other sources of funding must be considered. Among the other programs that are closest to employment and training programs, several noted by P/PV have the potential for funding supportive services, including the Perkins Vocational Education Act, the Adult Basic Education Act, Even Start (educational remediation for teen parents and their children), juvenile justice programs and the Independent Living Initiative (for youth who are about to "age out" of foster care).⁶ Although these programs can provide such services as transportation, life skills counseling, housing assistance and child care, no information was identified about the extent to which such services are used.

Of particular importance for employment and training policy are the experiences of juvenile justice programs, programs for homeless and runaway youth, and adolescent pregnancy programs. Many (if not all) of the youth they serve are probably eligible for federally funded employment and training programs. Two themes that emerge from the following review are (1) many (but not all) of these programs attempt to deal with youth in a caring and supportive manner, and (2) case management is the primary model of service delivery, particularly in the more comprehensive programs.

Juvenile Justice and Delinquency Programs

Over the years, various approaches have been used to serve youth in the juvenile justice system. Reamer (1990a, 1990b) discusses the ongoing tension that has existed in this field between the goals of "punishment" and "rehabilitation." In the 19th and early 20th centuries, most juvenile justice professionals supported institutionalization and punish-

⁶ Other federal legislation that authorizes supportive services includes the Americans with Disabilities Act, the McKinney Act, the Social Services Block Grant program and the Community Development Block Grant program.

ment. By the 1960s, mainstream practitioners had shifted to more community-based approaches, deinstitutionalization and rehabilitation. The community-based or noninstitutional programs include, for example, family treatment, alternative residential programs and assignment of advocates to youth. These programs include a range of supportive services, such as counseling, group therapy, transportation and housing assistance. But, according to Reamer, the "pendulum has swung again." Throughout the country, there have been recent attempts to replace the "velvet glove" with the "iron fist." In some communities, there is less public support for rehabilitation programs that rely on counseling and other services, and more support for longer periods of incarceration.

These shifts occur, apparently, not because of research evidence of differential effects, but rather are based on "political and public determinants, such as increased incidence of juvenile justice" (Reamer, 1990a). Public opinion in the 1980s and 1990s has led to tougher policies for dealing with youth in the juvenile justice system (Reamer, 1990a). The result of these types of shifts and the effect of public opinion on policy, according to Reamer, "is a system that is without clear direction, in which professionals are unable to agree on basic goals much less on methods of intervention" (1990b:665).

Despite the lack of consensus about what the juvenile justice system is intended to achieve, some juvenile justice programs provide insight into the role of supportive services. The rehabilitative approach is evident in the following quote (Smith, 1991:60): "Judges and probation officers who fall prey to the popular wisdom that espouses a get-tough policy on troublesome but nondangerous teens are doing them a great disservice. These youth need services, not time in detention centers." Rehabilitative programs are developed both to rehabilitate youth and to help them break the delinquency cycle, often in a caring and positively reinforcing environment. Some programs work with the youth through recreational programs, while others focus on education or vocational training. The goals are to build the self-esteem of youth and to teach them how to redirect their "negative" behavior patterns.

There are many programs serving juvenile offenders and delinquents that are based on this approach. The following are a few examples:

- The Associated Marine Institutes, Inc., is a nonprofit organization with programs for delinquent youth in Maryland, Florida, South Carolina, Delaware, Louisiana and Texas. The programs all provide GED instruction along with participation in maritime activities. Interaction is centered on the concept of staff-client bonding (Mardon, 1991).
- The Fort Smallwood program in Maryland tries to counterbalance negative self-images with positive attention. Youth are praised, congratulated and thanked for

each positive step they take, from showing up (youth live at home) to completing their chores. Staff are hired based on their positive attitudes toward people and their motivation, enthusiasm and values (Mardon, 1991).

- A Kansas program for young female offenders who have been sexually abused expects its staff to be willing to share their own experiences with them and to be comfortable with the specific problems they may need to discuss (Moore, 1991).
- A program for Puerto Rican youth offenders assigns each participant to a staff member. This advocate is expected to go beyond individual counseling and get to know the youth and his or her peers and family and look into the school, work and family situation and day-to-day behavior of the youth (Milton S. Eisenhower Foundation, 1990).

An extension of the rehabilitative approach involves using street-wise staff or community volunteers in programs attempting to divert young people from crime. Some diversion programs recruit as volunteers other young people, people from the same community or people who have overcome similar problems (Woodson, 1981). Programs developed to work specifically with gangs have used gang leaders to provide positive role models for other gang members. This often first requires program staff to earn the trust of these leaders, after which they can work together to develop positive programs for the youth (Woodson, 1981). Diversion programs are comparable to mentoring activities used in employment and training and other programs.

The belief in using staff or volunteers who can identify with the youth and their problems is shared by youth themselves. A recent Urban Institute study (Brounstein, et al., 1990) on substance abuse and delinquency among inner-city youth finds that 79 percent of the youth using peer-counseling services felt they were helpful. Of these youth, 82 percent were either using or selling drugs. When youth were asked how to improve school substance abuse programs, the most frequent answer was: increase credibility by bringing in people who had direct experience with the problems of substance abuse. Similarly, in a program aimed at preventing alcohol abuse among 12- to 17-year-olds in East Harlem, researchers found positive changes in attitude and behavior attributed to "workshops, outreach to parents, and role-modeling by staff" (Zambrana and Aguirre-Molina, 1987).

Thus, although there is some controversy about how society should deal with young offenders, nearly all of the juvenile justice and delinquency programs identified through this brief literature review include substantial supportive services.

Programs for Homeless and Runaway Youth

There are no definitive estimates of how many youth are homeless, but there is general agreement that many do not have families to which they can return and often have multiple problems. More than 65 percent of street youth come from homes in which they have been physically, sexually or emotionally abused. Staff working with these youth report that they must devote considerable effort and time to earning the confidence of the youth before they can begin to help them achieve stability (Price, 1990).

However, despite the fact that this population is likely to include many youth with multiple and serious problems that would normally require long-term services, most runaway and homeless youth centers, which are the primary programs serving this population, cannot provide such services. Federal regulations for the Runaway and Homeless Youth Program limit the length of stay in shelters to 15 days (the average length of stay is 12 nights). Given the relatively short length of stay, staff do not focus on long-term counseling, but provide short-term intervention and refer individuals to other programs for such services as health care, transitional housing or an independent living program (Cohen and van Houten, 1991; Mihaly, 1991). Supportive services that may be offered to the youth in these centers are services that enable them to maintain their "normal" life (e.g., transportation to school or recreation activities) or to return to their home or other suitable home environment (e.g., support groups or other counseling services).

Adolescent Pregnancy Programs

In 1980-1981, the Office of Adolescent Pregnancy Programs (OAPP) in the Department of Health and Human Services funded 38 local projects serving pregnant and parenting teens. The objective of the projects varied, but all were mandated to provide health and prenatal services and other supportive services needed by pregnant teenagers and their male partners. In an evaluation of these projects, Burt, et al., (1984) report that, in addition to the health and nutrition services all clients received, about 80 percent received at least one hour of counseling on contraception, sexual decision-making, parenting and family life, and/or vocational and career planning. Twenty percent (20%) received assistance with transportation (usually bus tokens or cash allowances). Other supportive services include child care, stipends and meals.

Burt, et al., emphasize the importance of "comprehensive or supportive services" and "monitoring clients" using a case management approach to "ensure that needed services are offered to all clients" (1984:136). They also stress the importance of postprogram follow-up services to "insure that the important gains made by the project are maintained and that clients meet long-term goals of independence and productivity" (1984:137).

There is other evidence from adolescent pregnancy programs that many staff feel their clients need comprehensive and supportive services and ongoing support to help them learn to properly care for themselves and their babies (Cohen, 1991).

DELIVERING SUPPORTIVE SERVICES: CASE MANAGEMENT

As is evident from the discussion above, there is no one set of supportive services that is or should be offered to all clients in all programs. Each program first needs to determine whether supportive services will be used to enable clients to participate in other services, or whether supportive services are the core services. Once a set of supportive services is decided on, the delivery approach must be developed. Some programs will choose to offer all services on-site, while others will refer clients to other programs offering specific services. It must next be determined whether all clients will receive the same supportive services or if the delivery of services depends on individual needs. For example, a juvenile justice program is likely to decide that all clients will participate in a mentoring or peer-counseling program, while a runaway and homeless youth program may only target certain youth for this type of service.

Case managers are often used by programs to help direct clients to outside services and to help determine which supportive (or other) services each client needs. At times, a case manager also serves as a counselor or an advocate with outside agencies. Case management is particularly developed in mental health programs, adolescent pregnancy programs and developmental disabilities programs.

Mental Health Programs

Case management has traditionally been an integral part of mental health programs, and research about those programs offers useful insight into case management. Fiorentine and Grusky (1990) explain that the several case management models all emphasize the "linchpin" or service brokering functions, but that many case managers routinely perform other activities that they classify as "integrative," "therapeutic" or "interventive." They also note that there is no research evidence to confirm that case management is effective for clients.

Fiorentine and Grusky find that the most common activities performed by mental health case managers are "interventive," such as keeping clients out of hospitals, helping with crises and serving as advocates. The second most common case management activities are "therapeutic," including helping clients understand their problems and strengths and improving their self-esteem. The linchpin activities are the third most common and involve assessment, gathering information, setting up a plan of action, monitoring progress and referring clients to other agencies. The least common activities are

"integrative," such as arranging or providing for transportation, helping clients with employment problems and teaching life skills--i.e., helping the client integrate into mainstream social and economic lifestyles.

These two researchers further suggest that case management is best understood within a contingency theory framework. The activities case managers perform depend on a number of factors (i.e., contingencies), including (a) the presence of needed services in the community, (b) their own backgrounds and training, and (c) the needs of their clients. At a minimum, case managers serve as linchpins between clients and other services; but if case managers feel that these other services or programs are not satisfactory, they will also provide needed service themselves.

It is not clear, though, whether mental health programs typically include such a broad model of case management. It seems that a case manager is often responsible for creating a package of needed services for a youth (such as health, recreation, education and family support services). The typical case manager also advocates on behalf of the youth in school, in court or within the treatment program. For example, in a North Carolina program, case managers are responsible for seeing that all facets of evaluation and treatment are carried out. They review and monitor treatment plans, locate and arrange for services outside the system and help parents obtain services that would help the youth (U.S. Congress, Office of Technology Assessment, 1986).

There are also reports that some mental health case managers primarily broker services (i.e., the linchpin function). The Youth Services division in Massachusetts and the New York City Family and Children's AIDS Case Management Program both offer examples of case managers whose primary responsibility is to assess client needs and help them access the necessary services. As clients enter various programs, case managers keep track of their activities.

Thus, in mental health programs, which involve providing a broad range of services depending on the needs of the client, the service delivery approach is routinely called case management but often includes a number of activities beyond brokering.

Adolescent Pregnancy Programs

Programs serving pregnant and parenting teens, which are primarily supportive service programs, also routinely use a case management approach to service delivery. Although there is no one standard description of case management in such programs, it generally involves assessing needs, linking clients with services from outside agencies, and tracking the progress of clients. That is, using the terminology from the discussion above, case managers in these programs generally perform linchpin functions.

In their evaluation of adolescent pregnancy programs, Burt, et al., (1984:137) describe what they consider the basic ingredients of effective case management, recognizing that there will be variation in how mechanisms are structured and staffed, depending on the agency, program, staff and community: (1) identification of all clients; (2) determining which services are to be delivered to these clients, both by the program and by referral agencies; (3) assignment of staff responsibility for particular services to individual clients; and (4) determination of whether clients are receiving services (e.g., showing up for appointments).

The above listing suggests that programs serving pregnant and parenting teens are primarily brokers of services (1, 2 and 4), but that staff provide services directly when necessary (3). In fact, much of the literature about these programs emphasizes the multiple problems facing this population and the need for access to a variety of services (e.g., health care, and training in parenting skills, financial planning and household management). In a survey of its member parenting programs, the Child Welfare League of America reports that 86 percent assigned a single case manager for each client (Vecchiolla and Maza, 1989). The role of these case managers is generally to help coordinate services and to monitor and assess the clients' progress and needs (Cohen, 1991).

Perhaps because of the recognized need for multiple services, many of these programs have adopted case management models that depend critically on staff assessments of client needs. For example, in the San Francisco Teenage Parent Program (TAPP), case managers conduct client assessments, provide short-term counseling and bus passes, and refer clients to other agencies for necessary services, e.g., longer-term mental health counseling, education, vocational training, child care, income maintenance or housing assistance (Loomis, 1987).

Developmental Disabilities Programs

Developmental disabilities (DD) programs also make routine use of case management. DD programs serve persons (regardless of income) who have a physical or mental disability (identified by the age of 23) that makes independent living difficult. The primary objective of DD programs is to help the individual, usually a young person, eventually live an independent life.

Ideally, DD programs place clients in jobs intended to prepare them for competitive employment. The supportive services provided during the gradual transition to regular employment include: transportation, allowances, family support (e.g., respite care to allow the individual to remain outside of an institution), readers (for visually impaired) and job coaching.

Case management, more typically called case advocacy, depends on intensive services both while preparing the individual for regular employment and during its initial period. A case advocate and job coach is assigned to each client. Gradually, supportive services are reduced as the client becomes prepared for independent living. Practitioners believe that postemployment advocacy, coaching and follow-up is essential to job retention, and these services continue for as long as the case manager feels it is necessary.⁷ Thus, on a continuum of case management approaches, DD programs fall somewhere between mental health programs (where case managers spend much of their time in intervention and counseling activities) and adolescent pregnancy programs (where case managers are primarily brokers of services, both within the sponsoring agency and with outside agencies).

SUMMARY

Programs reviewed in this section recognize the need for services that are called supportive in the employment and training field. However, one of the problems in assessing supportive service components in non-employment and training programs is that it is often difficult to delineate which services are "core" versus "supportive." For example, in mental health programs and adolescent pregnancy programs, supportive services are generally the core activities. Developmental disabilities programs include both supportive services (e.g., transportation) to enable clients to participate in core activities and service (e.g., coaching) to prepare clients for independent living, which is the primary intent of these programs.

Among the non-employment and training programs reviewed in this section, case management is used to deliver, coordinate and track supportive services, particularly for youth with multiple problems. Although the term has been used to describe service delivery in many programs, there is no one accepted definition of case management, nor one set of activities case managers perform. In many programs, case management involves a philosophical approach to service delivery.

The designs of programs and anecdotes from program operators suggest that supportive services are critical to youth programs. However, neither non-employment and training nor employment and training programs can provide information on the effectiveness of supportive services, or of case management. The lack of empirical evidence indicates a need for further study on the effectiveness of supportive services and their delivery in both types of youth programs. Given the different target populations, objectives and

⁷ Personal conversation with S.T. Tidwell, Louisiana State Planning Council on Developmental Disabilities, July 1991.

philosophies of these two types of programs, it is quite possible that different impacts exist as well.

VI. CONCLUSIONS AND RECOMMENDATIONS

This review of the role and provision of supportive services in programs for youth discloses that much more needs to be known about their effectiveness. Information available on supportive services generally is limited to a description of what is offered in various programs and the overall need to provide supportive services to youth. The following conclusions are presented within the context of these limitations.

CONCLUSIONS

Operational experience in employment and training programs indicates that certain activities or services are commonly provided in programs to help youth both participate in a program and make a successful transition to adulthood. To accomplish these goals, numerous services (see Table 1 in Section III) may (a) serve as incentives to enrollment, (b) help youth overcome material barriers to participation, (c) help youth overcome social disadvantages, or (d) help youth cope with serious physical or mental health problems.

Within employment and training programs, supportive services are not the main focus. In other youth programs, supportive services can often not be distinguished from the core activities. In fact, non-employment and training programs may be the very programs that provide services to youth participating in employment and training programs. This overlap among youth programs makes it difficult to assess the role and impacts of supportive services.

Despite the limitations of current knowledge, two main points can be drawn from this review. First, there is consensus that youth with multiple problems need supportive services. Second, there is evidence that many youth programs include case management and some degree of personal interaction between staff and clients. The intent of these strategies is to (a) develop self-esteem through ongoing positive relationships and (b) assure the provision of supportive services either directly or through other agencies. Program staff not only act as service providers and brokers but also serve as positive role models for the youth.

Thus, programs that serve youth have incorporated a range of supportive services designed to meet a number of different needs. The following recommendations encourage further assessment and development of the role and effectiveness of supportive services and their delivery.

POLICY RECOMMENDATIONS

1. DOL should initiate formal interagency dialogue about the multiple supportive service needs of disadvantaged youth.

DOL is already collaborating with the Departments of Health and Human Services and Education on several major initiatives to benefit youth, including the YOU demonstration, dropout prevention programs, and programs for teen parents and homeless persons. The review in the preceding sections suggests that (a) many direct providers receive funding from a number of sources, and (b) many youth are simultaneously eligible for a number of federally funded programs. Although little information exists about the number of disadvantaged youth with multiple service needs, it is clear that practitioners feel these youth are most in need of supportive services. There is also some anecdotal evidence of a need for more services (or more funding for services) among all youth programs.

It would be beneficial for federal agencies to sponsor forums and conferences to discuss (a) the extent of need for supportive services, (b) programmatic definitions of supportive services, (c) current problems or gaps in services and (d) regulatory inconsistencies that affect programs providing supportive services.

2. DOL should provide local programs with information about case management for youth.

Effective case management depends on staff who understand the range of services available for and needed by youth, especially those with multiple problems. It is important that local administrators, staff and Private Industry Council members receive information about the special needs of youth. The previous sections of this paper strongly suggest that youth may require counseling and longer-term services (including postprogram follow-up and support).

RESEARCH RECOMMENDATIONS

1. DOL should sponsor research to document (a) the types of supportive services provided to youth in JTPA programs, (b) the extent to which supportive services are provided, and (c) the relationship between supportive services and youth outcomes.

This paper suggests that supportive services are an important part of most programs for disadvantaged youth, both employment and training programs and other programs (e.g., mental health, juvenile justice and adolescent pregnancy programs). However, there is very little empirical data about how many youth receive supportive services or the impact

of supportive services on the subsequent experiences of youth (especially labor market experiences).

Since many programs funded by JTPA provide supportive services, DOL might sponsor research that would (a) collect information from administrative records in a sample of these programs in a sample of SDAs, (b) use this information to assess the types of supportive services and the extent to which they are provided, and (c) analyze the relationship between supportive services and youth outcomes.

2. DOL should sponsor a demonstration project that would enable evaluation of the effectiveness of (a) supportive services offered to youth in employment and training programs and (b) case management approaches to delivering services to youth.

Although numerous case studies of the provision of supportive services to youth in employment and training programs have been conducted, there are no empirical data to support their findings (i.e., that supportive services are important). A demonstration project should be designed and conducted to test the hypothesis that supportive services have positive impacts and to evaluate approaches to service delivery.

The demonstration design would consist of random assignment of youth to different treatment conditions. These treatment conditions could include: employment and training services with no other intervention; employment and training services with a combination of supportive services; and employment and training services with a stipend. Supportive services could include child care, transportation assistance, mentoring and life skills training. Each control group would not receive the designated service. The demonstration would be enhanced by testing different case management models (e.g., performance of interventive or integrative activities).

A demonstration would provide empirical evidence on the impacts of supportive services and of various approaches to their delivery. This information, which has not been available to researchers or policymakers, could be used to inform the effective design and implementation of youth employment and training programs.

REFERENCES

- Auspos, Patricia; Cave, George; Dolittle, Fred; Hoerz, Gregory
1989 Implementing JOBSTART: A Demonstration for School Dropouts in the JTPA System. New York: Manpower Demonstration Research Corporation.
- Berlin, Gordon
1984 "Towards a System of Youth Development: Replacing Work, Service and Learning Deficits With Opportunities." Testimony before the U.S. Congress, Committee on Education and Labor, Subcommittee on Employment Opportunities, March 26.
- Betsey, Charles L.; Hollister, Robinson; Papageorgiou, Mary R. (eds.)
1985 Youth Employment and Training Programs: The YEDPA Years. Prepared for the Committee on Youth Employment Programs, Commission on Behavioral and Social Sciences and Education, National Research Council, National Academy of Sciences. Washington, D.C.: National Academy Press.
- Brounstein, Paul J.; Hatry, Harry; Altschuler, David M.; Blair, Louis H.
1990 Substance Use and Delinquency Among Inner City Adolescent Males. Washington, D.C.: Urban Institute.
- Burbridge, Lynn C.
1983 Employment and Training Programs for Youth: An Interpretation and Synthesis of Measured Outcomes. Washington, D.C.: Urban Institute.
- Burt, Martha; Kimmich, Madeleine; Goldmuntz, Jane; Sonenstein, Freya
1984 Helping Pregnant Adolescents: Outcomes and Costs of Service Delivery. Final report on the Evaluation of Adolescent Pregnancy Programs. Washington, D.C.: Urban Institute.
- Cave, George and Quint, Janet
1990 Career Beginnings Impact Evaluation: Findings From a Program for Disadvantaged High School Students. New York: Manpower Demonstration Research Corporation.

Paper No. 2

Cohen, Barbara

1991 Evaluation of the Teenage Parent Employability Demonstration Projects.
Report to the Department of Labor. Washington, D.C.: Urban Institute.

Cohen, Barbara

1990 Implementation of Six DOL-Funded Teen Parent Employability
Demonstration Programs. Washington, D.C.: Urban Institute.

Cohen, Barbara and van Houten, Therese

1991 Follow-Up of Youth Using Runaway and Homeless Youth Centers.
Report to the U.S. Department of Health and Human Services.
Washington, D.C.: Urban Institute.

Diaz, W.A.; Ball, J.; Wolfhagen, C.

1982 Linking School and Work for Disadvantaged Youths: The YIEPP
Demonstration: Final Implementation Report. New York: Manpower
Demonstration Research Corporation.

Dryfoos, Joy

1990 Adolescents at Risk. New York: Oxford University Press.

Farkas, G.; Smith, D.A.; Stromsdorfer, E.W.; Trask, G.; Jerrett, R.

1982 Impacts from the Youth Incentive Entitlement Pilot Projects:
Participation, Work, and Schooling Over the Full Program Period. New
York: Manpower Demonstration Research Corporation.

Ferguson, Ronald F.

1990 The Case for Community Based Programs That Inform and Motivate Black
Male Youth. Washington, D.C.: Urban Institute.

Fiorentine, Robert and Grusky, Oscar

1990 "When Case Managers Manage the Seriously Mentally Ill: A Role-
Contingency Approach." Social Service Review, March: 79-93.

Kutner, Mark A.; Furey, Sandra; Webb, Lenore; Gadsden, Vivian

1990 Adult Education: Programs and Services: A View From Nine States
(draft). Washington, D.C.: Pelavin Associates.

Levitan, Sar A. and Gallo, Frank

1988 A Second Chance: Training for Jobs. Kalamazoo, MI: W.E. Upjohn
Institute for Employment Research.

Loomis, Amy

1987 A Formula for School Dropout Prevention. Manual for the Teenage Pregnancy and Parenting Program (TAPP). San Francisco: California State Department of Education.

Maller, Charles; Keraschky, S.; Thornton, C.; Long, D.

1982 Evaluation of the Economic Impact of the Job Corps: Third Follow-Up Report. Princeton, NJ: Mathematica Policy Research.

Manpower Demonstration Research Corporation

1980(a) Enhanced Work Projects--The Supported Work Approach for Youth. Youth Knowledge Development Report 7.3. Washington, D.C.: U.S. Government Printing Office.

Manpower Demonstration Research Corporation

1980(b) Summary and Findings of the National Supported Work Demonstration. New York: Ballinger.

Mardon, Steven

1991 "On Board, Not Behind Bars." Corrections Today, 53(1):32-38.

Masters, S. and Maynard, R.

1981 The Impact of Supported Work on Long-Term Recipients of AFDC Benefits. New York: Manpower Demonstration Research Corporation.

Mihaly, Lisa Klee

1991 Homeless Families: Failed Policies and Young Victims. Washington, D.C.: Children's Defense Fund.

Milton S. Eisenhower Foundation

1990 Youth Investment and Community Reconstruction: Street Lessons on Drugs and Crime for the Nineties. Washington, D.C.: Milton S. Eisenhower Foundation.

Mincy, Ronald and Wiener, Susan

1990 A Mentor, Peer Group, Incentive Model for Helping Underclass Youth. Washington, D.C.: Urban Institute.

Paper No. 2

- Mirengoff, William; Rindler, Lester; Greenspan, Harry; Harris, Charles
1982 CETA: Accomplishments, Problems, Solutions. A report by the Bureau of Social Science Research. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Mitchell, John J.; Chadwin, Mark L.; Nightingale, Demetra Smith
1980 Implementing Welfare-Employment Programs: An Institutional Analysis of the Work Incentive (WIN) Program. Washington, D.C.: U.S. Department of Labor.
- Moore, James
1991 "Kansas Youth Center Treats Sexually Abused Female Offenders."
Corrections Today, 53(1):40-46.
- National Governors' Association
1991 Quality Assessment in the JOBS Program. Washington, D.C.: National Governors' Association.
- Nightingale, Demetra and Burbridge, Lynn
1987 The Status of State Work-Welfare Programs in 1986: Implications for Welfare Reform. Washington, D.C.: Urban Institute.
- Nightingale, Demetra S.; Cammisa, A.; Cohen, B.; Holcomb, P.; O'Brien, C.; Seefeldt, K.; Yudd, R.
1991 Services to Clients in the Washington State Family Independence Program (FIP): Second Process Analysis from the Evaluation of the Family Independence Program. Washington, D.C.: Urban Institute.
- Nightingale, Demetra S.; Burbridge, Lynn C.; Bawden, D. Lee; Jeffries, Neal O.
1990(a) Evaluation of the Massachusetts Employment and Training (ET) Choices Program. Washington, D.C.: Urban Institute.
- Nightingale, Demetra Smith; Yudd, Regina; Anderson, Stacey; Barnow, Burt
1990(b) The Learning Disabled in Employment and Training Programs. Washington, D.C.: Urban Institute.
- Polit, Denise and O'Hara, Joseph J.
1989 "Support Services" in Cottingham, Phoebe H. and Ellwood, David T. (eds.)
Welfare Policy for the 1990s. Cambridge, MA: Harvard University Press.

Polit, Denise; Kahn, Janet; Stevens, David

1985 Final Impacts in Project Redirection. New York: Manpower Demonstration Research Corporation.

Porter, Kathryn

1990 Making JOBS Work: What the Research Says About Effective Employment Programs for AFDC Recipients. Washington, D.C.: Center for Budget and Policy Priorities.

Price, Virginia Ann

1990 Characteristics and Needs of Street Youth. Boston: Bridge, Inc., Bridge Over Troubled Waters.

Public/Private Ventures

1988 A Practitioner's Guide: Strategies, Programs, and Resources for Youth Employability Development. Philadelphia: Public/Private Ventures.

Reamer, Frederic G.

1990(a) "Review of Juvenile Correctional Reform: Two Decades of Policy and Procedural Change--Edmund F. McGarrell." Social Service Review, March: 164-166.

Reamer, Frederic G.

1990(b) "Review of Juvenile Justice in Double Jeopardy: The Distance Community and Vengeful Retribution--Justine Wise Polier." Social Service Review, December: 664-665.

Regional Institute of Social Welfare Research

1977 The Case Management Model: Concept and Process Definition. Athens, GA: Regional Institute of Social Welfare Research.

Richardson, Philip; Burghardt, John; Rosenthal, Arlen; Irion, Albert; Elliott, John

1985 Job Corps Process Analysis Final Report. Silver Spring, MD: Macrosystems.

Sawhill, Isabel and Ricketts, Erol

1986 Defining and Measuring the Underclass. Washington D.C.: Urban Institute.

- Sipe, Cynthia; Grossman, Jean Baldwin; Milliner, Julita A.
1988 Summer Training and Education Program (STEP): Report on the 1987 Experience. Philadelphia: Public/Private Ventures.
- Smith, Steven
1991 "Detention Is an Invaluable Part of the System, But It's Not the Solution to All Youths' Problems." Corrections Today, 53(1):56-60.
- Stromsdorfer, Ernst W.
1980 "The Effectiveness of Youth Programs: An Analysis of the Historical Antecedents of Current Youth Initiatives" in Anderson, Bernard E. and Sawhill, Isabel V. (eds.) Youth Employment and Public Policy. Englewood Cliffs, NJ: Prentice-Hall.
- Taggart, Robert
1981 A Fisherman's Guide: An Assessment of Training and Remedial Strategies. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Turner, Susan and Conradus, Carolyn
1978 Supportive Services: CETA Program Models. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.
- U.S. Congress
1988 Family Support Act. P.L. 100-485. October 13, 1988.
- U.S. Congress, Committee on Ways and Means
1991 Overview of Entitlement Programs (1991 Green Book). Washington, D.C.: U.S. Government Printing Office.
- U.S. Congress, Office of Technology Assessment
1986 Children's Mental Health: Problems and Services. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Education, National Center for Education Statistics
1989 1989 Education Indicators. Washington, D.C.: U.S. Department of Education.

U.S. General Accounting Office

1991 Job Training Partnership Act: Racial and Gender Disparities in Services. Testimony of Lawrence H. Thompson before the U.S. House Committee on Government Operations, Subcommittee on Employment and Housing. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1985 The Job Training Partnership Act: An Analysis of Support Cost Limits and Participant Characteristics. Washington, D.C.: U.S. General Accounting Office.

Vecchiolla, Francine J. and Maza, Penelope L.

1989 Pregnant and Parenting Adolescents: A Study of Services. Washington, D.C.: Child Welfare League of America.

Wetzel, James

1987 American Youth: A Statistical Snapshot. Washington, D.C.: William T. Grant Foundation.

Wilson, William J.

1988 The Truly Disadvantaged: The Inner City and Public Policy. Chicago, IL: University of Chicago Press.

Woodson, Robert L.

1981 Youth Crime and Urban Policy: A View from the Inner City. Washington, D.C.: American Enterprise Institute for Public Policy Research.

Zambrana, Ruth E. and Aguirre-Molina, Marilyn

1987 "Alcohol Abuse Prevention Among Latino Adolescents: A Strategy for Intervention." Journal of Youth and Adolescence, 16(2):97-113.

STRUCTURE AND SEQUENCE:

Motivational Aspects of Programmatic Structure in Employment and Training Interventions for Disadvantaged Youth

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I. INTRODUCTION

Despite the social, economic and technological revolutions of the 20th century, the structure of the American high school has remained the same, while employment and training programs for young high school dropouts have varied along almost every dimension. This paper examines the variations implemented in the 1970s and 1980s.

Even as its constituency has expanded from a voluntary few to virtually universal participation, the American high school has retained the structure it started with. Students are still grouped into age cohorts for three to four years. The day begins and ends early, punctuated at 40- to 50-minute intervals when students change location within a building. The years are punctuated by intervals with specific transition points. The structure is sequential, with fixed requirements for transition between levels measured in calendar and chronological increments. Content is academic, with occasional opportunities to participate in such activities as sports, clubs and band. Although there is some variation--some students have access to vocational training for at least part of the day, some schools offer enrichment activities in the arts and athletics--this routine has varied little across the decades of the century and geographic regions of the United States.

Conversely, employment and training programs for youth in the past decade have varied in content, length and goals. In some cases, structure has conformed closely with that of the traditional school, though usually within a more condensed time frame. In other

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cases, an attempt has been made to avoid any resemblance to school by providing participants with an entirely different experience, usually work. Some structures accommodate comprehensive services, necessitating frequent schedule changes and occasional venue changes. Some programs have group or team substructures.

This variation has been propelled by a sense that interventions for the most disadvantaged young high school dropouts must provide multiple services. Three demonstrations from the late 1970s provided at least part of the rationale for this argument.

Controlled studies of two single-focus demonstrations indicated that jobs programs alone did not produce indirect educational outcomes. By the end of the second program year, participants in the National Supported Work Demonstration, which offered work experience but no education or support services, showed no gains in rate of employment or wages relative to controls (Maynard, 1980). Similarly, the Youth Incentive Entitlement Pilot Projects (YIEPP) demonstration, which offered a guaranteed job for youth enrolled in high school, yielded no effects on secondary school attendance, graduation or college entry for the cohort of black students age 15 or 16 at enrollment (Diaz, et al., 1982).

In contrast, long-term findings from the Job Corps demonstrated that a comprehensive program could achieve desired outcomes. Four-year follow-up of 5,000 very disadvantaged corpsmembers enrolled during April 1977 found positive economic impacts relative to a comparison sample (Mallar, et al., 1982).

Perhaps most significantly, youth who stayed longer showed the greatest impacts. Early dropouts (30 percent of the sample), who left within the first 90 days of enrollment, demonstrated small but statistically insignificant effects relative to comparison group youth. Partial completers (also 30 percent), who stayed at least 90 days and completed at least one program segment, benefitted an intermediate amount. Completers (40 percent), who completed an entire vocational and/or educational program, consistently benefitted the most in terms of employment and earnings (Mallar, et al., 1982:125-126).

However, even as these findings appeared to resolve any uncertainty about the desirability of multidimensional alternatives for high school dropouts, they raised additional questions: If several components are necessary, which are essential? In what sequence should they be combined? How long should the intervention last? How much time does it realistically take to achieve an outcome? What outcomes are most desirable?

These questions reflect a lack of consensus about the mission of a second-chance program for disadvantaged youth. Many believe, for example, that second-chance interventions must remediate the educational skills trainees failed to acquire in school.

Advocates of a pedagogical approach believe employment and training has a mandate to teach skills and inculcate attitudes for labor market entry.

Others argue alternatively for a structure that attracts youth who disliked school enough to leave it in the first place. Adherents of what is here called a "marketing" approach argue that a program that youth like has the potential to reengage them in a traditional system, and thus potentially to motivate them to pursue work and education independently and long term. For these advocates, a structure's attractiveness varies directly with its dissimilarity to school: they look for new approaches that may or may not include didactic training.

Those who espouse the pedagogical approach usually substantiate their argument by pointing to the large number of high school dropouts and their poor academic skills. Estimates of dropout rates from several sources provide partial support for this stand.

Because of political implications of dropout data and the problems implementing collection and recording in schools, most school system reporting is suspect (Morrow, 1986). However, several relatively reliable estimates exist. These estimates all show that although national rates are low, rates in large urban districts are very high. Prevalence data from the National Longitudinal Survey yield an estimate of "no higher" than 14 percent. Although prevalence rates peak at age 19 (i.e., the proportion of all 19-year-olds who are uncredentialed), the rates drop below 14 percent by age 23 because of later returns to school (Morgan, 1984:225).

Closer analysis, however, reveals a difference in magnitude and trend by race. At age 19, compared with whites, prevalence rates for blacks were 7 points higher and for Hispanics 20 points higher. By age 22, these differences had expanded three additional points. Although prevalence rates for whites dropped after age 19, they remained essentially flat for blacks and Hispanics, reflecting the smaller proportion of minority youth who achieved a general equivalency diploma (GED). "Becoming a dropout is thus not only more prevalent among minority youth," the report concludes, "it is also more likely to become a permanent condition of undereducation" (Morgan, 1984:230-233).

These findings are corroborated by the National Center for Education Statistics (NCES), which reports that 17.3 percent of the cohort of 1982 had dropped out by the time their class graduated. However, by 1986, almost half of the dropouts had obtained a high school diploma or GED, another 12 percent of the dropouts were pursuing a credential, and only 7 percent of the cohort had not completed any degree program. Approximately two-thirds of those who thus obtained credentials had earned a GED; the remainder had obtained a high school diploma (NCES, 1988).

Noncompletion rates also show large variation--by geographic location, academic ability and socioeconomic status. Almost 25 percent of the sample enrolled in metropolitan high schools failed to graduate, compared to 15 percent from suburban or rural high schools.

Reports from two large-city school districts confirm these findings. An independent advocacy group reports a cohort dropout rate of 42.8 percent for 30,000 Chicago students enrolled in ninth grade in 1981. Black males age 15 or older were 16.8 percent of the total class but 25 percent of the dropouts. The report also finds wide variation among schools, much explainable by socioeconomic status of students but enough left unexplained to suggest effects of management and implementation (Hammack, 1986).

The New York City Board of Education reports similar calculations. A four-year dropout rate was calculated for 83,000 students who first entered ninth grade in 1984. By 1988, 20.8 percent had dropped out; however, because an additional 25 percent were still in school, the rate was expected to rise. Follow-up studies of the two previous classes accounting for students who dropped out in their fifth or sixth year yielded a final rate of 33 percent (New York City Board of Education, 1989).

The data also consistently indicate that most dropouts have long histories of academic and, in some cases, social problems. According to NCES, dropping out was usually preceded by histories of poor attendance, poor grades and grade repetitions. Thirty-one percent (31%) of the 1982 cohort who had ever repeated a grade dropped out, compared with 14 percent of those at grade level. Of students who reported they had been in serious trouble with the law, had been suspended or on probation from school, or had in the last year had disciplinary problems in school, one-fourth to one-third later became dropouts (NCES, 1988:24-39). In Chicago, entering high school overage and reading below age level greatly increased the probability of dropping out (Hammack, 1986). More than 70 percent of the dropouts from the New York City class of 1988 were overage when they entered ninth grade (New York City Board of Education, 1989).

In summary, although national dropout rates are low, high rates cluster among youth who are already at risk in the labor market because of residence, race and probably (inferred from these data) income. High school dropouts are more likely than graduates to be minorities residing in inner cities, to be attending poorly managed schools, and to have histories of poor academic performance and difficulties with school authorities or the law prior to dropping out. Among this group, educational remediation may be not only necessary to produce entry-level skills, but may also be an efficient way to remove the least intractable employment barriers.

Within employment and training, the comparable argument invokes attrition data. Although most attrition reports are anecdotal, they are consistent in direction: youth persistently fail to enroll in or complete education and training programs, thereby dropping out again, this time from the high school alternative. Proponents of a marketing approach argue that youth drop out because the education and training intervention is too similar to school, or because it does not deliver what youth want.

The problem marketing advocates face is that there are no reliable data about what it is that youthful high school dropouts want from a high school alternative. When asked directly, trainees seldom respond unambiguously. Youth who leave a program before completion often praise it, and many completers are fiercely critical (Higgins, 1988). Questionnaire responses at termination usually yield vague results, with the most frequently cited reason for leaving being "other."

Many practitioners argue persuasively that education and the opportunity to earn a GED is an incentive for youth to join programs. However, focus groups with younger participants suggest that they most enjoyed and remembered their work experience, even when offered remedial educational and life skills designed to appeal to them.¹ Furthermore, in-program data, when reported, consistently show low attendance in educational compared with training components.

Marketing advocates also frequently cite the high number of GEDs awarded annually as evidence that academic instruction in education and training programs may be superfluous. The American Council on Education reports that 56 percent of the 760,000 GED test takers in 1990 were youth between the ages of 16 and 24. Although slightly over 24 percent of them studied at least 100 hours for the exam, the median study time was 30 hours, considerably less than average GED preparation time in education and training programs. However, because the data are not disaggregated by income, race or highest completed grade, the percentage of at-risk youth among the GED test takers is not evident (American Council on Education, 1990).

This paper takes an indirect route to addressing the questions raised by these different approaches and philosophies. The paper attempts to advance the discussion through a consideration of the following two questions:

- What are existing structural alternatives and what do their outcomes suggest about optimal design?

¹ Unpublished data from the Summer Training and Education Program (STEP) demonstration by Public/Private Ventures.

- What can the literature from academic psychology on motivation suggest about what youth might want?

Section II presents a survey of the structural variation in 15 sites from six employment and training programs for disadvantaged youth that have been evaluated in the previous decade. It discusses the variation in structure and outcomes across all 15 sites. Because of the wide variation among programs, and the number of variables that are not reported, no definitive association between structure and outcomes is possible. Therefore, this summative presentation is made in order to clarify concepts and identify the range of alternatives and outcomes of employment and training programs.

Section III attempts to augment the mostly anecdotal information about what youth want from a second-chance program, and which experiences they find motivating. The section selects and reviews recent literature from academic psychology on the subject of achievement motivation and incentives. Although this discussion does not yield a definitive alternative to the structure of high school, it suggests concepts that can guide the design of second-chance settings.

Section IV reviews findings from Section II in the context of motivational theories. The section applies concepts introduced in Section III to what appear to be motivational aspects of several of the programs discussed in Section II. The section concludes with policy recommendations and suggestions for future study.

II. STRUCTURE AND OUTCOMES

This section reviews structural and outcome variations among six employment and training programs. It identifies the range of models and components, and presents analyses of impact data from program evaluations in the 1980s. The wide variation among programs precludes definitive conclusions about the relationship between program characteristics and outcomes. Thus, this analysis provides only a summary and distillation of available knowledge.

The survey includes four demonstrations and two independent programs. Three of the demonstrations--Minority Female Single Parent (MFSP), Supported Work and JOBSTART--include a diverse array of programs that vary across all structural dimensions. Because of these differences, this analysis presents data only from specific sites.

All the MFSP sites have been included to advance the discussion of program structure and duration: the Center for Employment Training (CET), the Atlanta Urban League (AUL), the Opportunities Industrialization Center (OIC) and Wider Opportunities for Women (WOW). Three Supported Work and five JOBSTART sites have been selected to illustrate differences in structure, services and outcomes. Two of the five JOBSTART sites (Los Angeles and Phoenix) are Job Corps.

The fourth demonstration, the Summer Training and Education Program (STEP), provides a consistent structure and array of services across all sites and years of operation. Although the demonstration's curriculum was upgraded between the first and second cohorts, the basic structure remained the same. This analysis includes enrollment and impact data for the second demonstration cohort across all five sites.

The four demonstrations were evaluated using random assignment to treatment and control groups. Participant characteristics cited here reflect only applicants assigned to the treatment condition. Impact data reflect the analysis of participant/control group differences at designated intervals after enrollment.

Both the independent programs--the California Conservation Corps (CCC) and the City Volunteer Corps (CVC) of New York City--operate multiple sites that are consistent across sites. The CCC sites are primarily residential, with structure and program determined at the state level. Although teams of CVC corpsmembers serve in all of New York's five boroughs, the program is highly centralized and has varied little since its founding. CCC has been evaluated using a comparison group methodology; a formal evaluation of benefits has not been conducted for CVC.

The Job Corps evaluation is not discussed here because it does not describe structural differences among specific sites (Mallar, et al., 1982). The definitive report on the Job Corps aggregates outcomes across sites (15 in total), thus obviating any analysis of structure and associated outcomes. However, because of the importance of the Job Corps in employment and training evaluation, aggregate data are reported in the three tables included in this section. References to the Job Corps in the text refer only to the two Job Corps sites in the JOBSTART demonstration.

This analysis is complicated by differences in the reporting conventions used in the individual reports. For example, the authors of the JOBSTART report do not always clarify whether transitions from educational sequences into training were conditioned on elapsed time or academic achievement. Similarly, the length-of-stay groupings in the MFSP evaluation limit cross-program comparisons. Other examples are cited as they arise.

PARTICIPANTS AND STRUCTURE

Table 1 summarizes participant and structural characteristics of employment and training programs. Program and site descriptions are presented in the appendix. The programs vary in components, sequencing, admission and termination policies, training options, curriculum, methods of instruction, subgroupings of youth and financial support.

Participants

Observers have reported that youth entering employment and training programs "became considerably more 'at risk' in the 1980s" (Public/Private Ventures, 1990a:13). Although they ranged in age from adolescent to young adult, the participants in the six programs selected for this analysis demonstrated multiple characteristics of at-risk status.

Most of the programs target at-risk youth. All Supported Work participants were between the ages of 17 and 20 and had poor employment histories, and at least 50 percent had a delinquency record. Seventy percent (70%) of the minority single mothers recruited for the MFSP demonstration were receiving public assistance when they enrolled. JOBSTART participation was limited to high school dropouts between 17 and 21 years of age who read below the eighth-grade level and were Job Training Partnership Act (JTPA) eligible.

Although nontargeted, most youth corps recruit youth with one or more indicators of disadvantaged status: welfare status as a child, lack of a high school or equivalency degree, minority status, lack of vocational skills or poor work history. Approximately one-third of CCC participants reported family income levels below the poverty line; and

Table 1
PARTICIPANTS AND STRUCTURE

Program Name/ Site *	Participants	Program	Entry/ Exit	Training Options	Life Skills	Education	Sub- groupings	Financial Support
Supported Work								
Hartford	17-20 years old, unem- ployed dropouts	Work experience	Open entry	No	No	None	Crews	Minimum wage; performance bonuses
Jersey City	17-20 years old, unem- ployed dropouts	Work experience	Open entry	No	No	None	Crews	Minimum wage; performance bonuses
Philadelphia	17-20 years old, unem- ployed dropouts	Work experience	Open entry	No	No	None	Crews	Minimum wage; performance bonuses
Minority Female Single Parent								
Center for Employment Training	Minority single mothers	Concurrent skills training and education; in-house	Open entry and exit	Wide selection available	No	Group instruction	No	No
Atlanta Urban League	Minority single mothers	Concurrent skills training and education; brokered	Both fixed and open	Limited selection	Weekly seminars	Group instruction	No	No
Opportunities Industrialization Center	Minority single mothers	Sequential; skills training dependent on GED	Fixed entry every six weeks	4 options	No	Group instruction	No	No
Wider Opportunities for Women	Minority single mothers	Assignment to education or skills training	Fixed entry at 10- and 7 week intervals	1 course	Yes	Group instruction	Yes	Yes

Table 1 (continued)
PARTICIPANTS AND STRUCTURE

Program Name/ Site ^a	Participants	Program	Entry/ Exit	Training Options	Life Skills	Education	Sub- groupings	Financial Support
JOBSTART								
Los Angeles Job Corps	17-21 years old, dropouts reading ≤ 8th-grade level	Sequential education and skills training; in-house	Open entry and exit	Wide selection	3 hrs./day ^b	Group	Yes	\$40-80/month
Phoenix Job Corps	17-21 years old, dropouts reading ≤ 8th-grade level	Concurrent skills training and education; in-house	Open entry and exit	Wide selection	2 hrs./day	CAI (PLATO)	Yes	\$40-80/month
El Centro (Dallas)	17-21 years old, dropouts reading ≤ 8th-grade level	Sequential education and skills training; in-house	Open entry and exit	Limited selection	2-3 hrs./day	Group	Education only	\$5/day
Connelley (Pittsburgh)	17-21 years old, dropouts reading ≤ 8th-grade level	Concurrent skills training and education; in-house	Fixed cycles	Wide selection	Yes	CAI (CCC)	Varied	\$5/day
Allentown (Buffalo, NY)	17-21 years old, dropouts reading ≤ 8th-grade level	Sequential education and skills training; brokered	Varied	Limited selection	3 hrs./day	CAI (CCP)	Education only	\$1-2/hour
California Conservation Corps	18-23 years old (nontargeted)	Concurrent work and education; residential	Monthly intake	No	Irregular	Group	Crews	Minimum wage
City Volunteer Corps	17-22 years old (nontargeted)	Concurrent work and education	Fixed cycles	No	20 hrs./week	Group	Teams	Deferred minimum wage
Summer Training and Education Program	14-15 years old, JTPA eligible (nontargeted)	Concurrent summer work and education	Fixed entry	No	20 hrs./summer	Group and CAI ^c	Education and life skills	Minimum wage
Job Corps	14-21 years old (nontargeted)	Concurrent work and education; residential	Open entry and exit	Yes	Health education	Group	No	Pay allowance

Sources: Maynard, 1980; Gordon and Burghardt, 1990; Auspos, et al., 1989; Lah and Wolf, 1985; Public/Private Ventures, 1990b; Sipe, et al., 1988; Mallar, et al., 1982.

^aProgram and site descriptions are presented in the appendix.

^bDuring education phase in sequential sites, several weeks after enrollment only at concurrent sites.

^cCAI for 20 to 25 percent of total instructional hours.

almost 40 percent of the families of CVC youth received some form of public assistance. The STEP demonstration screened for JTPA-eligible youth between the ages of 14 and 15 at enrollment.

Program

Only one of the programs in Table 1 represents a single intervention: Supported Work provided work experience only, structured in small groups with close supervision. The CCC and CVC models offer several weekly hours of educational remediation concurrently with work experience. The CCC is a residential program.

This report adopts the nomenclature proposed by Auspos, et al., (1989) to categorize the programs that combine educational remediation and skills training. Concurrent programs allow participants to participate in both components within the same week. Access to one is not restricted by performance requirements in the other. For example, achievement of a GED or any other educational benchmark is not required for entry into skills training at the Center for Employment Training (CET), one of the MFSP sites. In contrast, sequential programs segment their components, with some performance attainment required for transition. Transition between segments usually depends on attainment of a GED, as at the Opportunities Industrialization Center (OIC) in the MFSP demonstration, or completion of educational modules, as at the Los Angeles Job Corps. Some sequential programs, such as the El Centro JOBSTART site, continue basic skills instruction concurrently with training.

Programs also differ in whether they broker or offer services in-house. The Atlanta Urban League (AUL), for example, served mainly to broker services and provide case management for MFSP participants. Both Job Corps in the JOBSTART demonstration offered all services in-house. CVC brokers its educational program at the City University of New York (CUNY).

The four categories--concurrent, sequential, brokered and in-house--have benefits and drawbacks. Concurrent programs facilitate immediate entry into vocational training but often stint on education and life skills instruction. Sequential programs provide the educational remediation many consider essential to advancement to skilled jobs, but are often discouraging for participants looking for a more immediate vocational connection (Auspos, et al., 1989:183-185).²

² For example, no more than 50 percent of enrollees at the Los Angeles Job Corps and El Centro, and 30 percent at Allentown--all sequential sites--participated in training. In contrast, all participants at both concurrent JOBSTART sites (Connelley and the Phoenix Job Corps) took part in some training activity (Auspos, et al., 1989:122).

Restriction to in-house services narrows the scope of training options but facilitates implementation of a unified program and maximizes contacts between staff and youth. Brokering enables small agencies to offer employment and training services, but requires smooth transitions between agencies and concerted efforts to achieve integration among program elements (Hershey, 1988:211-214).

Entry/Exit

Education and training programs also differ in how they structure intake and termination. Many programs facilitate intake with an open entry policy, enabling trainees to enroll at any time in the program year. Trainees could enroll at any time at the three Supported Work sites, two of the four MFSP sites and four of the five JOBSTART sites. Alternatively, sites structure fixed entry times at various intervals: monthly at CCC, at the beginning of the summer for STEP. Some programs use both policies: at AUL, for example, education courses were open entry, but skills training courses had fixed start dates and were of fixed length (Hershey, 1988:96).

Each intake structure has advantages and disadvantages. Open entry facilitates access to the program and eliminates attrition from waiting lists. However, open entry requires a curriculum that can allow trainees with different start dates to progress independently. Fixed entry offers the advantage of group cohesion for those who enter together. Many practitioners argue that group cohesion reduces attrition and facilitates learning (Hershey, 1988:218-219).

Technically, every employment and training program is open exit: trainees can leave at any time. In practice, however, terminations can be either open, occurring at any time after entry, or fixed to specified dates or durations.

Most of the open entry programs also provide open exit, enabling trainees to terminate whenever they have completed a training module or found a job. Fixed entry programs vary, with some, such as Connelley, providing open exit and others, such as STEP, linking termination to the calendar.

Although the two Job Corps sites allowed open exit, both structured incentive payments to encourage retention. The Job Corps made monthly contributions to an escrow account that could only be redeemed by participants who stayed six months or longer. Similarly, CVC has a deferred wage structure. Participants receive partial pay and can redeem the balance only at intervals of 6, 9 and 12 months after enrollment.

Training Options

Employment and training programs also differ in the extent to which they offer participants options for training. At one extreme are the programs that do not provide training--Supported Work, CCC and CVC assign participants to work settings. At the other extreme are programs with a wide selection of training options. The Los Angeles Job Corps, for example, offers training in health occupations, automotive repair, construction, electrical appliance repair, clerical work, child care, building maintenance, culinary arts and industrial production. Some programs offer a limited selection of options. For instance, AUL brokered some training--in retail sales, for example--but channelled most participants into an in-house clerical course.

Life Skills Instruction

Life skills instruction usually includes units on health and nutrition, sexuality and family planning, and consequences of drug abuse. Some curricula also include instruction on personal budgeting, values clarification, and government and civics.

Formal life skills instruction was included in about half of the programs surveyed here. Auspos, et al., (1989) report that the two Job Corps sites and El Centro incorporated two to three hours of life skills classes into the regular program day. Allentown provided three hours of life skills instruction every afternoon during its educational sequence. Connelley developed an "after school" component that included sessions on human relations, sexuality and family planning.

CVC's Corpsmember Development curriculum, scheduled for two hours every week, emphasizes racial/ethnic diversity and tolerance. CVC also teaches "survival skills," such as budgeting and communication, at its one-week residential training program. STEP's Life Skills and Opportunities curriculum was written for the demonstration. Structured as a unit of 20 hours per summer, it emphasizes personal choice in the areas of sexuality, drug use and general health.

Education

Programs traditionally structure education in groups. Computer-assisted instruction (CAI) enables programs to teach individuals with widely varying abilities simultaneously and detach educational curricula from fixed enrollment dates.

Many employment and training programs have implemented one of the several available CAI packages. Sites participating in JOBSTART were required to offer CAI, though two sites, El Centro and the Los Angeles Job Corps, used group instruction. However,

Table 1 indicates that use of group instruction and/or CAI appears to be independent of entrance structure.

Subgroupings

Most programs with group education further divide students according to reading level. The usual demarcation is an eighth-grade reading level, with GED preparation offered to trainees reading at or above this level, and basic skills remediation offered to those reading below this level.

Demonstrations in sites that also enrolled adults occasionally provided subgroups for youth. To the extent that youth have different needs and interests than adults, this subgrouping enables sites to focus their interventions. Supported Work assigned trainees to work crews composed only of youth. MFSP participants at the OIC site, in contrast, trained and received instruction with all other OIC trainees. Three of the JOBSTART sites grouped youth separately only in education. (In CCC, CVC and STEP, all enrollees are youth.)

Financial Support

Financial support provided by programs in the form of a wage or allowance ranges from modest to nonexistent. Supported Work offered participants minimum wages with periodic bonuses for attendance or good performance. Bonuses ranged from \$5 a week to \$25 a month. Two sites, Hartford and Jersey City, also offered a bonus to participants who found and held a nonprogram job. The size of the bonus was calculated as a percentage of gross wages earned, increasing with length of program stay.

MFSP offered no financial stipends. However, most MFSP sites worked to broker in-kind supports, such as transportation and health benefits and, in the case of CET, emergency housing. Several of the sites offered child care on-site.

The two Job Corps sites in JOBSTART provided monthly allowances based on attendance, bus passes, a clothing allowance, and free meals at the centers. The monthly allowance increased with good behavior and performance, and the Job Corps made a monthly contribution to an escrow account redeemable after a six-month length of stay. Participants could use some of the escrow account for family expenses or child care while enrolled.

Other JOBSTART sites offered less extensive supports. For example, Allentown's only financial support was a one dollar per hour payment for Aid to Families with Dependent Children (AFDC) participants based on need, two dollars per hour for non-AFDC

participants. El Centro offered five dollars per week for perfect attendance, child care by referral and emergency rent funds for homeless participants.

CCC paid corpsmembers a minimum wage with opportunities for increases. CVC's deferred minimum wage contains a dual incentive for longer length of stay: corpsmembers who complete a 12-month rotation are eligible for a cash bonus that repays the deferred wage, or a college scholarship twice the value of the bonus. STEP paid participants minimum wages for time in school and at work.

Summary

In summary, no pattern emerges from a comparison of 15 employment and training sites across a range of structural dimensions. Although all except Supported Work offer educational remediation, programs differ according to whether education is offered as a precondition to training or concurrently with training. Variation along one component, such as group instruction, does not predict an associated characteristic, such as entry or exit policy. However, the trend over time from Supported Work to JOBSTART appears to be in the direction of program flexibility, integrating concurrent components, open entry and CAI.

With the exception of the programs that emphasize work, which pay participants a minimum wage, financial support is very modest. Participation rates are therefore remarkable, given the disadvantaged constituencies the programs have targeted and attracted.

LENGTH OF STAY, EDUCATIONAL ATTAINMENT AND EMPLOYMENT IMPACTS

Tables 2 and 3 display length of stay, educational attainment and employment impacts for the sample of employment and training programs.

Length of Stay

Most programs are on a 12-month schedule. However, open exit programs, such as CET, have flexible program lengths of stay, based on the needs of individual trainees and their facility in completing training modules. Auspos, et al., (1989) defined maximum length of stay for JOBSTART sites in hours: 200 for education, 500 for training. Other programs, such as STEP, are tied to the calendar. Table 2 indicates that whatever the optimal length of stay, most trainees in year-round programs stay on average six months. In the Supported Work demonstration, two 18-month sites, Hartford and Philadelphia, posted length-of-stay averages shorter than a 12-month site, Jersey City. Nor does there

**Table 2
LENGTH OF STAY AND
EDUCATIONAL ATTAINMENT**

Program ^a	Maximum Length of Stay	Average LOS (Mos)	% LOS <3 Mos	% Completing 12 Mos	% No GED or HS Diploma at Baseline	% Received GED Prep ^b	GED Attained	
							% in GED Prep	% Total Sample
Supported Work								
Hartford	18 months	5.9	29.5	16.3	100	0		
Jersey City	12 months	8.2	15.1	36.2	100	0		
Philadelphia	18 months	3.7	35.6	9.4	100	0		
Minority Female Single Parent^c								
Center for Employment Training	10 months	6.6		19.9	60.6	31.7	28.9	9.1
Atlanta Urban League	24 months	6.4		22.6	38.2	31.1	25.3	7.9
Opportunities Industrialization Center	3 months education 6 to 9 months skills training	7.2		29.3	44.7	37.7	29.9	11.0
Wider Opportunities for Women	2.5 months education 5 months skills training	5.6		11.0	50.9	28.9	17.4	5.0

Table 2 (continued)
LENGTH OF STAY AND
EDUCATIONAL ATTAINMENT

Program ^a	Maximum Length of Stay	Average LOS (Mos)	% LOS <3 Mos	% Completing 12 Mos	% No GED or HS Diploma at Baseline	% Received GED Prep ^b	GED Attained	
							% in GED Prep	% Total Sample
JOBSTART								
Los Angeles Job Corps	12 months	7.6	10.1	30.3	100	Not reported	Not reported	5.7
Phoenix Job Corps	12 months	6.9	10.6	19.7	100	Not reported	Not reported	19.2
El Centro (Dallas)	12 months	5.8	16.2	8.1	100	Not reported	Not reported	43.2
Connelley (Pittsburgh)	12 months	8.5	2.8	22.9	100	Not reported	Not reported	49.5
Allentown (Buffalo, NY)	12 months	8.7	0.7	22.9	100	Not reported	Not reported	37.0
California Conservation Corps	12 months	5.1	44.4	8.1	48.2	Not reported	Not reported	
City Volunteer Corps	12 months	5.8	40.3	25.2	87.3	24.6	33.1	8.1
Summer Training and Education Program	2 summers, 7-8 weeks each	75% reenrollment	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
Job Corps		8.8	Not reported	Not reported	85.3	Not reported	Not reported	

Sources: Maynard, 1980; Gordon and Burghardt, 1990; Auspos, et al., 1989; Voith and Leiderman, 1986; Public/Private Ventures, 1990b; Sipe, et al., 1988; Mallar, et al., 1982.

^aProgram and site descriptions are presented in the appendix.

^bReported as a percentage of program participants.

^cFigure given is upper limit of "expected duration" in programs. 11-13 month percentages are used for "percent completing 12 months" here.

Table 3
POSTPROGRAM IMPACTS

Program	Follow-Up (Months)	Employment	Education	Other
Job Corps*	24 months postenrollment (18 months average)	Positive impacts on earnings, employment rate and receipt of public assistance	Positive impacts on educational attainment	Reduced criminality rates that fade out after one year
Supported Work	18 months postenrollment	No impacts on employment, earnings or public assistance benefits	No effect on participation in employment and training	No effects on drug use or criminal activity
Minority Female Single Parent				
Center for Employment Training	12 months postenrollment	Positive impacts on employment rates, monthly earnings and hourly wages; women with young children and women on welfare showed especially large employment rate gains		
Atlanta Urban League	12 months postenrollment		Positive impacts on GED attainment	
Opportunities Industrialization Center	12 months postenrollment	Negative impact on earnings	Positive impacts on GED attainment	
Wider Opportunities for Women	12 months postenrollment	Negative impact on earnings and public assistance income		
JOBSTART*	12 months postenrollment	Negative impacts on weeks employed and earnings	Positive impacts on participation in education and training and on educational attainment	
California Conservation Corps	6 to 12 months posttermination	Positive impacts on hours worked per year for JTPA-eligible corpsmembers	Not reported	Positive attitudinal changes 148
Summer Training and Education Program	15 months postenrollment		Reduction in summer learning losses relative to controls	Positive gains in contraceptive knowledge; no impacts on sexual behaviors

Sources: Mathematica Policy Research, 1980; Maynard, 1980; Gordon and Burghardt, 1990; Auspos, et al., 1989; Wolf, et al., 1987; Sipe, et al., 1988.

*Reported results are for the entire demonstration, not disaggregated by site.

appear to be any association between program structure and length of stay. In the MFSP demonstration, a site that required GED attainment before skills training, OIC, posted the longest average length of stay. Another sequential site, Wider Opportunities for Women (WOW), had the shortest average in the demonstration. Among the JOBSTART sites, two programs--one concurrent, one sequential--posted length-of-stay averages exceeding eight months.

The timing of departures varies widely. Some sites reported low early attrition rates but low completion rates, indicating high midpoint attrition. For example, WOW lost less than 15 percent during the first and second months, but retained only 11 percent to the 12th month. Similarly, although both Job Corps sites reported losing only 10 percent of their participants in the first three months, less than a third completed a 12-month rotation. In contrast, CCC and CVC, with their rigorous preenrollment training, lost over 40 percent of their recruits by the end of the third month, and CVC retained about a quarter for the full program duration.

Several difficulties of comparing length-of-stay averages across programs surfaced during this analysis. First, Auspos, et al., report that the relatively long average length of stays posted by many JOBSTART sites mask the fact that a substantial portion of trainees were frequently absent from class (1989:96). The average duration of consecutive days absent varied by program structure, with 1.8 months inactive at concurrent programs, 1.7 months at sequential in-house sites and 2.5 months at sequential brokered sites. Almost 11 percent of all trainees were ever inactive at concurrent sites, 14 percent at sequential in-house sites and over 20 percent at sequential brokered sites (1989:98).

Auspos, et al., conclude that "a considerable amount of absenteeism may be inevitable in a program serving young dropouts, even at well-run sites that provide quality services and caring, supportive staff." One reason for absenteeism may be concurrent employment. Twenty-six percent (26%) of JOBSTART participants held jobs while enrolled, working on average 31 hours a week. Yet participants who worked on average stayed longer (8.3 months) than participants as a whole (6.7 months) (Auspos, et al., 1989:97).³

Absentee data from CVC confirm these findings. Public/Private Ventures (P/PV) calculated days suspended or "on hold" (an approved absence that exceeds four days) for all corpsmembers in the sample. Corpsmembers who stayed at least six months averaged 40 days suspended or on hold within the first six months of enrollment. Even early

³ These data are reported for the entire demonstration and are not disaggregated by site.

leavers compiled a substantial amount of absentee time. Corpsmembers who stayed less than three months averaged 16 days absent before their final departure.⁴

Many programs adjust length-of-stay calculations to reflect absenteeism. Supported Work sites allowed trainees up to three months "inactive time" in addition to their maximum 12 or 18 months of active participation (Maynard, 1980:33). Auspos, et al., (1989) report both length of stay in elapsed months and hours of participation. CVC calculates length of stay for bonuses by calendar time and program hours, and both indicators are reflected in P/PV's report (1990b).⁵ The MFSP and Supported Work reports present only monthly attainments, without indications of absentee rates.

A second difficulty in comparing programs arises from program structure. Programs with open entry may admit trainees at both the beginning and the end of a month, and both groups may be reported with the same length of stay. Some programs, such as OIC and WOW, structure their sequences by weeks. Reporting conventions do not always indicate whether transitions between program sequences, or between brokered services, are excluded from calculations. Programs that have preenrollment training, such as CCC and CVC, can calculate length of stay from entry into training or entry into the standard program.⁶

A third difficulty arises from differing conventions for reporting attrition frequencies. Maynard (1980) reports percentages of Supported Work participants still in the program at the end of periods of three months. For the MFSP demonstration, Gordon and Burghardt (1990) report the number of months in two-month blocks: 1 or 2 months, 3 or 4 months, etc. For the JOBSTART sample, Auspos, et al., (1989) report the percentage still participating in months 3, 6, 9 and 12 without indicating the part of the month ending each period. P/PV reports attrition by completed month for CCC (Voith and Leiderman, 1986) and CVC (P/PV, 1990b).

Finally, length of stay may be independent of program structure but highly reactive to the quality of program implementation, which is not usually reported. Length of stay for the Supported Work sample varies by enrollment date because of "the more relaxed

⁴ Unpublished data from P/PV's assessment of CVC in 1990.

⁵ Bonuses can be redeemed after compilation of 830 hours and 6 months, or 1,245 hours and 12 months. CVC allows corpsmembers up to 18 months to accrue 1,660 hours.

⁶ P/PV uses both conventions. For CCC, the 5.1-month average includes all corpsmembers who started training; length of stay for all corpsmembers who completed training averages 6.2 months (Voith and Leiderman, 1986). For CVC, P/PV (1990b) computes length of stay from posttraining induction.

termination policies of programs during the early period of their operation" (Maynard, 1980:57). Maynard (1980) concludes that sites "that set clear rules, carefully monitored daily attendance, quickly contacted absentee students, and worked closely with absentees to resolve underlying problems" were able to control absenteeism, but does not name those sites. CVC calculates but does not release length of stay by team as an indicator of a team leader's capability.

Reasons for Leaving

Analysis of reasons for leaving is also complicated by differences in reporting conventions. Supported Work sites reported terminations for "poor performance" ranging from 31 percent of participants at Jersey City to 54 percent at Philadelphia. Hartford and Jersey City lost approximately 30 percent of their participants for reasons that included low pay and problems with health, child care or transportation; Philadelphia reported losing only 7 percent for these reasons, probably an indication of different recording conventions (Maynard, 1980:60). Gordon and Burghardt (1990) do not indicate reasons for leaving in the MFSP demonstration, but report that approximately 50 percent of participants were "very satisfied with program services" at follow-up, with no differences among sites.

Auspos, et al., (1989) do not break down reasons for leaving JOBSTART by site or program structure. Overall, 20 percent of participants reported that they left for "program-related reasons," such as "problems with staff" (3%), "asked to leave" (3%) or "disliked education" (3%). Thirty-six percent (36%) left for "personal reasons," such as "needed a job" (10%), "transportation difficulties" (3%) or "pregnancy" (7%). Ten percent (10%) of participants in sequential in-house sites, 7 percent in sequential brokered sites and 4 percent in concurrent sites said they "disliked type of education or training." Twenty-one percent (21%) in sequential brokered sites said they "disliked program rules or staff attitudes," compared with 9 percent in concurrent and 6 percent in sequential in-house sites.

Fifty-seven percent (57%) of CCC departures were voluntary, for reasons that included "tired of program," medical reasons and employment. Voluntary departures peaked in the first month, thereafter remaining stable; involuntary departures, in contrast, peaked in the third month, then declined slowly. Forty-eight percent (48%) of the men but only 25 percent of the women left involuntarily. Fifty-three percent (53%) of corpsmembers without high school diplomas left involuntarily, compared with 27 percent with high school diplomas.

P/PV's unpublished case studies (1990b) of 39 CVC corpsmembers illustrate the difficulty of categorizing terminations. Eight out of 39 corpsmembers terminated within

the first month for single reasons that included "the program isn't for me," full-time employment and conflict with another corpsmember. Later terminations usually resulted from multiple causes. One corpsmember, for example, was forced to go on hold when an old police charge surfaced. By the time he returned, his friends on the team had left. After his grandmother became ill, he terminated to pursue part-time employment to pay for housing. Another corpsmember stopped attending after she and her sisters were abandoned by their mother. Soon thereafter she became pregnant and officially terminated.

Education and GED Attainment

Two of the demonstrations, Supported Work and JOBSTART, targeted high school dropouts. Even without targeting, all the programs surveyed here attracted large numbers of participants who lacked a high school diploma or GED. Almost 50 percent of all MFSP and CCC participants, and almost 90 percent of CVC corpsmembers enrolled without either credential.

All programs except Supported Work offered educational remediation and the opportunity for GED attainment. STEP's remedial curriculum for in-school youth is intended to promote high school graduation.

Most programs restrict access to GED preparation according to reading level, usually assessed by the Test of Adult Basic Education. Approximately one-third of MFSP participants who lacked a high school diploma or GED received GED preparation. CVC placed approximately 25 percent in GED preparation classes. Auspos, et al., (1989) do not give percentages for the JOBSTART demonstration.

GED attainment rates are usually reported as percentages of those enrolled in GED classes. The rates range from 17 percent at WOW to 33 percent at CVC. Because Auspos, et al., report GED attainment rates as percentages of the total sample, the JOBSTART rates are (except for the Los Angeles Job Corps) noteworthy (see Table 2).

The JOBSTART analysis signals three difficulties in comparing GED attainment rates across sites. According to Auspos, et al., some of the differences reflect state differences in GED examinations. State-level scoring conventions make it easier to pass in Texas, and more difficult in New York and California. States also control the minimum age of recipients. In most states, recipients must be 18, but in Arizona and New York, the locations of the Phoenix Job Corps and Allentown, the age is 19. Other differences among sites, according to Auspos, et al., reflect different average reading levels, which are not reported.

Auspos, et al., also credit program differences for differences in GED attainment rates. El Centro emphasized GED attainment, partly in response to contractual obligations to JTPA, and incorporated a substantial amount of practice test-taking into the weekly program. El Centro also placed heavy emphasis on group instruction. Connelley awarded a financial bonus for passing the GED (Auspos, et al., 1989:112-115).

Only P/PV (1990b) reports educational attainments for youth assigned to adult basic education classes, 62 percent of corpsmembers in CVC. P/PV finds that youth who stayed long enough to complete 100 educational hours (at six hours a week) showed significant reading gains.

Impacts

Except for CVC, all the programs surveyed in this paper have been evaluated by impact studies using either random assignment or comparison group methodologies. Control or comparison groups provide benchmark assessments for measuring the impacts of a demonstration, by providing information on what the behavior of experimentals might have been in the absence of the program.

Table 3 summarizes reported findings in employment, education and other areas, and the timing of the follow-up assessment relative to program enrollment or termination. Because of its importance for the field of employment and training, findings from the Job Corps evaluation are included in the table.

The Job Corps remains the only intervention to demonstrate positive impacts in more than one area (Mathematica Policy Research, 1980). Compared to peers (the evaluation used a comparison group methodology), Job Corps trainees were more likely to have found either civilian or military employment, and to show a five-week increase in annual employment. Former Job Corps members also reduced their participation in all six public transfer programs measured by evaluators, and showed large and statistically significant probabilities (a difference of 19 percentage points) of having a high school diploma or GED. However, early reductions in arrest rates faded out during the second postprogram year.

None of the subsequent evaluations has yielded positive impacts in more than two areas. Maynard (1980) found no positive impacts for Supported Work participants in any area: employment, education, drug use or criminal activity. In the MFSP demonstration, CET participants showed positive impacts only in the area of employment: compared with controls, treatment group members were more likely to be working (a difference of 10 percentage points) and earned \$133 dollars more a month. Positive impacts at AUL and

OIC were limited to educational attainment, where significantly more treatment group members than controls reported GED attainment at follow-up.

Similarly, 12 months postenrollment, JOBSTART trainees showed negative impacts on earnings, the cost of foregone employment and wages as a result of enrollment in the training intervention. However, 28 percent of experimentals received a high school degree or GED compared with only 10 percent of controls, an impact on educational attainment that matches the Job Corps rates.

CCC's short-term economic impacts were limited to the subgroup of JTPA-eligible corpsmembers, who showed a statistically significant positive benefit of \$678, in part because of positive effects on hours worked. In addition, CCC corpsmembers showed positive attitudinal changes in areas related to corps activities, such as awareness of environmental problems and the importance of community service work. STEP's short-term gains included a decrease in summer learning losses (1.1 grade levels in reading and 0.6 grade levels in math for controls versus no losses for treatment youth) and gains in contraceptive knowledge. However, STEP students did not show changes in associated sexual behaviors.

Summary

In summary, employment and training programs appear to average a six-month length of stay and a GED attainment rate of 30 percent of participants assigned to GED classes. No clear association between average length of stay and any outcome measure emerges. In the JOBSTART demonstration, for example, a longer than average length of stay is associated with both a high and a low GED attainment rate.

Differences in implementation appear to account for much of the deviation in GED rates above (El Centro) or below (WOW) average. Although sites that require educational attainment prior to skills training produce higher rates, their structure often deprives many participants of vocational training. Short-term impacts from CET and JOBSTART suggest that impacts in one domain--education or employment--are usually at the expense of the other, and that trade-offs may therefore be inevitable.

CONCLUSION AND IMPLICATIONS

This survey illustrates the array of structures and outcomes of employment and training programs for disadvantaged youth. The different structures have different advantages. Concurrent structures facilitate entry into training but often compromise educational outcomes. Brokered services expand the range of training and educational options but

require careful coordination. Corps and work experience programs provide no skills training but enable trainees to earn a minimum wage while enrolled.

The survey demonstrates that in the design of second-chance interventions for youth, no clear alternative to the high school model has emerged. Despite wide structural variation among programs, outcomes fall along a narrow range. Length of stay rarely exceeds six months. Only approximately 30 percent of those enrolled in GED preparation courses pass the exam. Since the Job Corps evaluation, only two sites, CET and CCC, have posted economic impacts, and only over the short term.

These findings have several implications for employment and training in both the practice and research areas.

Practice

First, structure should reflect program goals. No one structure among those surveyed is optimal, but some are clearly better adapted to specific goals. For example, a concurrent structure with self-paced modules appears adapted to training interventions. Sequential structures with either individualized or group learning settings appear to maximize educational gains. Some structural variables may determine or complement others in program strategy. Fixed entry suggests group learning; CAI allows open entry.

Second, the circumstances of participants and the consistent length-of-stay averages argue for the value of efficiency in program design. Few high school dropouts apparently are either willing or able to make 12-month commitments to training and education. Programs that offer flexible entry and exit and self-paced learning modules appear to address the learning needs and styles of these youth.

Research

This review indicates a need for research in three areas. First, the narrow range of outcomes argues that employment and training has a mandate--indeed, perhaps an opportunity--to evaluate structure from a psychological perspective. In the past decade, program design has usually been based on a sense of "what works," with justification argued from a social policy perspective (Maynard, 1980:2-12). Psychological arguments, based on theories that might predict how to motivate low achievers, have, to date, been an underutilized resource that might inform the central question of this paper: Is there a way to integrate what youth want from a high school alternative with what planners think they need?

Second, employment and training programs lack measures of successful implementation. Without indicators of how well a program was implemented--how consistently services reflected planners' goals--evaluators cannot assess whether outcomes reflect structural or implementation successes or failures. Employment and training research would also benefit from standardized reporting conventions that include non-GED educational attainment measures, baseline reading scores, and the time of onset and duration of absenteeism.

Finally, the attrition and absentee data argue for developing more understanding of their causes. The report that 26 percent of all participants worked while enrolled in JOBSTART indicates some of the pressures faced by significant numbers of youth who seek training. Careful study of attrition patterns and of reasons for absences or termination might guide the design of models to maximize training and education opportunities and participation.

In the next section, we identify several findings from academic psychology that might assist with program design. In the concluding section, we return to the discussion of program structure, integrating findings from the previous two sections.

III. ACHIEVEMENT MOTIVATION: PROCESS AND STRUCTURE

The concept of motivation has been problematic for those concerned with the welfare of the poor. All too often invoked to, in effect, blame those trapped in poverty for failing to escape from it, the concept has been understandably avoided by the research and policy communities. Yet no other theory has emerged to explain low enrollment levels or attrition in employment and training interventions, or to guide alternative designs. This section presents recent concepts of motivation that may address this problem.

BACKGROUND

In the last century, motivation has been redefined several times. For many decades, psychologists conceptualized motivation as the goals, desires and ideas of individuals. Research psychologists explained how people differed according to their goals and attempted to measure differences in the intensity with which they pursued them. However, following the development of behaviorism, genetics and Freudianism, motivation became a discredited concept. Because people were thought to be controlled by innate drives (genetics or Freudianism) or environmental stimuli (behaviorism), they supposedly lacked the capacity for independent action; research on motivation was therefore considered superfluous and theory-building waned.

The renewal of interest in motivation grew out of observations not explainable by classical behaviorism. Why, for example, would rewards cause children to lose interest in activities they had previously enjoyed? Why didn't simplification of a task enable children to grow in confidence and subsequent motivation? The resulting inquiries led to a model of motivation in which people act in part independently of cues from the environment or genes. The last two decades have seen a profusion of research defining how and when people are motivated to act.

The central insight driving this research has been that ideas about achievement experiences--not the experiences themselves--determine the intensity and direction of future action. "The search for understanding is the (or a) basic 'spring of action,'" one of the founding fathers of contemporary motivational research explains (Weiner, 1979). "Motivation is believed to be determined by what one can get (incentive) as well as by the likelihood of getting it (expectancy)," he writes in another place (Weiner, 1985). Causal ascriptions--how people explain what happened--determine reactions and expectations and motivate behavior.

Many of the findings about motivation have already been applied to educational interventions for youth. STEP's Practical Academics curriculum and the CAI programs now in wide use translate many of the key concepts into both format and content.

However, applications to the structure of employment and training programs remain untested.

For several reasons, much of the new work is relevant to employment and training. First, many psychologists have found the new concept of motivation applicable to learning settings for low achievers, especially children with histories of learning failures. Their reports of success suggest that their methods and insights might be useful to alternative programs for high school dropouts.

Second, by shifting the focus from outcomes to process, the theories can potentially advance discussions about how youth perceive and benefit from employment and training opportunities. Psychology may be able to inform efforts to design second-chance programs that provide what planners think youth need, in settings youth like.

Unfortunately, however, immediate applications to employment and training settings may be limited. First, the literature is complicated and often very technical. The several unifying theories of motivation implicate concepts from many domains within psychology--including cognition, affects, learning theory and behavior--any one of which is difficult for lay persons. "What it means" for the employment and training field can often require translation.

Second, almost all findings are based on experiments using elementary school students as subjects and conducted under laboratory conditions. Psychological research typically demands very controlled settings--very different from the applied settings in which employment and training research is conducted. Few studies of motivation have involved high school dropouts and none--at least none uncovered by this survey--employment and training programs.

Finally, most of the findings are based on short-term outcome measures, such as performance on arithmetic tasks, or self-reports on ideas or feelings following task completion. Few studies have probed the contingencies of "continuation motivation," defined as "a return to a task in a subsequent time, in similar or varying circumstances, without visible external pressure to do so, and when other behavior alternatives are available" (Maehr, 1976:448). Yet continuation motivation is the yardstick for employment and training programs whose impacts are measured months or years after participation.

THEORY AND EXPERIMENTAL FINDINGS

This presentation necessarily simplifies what is a complex area of inquiry and an extensive academic literature. The goal has been to select concepts that are immediately

relevant to existing programs and to explain them in nontechnical language. For convenience, the concepts are presented under three headings: expectations of personal effectiveness; the structure of goals; and intrinsic motivation and incentives.

To illustrate the relevance of many of the concepts, theoretical discussions are followed by practical examples. All examples are drawn from the Practical Academics curriculum, developed by P/PV for the STEP demonstration, which has integrated many of the key concepts into its design.⁷

Expectations of Personal Effectiveness

The core of current psychological theory is that the ideas people hold about their effectiveness determine the amount of effort they will exert, their choice of activities, and their persistence in the face of failure and accomplishments. Expectations people have about their effectiveness vary in magnitude, generality and strength. The stronger the ideas about personal effectiveness, the theory's chief proponent explains, "the more active the efforts" (Bandura, 1977).

People derive their ideas about their own effectiveness from various sources. In general, experiences of success increase and experiences of failure decrease a sense of personal effectiveness, though a failure after a string of successes may have little effect. Observations of peers improving their skills can convey a vicarious sense of effectiveness. Praise and encouragement can raise expectations, but only if the source is credible. Self-awareness can inform ideas about personal effectiveness. Sweating and trembling may signal ineffectiveness relative to a task; relaxation may indicate competence (Schunk, 1989).

An important source of ideas about personal effectiveness are the causes people ascribe to their success or failure: what psychologists call attributions. The most common attributions concern their own ability, the amount of effort they must exert to accomplish a task, the difficulty of a task and its outcomes. For example, people think differently about themselves depending on whether they think they succeeded or failed at a task and

⁷ Practical Academics provides reading and math instruction for 14- and 15-year-old disadvantaged youth performing below grade level in school. Created specifically for the 90 hours of basic skills instruction built into each summer of STEP, the curriculum includes 15 one- or two-week modules on the subjects of work, literature, drama, current issues or life skills. All focus on topics that are highly relevant to youth and emphasize specific basic higher-order skills, such as summarizing, predicting, drawing conclusions and problem-solving. The other ingredients of Practical Academics are CAI, journal writing, sustained silent reading and individual support activities (P/PV, 1991).

whether they attribute an outcome to their own ability, their own effort or the difficulty of the task.

Psychologists believe that ideas about ability and effort have a direct effect on performance.⁸ Because effort, as opposed to ability, is controllable, children who make effort attributions are more likely to do their best when confronting difficulty. Conversely, children who attribute failure to insufficient ability are likely to be debilitated by failure (Licht and Dweck, 1984).⁹ In fact, low achievers are more likely than high achievers to attribute failure to low ability and success to low task difficulty--in other words, to attribute outcomes to uncontrollable causes.

Psychologists have demonstrated that interventions that change attributions affect both ideas about personal effectiveness and achievement. Attributional retraining combined with learning task strategies has altered achievement levels in low-achieving children.¹⁰ However, interventions that provide low achievers only with success experiences do not affect subsequent performance.¹¹

⁸ Ideas about the relationship between ability and effort change as children age. Younger children believe high effort implies or is equivalent to high ability. Older children believe higher effort implies lower ability, and ability is seen as more critical for performance than effort. Adults employ more or less differentiated conceptions, depending on audience, task and setting (Nicholls, 1984).

⁹ For example, fifth-graders classified as high or low in self-concept were instructed to work in pairs. High self-concept children attributed success outcomes to their ability more than did low self-concept children (Ames, 1978). In a study of fifth-graders classified as "helpless oriented" or "mastery oriented," helpless children attributed failure to lack of ability. Mastery children, in contrast, made few attributions but engaged in remedies for failure. Despite failure, mastery-oriented children maintained a positive view about the eventual outcome (Diener and Dweck, 1978). After completing tasks with designed failures and successes, helpless children underestimated the number of their successes, did not view them as indicative of ability, and did not expect them to continue. Subsequent failure led them to devalue their performance (Diener and Dweck, 1980).

¹⁰ Children reading below grade level who were given direct attribution retraining showed significant increases in reading persistence and attribution to effort on a standardized posttest compared to controls (Fowler and Peterson, 1981). Students with deficient arithmetic skills who were given attributional retraining that combined task strategies and achievement beliefs showed statistically significant gains on a self-efficacy posttest (Schunk, 1981).

¹¹ Children defined as "helpless" were assigned to one of two procedures that provided either attributional retraining or success experiences. Subjects of the latter procedure demonstrated deterioration in performance after failure; subjects given attributional retraining maintained or improved their performance and showed an increase in the degree to which they emphasized effort versus ability (Dweck, 1975).

In summary, psychologists have demonstrated that ideas children hold about their effectiveness affect their achievement. The most influential of these ideas are the attributions: ideas about causes of success and failure. Because effort, unlike ability, is a cause that people can control, people who ascribe success experiences to their own effort are more likely to achieve in the future. Conversely, low achievers are more likely to make maladaptive attributions, such as low ability as a cause of their failures and low task difficulty as a cause of their successes. This attributional pattern inhibits their motivation for future challenges.

Practical Academics provides students multiple opportunities to change their ideas about their personal effectiveness. The many activities that encourage class participation enable students to see peers improving their skills. The activity of journal writing refocuses a writing task away from skills (and ability attributions) onto content and personal effort. The modules integrate challenging exercises--that require real effort--with material that is interesting and accessible to students. For example, a module on "Your Summer Job" teaches reading and spelling skills in the context of resume preparation, and math skills in the context of time cards and pay stubs.

The Structure of Goals

Not surprisingly, ideas about ability and effort do not arise in a vacuum. Psychologists can now describe how ideas about achievement are shaped by the structure of learning settings, and vice versa.

Recent research indicates that students instinctively structure learning situations differently. Some students construct performance goals in any learning setting; these students instinctively look for indicators of their own ability in relationship to how others are performing. Students who construct mastery goals, in contrast, focus on mastering a skill, value the process of learning and attaining mastery, and are usually more predisposed to pursue challenging tasks (Ames and Archer, 1988).¹²

Experiments with children have illustrated how structures imposed by adults affect ideas about personal effectiveness and achievement. When experimenters emphasize ability, high outcomes and comparison with other students, or performance goals, children make ability attributions and become despondent after failure. In mastery goals settings, when experimenters stress improvement, progress and the process of learning, children ignore

¹² Implicit ideas about goal orientation predict ability attributions. Eighth-graders were assessed for goal preference and their interpretation of effort. Subjects with performance goals used effort as an index of ability, with high effort implying low ability, and vice versa. In contrast, subjects with learning goals viewed effort as a means to achieve mastery, with greater effort indicating more ability (Dweck and Leggett, 1988).

cues about their ability and respond to failure with problem-solving strategies (Elliott and Dweck, 1988). When shown attainable short-term learning goals, even low achievers make rapid progress in self-directed activities (Bandura and Schunk, 1981).

Similarly, learning settings structured as competitive, individualistic or cooperative situations elicit different ideas about achievement in children. These differences result from the different relationships these structures impose on people. For example, competitive structures impose a condition of negative interdependence, so that the possibility or opportunity for one student to attain a goal is reduced when others are successful. In individualistic structures, in contrast, students are independent of each other and the opportunity to attain goals is equal for all students. In cooperative structures, students perform in groups and usually are dependent on each other for goal attainment (Ames, 1984:178-181).

Children think about their performance differently depending on these goal structures. In competitive structures, children tend to make ability attributions and to reward themselves exclusively on the basis of their present performance. In individualistic structures, in contrast, children are more likely to make effort attributions and to consider past and present performance when evaluating themselves.¹³ "Not only do [these] children attribute their performance to effort," one psychologist points out, "they also think about how to do the task" (Ames, 1984:203).

When learning in cooperative structures, children evaluate their own performance based on the group outcome. Successful group outcomes promote positive self-evaluations even in children who perform poorly on a group task. For this reason, "cooperative structures that ensure group success can be a real boon to low achievers," according to one psychologist (Ames, 1984:186).

Practical Academics provides a flexible structure that enables students to move between individualistic and cooperative learning situations. Students may work cooperatively on a task, such as creating a poster to illustrate a concept from a module. Individualized activities enable students to practice and reinforce skills while working independently. Because the curriculum focuses on mastery of higher-order thinking skills, it avoids the need for normative performance measures, such as grades. In fact, grades and other competitive measures of achievement are excluded from the curriculum.

¹³ Children placed in either competitive or individualistic settings were told to work on a task. In the individualistic setting, children's assessments of past and present performance counted almost equally toward their feelings of satisfaction. In the competitive setting, children focused almost exclusively on present performance (Ames and Ames, 1981).

Intrinsic Motivation and Incentives

The classical stimulus-response model of motivation posits a direct link between environmental stimuli or rewards and behavior. According to the classical paradigm, the bell rings and the dog salivates; the reward of food induces the rat to continue to press a bar.

The contemporary model is considerably more complex. It is based on research that found that when people receive rewards for activities in which they were initially interested--or "intrinsically motivated"--they lose interest in those activities.¹⁴ Rewards may have detrimental effects, especially when initial interest in an activity is high and the reward is viewed as a bribe. "The mere creation of an instrumental, contingent means-end relationship, even between two activities of high and initially equivalent interest to the child," psychologists explain, "may be sufficient to create a decrease in the child's later intrinsic interest in the activity undertaken as a means to some ulterior end" (Lepper and Hodell, 1989:77).

Psychologists point out, however, that not all rewards are detrimental. Rewards given to reinforce specific behaviors, such as attendance or adherence to a dress code, promote those behaviors. Rewards for competence in an activity, or achievement awards, can increase or decrease motivation, depending on success or failure in the activity. Rewards that lead to perceptions that an activity is being controlled--as in a bribe--always decrease subsequent interest in the activity (Lepper and Hodell, 1989:84-87).¹⁵

Furthermore, rewards linked to cooperative structures can have a positive and even powerful effect. Research on cooperative structures has demonstrated that rewards for team achievements increase individual achievement even if individuals in the group have

¹⁴ For example, children who showed intrinsic interest in drawing and were given expected rewards demonstrated less subsequent interest in the activity than children given unexpected or no rewards (Lepper, et al., 1973). Furthermore, adult surveillance of children engaged in activities in which they were intrinsically interested decreased subsequent interest, even when there was no explicit expectation of reward (Lepper and Greene, 1975).

¹⁵ Research suggests that application of these concepts, though complicated, is not impossible. For example, children who performed well in an intrinsically motivated task showed decreased interest in the activity when rewards were not related to performance. However, subjects who received rewards based on performance showed decreased interest only if they had performed poorly (Karniol and Ross, 1977). A summary of research on rewards and intrinsic motivation confirms that if rewards are contingent on performance, delivered systematically and repeatedly, and related to the tasks for which they are delivered, then negative effects on motivation can be minimized (Malouf, 1983).

worked independently. Group study itself had no effect on individual achievement; only when a group received a reward did individual achievement rise (Slavin, 1983).¹⁶

Psychologists point out that no reward given by others can replace the reward of enjoyment from the mere performance of an activity. However, some individuals may lack the skills necessary "to get into the flow, stay in it, and make the process evolve." These skills probably include a capacity to focus attention on an activity, to define goals and the means of attaining them, to seek feedback, and to balance challenges and skills. For some individuals, an ability to tolerate the anxiety of learning new skills--with the likelihood of failure accompanying the learning process--may also be necessary. In other words, to enjoy an intrinsically motivated experience may, for some people, pose both a challenge and a reward (Csikszentmihalyi and Nakamura, 1989:66-67).

STEP staff recommend that "Self-Identify" be one of the first Practical Academics modules taught in students' first summer of STEP. The module builds off activities in which pairs of students take turns discussing photographs of their families, which they have been asked to bring to class. These motivating activities, built around topics in which students are intrinsically interested, lead into exercises that teach higher-order skills, such as writing a description of the photograph, or drawing inferences from another writer's biography or photograph. The module concludes with independent tasks, selected by the student, that reinforce these interests or skills, such as a journal entry on a family story, or the construction of a family tree using a form in a workbook.

SUMMARY

Contemporary psychology defines motivation according to the thought processes that integrate internal and external information. Whereas past concepts of motivation identified what a person wanted, the new model describes how people think about past and future achievement experiences. These thought processes directly affect behaviors.

This revised model of motivation signals several facts relevant to interventions for disadvantaged youth. As dropouts from inner-city high schools, many recruits will probably use maladaptive attribution patterns that constrict their motivation. Learning structures that emphasize individual accomplishments and mastery goals--the process of

¹⁶ These findings are based on categorization of 46 studies of cooperative learning and achievement according to task structure and incentive structure. Tasks could be accomplished either by all group members working together or by individual specialization. Rewards could be distributed to groups based on either individual achievements or a group product, or to individuals based on individual achievement within the group effort. Slavin concludes that group rewards for individual or group learning are critical to the effectiveness of cooperative learning methods.

learning as opposed to grades--may encourage more productive orientations. Cooperative structures, especially those that confer rewards for group successes, may prove motivational even for low achievers. Exercises that emphasize the importance of effort in achievement may have long-term motivational benefits.

The new model reverses a familiar causal relationship. "Where there's a way there's a will," psychologists now argue, pointing to the potential for learning settings to elicit the thinking that precedes achievement (Corno and Mandinach, 1983). This revisionist formulation has far-reaching implications for interventions that seek "to make the connection" with youth at risk of school failure (Higgins, 1988).

Implementation of the new vision is, however, unavoidably complex. Motivation "works" on multiple levels, reinforced or extinguished by cues embedded in all aspects of educational interaction. The task for planners is to integrate the internal motivation of the individual with the structure of a learning environment--no small feat in multidimensional programs for youth with many needs.

IV. CONCLUSIONS AND RECOMMENDATIONS

This paper began with two questions related to the structure of education and training programs for youth. The first question probes the array of options available to design second-chance programs different from the high school model. The second question asks about the motivations of candidates for those programs. What would they want from an alternative structure, we asked? How could this structure be different enough from school to attract them but still prepare them for the world of work?

Our analysis of the structures of 15 sites in six employment and training programs implemented in the 1980s has illustrated the range of design options. Programs can be concurrently or sequentially structured; services can be in-house or brokered; core components can include work experience, training, education and life skills; and stipends may or may not be offered. Other options include open or fixed entry and exit, and groupings by age and by teams or crews.

Similarly, our review of contemporary theories about motivation has yielded insights about the types of experiences that students--at least those in laboratory settings--find motivating. Here we find additional diversity: different motivating cognitions and different structural settings where they can emerge.

In this section, we review findings from Sections II and III. We then apply concepts from Section III to explore what might be motivational components of existing education and training programs. We conclude with recommendations that emerge from these discussions.

REVIEW OF FINDINGS

The diversity of programs surveyed in Section II yields no clear alternative to the high school structure for second-chance interventions. Two factors contribute to this conclusion. First, despite the diversity, outcomes fall along a narrow range: length of stay averages about six months, GED attainment averages 30 percent of those who receive preparation, and impacts are limited to a single outcome--education or training--or subgroup of a research sample.

Second, different structures have different advantages. Concurrent structures reduce waiting lists but may also have reduced educational outcomes. Sequential structures promote education but may result in attrition because of delays between program segments. Offering all components in-house facilitates integration and reduces attrition but limits the training options programs can offer.

For these reasons, we conclude that any structural alternative involves trade-offs. Planners therefore need to identify goals prior to designing a program structure. Selection of goals--occupational training, educational remediation--should inform selection of structural alternatives.

However, absentee and attrition data suggest that, no matter what the structure, many candidates for employment and training programs will not or cannot participate beyond six months. The consistency of the attrition data argues for efficiency in program design: planners need to ensure that even short-term participants are able to derive some benefit.

The review of the psychological literature on motivation has yielded findings of a very different sort. In the last two decades, psychology has produced a profusion of research on motivational patterns. Much of the research has focused on the special needs of low achievers, and on the often subtle relationships between individual motivation and educational approach.

The survey reveals that patterns of thinking characteristic of low achievers can compromise their motivation for new and challenging tasks. Interventions that focus on the contribution of effort as opposed to ability in the attainment of goals can help revise maladaptive patterns and raise achievement levels. Individualistic (as opposed to competitive) structures that emphasize mastery (as opposed to performance) and attainable short-term goals can motivate all learners. Cooperative programs, especially when combined with group rewards, can provide experiences that are particularly constructive for low achievers.

Although these insights are compelling, the major findings from the review are more subtle. The framework of contemporary theories of motivation--the concepts that undergird the research--have far-reaching implications for educational interventions.

First, current understanding of how motivation works indicates the possibility for change. Interventions can be designed to address apparent motivational deficits in low achievers. Individuals can change the process whereby they define and seek out goals.

Second, motivation results from interaction between an individual and his or her setting (Higgins, 1988). Both sides of the connection are essential: the individual reaching for his or her goal; and the setting that makes the goal, and the path to its attainment, apparent. It follows that intervention will be admittedly challenging when the individual has had many experiences that discourage adaptive and productive motivational thinking and behavior.

Finally, intrinsic motivation--what an individual wants and strives to attain--may be the goal, as opposed to the starting place, of interventions for high school dropouts. The demographic literature suggests, and anecdotal reports confirm, that many recruits to second-chance interventions enroll with many deficits and many needs. Support services and constructive interactions may be necessary to enable them to experience the reward of intrinsic motivation.

MOTIVATIONAL ASPECTS OF EXISTING PROGRAMS

Below, we identify what may be motivational aspects of employment and training programs. From our review in Section II, the CCC, CVC and CET programs appear to have motivational components.

Youth Corps

Our survey included two youth corps programs, CCC and CVC. Although neither has demonstrated postprogram impacts (only the CCC has been formally evaluated), both remain popular with youth. Our review of the psychology of motivation suggests several reasons for this popularity.

Youth corps traditionally promote a strong social ethic, usually centered on the values of service and racial/ethnic tolerance. Corps reinforce these values on several levels: corpsmembers work in teams, wear uniforms, and perform community service for low wages. We have noted both the need for program structure to reflect program goals and the effect of setting on motivation. Our review suggests that to the extent that corps blend their values with their structure, they may elicit motivations associated with helping, service and interdependence.

In addition, because they are often challenging but require no prior skills, corps work projects may be motivational. CCC teams occasionally take on emergency assignments, such as fire fighting and flood control. CVC usually requires corpsmembers to work outside their own neighborhoods under difficult physical conditions or with difficult clientele, such as the mentally retarded or terminally ill.

Our analysis yields several insights into why many youth like these assignments. To the extent that a project is a group success, it motivates even those who contribute little toward the eventual outcome. A project's novelty may motivate some youth; others may be motivated by a difficult task.

Many corps, including CVC, require recruits to attend a preenrollment training session, or "hard corps challenge." These sessions often provide physical and psychological

challenges, such as rock climbing or predawn physical training. Perhaps paradoxically, they are often popular with corpsmembers--many describe it as "the best part of CVC." Although never researched, the training appears to contain motivational elements: difficult (but not impossible) tasks that require (and respond to) effort; coaching by sympathetic leaders; and discussion to focus attention on effort and feelings.

However, our review suggests that corps have yet to maximize the potential of groups to reinforce such social codes as attendance, or to elicit motivation on academic tasks. Many corps, including CVC, use a cooperative team structure for work but reward individuals for attendance and academic attainments. Yet research suggests that individual attainments are greater when the group receives the reward; the high GED attainment rates at the El Centro site in the JOBSTART demonstration may be an example.

CET

A site in the MFSP demonstration, CET offers a very different structure from the corps, but one that has demonstrated postprogram employment impacts. Contemporary psychology provides insights into its success.

In the CET model, participants begin training in an occupation of their choice immediately after enrollment. They then proceed at their own pace through a series of training modules. Participants have access to academic remediation concurrently with training. Because CET offers training only for demand occupations, participants who complete the modules can expect employment.

CET's success is usually attributed to its practical orientation. Participants are motivated to learn a skill, the argument goes, because training leads to a definite outcome: a better job than they could otherwise procure. Placement specialists guarantee that jobs are identified for those who attain training benchmarks.

Contemporary psychology suggests several different explanations. The goals embedded in the training modules may reinforce intrinsic interest in the selected occupation. The emphasis on mastery may elicit effort attributions and thus develop adaptive thinking about effectiveness. Focusing on the process by which participants master a skill may change thinking that may have compromised motivation and performance in the past. In addition, CET's supportive setting may enable participants to tolerate anxiety in learning new skills. Finally, mastery of a skill may provide its own reward.

CET's success is especially remarkable in that participants receive no stipend and no monetary incentives to attain designated benchmarks. Because the academic component

is subordinate, educational attainments, though comparatively low, are also remarkable and suggest that motivational experiences may be transferable.

Without further research, explanations of success based on the cognitive (as opposed to occupational) changes CET achieves must remain speculative. Although occupational impacts will always be the measure of employment and training programs, psychological research into skills mastery may help other settings emulate CET's success.

RECOMMENDATIONS

Integration of psychology with structural planning for employment and training interventions cannot be an immediate goal. Several steps in the short term, however, could facilitate this integration. We outline these steps below:

1. Investigate reasons for absenteeism and attrition. Section II has revealed widespread absenteeism from education and training programs and high rates of early terminations. Yet little credible information exists on the reasons youth are absent or leave before completion.

The few published reports of reasons for absenteeism or termination indicate the complexity of investigating these behaviors. Many youth who enroll in employment and training programs confront multiple, simultaneous problems that restrict their participation. Homelessness, pregnancy and family problems are in the backgrounds of many of these youth. Many find they must seek employment to provide for present needs, even while enrolled full time in a program that aims to improve their future.

Careful study is needed to identify reasons for absences. Identification of causes and patterns of attrition might enable planners to minimize interruptions. Even if absences and attrition are unavoidable, understanding causes might facilitate design of structures to maximize learning during intermittent or brief enrollments.

2. Standardize conventions for reporting attendance and length-of-stay outcomes. Section II has illustrated the difficulty of comparing attendance and length-of-stay outcomes across sites as part of the search for optimal program structures. Many youth compile absences of long duration while enrolled. In segmented programs, lapsed time between segments may or may not contribute to length-of-stay calculations. Evaluators compound the confusion by failing to indicate whether length of stay includes all or part of a month and by using different length periods.

Our review indicates that any convention should reflect both hourly and chronologically lapsed time. P/PV likes the CVC formula;¹⁷ formulas not identified in this survey may have other benefits. P/PV also recommends that "months" be reported as "months completed," with monthly or quarterly periods, and that evaluators follow Auspos, et al., (1989) and report hours by component.

3. Develop and promulgate indicators of good management. Any structure may appear promising in design. Yet without indicators of the quality of implementation, evaluators cannot explain whether a disappointing outcome reflects a design or implementation failure. Furthermore, to argue effects, evaluators need to demonstrate that trainees received the intervention.

Several indicators can probably be included in evaluations without significant increases in cost. Reports of average daily attendance based on time sheets are often good indicators of management quality. Attendance measures disaggregated by component can reflect how well components have been integrated and implemented. Conversely, absentee rates and average duration of absences indicate the constraints on an intervention if youth are consistently not present, especially if reasons for absences are reported.

Other indicators may have to be developed, or adapted from related fields. Evaluators, managers and participants usually have opinions about how well programs are managed--opinions that could form the basis for quantitative assessment. Some assessments may be purely qualitative--reporting the atmosphere of a site or team, the excitement generated by a group or a learning experience--but these often have value and can occasionally be quantified.

4. Broaden the range of professional disciplines involved in program planning, and provide opportunities for psychological research in employment and training settings. The review of literature on motivation from academic psychology has indicated the potential relevance of many central concepts to the design and implementation of second-chance interventions. Review of findings from other academic and practice areas might yield other key concepts with potential relevance to employment and training interventions for youth. Persistent attrition and disappointing outcomes demonstrate the need for input from a broad range of disciplines in a program's design and operational phases.

¹⁷ CVC computes length of stay by hours and chronological time. Absences longer than ten days are subtracted from the total. Corpsmembers have up to 18 months to accrue 12 months of enrollment time. Full-term enrollment to qualify for the maximum termination bonus requires 12 months and 1,660 hours.

Opportunities for psychologists to conduct research in employment and training settings could establish the validity of several core concepts for late adolescent clients. Although employment and training research is usually across sites, many sites provide subgroupings or distinct program segments that could support the small-scale studies typical of psychological research. These settings, for example, could provide opportunities to investigate motivational effects of group versus individualized education for youth.

CONCLUDING REMARKS

Thirty years ago, White (1959) postulated a drive he called competence motivation. "It is directed, selective, and persistent," according to White, "and it is continued not because it serves primary drives, which indeed it cannot serve until it is almost perfected, but because it satisfies an intrinsic need to deal with the environment" (1959:318). Fifteen years later, Harter (1974) published experimental data demonstrating that children find the attainment of competence pleasurable. "Children derive pleasure from cognitive mastery on problem-solving tasks," she concluded, and "the greatest gratification is derived from the solution of the most challenging problems" (1974:668).

These insights bring us back to the questions: What is it that high school dropouts want from a high school alternative? Is there any way to provide for them an attractive and effective intervention?

Youthful clients of second-chance interventions have often repeatedly failed to master the skills that enable competent interactions with social and employment settings. For them, the attainment of the mastery experience described by Harter may not be straightforward. Years of discouragement may have inhibited the competence motivation postulated by White. Nevertheless, these concepts remain a valid reminder of the human need "to interact effectively with [the] environment" (White, 1959:297)--a need that will motivate individuals at all achievement levels.

To the extent that employment and training programs can integrate mastery experience into second-chance settings, the pedagogical and marketing approaches to interventions for youth--what they should have versus what they want--will be congruent. For those youth no longer served by the high school model, the pleasurable aspects of learning and mastering skills might yet yield positive outcomes.

APPENDIX: PROGRAM AND SITE DESCRIPTIONS

SUPPORTED WORK

Between April 1975 and July 1977, the National Supported Work Demonstration targeted young high school dropouts. Participants received 12 to 18 months of paid work experience to enable them to transition to stable employment. Selected to be between the ages of 17 and 20, all participants had to have poor employment histories, and at least 50 percent had to have a delinquency record. Eighty-eight percent of those who enrolled were male.

The model provided for work under conditions thought to promote employability in individuals unable to meet performance standards of the labor market. The model emphasized close supervision, peer support through work assignments in crews, and "graduated stress" through gradually increased standards of attendance and performance. Work assignments included service industry jobs, auto repair, construction and, at one site, parks maintenance, building rehabilitation, and furniture manufacturing and repair.

The demonstration was implemented in five sites, all of which concurrently served other target groups, such as Aid to Families with Dependent Children recipients and ex-offenders. The three sites selected for this analysis reflect variation in maximum length of stay; the Hartford site is included because of its varied work program and the high percentage of youth in its overall program.

THE MINORITY FEMALE SINGLE PARENT (MFSP) DEMONSTRATION

The Rockefeller Foundation established only broad guidelines for the community-based organizations selected into the MFSP Demonstration, which operated from 1982 through August 1988. The Rockefeller Foundation provided matching funds for programs that combined assessment, counseling, education, training, job placement and child care assistance. Programs differed in structure and emphasis. All four community-based organizations selected into the demonstration are included in this analysis, which is based on all the minority single mothers who sought service between November 1984 and December 1987.

The Atlanta Urban League (AUL)

AUL offered participants basic education, skills training and direct job placement. AUL brokered educational, skills training and support services from other agencies. AUL focused on initial assessment, guidance and short-term preparation for outside courses.

The brokering arrangement allowed some participants to attend several classes simultaneously.

The Center for Employment Training (CET)

In the CET model, participants receive practical skills training in an occupation of their choice. CET teaches training in self-paced learning modules and structures basic educational remediation as a supplement rather than a precursor to skills training, with classes scheduled for one to two hours daily.

The Opportunities Industrialization Center (OIC)

OIC required MFSP participants without high school diplomas to attend general equivalency diploma (GED) preparation or adult basic education classes. Class schedules included sessions on job readiness and parenting. Skills training, only for those with high school diplomas or GEDs, was offered in-house and through brokers.

Wider Opportunities for Women (WOW)

WOW enrolled MFSP participants in one of two parallel courses based on Test of Adult Basic Education scores at entry. Participants reading above the eighth-grade level qualified for an electromagnetics course. Participants with lower literacy levels were assigned to an academic skills course, with no possibility for transfer to the occupational track. Participants reading below the fifth-grade level were referred to adult literacy programs. Both tracks included life skills training. The occupational course did not aim to impart a technical skill but a general knowledge of technical subjects and preparation for written exams used by many local employers.

JOBSTART

The Manpower Demonstration Research Corporation (MDRC) initiated JOBSTART in 1985 to test whether the Job Corps model, the only employment and training intervention to produce long-term impacts for high school dropouts, could be adapted and implemented within the Job Training Partnership Act (JTPA) system. Programs were implemented in existing sites and had to conform to JTPA as well as to demonstration guidelines. The major demonstration requirement was for a curriculum that included 200 hours of education and 500 hours of skills training.

The demonstration was structured to be more intensive and lengthy than most JTPA interventions, but with a less extensive array of support services than in most Job Corps. Participation targeted high school dropouts between 17 and 21 years of age who read

below the eighth-grade level and were JTPA eligible; MDRC allowed 20 percent of participants to read at or above the eighth-grade level.

Sites had latitude in selecting educational curricula--though computer-assisted instruction (CAI) was encouraged--and occupational skills training. Sites were also free to structure their program sequentially--requiring education before skills training--or concurrently, and to contract out either segment. Support services had to include child care, transportation and some combination of life skills training, personal and vocational counseling, and incentive payments.

Thirteen sites were selected for the demonstration. This analysis focuses on five of the sites, selected to illustrate variation in structure (concurrent and sequential), governance (Job Corps and community-based), and success in achieving length-of-stay and GED-attainment benchmarks. The analysis is based on participants who enrolled from August 1985 through November 1987.

The Connelley Skill Learning Center, Pittsburgh, Pennsylvania

Connelley operated as a division of the Pittsburgh Public School System. JOBSTART participants could select occupational training from more than 20 skills areas. Education was offered two hours a day in-house, using the Computer Curriculum Corporation (CCC) curriculum. Life skills sessions were offered as an "after school" component.

El Centro Community College Job Training Center, Dallas, Texas

El Centro provided a sequential program for JOBSTART. Education, organized as small group instruction, and two to three hours daily of life skills training preceded skills training. Students continued to spend about two hours a week on basic skills when in the training component. Training was offered in a variety of areas, including clerical work and autobody repair.

The Los Angeles Job Corps Center, Atlanta, Georgia

The Los Angeles Job Corps, operated by the Young Women's Christian Association, is one of the largest and oldest Job Corps in the nation. All JOBSTART participants were enrolled in its nonresidential component. Participants could select training in a wide array of areas after completing the educational component.

The Phoenix Job Corps Center, Phoenix, Arizona

The Phoenix Job Corps is a center operated by a for-profit organization enrolling Hispanic, Native American, Asian, black and white American youth. JOBSTART participants enrolled in its nonresidential component and attended concurrent educational and skills classes. Training options included preapprenticeship training by local unions in construction skills.

Allentown Youth Services Consortium, Buffalo, New York

Allentown is a major provider within the JTPA system. Allentown uses a sequential structure and contracts out vocational training. In the initial educational component, JOBSTART participants divided their time equally between a computer-assisted basic skills curriculum and life skills activities.

URBAN AND CONSERVATION CORPS

Youth corps usually enroll youth between the ages of 17 and 23. Although nontargeted, most recruit youth with one or more indicators of disadvantaged status: welfare status as a child, lack of a high school or equivalency degree, minority status, lack of vocational skills or poor work history.

Corps emphasize high standards of work, usually in conservation (public parks in rural areas, abandoned lots in cities) or human service settings (institutions for the aged, retarded or terminally ill). Most corps also offer opportunities for educational remediation, either in the evening after work, or in periods during the workday.

Corps indirectly offer what is sometimes called "employability development" through enforcement of rules about attendance, punctuality and teamwork, and an emphasis on high-quality supervision. Although few offer life skills classes, most emphasize a social ethic that values community service, environmental awareness and racial tolerance.

The California Conservation Corps (CCC)

The oldest and largest of existing corps, CCC annually enrolls almost 2,000 youth age 18 to 23 in both residential and nonresidential settings. Corpsmembers spend up to one year on conservation projects, many with high visibility. Educational classes, some subcontracted, are offered evenings and some weekdays. Corpsmembers with exemplary records can reenroll for one additional year to receive training in such areas as energy conservation, emergency helicopter fire rescue, carpentry and clerical skills.

The analysis includes corpsmembers who enrolled between November 1983 and October 1984.

The City Volunteer Corps of New York City (CVC)

The largest of the urban corps, CVC enrolls approximately 300 youth annually in its nonresidential program. CVC pioneered the addition of human service assignments to conservation and short-term projects. Teams of corpsmembers rotate through work projects at least every three months, thereby gaining experience in a variety of work settings. Corpsmembers attend classes at their neighborhood City University of New York branch one evening and one morning a week, and receive two hours a week of life skills instruction.

The CVC sample includes youth who enrolled from December 1988 through September 1989.

THE SUMMER TRAINING AND EDUCATION PROGRAM (STEP)

Beginning in 1985, the five-site STEP demonstration enrolled JTPA-eligible youth in a summer work and education program. The program offered seven to eight weeks of educational remediation, life skills instruction and work experience for in-school youth age 14 or 15 at enrollment, for two consecutive summers. Participants had access to a STEP counselor during the school year. Funded by a consortium of foundations as well as the U.S. Departments of Labor and Health and Human Services, STEP involved, at the local level, collaboration between public schools and the federal Summer Youth Employment and Training Program. However, the structure and curriculum were designed by Public/Private Ventures and implemented on a consistent basis across all sites.

The analysis is based on STEP's second cohort of youth, who enrolled in the summer of 1986 for two summers of participation.

REFERENCES

- American Council on Education
1990 1990 Statistical Report. Washington, D.C.: American Council on Education.
- Ames, Carole
1934 "Competitive, Cooperative, and Individualistic Goal Structures: A Cognitive-Motivational Analysis" in Ames, Carole and Ames, Russell (eds.) Research on Motivation in Education (Vol. 1). New York: Academic Press.
- Ames, Carole
1978 "Children's Achievement Attributions and Self-Reinforcement: Effects of Self-Concept and Competitive Reward Structure." Journal of Educational Psychology, 70:345-355.
- Ames, Carole and Ames, Russell
1981 "Competitive Versus Cooperative Reward Structures: The Salience of Past Performance Information for Causal Attributions and Affect." Journal of Educational Psychology, 73:411-418.
- Ames, Carole and Archer, Jennifer
1988 "Achievement Goals in the Classroom: Student's Learning Strategies and Motivation Processes." Journal of Educational Strategies, 80:260-267.
- Auspos, Patricia; Cave, George; Doolittle, Fred; Hoerz, Gregory
1989 Implementing JOBSTART: A Demonstration for School Dropouts in the JTPA System. New York, NY: Manpower Demonstration Research Corporation.
- Bandura, Albert
1977 "Self-Efficacy: Toward a Unifying Theory of Behavioral Change." Psychological Review, 84:191-215.
- Bandura, Albert and Schunk, Dale H.
1981 "Cultivating Competence, Self-Efficacy, and Intrinsic Interest through Proximal Self-Motivation." Journal of Personality and Social Psychology, 41:586-598.

Corno, Lyn and Mandinach, Ellen B.

1983 "The Role of Cognitive Engagement in Classroom Learning and Motivation." Educational Psychologist, 18:88-109.

Csikszentmihalyi, Mihaly and Nakamura, Jeanne

1989 "The Dynamics of Intrinsic Motivation: A Study of Adolescents" in Ames, Carole and Ames, Russell (eds.) Research on Motivation in Education (Vol. 3). New York: Academic Press.

Diaz, William A.; Ball, Joseph; Wolfhagen, Carl

1982 Linking School and Work for Disadvantaged Youths. The YIEPP Demonstration: Final Implementation Report. New York: Manpower Demonstration Research Corporation.

Diener, Carol and Dweck, Carol S.

1980 "An Analysis of Learned Helplessness: The Processing of Success." Journal of Personality and Social Psychology, 39:940-952.

Dweck, Carol S.

1975 "The Role of Expectations and Attributions in the Alleviation of Learned Helplessness." Journal of Personality and Social Psychology, 31:674-685.

Dweck, Carol S. and Leggett, Ellen L.

1988 "A Social-Cognitive Approach to Motivation and Personality." Psychological Review, 95:256-273.

Elliott, Elaine S. and Dweck, Carol S.

1988 "Goals: An Approach to Motivation and Achievement." Journal of Personality and Social Psychology, 54:5-12.

Fowler, Joseph W. and Peterson, Penelope L.

1981 "Increasing Reading Persistence and Altering Attributional Style of Learned Helpless Children." Journal of Educational Psychology, 73:251-260.

Gordon, Anne and Burghardt, John

1990 The Minority Female Single Parent Demonstration: Short-Term Economic Impacts. New York: Rockefeller Foundation.

- Hammack, Floyd Morgan
1986 "Large School Systems' Dropout Reports: An Analysis of Definitions, Procedures and Findings." Teachers College Record, 87:324-341.
- Harter, Susan
1974 "Pleasure Derived by Children from Cognitive Challenge and Mastery." Child Development, 45:661-669.
- Hershey, Alan
1988 The Minority Female Single Parent Demonstration: Process/Analysis of Program Operations. Princeton, NJ: Mathematica Policy Research.
- Higgins, Catherine
1988 Youth Motivation: At-Risk Youth Talk to Program Planners. Philadelphia: Public/Private Ventures.
- Karniol, Rachel and Ross, Michael
1977 "The Effect of Performance-Relevant and Performance-Irrelevant Rewards on Children's Intrinsic Motivation." Child Development, 48:482-487.
- Lah, David and Wolf, Wendy
1985 The California Conservation Corps: A Report on Implementation. Philadelphia: Public/Private Ventures.
- Lepper, Mark R. and Greene, David
1975 "Turning Play into Work: Effects of Adult Surveillance and Extrinsic Rewards on Children's Intrinsic Motivation." Journal of Personality and Social Psychology, 31:479-486.
- Lepper, Mark R. and Hodell, Melinda
1989 "Intrinsic Motivation in the Classroom" in Ames, Carole and Ames, Russell (eds.) Research on Motivation in Education (Vol. 3). New York: Academic Press.
- Lepper, Mark R.; Greene, David; Nisbett, Richard E.
1973 "Undermining Children's Intrinsic Interest with Extrinsic Reward: A Test of the 'Overjustification' Hypothesis." Journal of Personality and Social Psychology, 28:129-137.

Licht, Barbara G. and Dweck, Carol S.

- 1984 "Determinants of Academic Achievement: The Interaction of Children's Achievement Orientations with Skill Area." Developmental Psychology, 20:628-636.

Maehr, Martin L.

- 1976 "Continuing Motivation: An Analysis of a Seldom Considered Educational Outcome." Review of Educational Research, 46:443-462.

Mallar, Charles; Kerachsky, Stuart; Thorton, Craig; Long, David

- 1982 Evaluations of the Economic Impact of the Job Corps Program... Third Follow-Up Report. Princeton, NJ: Mathematica Policy Research.

Malouf, David

- 1983 "Do Rewards Reduce Student Motivation?" School Psychology Review, 12:1-11.

Mathematica Policy Research

- 1980 Evaluation of the Economic Impact of the Job Corps Program: Second Follow-Up. Princeton, NJ: Mathematic Policy Research.

Maynard, Rebecca

- 1980 The Impact of Supported Work on Young School Dropouts. The Final Report (Vol. 1). New York: Manpower Demonstration Research Corporation.

Morgan, William R.

- 1984 "The High School Dropout in an Overeducated Society" in Pathways to the Future: A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982 (Vol. IV). Columbus, OH: Ohio State University, Center for Human Resource Research.

Morrow, George

- 1986 "Standardizing Practice in the Analysis of School Dropouts." Teachers College Record, 87:342-355.

National Center for Education Statistics

- 1988 Droupout Rates in the United States: 1988. Washington, D.C.: U.S. Department of Education.

New York City Board of Education

- 1989 The Cohort Report: Four-Year Results for the Class of 1988 and Follow-Ups of the Classes of 1986 and 1987. Brooklyn, NY: New York City Board of Education, Office of Research, Evaluation and Assessment.

Nicholls, John G.

- 1984 "Achievement Motivation: Conceptions of Ability, Subjective Experience, Task Choice, and Performance." Psychological Review, 91:328-346.

Public/Private Ventures

- 1991 "Curriculum Development: When, What and Why We Do It." Public/Private Ventures News, Fall.

Public/Private Ventures

- 1990(a) The Practitioner's View: New Challenges in Serving High-Risk Youth. Philadelphia: Public/Private Ventures.

Public/Private Ventures

- 1990(b) "The City Volunteer Corps: An Interim Report." New York: City Volunteer Corps.

Schunk, Dale H.

- 1989 "Self-Efficacy and Cognitive Skill Learning" in Ames, Carole and Ames, Russell (eds.) Research on Motivation in Education (Vol. 3). New York: Academic Press.

Schunk, Dale H.

- 1981 "Modeling and Attributional Effects on Children's Achievement: A Self-Efficacy Analysis." Journal of Educational Psychology, 73:93-105.

Sipe, Cynthia L.; Grossman, Jean Baldwin; Milliner, Julita A.

- 1988 Summer Training and Education Program (STEP): Report on the 1987 Experience. Philadelphia: Public/Private Ventures.

Slavin, Robert E.

- 1983 "When Does Cooperative Learning Increase Student Achievement?" Psychological Bulletin, 94:429-445.

Voith, Richard and Leiderman, Sally

- 1986 The California Conservation Corps: A Report on Attrition. Philadelphia: Public/Private Ventures.

Weiner, Bernard

1985 "An Attributional Theory of Achievement Motivation and Emotion." Psychological Review, 92:548-573.

Weiner, Bernard

1979 "A Theory of Motivation for Some Classroom Experiences." Journal of Educational Psychology, 71:3-25.

White, Robert

1959 "Motivation Reconsidered: The Concept of Competence." Psychological Review, 66:297-333.

Wolf, Wendy C.; Leiderman, Sally; Voith, Richard

1987 The California Conservation Corps: An Analysis of Short-Term Impacts on Participants. Philadelphia: Public/Private Ventures.

CRITICAL SKILLS FOR LABOR MARKET SUCCESS: What Are They and How Can At-Risk Youth Acquire Them?

Amy W. Johnson and Michelle Alberti Gambone

I. THE PROBLEM

[T]he greatest issue facing American education today is how to do a better job of educating low achievers and other students at risk of school failure (Guthrie, 1989:1).

Many minority and disadvantaged youth enter employment and training programs severely lacking the requisite skills for future work--the basic academic, higher-order and coping skills traditionally obtained through the formal education process. This has been a persistent difficulty for second-chance programs designed to ready this population for long-term employment. Increasingly, students are not leaving high school (with or without degrees) with the level of skills demanded by a labor market that many believe will continue to grow more technical.

This problem is particularly acute for minority and disadvantaged youth. In a national study of young adults' achievement of the complex literacy required by today's work world, African Americans and Hispanic Americans demonstrated significantly lower levels of facility than did whites in "using printed and written information to function in society . . . and to develop one's knowledge . . ." (Kirsch and Jungeblut, 1986:3). A majority of these young adults were unable to interpret instructions from an appliance warranty (60%) or balance a checkbook (60%) (Kirsch and Jungeblut, 1986:16-17,36-37). While high school graduates exhibited higher levels of ability than did nongraduates in all of the skills measured in this study, minority and disadvantaged students are more likely to drop out of school than are their nonminority peers. The high school dropout rate has remained at 25 percent for the general population, with rates around 50 percent in some areas for African-American and Hispanic-American youth (Winters, et al., 1988).

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Low skill levels are increasingly noted by employers and have been identified as a significant labor force problem. For example, in a survey of Pennsylvania businesses, nearly half the employers reported dissatisfaction with newly hired employees' writing, communication and ability to follow oral instructions. Approximately two-thirds were dissatisfied with abilities in reading, reasoning and problem-solving (Koppel, 1990).

The repercussions of low skill levels are felt far and wide: among the employed, low skill levels affect business productivity and accident rates (Koppel, 1990); among the unemployed, the effects are even more severe. Research from the National Longitudinal Surveys of Youth Labor Market Experience shows a direct relationship between deficiencies in basic skills and joblessness, dropping out, unwed parenting, welfare dependency and various antisocial behaviors (Berlin and Sum, 1988).

The Job Training Partnership Act (JTPA) system's major response to skill shortages among youth was the institution of youth competencies, with an emphasis on basic skills training. Amendments to JTPA in 1986 further directed the Department of Labor to provide basic skills remediation to unemployed youth through summer programs. Early on, remedial education components were incorporated into employment and training programs only on an ad hoc basis, in part because there were no workplace-based literacy tools or strategies available to the JTPA system (Strumpf, et al., 1989).

In most cases, the addition of basic skills to job training programs has been an ancillary concern. These additions have not been well integrated into a clear set of strategies aimed at reaching the goals of the programs.

Current attempts to combat the problem of basic skills deficiencies range from cursory offerings of one or two hours per week in summer programs, to programs that require several hundred hours of individualized, self-paced instruction with the goal of a general equivalency diploma (GED). However, most of the teaching approaches in use are based on techniques used in the mainstream education system--techniques that have consistently proven inadequate for educating at-risk youth (Strumpf, et al., 1989). Practitioners' attempts to plan and implement educational components in employment and training programs have, in part, been hindered by the nature of research in the field of education, where findings are difficult to interpret and often provide contradictory information. A further limitation in current educational research is that it is predominantly focused on elementary school-aged mainstream students and, as such, is often not relevant to the circumstances of the at-risk teen population served by these programs.

As the list of failed attempts in preparing at-risk youth for productive employment grows, so too does the price of failure. The American Society for Training and Development has reported that corporations are spending hundreds of millions of dollars on remedial

education (Barton and Kirsch, 1990). Calculations from data on students in the class of 1981 have estimated the loss from dropouts for this class alone at \$221 billion in income and \$68 billion in government revenues (Gage, 1990).

THE ISSUES

How might employment and training programs better prepare at-risk youth for employment? Is there research available from the traditional education system that points toward particular instructional strategies or programs as more effective in skills acquisition than others? Likewise, is there research in this area indicating what employment and training programs ought not do? Based on a review of pertinent research, analyses and literature on this subject, this paper addresses the following questions:

- What are the critical abilities that young adults should have when they leave school or employment and training programs and enter the labor force? Are traditional "basic skills" enough, or does participation in the work force require "higher-order skills"? Is there general agreement on this matter, and if not, what does this imply?
- What is currently known about how the traditional education system transmits these skills? Does the system's limited success with at-risk youth provide us with valuable lessons or research indicating which pedagogical practices ought not to be duplicated in second-chance programs?
- What evidence of success is there in special programs designed to teach educational skills to disadvantaged youth? Are the findings sufficiently grounded to justify replication of these programs?
- What long-term strategies ought employment and training programs to pursue, in light of these issues?
- What research questions warrant further investigation?

In Section II, we address the issue of a lack of consensus regarding the meaning of critical educational skills, then briefly review, in Section III, some of the ways in which the traditional education system hinders at-risk youth. This examination provides insight into some deficiencies in the traditional structure and helps formulate lessons to the employment and training industry, which has the flexibility to modify program design according to relevant evidence.

Section IV contains a critical review of the evidence from evaluations of current approaches--both single-component strategies and comprehensive programs--and their indications of success in skills acquisition among at-risk students; Section V reviews the literature identifying those components of comprehensive programs that researchers have concluded to be important. Section VI presents our conclusions and recommendations for future practice and research.

Several points should be noted before moving on. First, the target population on which we focus throughout this paper is youth defined as "at risk." There are a number of different labels used to identify this population, such as disadvantaged, marginal and high risk, but these converge on several basic circumstances: all refer to students who demonstrate poor achievement in school; who come from low socioeconomic status homes, frequently from single-parent families; and who are frequently African-American or Hispanic-American. Second, issues concerning the process of identification of these youngsters are not addressed here. There is a substantial literature available on this subject, but because this paper is concerned with imparting skills to those who are clearly at risk, this question is not addressed. And finally, we acknowledge the abundance of individual programs and efforts across the country aimed at dealing with the basic skills crisis among at-risk youth, both in schools and in employment and training programs. Some may claim to be remarkably effective but have no formal evaluation data from which to make an objective judgement; others may have evaluation data but were not uncovered in the course of our review.¹

¹ Our review process included searches of computerized bibliographic data bases (ERIC documents and the Social Science Citation Index), an examination of printed collections of existing programs for youth skills acquisition (the National Diffusion Network catalogue of exemplary educational programs and the National Dropout Prevention Center, Clemson, South Carolina) and telephone calls to selected programs to request evaluation results. We restricted our review to programs and publications that focused specifically on skills acquisition, and those targeting the at-risk teenage population. Programs directed toward the needs of language-minority youth were not included.

II. IDENTIFYING CRITICAL SKILLS

There is virtually unanimous agreement that, as a nation, we must improve the labor force preparation of many of today's youth through either schools or other programs designed to serve youth. The first step toward better serving at-risk youth--in fact, youth in general--is to define clearly the capabilities or "skills" they must acquire in order to be self-sufficient as adults. This requires answering a series of questions:

- What are the "critical skills" that youth need as a basis for successful labor force participation?
- Do educators and employers agree on what skills youth should have when they leave formal preparation programs?
- Do skills form a hierarchy, in which some are fundamental while others are advantageous but less essential?
- How can attainment of these skills be measured?

A good start to answering these questions can be found in the numerous analyses and commissioned reports by government agencies and other organizations published in the last five to seven years. As a set, these reports represent what are widely considered some of the important skills with which students should depart any preparation program; as a set, however, they also represent somewhat disparate views. Table 1 displays the critical skills referred to in 11 recent documents concerned with this issue.²

We have clustered these skills along two dimensions, as follows: (1) the source of their definition--those located primarily in the traditional education system (the left-hand side of the table) and those chiefly concerned with the rapidly changing needs of the work force (the right-hand side)--and (2) the skill type--academic skills, which include the traditional basics plus science and history; higher-order skills, a reference frequently

² The set of documents included in this table is not exhaustive but rather constitutes a sampling of the positions receiving national attention. The original purpose of these documents varies, but they all represent attempts to direct policy in the areas of education and employment training. In the interest of legibility, some truncation of detail, as well as minor interpretation where wording was similar but not identical, was necessary.

Table 1
SPECIFYING "CRITICAL" SKILLS: SOME ALTERNATIVE APPROACHES

	School-Based Definitions						Work-Based Definitions					
	Applebee, et al., 1989	Johnson, 1986	Alabama State Commission on Higher Education, 1989	South Carolina State Department of Education, 1989	Florida State Department of Education, 1982	National Academy of Sciences, 1984, in Barton and Kirch, 1990	National Alliance of Business, in Barton and Kirch, 1990	U.S. Department of Education and U.S. Department of Labor, 1988	Carnegie, et al., 1988	Johnson and Packer, 1987	U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills, 1991.	
Academic Skills												
Reading	*	*	*	*	*	*	*	*	*	*	*	
Writing	*	*	*	*	*	*	*	*	*	*	*	
Math	*	*	*	*	*	*	*	*	*	*	*	
Science	*		*			*						
History/Social Studies						*						
Higher-Order Skills												
Problem-Solving			*			*	*	*	*	*	*	
Thinking/Learning to Learn			*			*	*	*	*	*	*	
Reasoning			*			*	*	*	*	*	*	
Creative Thinking							*	*	*	*	*	
Decision-Making											*	
Coping Skills												
Oral Communication			*			*	*	*	*	*	*	
Listening			*						*		*	
Responsibility						*	*	*			*	
Self-Esteem									*		*	
Ability to Work with Others						*	*	*	*	*	*	
Reliability							*	*			*	
Self-Discipline							*	*			*	

invoked but without precise definition; and coping skills, which include responsibility, an ability to work with others and oral communication.³

The discussion that follows focuses on three issues that result from an analysis of Table 1: the lack of agreement in defining critical skills, the question of a skill hierarchy and the difficulties in developing consistent standards for assessing skill levels.

LACK OF AGREEMENT

A review of the literature shows that there is no real agreement on what the requisite skills are for youth. The left- and right-hand sides of Table 1 (labelled as school-based and work-based definitions) reflect disparate views. The left-hand side of the table shows a fairly tight grouping of core academic skills that educators believe students should acquire before leaving school, while the employers' perspective, represented on the right-hand side of Table 1, encompasses a broader range of competencies regarded as critical to labor market success.

Math, reading and writing--the basics--are all considered critical. However, no other skill in any category extends across the table to indicate consensus. Further, even where there is apparent agreement on a skill's importance, a closer look reveals a range of definitions as to what competency entails. Math competency, for example, is defined in one document as the ability to perform basic computations; use basic numerical concepts; use tables, graphs, diagrams and charts; choose techniques; construct logical explanations for real world situations; express mathematical ideas orally and in writing; and understand the role of chance in the occurrence and prediction of events (U.S. Department of Labor, 1991). Another document defines math competency as possessing knowledge of geometry and trigonometry (Carnevale, et al., 1988); and yet a third specifies that math competency requires the ability to solve multistep problems and use basic algebra (Applebee, et al., 1989). Given that math is considered one of the three R's, and as such has a longer history in the limelight than many of the other critical skills included in the table, it is disconcerting that even so fundamental an area lacks clearer agreement once we move beyond its name.

A definition of higher-order skills proves even more elusive. Over half of the cited works identify one or more "higher-order" thinking skills as critical to success in adulthood. However, as Nickerson points out, there is little agreement as to what "thinking" really means:

³ Credit for the term "coping skills" goes to Walther (1976); he, however, defined coping skills as both "self-management skills" and the cognitive skills we categorize as higher-order skills.

Critical thinking, creative thinking, reasoning, problem-solving, and decision-making are among the topics around which substantial research literatures have developed. These literatures, while interrelated, are remarkably distinct and self-contained. Even within the articles and books that are focused on the teaching of thinking, one can find numerous definitions and characterizations of thinking, or, more commonly, of specific types of thinking If there is one point on which most investigators agree, it is that thinking is complex and many faceted and, in spite of considerable productive research, not yet very well understood (1988:9).

Lack of agreement in defining critical skills is a fundamental problem, strikingly illustrated by two facts: (1) the president and the nation's governors have declared a goal of national preeminence in science by the year 2000; and (2) science proficiency is not mentioned in 8 of the 11 documents listed in Table 1. This lack of agreement occurs, in part, because the various orientations toward defining necessary skills are driven by different goals: the president's concern is maintaining the nation's competitive status; the labor market perspective is driven by a fluid need for employees who can fill changing occupational demands; and the school system focuses on measurable traditional academic skills. The answer to the question of what skills are necessary is, therefore, largely framed by--and differs according to--the sector that is responding.

Even those who share the concern regarding labor market needs are hard pressed to agree on the skills necessary for employment. This difficulty is magnified by our uncertainty as to what impact our rapidly advancing technology will have on work force needs.

Many recent national statements (e.g., U.S. Department of Labor, 1991; U.S. Department of Education and U.S. Department of Labor, 1988) have predicted that the level of skills needed in various occupations will significantly change by the year 2000, thus calling for new emphases on what youth are taught. Based on careful analysis of job requirements and the development of a continuum of skills needed, the Hudson Institute predicts that, while currently 40 percent of jobs fall into the lowest skill categories on the continuum, only 27 percent will be at that level by the year 2000. Likewise, 24 percent of current jobs are in the highest three skill categories, but this figure is predicted to rise to 41 percent (Johnston and Packer, 1987:xxii).

However, Rumberger and Levin (1989) have concluded that "the average educational requirements of future jobs will not be significantly different than current jobs, as both high-skilled and low-skilled jobs will continue to exist in the future economy" (quoted in Barton and Kirsch, 1990:25). Support for this perspective is offered by Mishel and Teixeira (1991) in their recent report for the Economic Policy Institute. They conclude from their analysis of labor market trends that "increases in job-skill requirements due to

upgrading of the occupational structure will be modest and less than in the past" (1991:40). Based on a survey of employers in the Los Angeles area, Wilms (1984) reports that the impact of changing technology is unclear: 69 percent of employers reported that there had been no change in skills required in entry-level jobs, 22 percent reported an increase in skills required, and 9 percent reported a decrease.⁴ Wilms's conclusions may be quite relevant: the "lower the job level, the smaller the impact of technological changes" (1984:348); advancing technology may only serve to widen the existing gap between skilled and unskilled workers.

There is little doubt that changing technology will have an impact on human capital formation in some way, but our uncertainty as to what that impact will be may potentially cause future problems: being too slow to react could result in another woefully under-skilled generation, or charging forward to a more technology-based curriculum could be at the expense of vital groundwork in such areas as the coping skills.

HIERARCHY

Do the skills listed in the table reflect an implicit hierarchy of importance or acquisition? Are academic skills valued more highly than are coping skills? Does acquisition of academic skills need to precede higher-order skills in instruction?

While there is less than complete agreement on the answers to these questions, research indicates that some new perspectives are beginning to emerge. Basic academic skills, such as pronunciation, grammar and spelling, have long been considered essential prerequisites for learning more advanced, or higher-order, skills. At-risk youth, who may have dragged themselves through years of drill and practice, find that they must endure yet more rote learning before they will be permitted to move on to more interesting and relevant educational challenges. We have resolutely--until most recently--stuck to the belief that this established order should not be violated.

Now, however, there is some evidence that the more effective order in terms of acquisition may be the other way around:

[R]esearch . . . demonstrates quite clearly that students can acquire . . . comprehension skills--which we have traditionally called advanced--well before they are good decoders of the printed word . . . [F]irst-graders can solve a wide variety of math problems, using modeling and counting, before

⁴ It is important to keep in mind, however, the date of Wilms's survey and that he was not asking what employers predicted, but rather what their current experiences were.

they have perfected the computational algorithms that are traditionally regarded as prerequisites. Likewise . . . children can perform sophisticated composition tasks before they have acquired the mechanics of writing (Means and Knapp, 1991:4; research includes that of Palincsar and Klenk, Peterson, et al., and Calfee).

These new insights are encouraging, particularly in light of the fact that continuous instruction in the very basic skills may be one of the greatest deterrents to the participation of at-risk youth in programs offered outside of schools.⁵

Where do "coping skills" fit into educational instruction? Educators have long believed that such skills as decision-making and self-discipline are learned through regular cognitive development (Beyth-Marom, et al., 1989) and therefore need not be taught. It is, however, becoming increasingly clear that many students lack these coping skills, and that they do indeed need to be taught. Those who support the developmental-interaction approach have long recognized this need: "It is a basic tenet of the developmental-interaction approach that the growth of cognitive functions--acquiring and ordering information, judging, reasoning, problem-solving, using systems of symbols--cannot be separated from the growth of personal and interpersonal processes--the development of self-esteem and a sense of identity, internalization of impulse control, capacity for autonomous response, relatedness to other people" (Shapiro and Biber, 1972:61).

As to the position of coping skills relative to more academic skills, clearly the traditional hierarchy is being called into question: increasingly, researchers are concluding that coping skills are as important as other skills, if not more so. Even as early as 1976, Walther, in a review of employment and training programs sponsored by the Department of Labor, concluded that "what youth need are not immediately saleable job skills but . . . self-management skills . . . control of aggression . . . ability to reconcile conflicting demands and adaptation to authority" (Wehlage, et al., 1982:5). Wehlage, et al., (1982:4), as well, argue for what they term "adolescent social development"--qualities fundamental to long-term employability and life success.

NATIONAL STANDARDS FOR SKILLS ATTAINMENT

The lack of agreement in defining what constitute the critical skills youth should acquire is reflected in the absence of national standards for the formal training systems (e.g., the education system and the second-chance system) and lack of agreement about how to measure the skill levels of the youth served by these systems. As concerns about interna-

⁵ See Smith and Gambone, this volume.

tional competitiveness, a skilled work force and youth unemployment have risen, so has the demand for national standards for achievement in critical skill areas.

In the past, high school diplomas and GEDs were regarded as indicators of attainment of a fairly standard set of abilities. But, in part because schools and employment and training programs operate under highly decentralized systems, there has been great variation in the skill levels attained by participants in these systems, and certification is no longer regarded as evidence that certain skills have been acquired. This has led to the current proposals to establish national standards for achievement in critical skill areas.

The establishment of national standards is an important goal because they can be used to identify the educational needs of students; to determine whether stated educational goals are being reached; to evaluate the effectiveness of the teaching process; and to ascertain national skill levels in order to gauge future international competitiveness and social and economic progress.

National standards can be used to define levels of competency, while means of attainment can be left to local discretion. In employment and training programs, concerns about the ad hoc nature of remedial education programs and the persistence of poor outcomes might be addressed through more uniformly defined levels of competency as well as close monitoring of participant progress. But progress toward defining standards is impeded by two factors.

First, as much of this section has shown, the lack of consensus regarding the essential skills for today's youth poses a serious obstacle. What the documents in Table 1 suggest, despite the variation in their original purposes, is that the process of standardizing definitions of requisite skills will be a difficult one. Unfortunately, policymakers and practitioners are moving forward to set standards without consensus, and are continuing to put forth a variety of definitions of what the necessary skills are. This may jeopardize the ability to generate any truly national standards.

Second, national standards can only be useful if there is consensus on how to measure attainment of skills. But the assessment question has been mired in debates about what constitutes an accurate measure of skills attainment. Traditional standardized measures are often adequate for making summative evaluations, but they are not always useful in assessing the educational needs of a particular student or group of students. Nor are they necessarily the best indicators of the proficiencies demanded by any particular occupation. In addition, the work-based perspective on skills indicates a demand for many skills (higher-order thinking and coping) that have few, if any, assessment instruments to measure their acquisition.

Current research is beginning to disclose that past approaches to measurement may not be serving either the education system or the labor market very well. Part of the difficulty is that the standardized measures favored by many to evaluate the education system are most easily designed to measure basic academic skills. There is some evidence that this results in a focus by teachers on discrete skills, at the expense of higher-order skills so often cited as important. Means and Knapp, in their review of research in this area for the Department of Education, sum up this tension well:

Equally important is the compatibility of assessment instruments with program goals. If teachers continue to be held accountable mainly for the teaching of basic and isolated skills . . . it is foolhardy to think that real change will occur in the instructional opportunities offered to children at risk We have been struck repeatedly by the importance of an alignment between assessment and instructional goals (1991:32).

Without assessment, it is not possible to work toward instructional improvement or to measure national progress. There is reason to hope that improvements are forthcoming, since many who have an interest in assessment are moving in a direction that may address some of the difficulties in accurately measuring both individual skills attainment and institutional progress. Applebee, et al., (1989) discuss the consideration of alternative forms of assessment; as they point out:

Since tests and grades send a message to students about what is valued in their course work, the focus of tests also will need to shift. Instead of simply displaying their knowledge of facts and rules, students will need to show that they can think about and use their knowledge. A number of alternative assessment procedures have been suggested. For example, in course work, portfolios of selected work, simulations, problems, or cases can be used as the bases for assessing students' knowledge and abilities (1989:41).

The National Governors' Association also has noted, alongside its call for more rigorously defined educational benchmarks, the shortcoming of much of our current standardized assessment: "Achievement tests must not simply measure minimum competencies, but also higher levels of reading, writing, speaking, reasoning, and problem-solving skills" (1990:39). Yet another sign that the methods of assessment may face some change comes from the draft regulations for curriculum and student assessment recently proposed by the State Board of Education in Pennsylvania. The proposed regulations include detailed proficiency standards in academic and higher-order skills, as well as attention to many coping skills: "All students must demonstrate life skills (e.g., decision-making, refusal skills, social skills, coping skills and critical evaluation) to enhance men-

tal, emotional and social health" (Pennsylvania State Board of Education, 1991:2). The goals inherent in these suggested outcomes--from a state board of education--reflect a potentially greater convergence than is evidenced in Table 1 between what educators intend to supply and what the labor market demands.

The issues of national standards and assessment are critical for the employment and training system. If a consensus can be reached that accurately reflects labor market needs, then the utility of devoting employment training resources to educate youth in critical skills through second-chance programs can be measured. If national standards are adopted and assessment techniques are validated, then the need to measure performance outcomes in this highly decentralized system can be met in a more effective way, and the link between skills training and labor market success should be forged more strongly.

CONCLUSIONS

This section has illustrated the current lack of agreement in defining the skills "critical" for labor market success. The broad range of skills being called for by educators, employers and policymakers can only serve to exacerbate the difficulties in designing effective skills training and the evaluation of skills acquisition. This section has also highlighted forces that influence the various laundry lists of skills, as well as pointed out issues for consideration as we continue to define what today's youth should know and be able to do. From this analysis, we draw the following conclusions:

- There is remarkable lack of agreement on what we mean when we refer to critical skills. Politicians, educators, panels and commissions have all been anxious to decry existing skill levels, but what we have been left with is a list of needs that does not cohere. In addition, apparent agreement on the labels used for skills often masks underlying differences in definition.
- There is also disagreement about the hierarchy of skills acquisition. While the education system seems to stay focused, in large part, on basic academic abilities, work-based agendas often include far more elaborate versions of skills that appear to stray from necessary to desirable characteristics. We clearly need to separate desirable skills from those that are necessary.
- The current range of desired competencies is so broad that it precludes coordinated direction of policy and programming toward improving skill levels.

- If coping and higher-order skills, in addition to traditional academic competence, are necessary, current assessment instruments are inadequate and constrain pedagogical content and delivery.
- National standards are necessary for meaningful measurement of progress or effectiveness. Standards, and the tests to measure them, should not be defined or developed, however, without first defining what the necessary skills are. Current practice has reversed this order, and policymakers are moving forward to develop standards without first settling the question of what skills are critical to reaching stated goals. This may result in little or no improvement in preparing youth for the transition into the labor market.

III. SHORTCOMINGS OF THE TRADITIONAL SCHOOL SYSTEM

Once critical skills are defined, the next step is to determine the most effective way to impart them to youth. The current ad hoc incorporation of remedial education components in employment and training programs has precluded implementing a well-informed, well-planned set of strategies for teaching critical skills. But the problem of inadequate preparation in critical skills has very real labor market consequences--for employers who find themselves without an adequate work force and for individuals who are unable to achieve labor market success.

What is the most effective way to teach these critical skills? Since skills training has been an ancillary rather than primary concern in employment and training programs, few systematic efforts have been made to evaluate or improve the success of educational efforts in second-chance programs. Consequently, there is little pragmatic knowledge from the employment and training field regarding the education of at-risk youth. However, experience in schools can be a fairly rich source of information, from several perspectives: it provides information on what does not work and where the major sources of trouble are; limited information on the success of some alternative approaches; and information on what remains to be learned--particularly in the area of program evaluation. This section addresses practices and problems of the traditional school system that should inform program design in the employment and training industry.

A full discussion of the shortcomings of mainstream education is well beyond the scope of this paper. A brief review, however, of some of the major systemic problems can inform approaches used in second-chance programs. If, for example, enough research indicates that student tracking or drill and practice techniques have detrimental impacts on learning outcomes, then youth employment and training programs that mirror these strategies are misdirected and most probably headed for failure.

There is no question that circumstances outside of schools have much to do with academic failure. Educators and policymakers have known for at least three decades that young people who grow up in poverty do not fare well in the education system. "But it is also true that most schools simply do not provide environments congenial to students who fail to adapt to the conventional expectations and regularities of schooling" (Goodlad and Keating, 1990:9). What does current research tell us about where the trouble lies in the traditional school system's delivery of educational skills?

Some of the best evidence available has clearly identified the practice of tracking students--and its domino effects--as severely detrimental to student achievement. Disadvantaged students are commonly tracked into lower-ability groups which, in turn, places them in classrooms that do not receive a fair allocation of teaching resources and where

expectations for achievement are greatly diminished. This succession of events commonly follows initial tracking that is often discriminatory and coalesces to place at-risk students at a serious disadvantage in acquiring critical competencies.

The general consensus in the research is that placement into a given track is largely based on socioeconomic status rather than ability (for a current review of research on this topic, see Bempechat and Wells, 1989). In one large study based on the High School and Beyond data, researchers found that socioeconomic status (SES) had an effect on track placement even when ability levels were held constant. High-status students (in the top SES quartile) had a 53 percent chance of being placed in an academic rather than a vocational track, compared with a 19 percent chance for those of low socioeconomic status (bottom SES quartile) (Bempechat and Wells, 1989).

A recent study by the General Accounting Office also found "a disproportionate number of minority students in some classes in more than half of the nation's school districts" and some evidence that about 10 percent (about 1,700) of the nation's middle schools sort students into ability groups in a "possibly discriminatory manner" (U.S. General Accounting Office, 1991:7). What makes these findings even more alarming is that once a student (usually poor or minority) is placed in a low-ability group, he or she has little chance of moving to a higher-ability group (Oakes, 1985), and the disparity between the attainments of the highest and lowest groups simply grows greater over time.

Contributing to this disparity is the frequently inequitable allocation of teaching resources. Students in nonacademic (lower-ability) tracks are at a disadvantage in developing skills in the areas that are uniformly agreed to be important--reading and mathematics. Research on the effects of tracking has shown that the "students in greatest need of the best teaching are the least likely to get it" (Darling-Hammond and Green, 1990:239). Largely due to training and incentives, research indicates that the most competent and experienced teachers are assigned to the high-ability tracks; that these teachers are better able to instruct students; and that their students learn better (for a summary, see Darling-Hammond and Green, 1990). This unequal distribution of skilled teachers greatly affects classroom climate in terms of expectations and implicit messages communicated to students.

Lower expectations, the message in the sequence that begins with tracking, have been identified as a critical element in educational failure. Table 2 shows that the expectations low-track teachers hold for their students are profoundly different from those of teachers instructing high-track students. High-track teachers, for example, expect their students to learn to reason logically, learn values and morals, think critically, think for themselves, analyze and collect information, and master problem-solving. This is in contrast to low-track teachers who, for example, expect their students to learn to develop

more self-discipline, cope with frustration, improve study habits, fill out a job application and learn how to work with a checking account (Oakes, 1985).

These divergent teacher expectations are reflected in what students say they learn. High-track students report that they learn, for example, to form their own opinions on situations, to speak in front of groups, to be creative and free in doing things, to be organized, to listen and to think quickly, to understand concepts and ideas and experiment with them, to work independently and to think in a logical way using a process of elimination (Oakes, 1985:87-88). Low-track students are more likely to say that they learn, for example, to behave in class, to have self-control, to have manners, be quiet when the teacher is talking, to respect the teacher and to be a better listener in class (Oakes, 1985:89). Clearly, the skills needed for successful employment, as listed in Table 2, are more likely to be incorporated into high-track classes than into low-track classes.

While researchers and educators have found it more difficult to document the impacts from other structural arrangements and school conditions, there is increasing consensus on some other important barriers to achievement. These include a disjuncture between student aspirations and opportunities available to pursue them (Ogbu, 1985), a lack of engaging learning experiences (Goclad and Keating, 1990), a lack of adequate counseling, abrasive relationships between teachers and low-achieving students, a conflict between the home and school cultures, and an inflexibility in responding to great diversity in student needs.

The employment and training system can design interventions that do not duplicate the mistakes in traditional school settings. Specifically, this entails not segregating the lowest achievers from better achievers, ensuring that well-trained instructors and adequate resources are devoted to teaching at-risk students, and setting and maintaining consistent high expectations for students.

There are efforts underway to supply remedial education to students who have not been adequately served by mainstream schools. Some efforts are "pull-out" programs within schools and some are comprehensive alternative programs. The next sections examine current efforts to evaluate these programs and the elements for effectively teaching critical skills to at-risk students.

Table 2
TEACHER EXPECTATIONS FOR STUDENT ATTAINMENT, BY TRACK LEVEL

High Track	Low Track
"Ability to reason logically in all subject areas."	"Develop more self-discipline--better use of time."
"Deal with thinking activities."	"Independence--start and complete a task on their own."
"Self-reliance, taking on responsibilities."	
"To learn values and morals--to make own personal decisions."	"To try to get the students to at least be aware of how to keep themselves clean."
"To think critically--to analyze, ask questions."	"How to cope with frustration."
"How to think critically--analyze data, convert word problems into numerical order."	"Business-oriented skills--how to fill out a job application."
"To be creative--to express oneself."	"More mature behavior (less outspoken)."
"Ability to think for themselves."	"Content--minimal. Realistic about goals. Develop ones they can achieve."
"Ability to collect and organize information. Able to think critically."	"Work with checking account."
"Determine best approach to problem-solving. Recognize different approaches."	"Good work habits."
	"To learn how to follow one set of directions at a time."

Source: Oakes, 1985:80-83.

IV. EVIDENCE FROM IN-SCHOOL EFFORTS

Across the country, efforts in both second-chance programs and school districts are underway to impart to at-risk youth many of the critical skills discussed in Section II. In some cases, there is collaboration between second-chance programs and schools; in other cases, each is struggling independently. It is both vital and cost-effective--in terms of dollars spent and futures saved--for these two groups to share their best knowledge of success and failure, given that they share the same ultimate goal. While the evidence available from in-school efforts may not look tremendously different from the evidence--or lack thereof--from second-chance programs, attempts to learn from one another could provide some confirmation or insight regarding appropriate and inappropriate directions.

Two points are important to emphasize at the outset. First, the corpus of evidence based on rigorous evaluation is meager. For this reason, conclusions must be qualified until better evidence is collected. Second, this section explores what the employment and training industry can learn from less-traditional in-school efforts to teach critical skills to the at-risk population. Evaluations or reviews of evidence, for the most part, focus on the "basic" academic skills listed in Table 1--i.e., the traditional skills of reading, writing and mathematics. Where other skills are addressed or assessed, these are noted.

CURRENT APPROACHES

As with the literature defining critical skills, the literature covering in-school approaches to teaching skills to disadvantaged youth is diffuse. A framework within which to cluster various efforts is therefore helpful in sorting through the evidence. For our purposes, we first distinguish between single-component strategies and comprehensive programs.

Single-component strategies are particular methods, tools, approaches or curricular materials that teachers can use inside the classroom, targeted toward a primarily academic goal. As distinct from single-component strategies, comprehensive programs are those efforts that aim to address a broader spectrum of needs--particularly developmental--through the provision of a wide range of services, opportunities and approaches.

Considerable research has been conducted on various instructional strategies and their effectiveness with at-risk students, in particular by researchers Slavin and Madden. While their analyses have contributed greatly to a better understanding of the impacts of various efforts, their research has been primarily confined to the kindergarten to sixth-grade population, due to the dearth of available evidence for older students. The utility of this research for the employment and training field is, therefore, limited and perhaps more relevant for efforts undertaken with the system's youngest clients.

We begin with a discussion of the evidence of effectiveness for various single-component strategies.⁶

SINGLE-COMPONENT STRATEGIES

Single-component strategies can be further distinguished as those that encompass a particular delivery mode, defined by how the teacher interacts with or presents material to the students, and those that involve a particular instructional content, such as a focus on discrete skills, a multicultural curriculum or experience-based education. For those students identified as at risk, it has become particularly important to ask how much of a difference the mode of delivery and the particular content make in skills acquisition. Are some strategies more effective than others?

Delivery

Table 3 displays the most widely discussed single-component strategies fundamentally concerned with how particular material is delivered to students--in small groups, one-on-one, through use of technology, in the classroom or in a separate location (referred to as "pull-out" programs), etc. As can be seen from the table, many of the instructional delivery modes share an individualized approach and a belief in frequent assessment. Tutoring, computer-assisted instruction, videodisc instruction (depending on use), continuous progress and mastery learning all emphasize attention to the unique needs of each student. Cooperative learning and direct instruction, while not placing such heavy emphasis on the individual approach, share an emphasis on frequent assessment.

Despite these similarities, the effectiveness of single-component strategies that focus on the mode of instructional delivery is not consistent: the results are mixed, and some results are conflicting. Other findings are based on so little evidence that a definitive statement would be inappropriate. We briefly review each of the delivery approaches noted in Table 3 according to a summary of the available evidence of effectiveness: inconclusive evidence, marginal evidence, or consistent and positive evidence.

Inconclusive Evidence

The evidence regarding effectiveness for both mastery learning and computer-assisted instruction is inconclusive.

⁶ The research included in this review is limited to literature reviews and meta-analyses that used clearly identified selection criteria for inclusion of evaluations and that focused on strategies and programs designed to serve the "at-risk" population later eligible for employment and training programs.

Table 3
SINGLE-COMPONENT STRATEGIES: FOCUS ON MODE OF DELIVERY

Strategy	Definition	Effectiveness with At-Risk Youth
Mastery Learning	Similar in format to continuous progress; students learn through a succession of lessons and tests, until mastery is acquired.	Inconclusive evidence
Computer-Assisted Instruction	Students work on computers for part or all of their remedial instruction.	Inconclusive evidence
Diagnostic-Prescriptive	Students are assessed and provided instruction appropriate to their needs, in a separate location, in small groups.	Marginal effects; not sustained
Videodisc Instruction	Similar to computer-based instruction in technology; students respond to and manipulate instructional materials through videodisc presentations.	Some positive effects; little research
Direct Instruction	Students are told explicitly how to accomplish tasks and are guided through the process; feedback and assessment are frequent.	Positive effects, with discrete skills
Tutoring Programs	Tutors (teachers, volunteers or paraprofessionals) work one-on-one with students.	Consistent, positive effects
Continuous Progress	Students proceed through a hierarchy of skills, and proceed to each new level based on their individual readiness. Instruction is delivered to students at the same skill level.	Consistent, positive effects
Cooperative Learning	Students are given instruction in small groups, based on ability level, then work in mixed-ability teams. Students are frequently assessed.	Consistent, positive effects

Sources: Madden and Slavin, 1987; J.D. Fletcher, 1990; Slavin and Madden, 1987; Knapp and Shields, 1990; Wehlage, et al., 1982.

Mastery learning is grounded in the theory that students learn best if enabled to master a concept or lesson prior to tackling additional material. After a series of lessons, students who achieve an established level of mastery move on to new material, while others receive instruction designed to bring them up to the mastery level (Slavin and Madden, 1987).

It is unclear how effective this strategy is for improving the achievement of at-risk students. Slavin and Madden (1987) conclude that there are no significant gains from this approach for the at-risk population. Knapp and Shields (1990) also conclude that it is unclear how much positive impact this method has, that evaluations assess effects based on very short time periods (a week or less) and that mastery learning is a difficult strategy to implement in large inner-city schools because of the required teacher-to-student ratios.

Computer-assisted instruction varies a great deal, depending in part on what software is used and how students interact with the computers (e.g., whether they are supervised, and whether they share a computer or work alone).

A number of studies and meta-analyses have been done on the effectiveness of computer-assisted instruction, but, overall, there is lack of agreement as to whether or not this strategy is effective with disadvantaged youth. Some studies have shown no effectiveness at all (Caldwell and Heidl, 1984) or effectiveness in certain areas but not others (Harris and Harrison, 1987); other studies show positive effects favoring the at-risk group in certain areas and the control group in other areas (Educational Testing Service, 1983, cited in Madden and Slavin, 1987).

One key area of disagreement is whether this technique is more effective for teaching basic skills or higher-order skills. For example, Madden and Slavin conclude that, overall, the effects of computer-assisted instruction are "well-established and positive, though in the best-controlled studies they are usually modest in magnitude and appear more frequently on basic skills [emphasis added] than on higher-order skills" (1987:17). On the other hand, Samson, et al., based on a meta-analysis of 43 studies of computer-assisted instruction in secondary schools, indicate that there are individual findings that give "conflicting and sometimes inconclusive results" (1986:312-313). But, in contrast to Madden and Slavin's, these findings indicate that lessons requiring higher-order outcomes were more effective than those requiring only factual outcomes or a combination of the two.

Samson, et al., report that programs emphasizing drill and practice are, on average, less effective than tutoring programs that introduce new concepts. These researchers assert that computer-assisted instruction seems to be more effective than reducing class size or

mainstreaming but concede that other strategies--tutoring, mastery learning and cooperative learning--produce considerably larger positive effects (Samson, et al., 1986).

Moderate Evidence

Diagnostic-prescriptive approaches, videodisc instruction and direct instruction all demonstrate some evidence of effectiveness, but none that is compelling. This is due, respectively, to evidence that effectiveness is not sustained; little available research; and evidence of effectiveness in certain areas but not in others.

A diagnostic-prescriptive approach is usually a "pull-out" approach in which students are assessed and provided instruction appropriate to their needs in small groups. From this type of strategy, there are frequently fall-to-spring gains in skill levels, which then decline over the summer. While there is some evidence of effectiveness, the gains here are generally not very large or sustained (Madden and Slavin, 1987).

Videodisc instruction, like computer-assisted instruction, has received somewhat mixed reviews. Some of the early research conducted to examine its applicability to at-risk youth indicates that this is an instructional strategy with potential that should be explored. Risko, et al., (1990) conducted an evaluation of videodisc instruction that was used with at-risk fifth-graders for two years. The evaluation involved random assignment to a control and an experimental group, and findings were based on a pretest and posttests after each year. The researchers report that videodisc instruction resulted in significant gains in writing after the first year and significant gains in writing, reading comprehension and critical thinking after the second year.

Also like computer-assisted instruction, videodisc instruction is a strategy that will continue to evolve as new presentations, new applications and more advanced technology are developed. Videodisc and computer-assisted instruction may be strategies that are the most influenced by the variables of delivery and content: as technology changes and instructors become more familiar, adept and creative in capitalizing on its potential, increased efficiency could produce greater positive effects.

Direct instruction, which emphasizes drill and practice, has shown some effectiveness with fundamental skills but has been sharply criticized for its narrow focus. Students are told explicitly how to accomplish tasks, are guided through each step, and get frequent feedback and assessment. Questions remain as to whether what is learned through this strategy can be applied to more independent tasks (for a review of research, see Knapp and Shields, 1990). These questions, in turn, call into question the viability or reasonableness of using this approach if the aim is to impart many of the higher-order and coping skills sought particularly by employers.

Consistent Positive Evidence

Tutoring, continuous progress and cooperative learning all have consistent and positive evidence of effectiveness with at-risk youth. Assessment and corrective instruction are essential features of all three strategies.

Tutoring involves using teachers, volunteers or paraprofessionals to work one-on-one with students who need remedial help. Unlike diagnostic-prescriptive strategies, tutoring programs have demonstrated fairly consistent and impressive evidence of effectiveness with at-risk students, particularly in improving math and reading (word recognition and oral reading) skills, where gains are "large and important" (Madden and Slavin, 1987). Reading comprehension, however, is often not tested in tutoring programs.

Tutoring has also been shown to prevent students from falling behind, at least in the short term. A finding of particular interest for employment and training programs is that, in a program using older students to tutor younger students, both groups showed significant increases in reading and math skills. The tutors were required to be able to read and compute only at the fifth-grade level and received intensive training in tutoring skills. Given that students with relatively low basic skills levels can be tutors, this type of technique could be useful in employment and training programs; both the "teachers" and the "students" in the program could improve basic skills while at the same time developing the interpersonal skills that employers often seek.

In continuous progress, students proceed through a specified hierarchy of skills and move on to each new level based on their individual readiness, as in mastery learning. Some continuous progress programs are even identified as mastery learning models, but there are important differences between the two. With continuous progress, students move at their own rates and are constantly grouped and regrouped, often across grade lines. Using this approach, students are instructed by teachers (rather than using programmed or individualized materials) and careful records are kept of each student's progress through the curriculum.

On examining 11 evaluations of continuous progress programs for elementary school students (such as Distar and USAIL), Slavin and Madden (1987) found that five demonstrated positive effects for at-risk youth in language, reading and math skills--but not higher-order skills, such as reading comprehension and math problem-solving. (The other six programs, while they showed positive effects, did not assess applicability specifically for the at-risk population.) The finding of consistent and positive evidence must be somewhat tempered, therefore, regarding the range of skills (particularly higher-order) that employers seek.

In cooperative learning situations, students are given instruction in small groups of similar ability levels, but they then move on to work on tasks in mixed-ability groups, with the expectation that students will learn from each other. Of the two cooperative learning studies reviewed, both used a control group design and showed positive effects for at-risk youth. In a brief synthesis of best evidence, Slavin (1989) reviewed achievement outcomes and other areas affected by cooperative learning. His review concludes that cooperative learning positively affects student achievement only if group goals and individual accountability are incorporated. In other areas, cooperative learning was found to produce positive effects on intergroup and race relations, acceptance of academically handicapped students and self-esteem. These are important outcomes in light of the demand for workers who can work well with others and have a healthy sense of self-esteem (see Table 1).

Summary of Evidence

Slavin and Madden have concluded from their extensive research that the two methods that appear to show the most encouraging results are continuous progress and cooperative learning. These strategies share the elements of small groups, instruction by a classroom teacher, frequent assessment, adequate time for any necessary remediation, and a hierarchy of skills that students must master.

The major shortcoming of their research, for the purposes herein, is that evaluations were confined to the kindergarten to sixth-grade group. Although research is being conducted at the Johns Hopkins University Center for Research on Effective Schooling of Disadvantaged Students on cooperative learning for middle school students, there are no definitive findings for this group (McPartland and Slavin, 1990:16). Cooperative learning and continuous progress might be appropriate for the younger students (age 13 to 16) in both school and second-chance programs, while individual approaches, such as tutoring, may prove more effective with older at-risk youth (age 16 to 21). The need for programs that contain a rigorous evaluation component is still great, so that appropriateness of method is better determined.

Instructional Content

Single-component strategies that focus on curricular content--as opposed to mode of delivery--are grounded in the belief that the nature of the material contributes most significantly to student success in learning. While every teacher in every classroom, to some degree, presents a unique instructional content, there are a number of identified approaches that have been labeled and received attention in the literature.

The research and debate surrounding instructional content to a large extent centers around whether content ought to focus on discrete skills, such as punctuation and grammar (often referred to as a component skills approach); on higher-order skills, such as problem-solving (e.g., a process approach); or on integrated or contextualized skills (e.g., a whole-language approach, which emphasizes the integration of writing with reading and oral expression, or vocational education, which teaches skills in the context of a particular trade).

While content can certainly be closely bound to how it is delivered, it is important to consider the question: How important is content alone to skills acquisition?

Knapp and Shields (1990) have summarized some of the principal content elements that seem to be important with at-risk youth. They have concluded that writing instruction should deemphasize discrete skills (research has consistently shown a discrete skills approach to be ineffective in facilitating writing); that, instead, skills ought to be integrated with a purposeful use of language, in a context that enables students to communicate ideas of value to them; and that, in terms of delivery, teachers ought to demonstrate awareness of and respect for different cultural and linguistic backgrounds.

In math, the principles Knapp and Shields discuss echo the principles in writing: that greater emphasis on developing a conceptual understanding has proven more effective; that, in terms of delivery, students should be exposed to concepts much earlier than they are at present; and that math skills ought to be integrated into contexts that allow students to apply them to actual situations and problems.

Research in support of this view comes from Sticht, et al., (1984), who summarize content approaches that they found effective in their Project 100,000 for low-aptitude youth previously excluded from the military. "One of the major findings of this study was that remedial programs directly related to the life experiences of participants . . . i.e., instruction developed from the functional needs of military life, as opposed to general literacy instruction, had the most significant results" (Strumpf, et al., 1989:5). They conclude that the most effective instructional content for older youth who are well behind their peers is that which is related to existing knowledge or experience and integrates technical training.

Two of the most frequently used content approaches with at-risk youth have been vocational education and experience-based education, both of which base instructional content on applications outside of the traditional classroom.

Vocational education, however, is defined and taught in many different ways and settings. It is an approach, similar to cooperative learning and continuous progress, whose effec-

tiveness may be significantly affected by the age of the youth who participate. The work of Sticht, et al., pertains to an older cohort of youth--those of an age to enter the military. Findings from other research on vocational education with at-risk youth in school, and presumably of a younger age for the most part, are less encouraging.

Natriello, et al., (1989) report that students in a vocational education track gained less in skill levels than did students in either academic or general tracks. Research on vocational education has shown that the only real wage and employment gains derived from this approach come from career-specific courses of training.⁷ In addition, the usefulness of traditional vocational education is increasingly questioned by employers, who are less inclined to seek workers well skilled in a narrowly focused area. "Most of their skilled work, employers say, is . . . too specific to their firms to be taught anywhere else" (Hamilton, 1986:423).

The Experience-Based Career Exploration (EBCE) program is a large-scale effort to teach a variety of skills through nontraditional content. EBCE focuses on broad career, personal and intellectual skills "that facilitate gathering information used to make knowledgeable decisions about future training and careers" (Bucknam and Brand, 1983:68). Instructional content comes from work experience at multiple community sites, goal-setting and planning a personalized education. A meta-analysis of 80 evaluations of EBCE programs showed participating students to have made large gains, relative to a comparison group, not only in career and life attitudes, but also in academic skills (Bucknam and Brand, 1983).

Conclusions

- The problem of isolating effective teaching strategies is compounded by the lack of agreement as to what skills to address. For example, computer-assisted instruction is better for teaching basic skills than for teaching higher-order skills. But many programs rely almost solely on this technique for the component that addresses skills acquisition. If there is disagreement about what is most important to teach, it is difficult to decide what teaching strategy to use.
- None of the strategies is overwhelmingly effective in preparing youth for the labor market. Skill gains are, for the most part, only in basic skills--reading and math.
- For younger at-risk students, the best evidence suggests that tutoring, continuous progress and cooperative learning strategies offer the most hope of improving

⁷ See Smith and Gambone, this volume.

basic skills. Tutoring seems particularly well suited to be incorporated into employment and training programs, since young people experience increased proficiency in reading and math both as students and as tutors. Tutoring can also be a relatively inexpensive strategy to use when program participants or volunteers are used as tutors.

- For older students, approaches that incorporate meaningful content based on current knowledge and experience seem to offer the most hope of improving skill proficiencies.
- Most research on single-component strategies has neglected the population between the ages of 13 and 16. Instead, research has focused on kindergarten to sixth-grade students or on older youth in job or military training programs. This has left a real gap in knowledge with which to build remediation programs for this population.

COMPREHENSIVE PROGRAMS

Implementation variables are extremely difficult to isolate but may play a large role in how well students fare. For example, expectations and support communicated by individual teachers are increasingly viewed as important. Due to greater awareness of these factors, and because of the absence of definitive direction from single-component strategies, many recent efforts have undertaken a more comprehensive approach with at-risk youth. Because these programs often contain a developmental as well as an academic component, they appear the most likely to address the range of skills called for by employers.

We conducted a review of comprehensive programs in order to help formulate conclusions as to what features or elements contribute to critical skills acquisition among at-risk youth. We confined our search to programs that specifically noted a basic skills component and targeted at-risk students from seventh grade on, and to evaluations that used respectable research methods (a control group with random assignment or a comparison group, and pretest and posttest results).

From the best available evidence, is it possible to draw some conclusions as to program elements most likely to produce positive effects? Or must we accept the conclusion of researchers McPartland and Slavin that, with regard to middle and high school-age youth, "no proven approaches exist for successfully reaching these students" (1990:15)?

Program Evidence

Table 4 gives information on ten of the comprehensive programs we reviewed and focuses specifically on the area of outcome evidence. We have included the source, the program name, a brief listing of the easily identifiable program elements, the evaluation method used and the findings on specific outcomes. Here, we include any information that was given in the areas of academic skills, school retention or attendance, and personal development. Under the outcomes categories, a "yes" entry indicates significant gains for the at-risk population; a "no" entry indicates no positive gains from efforts in that area; and a "not assessed" entry indicates that this was not an area the program evaluation measured.

In focusing on the outcomes in Table 4, the first point to make is that improvements in academic outcomes and school retention/attendance do not necessarily move in tandem. In a program for which findings regarding academic skills are positive (e.g., Alternative High School), there is not always a similarly positive result regarding school retention rates. Likewise, in two programs where school retention or attendance rates are significantly affected (Fresh Start Mini School and the Career Intern Program), basic skills are not. Only two of the ten programs (Academy for Career Education and Higher Horizons) show positive outcomes in both areas.

This lack of parallelism in these two very important areas makes the task of determining how to shape programs even more difficult. Is there any benefit to be gained from programs that significantly improve academic skills (at least for the short term) but have no impact on student persistence rates? Given the high degree to which future employment is related to the attainment of a high school diploma, how beneficial would this be? Likewise, any program that significantly improves the graduation rates of its students but can demonstrate no impact on basic skills is somewhat suspect. Given the tremendous emphasis that employers and others are placing on the acquisition of academic skills, how great would the benefit to youth be if they leave school with nothing more than a piece of paper?

There are, however, several interesting parallelisms. Three of the five programs that indicate positive gains in basic skills contain a work experience component. Of the other two, one uses vocational education. While hardly conclusive, this provides some support to the contention that linking content to work applications may be, for many youth, the most successful way to ensure academic skills acquisition (Sticht and Mikulecky, 1984).

The table highlights the degree to which developmental goals, while noted in program designs, are difficult to measure. This can be seen from the majority of programs for which a "not assessed" notation is made under this outcome category. As discussed

Table 4
COMPREHENSIVE PROGRAM EVALUATION OUTCOMES

Program	Elements	Evaluation	Significant Outcomes		
			Basic Skills	School Retention/ Attendance	Develop- mental Goals
Academy for Career Education	Experience-based career education: basic skills, career guidance, career education. Development: self-exploration, values clarification, life skills, motivation.	Experimental design - random assignment	Yes (after 2 years)	Yes	Yes
Fresh Start Mini School	School-within-school: self-paced instruction, continuous assessment. Development: rap sessions.	Experimental design - random assignment - controls never tested	No	Yes	Not assessed
Higher Horizons 100	School-within-school: remedial training. Development: cultural activities, intensive counseling.	Pre/posttest design - no control group - spring-to-spring measures	Yes (after 3 years)	Yes	Not assessed
Career Intern Program	Alternative school: school-work unit, work experience, basic skills, English, science. Development: counseling.	Experimental design - random assignment	No	Yes	Not assessed
Career Education for 9th-Graders in a Community College Setting	Alternative school setting: 1/2 day of classes at college in reading, math, English. Development: daily guidance sessions with counselor.	Pre/posttest design - no control group	No	Not assessed	Not assessed

Table 4 (continued)
COMPREHENSIVE PROGRAM EVALUATION OUTCOMES

Program	Elements	Evaluation	Significant Outcomes		
			Basic Skills	School Retention/ Attendance	Develop- mental Goals
Alternative High School	Individualized program: 1/2 day basic skills; 1/2 day work experience, job search assistance, job referrals. Development: support services (child care, transportation, health care).	Pre/posttest design - no control group	Yes	No	Not assessed
Institute for Career Exploration	Summer program: integration of writing and career exploration, writing remediation, occupation course, work experience, peer tutors, computers. Development: student mentors, counseling, cultural activities.	Pre/posttest design - no control group	No	No	Not assessed
Basic Skills Academy/ Comprehensive Competency Program	Summer program: individualized instruction in reading and math, individually tailored sequence and goals, computer-assisted instruction, self-paced.	Pre/posttest design - no control group	No	Not assessed	Not assessed
Summer Training and Education Program	Summer program: basic skills remediation, work experience. Development: life skills.	Experimental design - random assignment	Yes	No	Yes
Louisiana State Youth Opportunities Unlimited	Residential program (8 weeks): work experience, academic training, health care, computer-assisted instruction. Development: support services, parental involvement, life skills.	Experimental design - random assignment	Yes	Not assessed ^a	Yes

Sources: Biester, 1976; Washington, D.C., Public Schools, 1981; Hartford Public Schools, 1984; Gibboney and Langsdorf, 1979; Lieberman, 1979; Malmberg, 1983; New York City Board of Education, 1989; Mei, 1990; Sipe, et al., 1988; Shapiro, et al., 1986.

^aThis outcome was measured as a participant's "intention to complete the current year and graduate." Statistically significant differences were found over time within the treatment group, but no comparison was made to the control group. Since this measure does not directly assess school retention, we classify this outcome as "not assessed."

earlier, current assessment instruments do not allow for measurement of many developmental or "coping" skills.

Of the three programs that provide evaluation data in this category, all show positive outcomes. In addition, two of the three also show improved school retention or attendance (see the table footnote; the third program did not directly assess school retention). Finally, all of the programs with positive developmental outcomes also indicate positive results in basic skills. These parallel outcomes, while again hardly conclusive, support the argument that developmental goals may play an important role in skills acquisition and improved school or program retention rates.

Clearly, there are many and varied efforts to deal with the educational difficulties faced by at-risk youth. What is equally clear is that it is still impossible to determine precisely which program components are responsible for the respective successes and failures of these efforts. Mann reports that his attempts to conduct a useful program content analysis of 12 school district programs for at-risk youth resulted in 360 different entries "scattered almost randomly over the major and minor headings" (1986:69). D'Amico has concluded that, while effective programs do exist, "each one's effectiveness . . . seems to represent an intricate, perhaps even idiosyncratic, phenomenon that, in turn, is probably the result of intricate, perhaps idiosyncratic, processes" (1982:62).

Shortcomings in evaluations certainly compound the problem of developing programs for at-risk students. Many programs have no evaluation component. Even those evaluated often do not use comparison or control groups, or random assignment, making it difficult to attribute gains to program participation; and they frequently measure only fall-to-spring changes and avoid the issue of possible summer losses. One high school program, reviewed by Taylor and Pinard (1988), reports extremely positive outcomes: a greater than 98 percent graduation rate, with 92 to 97 percent of its students accepted to four-year colleges. This is a high school located in the West Harlem section of Manhattan, in which 44 percent of the students receive some form of public assistance, 76 percent are African-American and 23 percent are Hispanic-American. However, no formal evaluation was conducted, thereby minimizing the value of this information.

Other Information

A few final points to make regarding Table 4 have to do not with what is presented, but rather with what has been omitted. Three areas of importance have received comparatively and disturbingly little attention in program evaluations. These areas are: program length, program cost and staff training.

Program Length

There are two angles from which to consider program length: the length of time an individual student is enrolled and the length of time a program has been in operation.

The length of time necessary for a student to be enrolled in any comprehensive program is really unknown. Programs vary greatly, though most--particularly those using instructional strategies--have been relatively short-term (one year or less). There is some indication that, most recently, comprehensive programs are being designed for longer terms (from two to five years). While longer interventions seem logical, this is a program feature that has not been much explored and may be critical. For example, the gains in skill proficiencies in two of the programs in Table 4 occurred only after two or three years. How much of a role does length of involvement play in program success? Are many of the short-term interventions (one year or less) futile, given that without sufficient time, no intervention can hope to work? Are two years sufficient, or are four or five years needed? Or longer? These are important questions to research, particularly in light of Hahn's (1987) warning that short-term interventions will lead only to short-term results.

In terms of duration of program operation, here, too, there is compelling logic to the assumption that the longer a program is in operation, the longer it has to develop, be revised, learn from past success and failure, and ultimately improve. Hahn points out the degree to which this has been true for the Job Corps, which, he asserts, has benefitted from the ability to experiment with learning methods: "This process of experimentation and standardization could only bear fruit in a program that is allowed to operate for several years" (1987:263). Of the multitude of efforts funded across the country to serve the at-risk population, many appear to be abandoned after only a very short period. In following up on programs eligible for funding and dissemination through the National Diffusion Network for their effectiveness with at-risk youth, we were told in some cases that programs were no longer in operation or had no evaluation data to share.⁸ While this aspect has been neglected in the research, the Summer Training and Education Program (STEP),⁹ the programs of James Comer at the Yale University Child Study Center, and Henry Levin's Accelerated Schools program may have benefitted from sustained efforts.

⁸ After contacting by phone five program officers and getting confirmation on evaluation data available from only one, we abandoned this effort as fruitless.

⁹ After the first year, STEP revised its curriculum to reflect new insights from its first-year experiences.

Cost

Few programs provide information on actual cost of operation. In a time of particularly limited funding, this is a distressing omission. Certain interventions or strategies, such as paid tutors and computer-assisted instruction, clearly have higher start-up costs than others, such as cooperative learning and volunteer tutoring. Do they, then, reduce costs of later remediation more effectively than less-expensive methods? Given the large and growing number of youth at risk and the limited--and perhaps shrinking--funds available for this population, we need to be able to allocate money in the most cost-effective way. This is possible only with more complete information on program costs.

Staff Training

Information on staff training for program operation indicates that it can range from absolutely no training (as is the case for the majority of programs we reviewed) to ongoing and intensive training. This, too, is an area in which we know very little that is conclusive. How important is training for personnel involved in management and teaching? What should that training consist of? Do programs that devote more attention to staff training produce better results? Is a certain amount sufficient, or should training be ongoing?

While it is not yet possible to prescribe what is needed or sufficient in the area of training, a lack of training matches the poor results of some programs and thus raises questions. Given both the complexity of needs and the continual evolution of best practices related to meeting them, it is difficult to understand the assumption that no training would be necessary, particularly in a field where staff turnover can be high. This may be an area of great importance to program success but generally receives only secondary consideration. Personnel and implementation factors may play a significant role in ultimate success; adequate training could play a large role in these factors.

Conclusions

- Existing evaluations of comprehensive programs are not adequately designed or implemented to allow for consideration of all of the variables that might be linked to positive effects.
- As in single-component strategies, linking instructional content to work applications in comprehensive programs seems to produce better outcomes in skills acquisition.

- Limited evidence suggests that developmental gains are linked with gains in academic skills.
- The developmental needs of youth could play a vital role in student persistence and attitudes. Both assessment instruments and evaluations designed to consider developmental outcomes are needed.

V. COMPREHENSIVE NEEDS CALL FOR COMPREHENSIVE PROGRAMS

Many researchers have come to the conclusion that "[e]ffective programs are comprehensive" (Slavin and Madden, 1989:11); "[t]he most vital lesson educators and trainers can derive from this review . . . is the importance of integrating and relating the critical components of a comprehensive effort" (Hahn, 1987:263);¹⁰ "[n]o single factor makes schools effective in sustaining student interests and commitment Rather, a constellation of both structural and normative features appears to be involved" (Bryk and Thum, 1989:375).

The most compelling reason to conclude that program designs for at-risk youth should encompass more than single-component strategies is that comprehensive needs call for comprehensive programs. The multitude of problems faced by at-risk youth today, and their reasons for leaving school (Rumberger, 1987), are, perhaps, sufficiently compelling reasons to believe that approaches in confronting their educational needs must be comprehensive, rather than solely instructional. Such reasons as dislike of school, pregnancy, financial concerns, drugs and home difficulties all point toward the need for a collaborative effort expressly designed to assist these youth with those issues first and foremost in their minds--issues against which basic skills pale in terms of immediate importance or relevance.

The very factors that have placed these youth at risk are what need to be addressed. Wehlage, et al., (1982) have reviewed the various approaches taken with at-risk youth--remediation in basic skills, vocational training and work experience--and argue that these approaches have been too simple and misdirected. They state that "[t]he assumption that some variation of skill remediation or training will eventually alter the life circumstances of marginal students underlies most of our recent national youth policy" (Wehlage, et al., 1982:4). Their report argues that attention to "adolescent social development" is far more important to the long-term success of these youth and that acquisition of skills "can be most beneficial only in the context of broad development" (1982:9).

Those programs that attempt to impart educational skills alone, without attention to developmental needs, indeed have not had great success. They have succeeded more with elementary school-aged children, precisely because the issues discussed above, such as pregnancy, drugs and financial responsibilities, are not so prevalent. In addition, it is now quite clear how detrimental a role tracking and low expectations have played in increasing the alienation many at-risk youth experience in schools. Only a comprehensive approach that is systemwide can adequately address these issues.

¹⁰ Hahn's review was of second-chance programs.

Finally, it is becoming increasingly clear from the demands of employers, as seen in Table 1, that what these youth need for future success are not just academic and higher-order skills, but coping skills as well. Coping skills, such as responsibility, self-esteem and self-discipline, will be learned only through programs that are expressly designed to teach them. Researchers have concluded that these skills are not automatically or necessarily learned along with simple cognitive development; they must instead be a basic aim of programs (Beyth-Marom, et al., 1989).

How best to design the comprehensive program? From carefully researched reviews that constitute some of the best analyses, we pull out and summarize those program elements researchers have identified as important in comprehensive programs that aim to serve at-risk youth. This information has been organized in Table 5.¹¹

We categorize the elements of these programs into four areas: instruction, which refers to single-component strategies used in the classroom (discussed in the previous section); development, which refers to efforts that target the developmental needs of at-risk youth, including an extended day, early intervention or a summer component; leadership, which refers to elements chiefly concerned with overall program management or teacher behavior; and school ethos, which refers to those elements, such as high standards, that attempt to create a general atmosphere conducive to learning.¹² Efforts in the last three areas--development, leadership and school ethos--are what largely distinguish comprehensive programs from single-component strategies; they are also three areas that few employment and training programs address.

Table 5 exemplifies the current state of understanding and effort in serving at-risk youth: it reflects both the continuing debate and uncertainty, and the increasing complexity of programs. Across the 12 reviews included here, 37 elements pertain to issues of instruction, while 47 elements pertain to issues of development. Considerable attention also goes to school ethos, with 27 elements listed. The category with the fewest number of elements (19) is leadership. That comparatively minimal emphasis could be a result of

¹¹ In constructing this table, we eliminated those few instances where components were not clearly defined. We also combined elements that appeared virtually identical but had been given different names. Finally, many details have been truncated, and the authors' words have been translated into a more uniform taxonomy.

¹² Clearly, there are many ways to categorize the various elements of comprehensive programs; e.g., the William T. Grant Foundation Commission on Work, Family and Citizenship (1988) uses the categories of program context, instructional context and community context; McPartland and Slavin (1990) use instructional practice and content in remedial reading, tracking and curriculum, and dropout prevention.

Table 5
IMPORTANT ELEMENTS OF COMPREHENSIVE PROGRAMS

Source	Instruction	Development	Leadership	School Ethos
Berlin and Sum, 1988	Emphasis on both academic and employment needs	Developmental needs; support services	Accountability; flexibility; creativity; centralized management; decentralized component	High standards; uniform standards
Bryk and Thum, 1989	Emphasis on academics			Faculty interest in students; orderly environment; supportive environment
William T. Grant Foundation, 1988	Flexible pacing; multiple teaching modes; computer-assisted instruction; mastery learning; emphasis on academic-work link; relevant, cultural curriculum; assessment	Support services; collaboration with community; assurance of work; employability skills; longer-term intervention	Instructional leadership; stable funding	Orderly environment; competent, caring teachers; supportive environment
Guthrie, 1989	Coordinated instruction	Early intervention; time after school, during summer	Staff development	Philosophy 'all can learn'; comprehensive approach targeted toward all students; high expectations
Hahn, 1987	Individualized instruction; competency-based curriculum	Counseling; support services; school/business collaboration; parent involvement; mentoring; year-round programs	School incentives	
Hamilton, 1986	Strong vocational component; small classes; individualized instruction	Out-of-classroom learning; counseling		Separate potential dropouts
Levin, 1988	Deadline for catching up; fast-paced curriculum; interesting applications; higher-order skills; peer tutoring; cooperative learning	Parent involvement; community involvement; nutrition and health; parent training; extended day	Autonomy; accountability; school-based governance; periodic evaluations	High expectations; high status; unity of purpose; clear goals

Table 5 (continued)
IMPORTANT ELEMENTS OF COMPREHENSIVE PROGRAMS

Source	Instruction	Development	Leadership	School Ethos
Mann, 1986	Emphasis on academic-work link	Coalitions; early identification		Care
Rumberger, 1987	Emphasis on both academic and employment needs; individualized instruction	Counseling; early identification		Sensitive staff
Wehlage, 1982	Small size; variable expectations; individualized curriculum in group setting; cooperative learning; relevant applications; experiential education	Extended role for teachers	Autonomy; accountability	Optimism about student success; high expectations; positive peer culture; cooperative effort; family atmosphere; support for program goals; admission of need for help
Wells, 1990	Small classes; experience-based education; emphasis on both academic and employment needs; challenging curriculum; peer tutoring	Self-concept development; counseling; student empowerment; interpersonal and life skills; transition programs; voc/adult education; work/study programs; parent involvement; substance abuse programs; pregnancy programs; after-school care; community involvement; business involvement; community-based youth activities; community service; preschool intervention; mentor programs	Flexibility; clear rules and procedures; staff development; school choice	High expectations; minority role models
Winters, et al., 1988	Emphasis on academic-work link; team approach; collaboration	Summer component		

207

220

the very heavy emphasis this area is receiving in the current reform of mainstream education.

INSTRUCTION

Careful scrutiny of the elements included in the instruction category reveals the degree to which debate continues in two areas delineated earlier: delivery mode and instructional content. Of those reviews that recommend specific instructional delivery strategies, the dispersment of recommendations (according to the number of reviews) is as follows: individual instruction (4), cooperative learning (2), mastery learning (2) and peer tutoring (2). In terms of instructional content, the range of advocated approaches is similar: an emphasis on both academic and employment needs (4); an emphasis on the link between academics and work (3);¹³ relevant and cultural applications (3);¹⁴ experiential education (2); and challenging content (2).¹⁵

While contradictions appear widespread, the mass of research generally points to instructional delivery that focuses on the unique needs of each student--either in small groups or individually--and content that has substantial relevance to the students' life experience. This summary appears to closely coincide with the evidence presented earlier on single-component strategies.

DEVELOPMENT

Under the category of development, the amount of detail provided varies considerably, from a simple declaration that "developmental needs must be met" (Berlin and Sum, 1988) to a listing of specific programs, such as those designed to address teen pregnancy and substance abuse (Wells, 1990). Despite these differences in detail, there appears to be greater convergence in the area of developmental needs than in the instructional strategies category. The most consistently noted elements are: provision of increased time through an extended day, a summer component or a longer-term intervention (6);

¹³ The former emphasis on both academic and employment needs pertains to recommendations for a curriculum that contains both components but does not necessarily teach academics through their connection and relevance to work.

¹⁴ Relevant applications may or may not be the same as the academic-work link. Details supplied did not make this clear.

¹⁵ Challenging content could also be considered a mode of delivery, in that the degree to which material is challenging can also be a function of the pace at which it is presented.

involvement of other constituencies, such as business, community and/or parents (5); counseling (4); social services (4); and early intervention (4).

The relative consistency and repetition of several themes here suggests, at a minimum, a general recognition that it is critical to address the developmental needs of at-risk youth--perhaps, given the volume of elements noted (47), even more critical with this population than are the instructional needs.

LEADERSHIP

Although given the least attention when considering the needs of at-risk youth, the leadership elements noted, on the whole, reflect the current recommendations being made in the mainstream education reform movement. For the most part, these pertain to governance and the delicate balance between centralization and decentralization. Such elements noted include: accountability (3), staff development (2), increased autonomy (2), school incentives and school choice.

From a review of evaluations of these types of efforts with mainstream populations, their impacts on student achievement appear weak, if present (Summers and Johnson, 1991). Some evidence indicates a positive impact on student absenteeism and dropout rates, though what is available is hardly conclusive (Collins and Hann, 1991).

SCHOOL ETHOS

School ethos is an area that has gained increasing attention over the last five years and probably will continue to be a particular focus of programs targeting at-risk youth. As discussed in Section III, there is general agreement that such elements as uniform and high expectations are critical to a productive and positive atmosphere in schools. Of the 12 reviews included here, high expectations are noted by five, while four others note care or sensitivity on the part of school personnel. Implicit in the recommendations for these elements is the certainty that many subtle messages from teachers and others in schools have, both in the past and today, negatively affected many students. The extent of agreement as to the importance of high expectations, as well as how closely the advocacy represents a response to findings from research (see Section III), is encouraging.

NOTES OF CAUTION

There are three notes of caution to raise from what has been presented in Table 5. The first relates to the degree to which we believe that many of the elements listed, once stipulated or mandated or even requested, will become reality. How do we ensure, for example, that high expectations are communicated? This is a problem that can be

addressed through staff training, but, as discussed previously, staff training has received very limited attention.

The second caution pertains to program design. Powell, Farrar and Cohen (1985) have criticized the current state of education by using the analogy of the shopping mall to characterize the huge and seemingly random gamut of offerings or selections available to high school students. There may be another, equally disturbing, way to apply their analogy: Table 5 might lead one to conclude that approaches and programs for at-risk students could also become "shopping malls." Schools and employment and training programs must guard against combining a little bit of this with a little bit of that, adding a few more things to the basket if there is money left over, then hoping that the end result is satisfactory. The array of elements discussed in this paper should not be treated as a shopping list.

The array of elements and evaluations discussed, however, provides us with the only information available as to how to successfully teach educational skills to at-risk youth. The employment and training sector is forced to draw on this "best evidence" from schools, given the dearth of coherent strategies and evaluations from current second-chance programs.

The third note of caution is that we can place only limited trust in the effectiveness of current strategies. Essentially, all of the conclusions regarding how to teach educational skills must be qualified. What would constitute an informed approach in both practice and research draws on this review and is discussed in the recommendations that follow.

VI. CONCLUSIONS AND RECOMMENDATIONS

This review has focused on two major tasks: (1) outlining the problem of, and issues associated with, identifying the skills needed for labor market success; and (2) identifying for the employment and training system effective strategies, techniques or programs that have been used in the mainstream education system and are designed to serve at-risk youth. As second-chance programs face the need to serve youth who lack the skills employers seem to want--because school practices result in inadequate skill outcomes for these youth--it is important to try to answer the questions with which we started.

Unfortunately, the foregoing review indicates substantial limitations in the development of well-documented, successful approaches to increasing the proficiency levels of disadvantaged youth. For this reason, answers to our original questions cannot be considered definitive, but informed. In addition, the answers highlight several serious impediments to progress in efforts directed at preparing at-risk youth for labor market success.

- What are the critical abilities that young adults should have when they leave school or employment and training programs and enter the labor force? Are traditional "basic skills" enough, or does participation in the work force require "higher-order skills"? Is there general agreement on this matter, and if not, what does this imply?

There is little agreement on the important educational skills required to enter productive employment. Many and differing voices, described in Section II, hold an equal number of opinions. We concur with the conclusion of the SCANS report, that "[p]art of the difficulty is that employers and school personnel are passing each other like ships in the night: one speaks in Morse code, the other signals with flags" (U.S. Department of Labor, 1991:4). Educators and the business community are not in accord over requisite capabilities; progress toward better serving the youth population through planned programs is severely impeded by lack of agreement on fundamental goals. In addition, the establishment of competency standards--vital to evaluating programs and participant progress--is necessary but should not precede agreement on skill definitions and program goals.

- What is currently known about how the traditional education system transmits these skills? Does the system's limited success with at-risk youth provide us with valuable lessons or research indicating which pedagogical practices ought not to be mirrored in second-chance programs?

The majority of at-risk students are ill served by an education system whose essential structure and practices compound these students' problems. It is reasonable to suggest

that the need for second-chance programs could be greatly reduced if mainstream education, which interacts with these youth first, were more successful in meeting their various needs. In the meantime, employment and training programs can learn much from research findings on traditional pedagogical techniques, which are too frequently imitated in other programs. The clearest research indicates that programs need to avoid ability tracking; that programs should communicate high and uniform expectations; that programs should use well-trained staff; and finally, that learning must be structured so that it truly engages students.

- What evidence of success is there in special programs designed to teach educational skills to disadvantaged youth? Are the findings sufficiently grounded to justify replication of these programs?

The volume of effort, while commendable, has impeded our ability to discern effective approaches. An improved understanding of effective practices is hindered by current interventions that include a seemingly random combination of elements--in shopping-mall style--and exclude, for the most part, attention to rigorous evaluation. As Mann (1986) has pointed out, we are learning less than we are doing and continue to be forced to design programs based on limited information. This, however, serves little purpose if what we are doing is not effective. Without agreement about the contribution to research that program evaluations are expected to make, we will continue in a haphazard fashion, and 15 years will pass again without much better understanding of how effectively to reach the at-risk population.¹⁶ As Kirst stated in response to President Bush's America 2000 plan: "We need . . . overarching priorities to guide both research and practice; what we don't need is more random innovation" (1991:38).

- What long-term strategies ought employment and training programs to pursue, in light of these issues?

Current strategies that focus on teaching basic skills alone will probably not result in any large-scale success. The types of strategies currently employed by second-chance programs to increase the skill levels of disadvantaged youth are generally aimed at only basic skills. Research indicates that acquisition of higher-order and coping skills is not necessarily a by-product of a purely cognitive approach. In addition, employers deem these other skills critical for long-term labor market success.

¹⁶ This 15-year gap refers to the time passed since Walther (1976) came to many of the same conclusions regarding the developmental needs of youth that we have come to in this review.

Employment and training programs must define the critical skills--academic, higher-order and coping--to be taught; design programs incorporating recommended elements from the best evidence currently available (see recommendations 6 and 7, which follow); establish national standards for competency levels in these areas and determine the appropriate assessment instruments to use; and conduct rigorous evaluations to both monitor progress and adjust program design as necessary.

- What research questions warrant further investigation?

Specific research questions that can be addressed by the Department of Labor are listed below (recommendations 8 through 10).

RECOMMENDATIONS

The recommendations for the employment and training system presented here are of three kinds: for policy development, for practice in the field and for research.

Recommendations for Policy

1. The Department of Labor (Secretary's Commission on Achieving Necessary Skills) has already directed some effort toward defining educational skills critical for labor market success, but more is necessary to refine skill definitions and distinguish necessary skills from merely desirable ones. To serve the youth population effectively, strategies need to be developed to address skill needs; this can only be accomplished with a clear understanding of what these needs are.
2. The Department should support efforts to explore new and varied methods of "skill" assessment, once skills have been better defined. Given the evidence that a wide range of skills is demanded by today's employers, we must develop better methods to both guide and measure the effectiveness of teaching them. The employment and training system is an opportune testing ground for exploring alternative measures of academic skills acquisition (such as the new Educational Testing Service measures of literacy) and for formulating measures of the higher-order and coping skills not incorporated in traditional national tests.
3. The Department of Labor, in conjunction with the Department of Education, should support projects that aim to coordinate the various efforts of schools, social service agencies, employment and training programs and others involved in delivering services to at-risk youth. Because we are increasingly looking toward comprehensive programs as the only sensible way to address the broad range of needs faced by these youth, this type

of coordination would help to reduce costs, avoid repetition of failure and unnecessary duplication of effort, and facilitate the dissemination of effective strategies.

4. The Department should explore ways to foster greater school retention, which should include efforts targeting youth at a much younger age. Evidence of remediation and second-chance program success is so modest that it argues for a more preventive approach focused on school retention rather than on later remediation. The earlier an intervention occurs in the lives and education of these youth, the more likely it is that later need for remediation will be reduced. Current efforts must address those immediately in need, but a gradual shift of resources toward prevention, rather than remediation, is vital in terms of cost-effectiveness and optimal results.

5. The Department should undertake a program of technical assistance and knowledge dissemination aimed at providing better information to practitioners about effective educational strategies and how they should be incorporated into employment training programs. An important part of this program should be an effort to steer practitioners away from educational practices--such as context-free skills-drilling--that have been identified as unsuccessful. As much as possible, the Department should encourage adoption of alternative techniques that show some--though still marginal--promise for success, and discourage use of practices that clearly have failed.

Recommendations for Practice

6. Practitioners should seek to incorporate comprehensive educational components that target the unique instructional and developmental needs of each individual, without the stigma or lowered expectations commonly associated with tracking; that present a hierarchy of skills; that provide a context that is relevant and engaging; that frequently assess progress; and that communicate uniform and high expectations.

7. Two approaches that have demonstrated some success and appear particularly appropriate for the age and circumstances of youth in employment and training programs are tutoring and work experience. Practitioners should design programs with these in mind.

Recommendations for Research

8. The Department of Labor should sponsor a research project to identify those programs believed to be the most successful or that have some evaluation data pointing toward success. Complete evaluations of these programs (see recommendation 10) should then be sponsored by the Department.

9. Information should be collected on the levels of training that program staff currently have, whether programs with better-trained staff achieve better outcomes and whether ongoing staff training is needed for comprehensive programs.

10. The Department of Labor should standardize design requirements for evaluations of programs directed to increasing the educational skill levels of at-risk youth. The design requirements should include: minimum time periods for program operation; control group designs with random assignment; uniform assessment measures, with a pretest and posttest component for both control and experimental groups; measures of program effects on dropout prevention; follow-up data collection of postprogram labor market outcomes; and information for a complete program cost assessment.

REFERENCES

- Alabama State Commission on Higher Education
1989 Academic Preparation for College: What Students Need to Know and Be Able to Do to Enter College in Alabama. Montgomery, AL: Alabama State Commission on Higher Education.
- Applebee, Arthur N.; Langer, Judith A.; Mullis, Ina V.S.
1989 Crossroads in American Education. Princeton, NJ: National Assessment of Educational Progress.
- Barton, Paul E. and Kirsch, Irwin S.
1990 Workplace Competencies: The Need to Improve Literacy and Employment Readiness. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Bempechat, Janine and Wells, Amy
1989 "Trends and Issues in Urban and Minority Education: Promoting the Success of At-Risk Students." New York: ERIC Clearinghouse on Urban Education.
- Berlin, Gordon and Sum, Andrew
1988 Toward a More Perfect Union: Basic Skills, Poor Families, and Our Economic Future. New York: Ford Foundation.
- Beyth-Marom, Ruth; Fischhoff, Baruch; Jacobs, Marilyn; Furby, Lita
1989 Teaching Decision-Making to Adolescents: A Critical Review. Washington, D.C.: Carnegie Council on Adolescent Development.
- Biester, Thomas W.
1976 Evaluation of Cumulative Effects of RBS Career Education, 1974-1976. Philadelphia: Research for Better Schools, Inc.
- Bryk, Anthony S. and Thum, Yeow M.
1989 "The Effects of High School Organization on Dropping Out: An Exploratory Investigation." American Educational Research Journal, 26:353-383.

- Bucknam, Ronald B. and Brand, Sheara G.
 1983 "EBCE Really Works: A Meta-Analysis on Experience-Based Career Education." Educational Leadership, 40:66-71.
- Caldwell, Robert M. and Heidl, John J., Jr.
 1984 "Computer-Based Basic Skills Instruction in a CETA Funded Project: A Case Study." The Urban Review, 16:76-86.
- Carnevale, Anthony P.; Gainer, Leila J.; Meltzer, Ann S.
 1988 Workplace Basics: The Skills Employers Want. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration and American Society for Training and Development.
- Collins, Robert A. and Hann, Maymie K.
 1991 Summative Evaluation Report, School-Based Management/Shared Decision-Making Project, 1987-1988 through 1989-1990. Miami: Dade County Public Schools, Office of Educational Accountability.
- Comer, James P.
 1988 "Educating Poor Minority Children." Scientific American, 259:42-48.
- D'Amico, Joseph
 1982 "Each Effective School May Be One of a Kind." Educational Leadership, December: 61-62.
- Darling-Hammond, Linda and Green, Joslyn
 1990 "Teacher Quality and Equality" in Goodlad, John I. and Keating, Pamela (eds.) Access to Knowledge: An Agenda for Our Nation's Schools. New York: College Entrance Examination Board.
- Fletcher, J.D.
 1990 Effectiveness and Cost of Interactive Videodisc Instruction in Defense Training and Education. Alexandria, VA: Institute for Defense Analysis.
- Florida State Department of Education
 1982 Reading, Writing, and Mathematics: Beginning Grades 3, 5, 8, and 11, Minimum Student Performance Standards for Florida Schools, 1985-1990. Tallahassee, FL: Florida State Department of Education.

Paper No. 4

- Gage, N.L.
1990 "Dealing with the Dropout Problem." Phi Delta Kappan, December:
280-285.
- Gibboney, Richard A. and Langsdorf, Michael G.
1979 "The Career Intern Program: An Experiment in Career Education That
Worked." Journal of Research and Development in Education, 12:103-105.
- Goodlad, John I. and Keating, Pamela (eds.)
1990 Access to Knowledge: An Agenda for Our Nation's Schools. New York:
College Entrance Examination Board.
- Guthrie, Larry F.
1989 What Schools Can Do for Students At Risk. San Francisco: Far West
Laboratory for Educational Research and Development.
- Hahn, Andrew
1987 "Reaching Out to America's Dropouts: What to Do?" Phi Delta Kappan,
67:256-263.
- Hamilton, Stephen F.
1986 "Raising Standards and Reducing Dropout Rates." Teachers College
Record, 87:410-429.
- Harris, Bruce and Harrison, Grant
1987 "An Evaluation of an Innovative Use of Computers and Volunteers in 7th
Grade Math Instruction." Paper presented at the annual meeting of the
California Educational Research Association, San Jose.
- Hartford Public Schools
1984 Higher Horizons 100, 1983-84: An Evaluative Report. Hartford, CT:
Hartford Public Schools.
- Johnson, Carl I.
1986 New Jersey High School Proficiency Test: Identification of the Skills and
Development of the Items. Trenton, NJ: New Jersey State Department of
Education.

- Johnston, William B. and Packer, Arnold H.
 1987 Workforce 2000: Work and Workers for the 21st Century. Indianapolis, IN: Hudson Institute.
- Kirsch, Irwin and Jungeblut, Ann
 1986 Literacy: Profiles of America's Young Adults. Princeton, NJ: National Assessment of Educational Progress.
- Kirst, Michael W.
 1991 "Toward a Focused Research Agenda" in Voices From the Field. Washington, D.C.: William T. Grant Foundation and Institute for Educational Leadership.
- Knapp, Michael S. and Shields, Patrick M. (eds.)
 1990 Better Schooling for the Children of Poverty: Alternatives to Conventional Wisdom. Washington, D.C.: U.S. Department of Education, Office of Planning, Budget and Evaluation.
- Koppel, Ross
 1990 Pennsylvania Employers' Perceptions of Workers' Skills, Abilities, and Attitudes. Report to the Pennsylvania Occupational Information Coordinating Committee. Philadelphia: Social Research Corporation.
- Levin, Henry M.
 1988 Accelerated Schools for At-Risk Students. New Brunswick, NJ: Center for Policy Research in Education.
- Lieberman, Janet E.
 1979 Career Education for 9th Graders in a Community College Setting. New York: City University of New York Research Foundation.
- Madden, Nancy A. and Slavin, Robert E.
 1987 Effective Pull-Out Programs for Students at Risk. Baltimore, MD: Center for Research on Elementary and Middle Schools.
- Malmberg, Steven Robert
 1983 A New Beginning: A Case Study of the Establishment of a Rural Community-Based Alternative High School, Emphasizing Basic Academic Skills, with a High Native American Minority Student Population. Sault Sainte Marie, MI: Department of Compensatory Education Services.

- Mann, Dale
1986 "Dropout Prevention--Getting Serious About Programs That Work."
NASSP Bulletin, April: 66-73.
- McPartland, James M. and Slavin, Robert E.
1990 Increasing Achievement of At-Risk Students at Each Grade Level.
Washington, D.C.: U.S. Department of Education, Office of Educational
Research and Improvement.
- Means, Barbara and Knapp, Michael
1991 Teaching Advanced Skills to Educationally Disadvantaged Students.
Washington, D.C.: U.S. Department of Education, Office of Planning,
Budget and Evaluation.
- Mei, Dolores M.
1990 Institute for Career Exploration, the Basic Skills Academy/Comprehensive
Competency Program, and the Career Employment Center Summer School
Program. New York: New York City Board of Education.
- Mishel, Lawrence and Teixeira, Ruy
1991 The Myth of the Coming Labor Shortage: Jobs, Skills and Incomes of
America's Workforce 2000. Washington, D.C.: Economic Policy Institute.
- National Governors' Association
1990 Educating America: State Strategies for Achieving the National Education
Goals. Washington, D.C.: National Governors' Association.
- Natriello, G.; Pallas, A.; Alexander, J.
1989 "On the Right Track? Curriculum and Academic Achievement." Sociology
of Education, 62:109-118.
- Nickerson, Raymond S.
1988 "On Improving Thinking Through Instruction" in Rothkopf, Ernst Z. (ed.)
Review of Research in Education, Vol. 15. Washington, D.C.: American
Educational Research Association.
- Oakes, Jeannie
1985 Keeping Track: How Schools Structure Inequality. New Haven: Yale
University Press.

- Ogbu, John
 1985 "A Cultural Ecology of Competence Among Inner-City Blacks" in Spencer, M.; Brookins, G.; Allen, W. (eds.) Beginnings: The Social and Affective Development of Black Children. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Pennsylvania State Board of Education
 1991 Draft Regulations of the State Board of Education of Pennsylvania. Harrisburg, PA: Pennsylvania State Board of Education.
- Powell, Arthur; Farrar, Eleanor; Cohen, David
 1985 The Shopping Mall High School. Boston, MA: Houghton Mifflin Company.
- Risko, Victoria; Kinzer, Charles; Vie, Nancy; Rowe, Deborah
 1990 "Effects of Videodisc Macrocontexts on Comprehension and Composition of Causally Coherent Stories." Paper presented at the annual meeting of the American Educational Research Association, Boston.
- Rumberger, Russell W.
 1987 "High School Dropouts: A Review of Issues and Evidence." Review of Educational Research, 57:101-121.
- Samson, Gordon; Niemiec, Richard; Weinstein, Thomas; Walberg, Herbert
 1986 "Effects of Computer-Based Instruction on Secondary School Achievement: A Quantitative Synthesis." AEDS Journal, 19(4):312-324.
- Shapiro, Edna and Biber, Barbara
 1972 "The Education of Young Children: A Developmental Interaction Approach." Teachers College Record, 74:55-79.
- Shapiro, Jonathan; Gaston, Susan; Hebert, Janet; Guillot, Dewey
 1986 LSYOU (Louisiana State Youth Opportunities Unlimited): Project Evaluation. Baton Rouge, LA: Louisiana State University, College of Education.
- Sipe, Cynthia; Grossman, Jean Baldwin; Milliner, Julita
 1988 Summer Training and Education Program (STEP): Report on the 1987 Experience. Philadelphia: Public/Private Ventures.

Paper No. 4

Slavin, Robert

1989 School and Classroom Organization. Hillsdale, NJ: Lawrence Erlbaum Associates.

Slavin, Robert E. and Madden, Nancy A.

1989 "What Works for Students at Risk: A Research Synthesis." Educational Leadership, 47:4-13.

Slavin, Robert E. and Madden, Nancy A.

1987 Effective Classroom Programs for Students at Risk. Baltimore, MD: Center for Research on Elementary and Middle Schools.

South Carolina State Department of Education, Office of Research

1989 South Carolina Exit Examination: Questions and Answers. A Basic Skills Assessment Publication. Columbia, SC: South Carolina State Department of Education, Office of Research.

Sticht, Thomas and Mikulecky, Larry

1984 Job-Related Basic Skills: Cases and Conclusions. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.

Strumpf, Lori; Friedman, Pamela; Rickard, Patricia.; Egeuz, Jane

1989 Improving Workplace Skills: Lessons From JTPA. Washington, D.C.: Center for Remediation Design.

Summers, Anita A. and Johnson, Amy W.

1991 "A Review of the Evidence on the Effects of School-Based Management Plans." Paper prepared for the Panel on the Economics of Educational Reform and Teaching.

Taylor, Lottie L. and Pinard, Joan R.

1988 "Success Against the Odds: Effective Education of Inner-City Youth in a New York City Public High School." Journal of Negro Education, 57:347-361.

U.S. Department of Education and U.S. Department of Labor

1988 The Bottom Line: Basic Skills in the Workplace. Washington, D.C.: U.S. Department of Education and U.S. Department of Labor.

- U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills
 1991 What Work Requires of Schools. A SCANS Report for America 2000.
 Washington, D.C.: U.S. Department of Labor.
- U.S. General Accounting Office
 1991 Within School Demonstration: Inadequate Title VI Enforcement by
 Education Office for Civil Rights. Testimony of Lawrence H. Thompson
 before the U.S. Senate Committee on Labor and Human Resources.
 Washington, D.C.: U.S. General Accounting Office.
- Walther, R.H.
 1976 Analysis and Synthesis of Department of Labor Experience in Youth
 Transition to Work Programs. Springfield, VA: National Technical
 Information Service.
- Washington, D.C., Public Schools
 1981 The Fresh Start Minischool E.S.E.A. Title IV-C. Final Evaluation Report.
 Washington, D.C.: Washington, D.C., Public Schools.
- Wehlage, G.G.; Stone, C.R.; Lesko, N.
 1982 Effective Programs for the Marginal High School Student: A Report to
 the Wisconsin Governor's Employment and Training Office. Madison, WI:
 Wisconsin Center for Education Research.
- Wells, Shirley E.
 1990 At-Risk Youth. Identification, Programs, and Recommendations.
 Englewood, CO: Teacher Ideas Press.
- William T. Grant Foundation, Commission on Work, Family and Citizenship
 1988 The Forgotten Half: Non-College Youth in America. Washington, D.C.:
 William T. Grant Foundation, Commission on Work, Family and
 Citizenship.
- Wilms, Wellford W.
 1984 "Vocational Education and Job Success: The Employer's View." Phi Delta
 Kappan, 65:347-350.
- Winters, Karen; Rubenstein, Mark; Winters, Raymond
 1988 An Investigation of Education Options for Youth at Risk, Ages 9 to 15:
 Demographics, Legislation, and Model Programs. Washington, D.C.:
 National Commission for Employment Policy.

SCHOOL-TO-WORK TRANSITION: Failings, Dilemmas and Policy Options

Richard H. de Lone

I. INTRODUCTION

School-to-work transition refers both to individual journeys and to institutional processes. For individuals, it describes the gradual development of the maturity and the academic and occupational skills required to move from the status of student to that of solidly employed worker. It also describes the programs, services and avenues available through education, training, the workplace and the labor market itself, which together provide the preparation, training, experiences and opportunities available to youth as they attempt the transition.

As a developmental process, the school-to-work transition occurs over a number of years. There is no common definition of the boundaries of this span, but most discussions assume it to be the period from the beginning of high school (roughly age 14) to age 24 or 25, by which time most--but not all--youth appear to have stopped "floundering" and settle into careers (Osterman, 1980; Hamilton, 1986). Some discussions imply a longer span.

The U.S. General Accounting Office (GAO, 1990) cites the fact that early school failure usually creates a problem for the school-to-work transition. It is certainly true that if youth enter high school with serious basic skills deficiencies, the likelihood of an effective school-to-work transition is slight. Also, it is clear that the search for a career--or, more modestly, stable employment--lasts beyond the mid-20s for many. For instance, a majority of community college students across the country are over 25, and many of them are pursuing occupation-related education.

The primary criticism of the school-to-work transition system in America is that, except for those who move fairly smoothly through colleges and graduate schools to work, there is no system worthy of the name. Critics argue that this is especially true in contrast to other industrialized nations, which have systematic, well-articulated systems for moving non-college youth through training to jobs in their mid-teens to early 20s (e.g., Nothdurft, 1989; GAO, 1990; Hamilton, 1990).

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Much criticism has focused on the lack of effective education for employment during high school for non-college-bound youth in America, "The Forgotten Half," as the William T. Grant Foundation Commission on Work, Family and Citizenship (1988) has called them. More recently, criticism has also focused on the lack of a training system to carry youth from late secondary through postsecondary years, and the lack of employer involvement in youth training or connection of employers to schools (Barton, 1990; Hamilton, 1990; Hoyt, 1990; GAO, 1990; Commission on the Skills of the American Workforce, 1990; Lerman and Pouncy, 1990). These systemic shortcomings are presumed to result in many youth failing to make an effective school-to-work transition.

While the definition of "successful" can be problematic, much of the literature on the school-to-work transition focuses on the problems of youth who do not form a solid connection to the labor force--primarily disadvantaged and minority youth whose education does not go beyond high school. The data leave little doubt, as we shall see, that by normative standards (earnings, stability of employment), the school-to-work transition is especially rocky for those with no more than a high school education, for youth from poverty families, for minorities and for women.

Some, however, go further and argue that even those youth who make it by normative standards are not well served by standards of international competitiveness. Here, the argument is both that youth enter the labor force with weak skills and that they take a longer time making the transition than is true in other countries.

So broadly defined, as an object of public policy concern, it is not surprising that the topic becomes quite diffuse and complex. If there is one word that captures the overall nature of the subject--the literature that surrounds it, the institutions that deal with it and the efforts to reform it--it is "disjointed." What seems to be a fairly simple concept to define turns out to be a study in disjuncture for several reasons:

- Differing and, to some extent, competing definitions and analyses of the nature and/or causes of the problem;
- A varied set of institutions whose involvement is presumably needed to solve the problem (however defined) but which have limited history of or incentives for collaboration;
- A wide range of differing and, to some extent, competing policy and program recommendations--some quite discrete, others amounting to nothing less than fundamental critiques of the economic and social structure--backed by very little definitive evaluation research to help one choose the most effective course of action; and

- The setting against which the transition occurs--the labor market, which is a moving target; "what works" at one time and place at one stage in the economic cycle for some segment of youth in a particular sector of the economy may not hold when any of these variables changes, as they constantly do.

This paper reviews the literature and history of school-to-work transition as a policy issue and, while recommending issues for further research, also attempts to present some unified recommendations for action--recommendations for policymakers and practitioners alike.

II. THE PROBLEM

In a spate of recent criticism, the school-to-work transition in this country has been called "haphazard," a "system for preparing youth, particularly non-college youth, for employment (that) has evolved without a coherent overall strategy" (GAO, 1990) and perhaps "the worst school-to-work transition system of any advanced industrial nation" (Commission on the Skills of the American Workforce, 1990).

In effect, most critics argue, it is a fragmented "non-system," based on laissez-faire principles. Basic education is made available to all, but that system is implicitly biased toward college preparation and does little to prepare for the workplace those not headed for college (William T. Grant Foundation, 1988). With the exception of vocational education, which serves only some of these youth (with disputed effectiveness), there is little by way of career counseling, employability skills development, job search assistance or other career-oriented programs and services in most high schools.

With regard to services and programs with an explicit emphasis on preparation for careers, the most widespread school activity is vocational education. Nearly 20 percent of all high school credits taken are in vocational education. Some 97 percent of high school students take at least one "voc ed" course, but a substantial percentage are in fields, such as home economics, industrial arts ("shop") or typing, with little or no claim to serious occupational preparation. Nearly 47 percent take more than four vocational courses in high school, while 16.5 percent take more than eight courses (Wirt, 1991).

Despite these large numbers, it is not clear how many students are enrolled in coherent programs (as opposed to hopping through a range of electives). Some estimate it is as few as 13 percent (Hamilton, 1990), and quality is uncertain. Bottoms (1989) concludes that many comprehensive high schools have no coherent vocational programs, that less than half of vocational students receive guidance help in planning a sequence of courses consistent with their career aims, and that low expectations, particularly evident in assignment of students to low-level academic courses (e.g., general math in lieu of algebra), damage them academically, making the image of vocational education as a dumping ground a self-fulfilling prophecy. Further, disadvantaged students appear least likely to have access to quality vocational programs, in part because they are concentrated in less-wealthy school districts (GAO, 1990; Wirt, et al., 1989).

Other than vocational courses, career-related activities and services are limited. While most youth have some employment during high school--which most studies find to be a predictor of subsequent labor market success (Meyer and Wise, 1982; D'Amico and Baker, 1984)--less than 10 percent of vocational students and 3 percent of all students participate in cooperative education and other structured work/study programs (William

T. Grant Foundation, 1988) and minority students are less likely than whites to get any work experience as teenagers. Few schools offer job placement assistance (William T. Grant Foundation, 1988), and career counseling is a low priority for school guidance counselors (Hoyt, 1990).

THE LIMITS OF POSTSECONDARY OPTIONS

The education and training options of non-college-bound youth are limited. As a nation, we send more students to college than any other industrialized country, and we spend much less than most on postsecondary training of non-college youth, according to the GAO (1990). The GAO concluded that, exclusive of high school expenditures, the average public investment for a college youth is seven times that for a non-college youth.

Dropouts have the fewest options. Other than Job Training Partnership Act (JTPA) programs, which have the capacity to serve about 5 percent of those eligible, the 21 percent of students who drop out have few options for further education and training unless they first obtain a general equivalency diploma (GED) or are fortunate enough to obtain a job with substantial on-the-job training. Morgan (1984), analyzing National Longitudinal Survey (NLS) data, has found that close to a quarter of dropouts receive a high school diploma or are reenrolled in education by age 22. He concludes that about 16 percent of all youth remain dropouts at age 22, though minority rates are higher, especially for Hispanics.

High school graduates, of course, have an array of options available to them, if they take the initiative to pursue them. These include training offered in the military, enrollment in proprietary schools, apprentice programs, in-house employer programs, attendance at community colleges and other two-year institutions, or enrollment in four-year colleges. However, apprenticeship is a small program, and, except for informal on-the-job training, employers conduct little training for entry-level workers in most occupations (Tan, 1989).

Grubb (1989b) has found that 61.7 percent of the graduates of the class of 1980 (roughly 50 percent of the whole cohort, including dropouts) enrolled in some form of postsecondary education within four years of graduation. Of these, 35.5 percent enrolled in four-year colleges, with the remainder in two-year colleges, technical institutes and proprietary schools. Blacks, Hispanics and Native Americans are underrepresented in four-year colleges. Most non-college postsecondary enrollments are in vocational programs, which also graduate the majority of two-year degree candidates.

Within four years of graduation, over 40 percent of those enrolled in all forms of postsecondary education other than four-year college had dropped out, and about 20 percent had received degrees or certificates, with the rest still in school or having transferred.

Dropout rates for four-year colleges were lower (19.3%) and completion rates higher (27.2%). Enrollment rates stayed about the same, but dropout rates increased from the class of 1970 to the class of 1980 (Grubb, 1989b).

According to Hamilton (1990), there is little evidence about the economic benefits of postsecondary vocational programs, as opposed to academic programs, and Grubb (1989b) concludes that most dropouts from these institutions receive too little education and training to gain much benefit. This is consistent with findings of the GAO (1990) that enrollment in proprietary schools leads to some improvements in stability of employment, but not in wages.

For those who do not go to four-year colleges, then, the existing postsecondary system is characterized by relatively high dropout rates and marginal benefits for noncompleters. While many options are available, a large percentage of high school graduates--those who do not enter postsecondary education and some who do but drop out early--receive little education or training to help them make their transition to work. Rather, as Barton (1990) sees it, education and work remain separate worlds.

If current trends continue and the school-to-work transition system remains in effect, a non-system, the argument can be made that the only school-to-work transition strategy that will lead to a decent income is college completion. That is equivalent to saying that 70 to 75 percent of youth face the prospect of an unsatisfactory transition, with the results most devastating for disadvantaged youth who receive the least education.

WHAT THE DATA SHOW

To get an overview of who does (and does not) make a successful school-to-work transition, we analyzed the NLS youth sample. Baseline data on this large sample was collected in 1979. To get numbers large enough to extrapolate to the population at large, we included all youth 15, 16 and 17 years old in that sample. Taking 18 as the typical age at high school graduation, we followed up these individuals two and five years after their assumed year of graduation (at ages 20 and 23, respectively). This means we were taking two-year follow-up measures in the period of 1981-83 and five-year measures in the period of 1984-86. The latter yield a picture that is relatively current and that was taken during a strong national economy.

If one uses earnings five years after leaving school as a proxy for making the transition successfully, the data reveal the importance of race, gender, educational attainment and family background to a successful transition (which, for illustrative purposes, we define as earning \$10,000 or more a year five years out of high school).

Race/Ethnicity and Sex

As Table 1 shows, only 18 percent of black females were earning over \$10,000 five years after the high school period. They were the least likely group to be earning at least \$10,000, followed by Hispanic females (24.3%) and black males (25.8%). In contrast, white females (32.6%), other males (35.8%) and white males (44.9%) were much more likely to be earning at least \$10,000. The "other" categories are dominated by Asian Americans. Table 1 also shows that women are much less likely than men to be among the highest earners in every race/ethnicity group, with the differences most pronounced for minorities.

Hispanics and blacks are least likely to have completed college (at least 16 years of school), with black males lagging behind black females. (See Table 2.) Hispanic males are the most likely to have completed less than 12 years of schooling, followed by black males and Hispanic females. These differences at the low and high ends account for most of the variation by race/ethnicity and sex. The percentages whose educational attainment falls in the middle ranges (12 years and 13 to 15 years completed) are fairly close. Complex interactions among race/ethnicity, sex and earnings are suggested by the fact that at age 23, Hispanic males, with considerably less overall education, are much more likely than females or black males to be earning over \$10,000, while black females, with more education, are less likely than black males to earn over \$10,000. (See Table 1.)

Table 3 shows two indicators of failure to make an effective transition: the percentage of each group with no earnings and the percentage of each group living in a household receiving welfare. Generally, as one would expect, the results here are the inverse of those regarding high earnings and high educational attainment. It is notable that women are more likely to be on welfare than men in the minority groups, but not among whites. Sex makes little difference in probability of no earnings, except among Hispanics.

Table 4 shows changes in the percentage of those with no earnings between two and five years out of school (ages 20 and 23). Note that there are only modest changes for whites and others, but there are decreases in the proportion with no earnings for black men and women and for Hispanic men, but there is an increase in this proportion for Hispanic women. Again interactions of race/ethnicity and sex are strong.

Education Effects

For those who do not go directly from high school to full-time labor force participation, postsecondary education is an alternative route to careers. In the long run, the payoffs to increased education are substantial. In the short run, however, as Table 5 indicates,

Table 1
PERCENTAGE AT AGE 23 EARNING ABOVE \$10,000,
BY RACE/ETHNICITY AND SEX

	% Above \$10,000	% Above \$15,000
Black Male	25.8	12.7
Black Female	18.3	4.9
Hispanic Male	35.9	19.3
Hispanic Female	24.3	8.3
White Male	44.9	26.1
White Female	32.6	12.9
Other Male	35.8	21.5
Other Female	27.7	6.7

Source: Public/Private Ventures' unpublished analysis of National Longitudinal Survey data for respondents five years post-high school in 1984-86.

Table 2
YEARS OF EDUCATION COMPLETED AT AGE 23,
BY RACE/ETHNICITY AND SEX

	<12 Years	12 Years	13-15 Years	16+ Years
Black Male	33.0	38.7	20.9	7.4
Black Female	20.0	40.7	29.3	10.0
Hispanic Male	46.5	26.6	21.4	5.5
Hispanic Female	32.5	36.7	24.0	6.7
White Male	20.9	36.3	21.8	20.9
White Female	17.3	41.5	21.2	20.0
Other Male	25.9	38.2	19.6	16.3
Other Female	15.9	42.6	22.8	18.6
All	21.6	38.7	22.0	17.7

Source: Public/Private Ventures' unpublished analysis of National Longitudinal Survey data for respondents five years post-high school in 1984-86.

Table 3
PERCENTAGE AT AGE 23 RECEIVING WELFARE AND
HAVING NO EARNINGS FIVE YEARS POST-HIGH SCHOOL

	% Receiving Welfare		% With No Earnings	
	Male	Female	Male	Female
Black	5.6	10.0	24.1	28.6
Hispanic	3.7	8.2	15.1	28.4
White	2.7	2.7	12.4	13.8
Other	1.1	5.4	15.0	13.1

Source: Public/Private Ventures' unpublished analysis of National Longitudinal Survey data for respondents five years post-high school in 1984-86.

Table 4
PERCENTAGE WITH ZERO EARNINGS AT AGES 20 AND 23,
BY RACE/ETHNICITY AND SEX

	No Earnings Age 20 (%)	No Earnings Age 23 (%)	Change	% Rate of Change
Black Male	28.2	24.1	-4.1	-14.5
Black Female	35.7	28.6	-7.1	-19.9
Hispanic Male	21.7	15.1	-6.6	-30.4
Hispanic Female	22.0	28.4	6.4	28.6
White Male	11.3	12.4	1.1	9.7
White Female	12.7	13.8	1.1	8.7
Other Male	17.8	15.0	-2.8	-15.7
Other Female	14.1	13.1	-1.0	-7.1

Source: Public/Private Ventures' unpublished analysis of National Longitudinal Survey data for respondents two years post-high school in 1981-83 and five years post-high school in 1984-86.

Table 5
PERCENTAGE AT AGE 23 EARNING ABOVE \$10,000,
BY EDUCATION LEVEL AND SEX

	Male	Female
Less than 12 years	27.8	12.2
12 years	42.2	31.3
13 to 15 years	35.5	40.5
16 or more years	37.8	31.9

Source: Public/Private Ventures' unpublished analysis of National Longitudinal Survey data.

there is a trade-off between education and earnings, since those pursuing postsecondary education are, in many cases, either not available for full-time work or are working to support their education in jobs unrelated to eventual careers. Thus, at five years out, the earnings differential between dropouts and high school graduates has emerged clearly, but the payoff for continuing education has not yet emerged, except for women with 13 to 15 years of schooling.

Economists view the decision to continue education as an investment decision: immediate earnings are foregone in the prospect of larger earnings downstream. The NLS data are consistent with this perspective: five years out of high school, only 26 percent of those still enrolled in education had earnings over \$10,000, compared with 40 percent of those no longer in school.

In the past 20 years, with accelerating speed in the 1980s, the importance of higher education to a successful school-to-work transition has grown. In this period, real earnings of the average worker (that is, earnings in constant dollars adjusted for inflation) have declined--an unprecedented phenomenon in our economy. But the decline in the average disguises large variations. In fact, real earnings for all workers with some college education have increased modestly and real earnings for college graduates have increased the most (Blackburn, et al., 1990).

For younger male workers, real earnings have declined, with the rate of decline inversely related to years of education (Berlin and Sum, 1985; William T. Grant Foundation, 1988). These trends, illustrated in Table 6, have led some to worry that we are creating a two-tiered economy, with some--largely the disadvantaged--stuck in low-paying, high-turnover jobs in the secondary labor market while others find their way, through higher education, to more stable, rewarding and better-paid professional, technical and managerial jobs in the primary labor market.

While there is considerable debate on causes, future directions, and best policy responses to these signs of growing earnings inequality, it seems reasonable to conclude that, at minimum, making the transition to work with good pay and reasonable prospects for stable employment takes more than a high school education. While this seems obvious, it is a fact more often ignored than not in the school-to-work literature, most of which, as we shall see, tends to focus heavily on changes in the high school program. Such changes are important, but the bigger challenge may be in extending the effectiveness and quantity of postsecondary training opportunities, to fight sagging earnings with higher productivity and greater equality of educational attainment.

Table 6
ANNUAL MEAN EARNINGS (IN 1986 DOLLARS) OF 20- TO 24-YEAR-OLD
MALE WORKERS, BY EDUCATION LEVEL

	1973	1986	% Decrease
Less than 12 years	\$11,815	\$6,853	42.0
12 years	15,221	10,924	24.4
13 to 15 years	13,108	10,960	16.4
16 years	14,630	13,759	6.0

Source: William T. Grant Foundation, 1988.

Effects of Background Variables

In addition to race/ethnicity, sex and education, background variables that influence earnings include poverty status as a teenager and education level of parents, with poverty a particularly strong factor. Our analysis of the NLS sample shows that only 21 percent of those from families below the poverty line in 1979 were earning more than \$10,000 five years after high school, compared with 39 percent of all others. Similarly, only 27 percent of youth whose parents had less than a 12th-grade education were earning over \$10,000, compared with 39 percent of youth whose parents had a college education.

Results of Floundering

The point-in-time data give a snapshot of differing labor market outcomes, but they do not describe the process by which youth arrive there. While some young people exit high school and enter careers directly, this is not the norm. Rather, most go through a considerable period of "floundering." They alternate between fits of employment--in low-pay, low-skill, high-turnover secondary labor market jobs--and either unemployment or labor force withdrawal. For many, this pattern lasts into the early or mid 20s--about the time others are moving from college or graduate school into careers--when some settle into careers, while others continue muddling or drop out of the work force, settling into the welfare system, the underground economy or the corrections system (Osterman, 1980; William T. Grant Foundation, 1988; Hamilton, 1986, 1990).

Race/ethnicity and sex continue to be associated with different results in this period. In particular, as Table 7 shows, Hispanic and black males tend to experience longer periods of unemployment. Their unemployment spells are much more likely to end in withdrawal from the labor force than are similar spells of white males. For females, differences in duration of unemployment are less marked by race/ethnicity and women generally experience shorter unemployment spells than men. Indeed, 20- to 24-year-old Hispanic females have the shortest average unemployment spells. However, a period of unemployment for women is much more likely to end in withdrawal from the labor force, and black and Hispanic women are much more likely than white women to withdraw at age 20 to 24. The brevity of the average spell of unemployment for Hispanic women in this age group appears to be largely a factor of not finding a job, becoming discouraged and withdrawing.

When combined with limited education, the duration of unemployment and periods of withdrawal from the labor force result in less time spent developing human capital--in school or on the job. Some have argued against this human capital perspective, claiming that job switching among teens is a strategy for increasing wages (Becker and Hills, 1983), though they have found that the effects on wages are modest, at best, and only

Table 7
MEAN DURATION OF UNEMPLOYMENT SPELLS AND
PERCENTAGE ENDING IN WITHDRAWAL (BEGINNING IN 1984)

	16 to 19 Years Old		20 to 24 Years Old	
	Weeks	% W'draw	Weeks	% W'draw
Black Male	5.12	55.1	4.52	41.8
Black Female	2.95	42.8	3.90	57.3
Hispanic Male	3.77	35.2	4.19	15.3
Hispanic Female	NA	NA	2.47	64.0
White Male	3.38	29.2	3.21	13.3
White Female	2.98	37.1	3.03	33.8

Source: Household Economic Studies, 1989.

pertain when spells between jobs are brief. Perhaps job switching is a strategy for advancement for some, but, as Table 7 indicates, this is not the case for minority youth in general and minority women in particular.

Kim (1984) has analyzed NLS data and concluded that longer spells of unemployment produced wage gains--consistent with the hypothesis of search time as an investment of effort. But Lynch (1989), also analyzing NLS data, has found that longer spells significantly decreased the reemployment probabilities for minority youth of both sexes, arguing that her data (and most studies) support the view of earlier researchers that teenage unemployment has a permanent "scarring effect" on subsequent earnings and employment.

IMPLICATIONS OF THE DATA

The data are useful in determining the populations that experience the greatest difficulty making a successful transition. In this respect, they contain few surprises. They support a focus on disadvantaged youth and those with limited educational attainment. But they also raise questions.

Controls for family background (income, education level of parents) explain some of the racial/ethnic differences in outcomes, but not all of them. Little is known about the contributions of traditional sex roles, ethnic cultural traditions, and sex or race discrimination to differential labor market outcomes. Still less is known about how to intervene effectively in such mechanisms. These are intrinsically difficult issues for large-scale quantitative and econometric studies to resolve. Rather, qualitative studies--which have not been a major feature in a research landscape dominated by economists--seem more likely to produce useful information. The answers to these questions, in turn, could help program planners and researchers address such practical questions as whether different approaches are needed for different race/ethnicity and sex groups.

III. RECENT HISTORY OF THE SCHOOL-TO-WORK TRANSITION AS A POLICY ISSUE: INITIATIVES AND RESEARCH FINDINGS

Philosophically, concern for the school-to-work transition has roots in debates about the purposes of education and its relationship to work that go back over a century (Wirth, 1986; Lazerson and Grubb, 1974). In essence, this is a debate between those who view work largely as instrumental labor and judge schools in terms of their contribution to economic efficiency, and those who view work as a source of individual meaning and fulfillment. The latter, epitomized by John Dewey and his followers, take a broad view of the purposes of education and, while agreeing that work can have value as a means of education, distinguish the broad educative uses of work from the end of training for specific jobs. Thus, the latter tend to criticize the former for espousing narrow vocationalism. These debates, particularly among educators, still hover over the topic.

Operationally, school-to-work transition programs have antecedents in such turn-of-the-century developments as the educational guidance and industrial education movements, and the federal government's entry into vocational education funding with the Smith-Hughes Act of 1917, which in essence gave birth to public school vocational education nationwide. This was a movement in which the instrumentalists tended to dominate, seeing vocational education primarily as a means to train for specific jobs.

Despite this long tradition, there was relatively little research or policy attention paid to the school-to-work transition prior to the 1950s. Presumably, this is because it was not until then that high school graduation became the norm; because a broad range of blue-collar jobs were available for those with no more than 12 years of schooling; and because the transitional problems of minority youth in a segregated society were widely ignored.

From the 1960s on, however, issues of youth unemployment and concerns about preparing youth for the rapidly changing nature of work have made the school-to-work transition a frequent, if somewhat inconsistently pursued, theme of policymakers at federal, state and local levels, both in the realm of public education and in the realm of employment and training programs.

While emphases have shifted with each decade, there has been considerable continuity of policy themes and concerns surrounding the school-to-work transition throughout the past 30 years. In this period, policy and programming has traveled along three different tracks which, despite occasional efforts at coordination, have remained largely separate worlds in both analysis and implementation: reform of basic education, reform of vocational education, and development, primarily through the U.S. Department of Labor, of employment and training programs for (predominantly out-of-school) youth.

This growing concern since the 1950s was coincident with a number of broader developments that focused attention on the school-to-work transition. These included:

- The gradual disappearance of unskilled jobs offering decent wages or security, especially in urban manufacturing centers;
- Increases in educational attainment and the importance of a high school diploma (and subsequent degrees) to employment and solid careers;
- Increased awareness, stimulated by the civil rights movement, of the growing difficulty many disadvantaged and, especially, minority youth have forming a strong connection to the labor force; and
- Demographic changes--first the baby boom and later the baby bust.

THE SIXTIES

In the 1960s, concern was fueled by the swelling youth cohort as the baby boom came of age. Coleman (1965), for example, argued that schools would make little progress in reducing the (then) 31 percent dropout rate and that society was unlikely to create enough low-skilled jobs to absorb the numbers of young people who would be entering the labor market. In fact, he was one of many who believed automation would shrink the number of jobs. Coleman suggested that a combination of public works programs and a new set of alternative education and training institutions--including some run by private entrepreneurs--would be needed to cope with the problem of excess supply of labor, particularly among disadvantaged youth. Then, as now, policy responses proceeded along distinct paths.

Vocational Education

The Vocational Education Act of 1963, the predecessor of today's Perkins Act, helped fuel the growth of area vocational and technical schools, which emerged and spread rapidly through the 1960s and 1970s. As significantly, it helped partially reorient vocational education from an effort to train for specific jobs to a developmental program for individuals, through its emphasis on assistance to the disadvantaged (Mangum, 1968).

Basic Education

More money and public attention, however, were focused on reform or enhancement of basic education, including such programs as Head Start (initially in the Office of Economic Opportunity) and Title I of the Elementary and Secondary Education Act of 1965

(remedial and other services to disadvantaged youth). These programs are, of course, with us today.

There is solid evidence that preschool programs can make long-term, if modest, differences in educational attainment and achievement (Berrueta-Clement, et al., 1984), though a major meta-analysis of Head Start research casts doubt on whether Head Start as a whole has been that effective (McKey, et al., 1985). The evidence on the effectiveness of Title I is mixed, at best.

Employment and Training

The 1960s also saw the entry of the federal government into youth employment and training on a large scale, with the creation of the Job Corps and the Neighborhood Youth Corps (NYC) and the inclusion of youth as a target population in the Manpower Development and Training Act (MDTA) of 1962. MDTA was initially passed to serve adult workers in the face of widespread concern that automation would displace many from their jobs and create the need for massive retraining (Ginzberg, 1980). However, it was rapidly amended to include youth, and its purposes were caught up in the "war on poverty."

Along with the Job Corps and the short-lived NYC, the MDTA youth programs were shaped largely as antipoverty programs, partly in response to political concerns over urban unrest. They were only in the broadest sense concerned with the school-to-work transition, though, as Smith and Gambone¹ point out, they created the mix of strategies that have characterized youth employment and training efforts since: occupational training, work experience, basic skills education, employability skills development and career counseling, with a modest amount of on-job-training and ancillary services thrown in. By any name, all are components of most proposals for improving the school-to-work transition.

Little rigorous evaluation of these efforts (or their counterparts in the schools) was performed, but subsequent studies of the Job Corps provide the best--some argue the only methodologically sound--evidence that occupational skills training can be an effective strategy for out-of-school youth (Betsey, et al., 1985).

¹ See Smith and Gambone, this volume.

THE SEVENTIES

The 1970s saw a tremendous increase in the literature, funding and policy attention paid to the school-to-work transition. Arguably, this decade was the high-water mark of concern with this issue in the schools, when it became one of the leading policy concerns of educational planners. Again, developments occurred on three tracks.

Vocational Education

Vocational and technical schools continued to grow, and in many parts of the country, vocational enrollments appear to have increased throughout most of the 1970s. Federal support to vocational education further increased attention to disadvantaged students. But there also began to appear, toward the end of the decade, a considerable body of research that questioned the benefits of vocational education.

In particular, with the exception of vocational training for women in office occupations (which almost all studies then and since have found to have economic payoffs), these studies found little or no evidence that vocational education in secondary school produced benefits for students in terms of improved wages, employment and earnings (Grasso and Shea, 1979; National Institute of Education, 1981). Such studies have since been criticized on methodological grounds--primarily, that they failed to separate vocational "concentrators" from those who simply elected a course or two. They have also been disputed by other studies (Bishop, 1989). However, they helped cast a pall on vocational education from which it has yet to recover.

Career Education

Perhaps the most significant educational development of the decade was the birth and rapid rise of the career education movement. While other researchers paved the way, this movement's birth is generally attributed to a 1971 speech by U.S. Commissioner of Education Sidney P. Marland, and (spurred on by federal funding) it rapidly generated a substantial literature, compendiously reviewed by Youthwork, Inc. (1980).

At its narrowest, career education was an effort to expand career guidance functions and infuse career-related topics into the curriculum. But most of its partisans viewed it much more broadly, as nothing less than an effort to revitalize and unify the entire educational system, embracing all experiences through which one learns about and prepares to engage in work, helping students develop self-esteem and teaching the most effective uses of leisure time. The Career Education Incentive Act of 1977 aimed to make education as preparation for work and as a means of relating work values to other life roles and choices (such as family life), a major goal of all who teach and learn.

As opposed to vocational education, which was always seen as a curricular choice for some students, proponents of career education viewed it as having something for all students or, more radically, as offering a broad-based alternative to traditional classroom-based, academic instruction for large numbers of students. Further distinguishing themselves from traditional vocational education, proponents of career education also argued that the labor force was rapidly changing and that lifelong learning and the ability to adapt to change would be critical to success in the work force of the future--positions that cast doubt on the viability of specific occupational training. Where occupational training was to occur, career education partisans (and some vocational educators) argued that a broad "cluster of skills" approach would better prepare youth for entry into any number of career slots in a shifting occupational structure.

One far-reaching approach to career education was the Experience-Based Career Education (EBCE) movement, launched as an experiment by the National Institute for Education in 1971. Funded by the Office of Education and run by four of the federally funded regional education labs, EBCE spread to over 500 sites. While the program varied quite widely in implementation (Farrar, et al., 1979), it had several key principals common to most sites. These included (de Lone, 1990):

- Use of community people and facilities as learning resources;
- A method for identifying and analyzing community learning experiences (including work-based learning);
- Developing individualized student programs;
- Combining the roles of teacher and counselor;
- Career exploration activities; and
- Activities and guidance to develop broad competencies needed for adult life.

EBCE was extensively evaluated, using random assignment methodologies in the major studies, and findings were generally positive, with EBCE students developing more positive life attitudes, more career knowledge and slightly better academic skills than comparison students (Owens, 1982; Bucknam and Brand, 1983). However, the differences were not vast, and did not occur in all programs. Bucknam and Brand (1983) found effects were strongest in programs with greatest fidelity to the models developed by the regional labs.

Hoyt and High (1982) conducted a "meta-analysis" of career education studies performed in the 1970s and found modest but generally positive results of career education programs. However, again the results are modest. Positive benefits were found in only about a third of the cases (negative results were almost never found); methodology was usually nonexperimental (neither matched comparisons nor pre- and posttests); and, as the authors pointed out, most had short time frames and focused on small parts of the overall career education program (e.g., career guidance at one grade level). There was a dearth of longitudinal studies and no evidence on the question of whether or not career education improved labor market success.

With strong federal leadership and dollars, career education became one of the most discussed education reforms of the 1970s, but it is not clear how extensively the movement penetrated the schools. Hoyt and High cite evidence that by 1980, most school systems reported having career education programs, and the majority of a national sample of teachers reported using occupational themes in their classrooms. But McLaughlin (1976, cited in Hoyt and High, 1982) found that thorough implementation of career education had occurred in only 3 percent of the sites she visited. Nonetheless, as we shall see, by 1980, the career education movement and such expressions of it as EBCE had peaked and reform movements of the 1980s shunted them aside.

In fact, the very breadth of definitions given to the career education movement made it conceptually difficult to know what it was or to measure whether it was happening or not. While much of the writing about career education clearly derived from Deweyan views of the role of schooling in preparation for work, in practice it was criticized as being a new form of the old social efficiency school, with the risk that it would result in tracking low-income students into low-status jobs (Lazerson and Grubb, 1975). In fact, however, the greater risk was that, because it was so broadly defined, career education threatened to mean all things to all people and nothing in the end.

This is illustrated by a series of essays commissioned by the National Institute for Education (McClure and Buan, 1973) in which career education is variously defined as synonymous with liberal education (McMurrin, in McClure and Buan, 1973); as a series of occupation-oriented courses for all but with concentration on vocational training for potential dropouts (Shapiro, in McClure and Buan, 1973); as not being vocational education but including vocational education (Parnell, in McClure and Buan, 1973); as a way to teach young people who do not require a college education that there are no second-rate jobs for second-rate people (Zigler, in McClure and Buan, 1973); as a way to help young people learn to deal with dead-end jobs and meaningless repetitive labor (Green, in McClure and Buan, 1973); as preparation for use of leisure time (Gordon, in McClure and Buan, 1973); as a vehicle for introducing competency-based education to the schools (Bailey, in McClure and Buan, 1973); and as an effort by public education and the com-

munity to familiarize all individuals with the values of a work-oriented society (Mangum, in McClure and Buan, 1973).

In short, career education, while properly recognizing the range of issues involved in addressing a topic as complex as the school-to-work transition--and also sounding many themes current today--became a mirror on the wall that reflected back anything the observer wanted to see.

Research and Demonstrations

In the 1970s, the Comprehensive Employment and Training Act (CETA) decade, youth became a stronger emphasis of federal training programs, in the face of data showing consistently high youth unemployment rates, especially for minorities, and declining labor force participation rates for black teenagers. Youth were overrepresented in Title I, CETA's main training title (Grubb, 1989a), and were the subject of a separate title passed in 1977 as the Youth Employment and Demonstration Projects Act (YEDPA). Concerned that too little was known about "what works" for youth, Congress mandated an ambitious "knowledge development" program for YEDPA, and the Labor Department mounted a wide range of research and demonstration activities whose findings are summarized by Taggart (1981) and critically reviewed by the National Research Council (Betsey, et al., 1985).

YEDPA demonstrations tested a broad range of youth employment strategies, including subsidized private and public sector employment and other forms of work experience, on-the-job training (OJT), preemployment (job readiness) training, classroom training, and combinations of these with each other and basic skills remediation. While YEDPA produced some useful research and a great deal of discussion about "what works," many of its efforts suffered from rushed timetables and weak research designs (Betsey, et al., 1985). Further, much of it focused on out-of-school youth (as did CETA in general), so lessons for the school-to-work transition are limited.

While not a test of transitional strategies *per se*, the most important findings regarding in-school youth came from the Youth Incentives Entitlement Pilot Projects (YIEPP), a massive demonstration to test the effectiveness of publicly subsidized part-time work as an incentive for staying in school. This 76,000-student demonstration concluded that YIEPP increased the labor force participation rates of eligible youth, bringing blacks to parity with whites, and increased their earnings by between \$10 and \$11 a week, both during the program and a year after program participation. However, there was no significant effect on school enrollment, and longer-term impacts are not known (Farkas, et al., 1984).

Among other useful YEDPA findings² were that preemployment training and placement assistance, while beneficial in the short range, did not produce long-term wage and employment benefits for out-of-school participants; and that work experience alone (for out-of-school youth, again) yielded no benefits. Some studies found evidence of gains from OJT, public service employment and classroom training, but--with the exception of research on the Job Corps, which provides classroom training in conjunction with other services in a residential setting--none of these findings are clear-cut or undisputed.

While the YEDPA findings concerning single treatments are, like the preponderance of research on CETA youth programs, generally discouraging, some analysts find support for the proposition that combinations of program treatment--e.g., work experience, training and remedial education--are more effective (Hahn and Lerman, 1985). This intuitively pleasing proposition can be inferred from the fact that most of the programs for which methodologically sound and positive results have been obtained combine treatments.

Another broad overall inference drawn from the YEDPA experience and related research has been that basic skills achievement is the most important factor in predicting both success in training programs and subsequent employment and earnings (Taggart, Sum and Berlin, 1987; Berlin and Sum, 1985). This finding is consistent with the fact that academic achievement is the best predictor of school completion and, almost by definition, entrance into college. Again, this is an intuitively pleasing inference that accords well with common sense, but neither the employment and training literature (Barnow, 1989) nor the education literature yield much definitive guidance on how to improve basic skills--especially for the 14- to 24-year-old group at issue in the school-to-work transition.

THE EIGHTIES

While the 1980s saw a continuation of many of the concerns and policy strands of the previous decades, some--notably career education and extensive demonstration research on youth employment strategies--waned, to be replaced by distinctive new notes. These include renewed emphasis on basic education reform, triggered by A Nation at Risk (National Commission on Excellence in Education, 1983); concern that poor schooling (including weak school-to-work transition strategies) is undermining U.S. competitiveness in the global economy; greatly increased attention to the role of the private sector, in the education system as well as in the employment and training system; and, toward the end of the decade, suggestions that new institutions are needed to span the years from rough-

² See summary in Smith and Gambone, this volume.

ly age 16 (11th grade) through the early 20s to create a better school-to-work transition. Finally, the new demographic realities of the baby bust added a sense of urgency to improving the education and training of minorities, disadvantaged youth and women, who will far outnumber middle-class white males among labor force entrants in coming years (Johnston and Packer, 1987).

The emphases on tougher academic standards and school restructuring in the 1980s were accompanied by fading interest in career education. The number of articles and studies on the topic declined (Halasz, 1988). As federal priorities changed, EBCE, after reaching a high-water mark in 1978 with programs in over 200 school districts, began to wither away (de Lone, 1990). At the same time, however, the eighties saw new interest in integrating vocational and academic education, with special attention aroused by apprenticeship models from abroad.

Education Reform

The new demographic issues of the 1980s were accompanied by increasing concern about the competitiveness of the U.S. work force, with many critics arguing that poor schooling was the root of the problem and some that inadequate attention to human resource development in industry was compounding it. Further, others argued that higher skill levels are now needed in the work force, as a result of global competition and new markets, new quality standards, greater emphasis on flexible production techniques, and the use of new technologies. Johnston and Packer (1987), for example, conclude that by the year 2000 skill levels now characteristic of the middle of the job hierarchy will characterize the lowest level.

Some (e.g., Levin and Rumberger, 1987) have disputed this view, arguing that the greatest number of jobs are low-level service jobs and that it is credentialism, not actual skill requirements, that are producing higher educational requirements for other jobs, resulting in "overeducation" of the work force (Rumberger, 1981). Bureau of Labor Statistics occupational forecasts also have projected that there will be an oversupply of college graduates, though they conclude that through the year 2000, demand for workers with at least one year of college will grow and demand for workers with a high school diploma or less will shrink--most rapidly for the latter group (Kutscher, 1987).

Barton and Kirsch (1990) are among those who argue that we simply do not know what will happen to skill requirements. They point out that labor market forecasting, like other forms of forecasting, is far from a precise science. Certainly only time will tell what will happen to skill levels in the work force as a whole. But an a priori case can be made that skills should increase if productivity and international competitiveness are to improve, especially in labor-intensive service industries.

Further, careful analyses of changes in banking, insurance and textile industries by Bailey (1989) and Noyelle (1989) leave no doubt that, in these industries, the combined effects of new technology and international competition have raised skill requirements, so that some jobs once held by high school graduates have been restructured and now employ college graduates. Additionally, the fact that real earnings increased for college graduates while they fell for those with a high school degree or less casts doubt on the "over-education" hypothesis. If anything, it underscores the importance of improving the school-to-work transition opportunities available after high school.

Academics

In the realm of basic education, the middle years of the decade saw a tremendous amount of attention given to upgrading the academic content and increasing the academic requirements of public schools. A Nation at Risk was followed by a flood of reports that criticized American schools for poor results in various subjects, especially science and math (National Science Board, 1983); found widespread evidence of low levels of literacy (Applebee, et al., 1989); and chastised schools for a lack of focus and curriculum coherence (Boyer, 1983; Sizer, 1984), to cite just a few.

While some reports made at least passing reference to school-to-work transition issues, the overwhelming effect of this first wave of reform reports was to place the focus on academic issues. To the extent that these reports were concerned with the school-to-work transition at all, they implicitly assumed that if academic skills were improved, the transition would take care of itself. This viewpoint was reinforced by reports by private sector groups (e.g., Research and Policy Committee of the Committee for Economic Development, 1991; Lund and McGuire, 1984), which argued that employers could do the training if schools turned out students with good basic skills. As Hamilton (1990:12) put it, "chief executive officers of large corporations have become leading proponents of improved academic education . . . arguing that they must invest heavily in remedial education before beginning to train new workers for specific jobs."

While some of these reports stressed the need for major changes in pedagogy and curriculum, the main result of this first wave of education reform was the imposition of increased academic requirements on local systems by state legislatures. Some criticized this emphasis on tougher standards, arguing that it would increase failure rates of the disadvantaged while offering little or nothing to enhance their instruction (Levin, 1985). Evidence available at the end of the decade (Clune, et al., 1989) found little to support this criticism, but also concluded that the reforms themselves had produced few benefits, largely because there was no consensus about, and frequently little attention to, how to translate tougher standards and new course requirements into improved instruction in individual schools and classrooms.

Restructuring

Toward the latter part of the decade, a second wave of school reform, generally called "restructuring," began to supersede the excellence reforms, stimulated by a report of the Carnegie Forum on Education and the Economy (1986) and high-profile early publicity and teachers union support given to efforts in such school systems as Dade County, San Diego and Rochester. While "restructuring" means different things in different places, dominant themes include moving to school-based management, with site accountability for results; empowering teachers not only to share in decisions but to redesign curricula, educational programs and staffing structures in the school; and involving parents and the community in governance or programming (see, for example, McDonnell, 1989; David, 1989).

While observers have found that restructuring to date has often succeeded in enlisting the creative energies of many teachers, yielding an aura of excitement and potential for change, there is no evidence that it has accomplished what its proponents argue it will: radically change school systems and improve student learning. Indeed, as McDonnell (1989) warns, restructuring proposals tend to be short in elaborating even casual logical hypotheses about their relation to improved learning. Furthermore, most restructuring has occurred under the purview of superintendents and existing school bureaucracies, which, the proponents of restructuring often argue, are part of the problem. In fact, some proponents argue that those bureaucracies must be dismantled and stripped of their political control before serious restructuring can occur--an argument made most forcefully by choice advocates (Chubb and Moe, 1990).

The effectiveness of restructuring in any of its variants, in short, remains to be seen. The further question of whether any improvement wrought by restructuring helps students--in particular disadvantaged students--achieve better school-to-work transitions also remains. It seems safe to say that it probably will not, unless specific attention is paid both to more effective basic education of the disadvantaged and to creating new avenues to and/or linkages with postsecondary training and the labor market. Nevertheless, one basic axiom of the restructuring movement--that change and improvement must occur school by school with the enthusiastic participation of teachers--seems highly plausible and needs to be considered in any effort to improve the transition.

Career Guidance

It is widely believed that career guidance is especially important to disadvantaged youth, who frequently lack informal exposure to the range of careers and knowledge about their educational and other requirements, though career guidance is often the lowest priority for school counselors (Hoyt, 1990).

Campbell, et al., (1983) have reviewed findings of over 100 empirical studies of career guidance conducted between 1970 and 1980. They conclude that most studies have found evidence that career guidance activities can be effective in a number of dimensions (improved school attendance and graduation rates, career knowledge and planning skills, personal and interpersonal work skills) if such activities are provided in a systematic developmental sequence. However, the authors caution that few of the studies they reviewed used random assignment control groups, almost all were short-term and none followed students long enough to see if there were any impacts on labor force participation. Further, most studies do not distinguish between results for disadvantaged and other groups.

Stronger evidence on the impact of career guidance strategies comes from the random assignment evaluation of Career Beginnings, a 24-site demonstration program that provided summer work experience and an array of guidance activities (college and job fairs, mentoring, financial aid counseling, preparation for taking the college boards, job readiness training, etc.) in the summer and the senior year. This demonstration, targeting disadvantaged youth, had the twin goals of increasing college attendance and improving the jobs obtained by students not going to college. The results varied widely by site but, overall, a significantly higher proportion of experimental students (53.2%) went to college than controls (48.5%). Initially, experimental students had lower employment rates and earnings than controls, reflecting a trade-off between education and work, but differences washed out in a year (Cave and Quint, 1990).

There is certainly plausibility to the argument for systematic career guidance, and the Career Beginnings demonstration shows that a multimodal approach can affect college attendance rates. Evidence on effects of career guidance on career attainment for the non-college-bound, however, is nonexistent.

Vocational Education

Vocational education was a nonstarter in the major reform efforts of the decade. With studies undercutting its traditional claim of providing an economic advantage to youth through training for specific jobs, and corporate reports claiming business would take care of skills training if schools laid a good foundation, vocational education was either scarcely mentioned or dismissed by most reform reports. Further, there is evidence that in at least some states, after two or more decades of rising enrollments, vocational enrollments dropped sharply as the added course requirements of the academic excellence reforms squeezed vocational options (Bailey, 1991).

Ironically, the 1980s saw a second generation of studies of the economic payoffs to vocational education that were somewhat more favorable than the studies of the late

1970s. Unlike the earlier studies--which classified students as vocational, general or academic based on their own characterizations of their program--these studies classified students according to transcript data that showed whether they took a heavy concentration of vocational courses or simply a smattering of elective vocational courses. In fact, almost all students in what Powell, Farrar and Cohen (1985) have called the "shopping mall" high schools of America elect at least one vocational class, but only about 13 percent can be considered "concentrators" (Hamilton, 1990).

Studies that accounted for the quantity of vocational education courses taken continued to find, as had most earlier studies, payoffs for women taking vocational education in office trades, and found stronger evidence of at least short-term payoffs for men and women in other fields (Meyer, 1981; Rumberger and Daymont, 1989; Bishop, 1989). Meyer (1981), however, whose studies provide the best longitudinal data available, found that these benefits had eroded and in some cases become negative six years after graduation. Finally, the studies using different data bases were not uniform in their findings of benefits for men and women in fields outside office trades.

Integrating Academic and Vocational Education

But if vocational education suffered, the 1980s were also a period in which adversity stimulated significant rethinking of its nature and role. The core of this rethinking, much of it embodied in the 1990 reauthorization of the Perkins Act (Wirt, 1991), is an effort to move secondary school vocational education away from its historical emphasis on training for specific jobs (though that goal is not totally eliminated) toward a new emphasis on vocational education as an alternative to academic education for teaching both basic and "higher-order" academic skills (e.g., problem-solving skills).

As a corollary reform, emphasis is placed on deferring skills training for specific occupations to the 11th grade or later, with support in particular for "tech prep" and other "two plus two" programs initially advocated by Parnell (1985). These are programs that link the last two years of high school with two years of community or technical college, in a sequence of activities emphasizing the academic skills needed to succeed in an occupation and blending academic with vocational training.

These trends, which to some extent bridge the distinction between vocational education and career education, are responsive both to longstanding criticisms of vocational education as a "dumping ground" for students who do poorly in academics, and to arguments that academic skill requirements are increasing in the labor force.

The ability of occupation-oriented programs to serve as vehicles for teaching academic skills on a mass scale remains to be seen. There is no definitive evidence on how best to

integrate the teaching of basic skills into occupational content and contexts. However, the potential of this approach gains credence from several sources. While vocational educators, adult educators and others have long argued that many learn best when academic skills are taught in an applied context, it is only recently that shreds of evidence and a strong theoretical basis for this approach have begun to take shape.

Some educators believe vocational students suffer in terms of academic basic skills, but if so, this may reflect the use of vocational education in lieu of academics in many schools. Bishop (1989), for instance, has found that when vocational students also took more rigorous academic courses, their basic skills gains were comparable to nonacademic students. Bottoms (1989) reviews evidence of solid gains in mathematics skills taught as an integral part of vocational programs. And, while not including measures of academic gains per se, quasi-experimental studies of programs in Philadelphia and California using the High School Academies model--a school-within-a-school with emphasis on work experience--show improvements in school attainment, graduation rates and post-high school employment (Stone, et al., 1989; McMullan and Snyder, 1987b).

The intellectual energy behind integrating vocational and academic skills, however, comes from the field of cognitive science--the study of how people learn to think and solve problems. This complex body of research, and its implications for vocational education, has been extensively reviewed and skillfully synthesized by Raizen (1989). The central point, however, is that virtually all cognitive skills--analyzing, synthesizing, problem-solving, etc.--are learned by most people, most of the time, in particular contexts that present a problem to be solved. These contexts or settings rarely resemble traditional classrooms and have little to do with instruction from teacher lectures--the dominant form of classroom education (Goodlad, 1984).

Resnick (1987), a leader in the field, has argued further that there is a disjuncture between the kinds of problems presented in the workplace and those presented in school. She notes, for instance, that in school, material is read so students can answer questions about it, while in the workplace, the expectation is that reading will lead to new behaviors. In school math, the emphasis is on solving problems with all data provided; in the workplace, it is on applying "expert" problem-solving techniques to a range of situations in which the relevant data must be discerned.

Scribner and Stephens (1989), in some of the basic research underlying this finding, further have found little correlation between ability to solve typical classroom problems and ability to solve the kinds of problems encountered in the workplace. They suggest that this disjuncture lies behind frequent complaints of employers that youth lack problem-solving skills and, further, that use of the workplace (actual or simulated) as a learning setting may be the best strategy for increasing those skills.

The road from cognitive science theory to vocational education practice has not been built, though many believe it can be. If so, vocational education--albeit in much revised form--could become an important part of the reform agenda of the 1990s as well as a key part of an improved school-to-work transition, whether in the form of a new training system, such as that proposed by the Commission on the Skills of the American Workforce (1990), or as a much revamped version of "voc ed" in high schools and community colleges.

Work Experience

The relevance of work experience to the school-to-work transition is a topic that, while not a major emphasis of school reform or JTPA (with the significant exception of summer jobs), has nevertheless come under considerable scrutiny in the past 15 years and merits discussion. The literature is characterized by some controversy and conflicting findings.

A number of large surveys have found that up to a point, working as a teenager is predictive of success at finding employment as an adult (D'Amico and Baker, 1984; Meyer and Wise, 1982; Kang and Bishop, 1986). Analyzing NLS data, for example, D'Amico and Baker (1984) have found that work experience is associated with a higher likelihood of school completion, no decline in grades of high school students, and modest wage and employment benefits after graduation. These effects seemed to pertain regardless of the nature of the job. A number of studies, however, have arrived at a consensus that the benefits stop at about 20 hours per week, after which work experience may interfere with schooling and begin to produce negative effects (Hamilton, 1990).

However, there are a number of questions important to policymakers and program planners that these large surveys and research studies cannot answer alone. One is whether these effects simply reflect higher levels of motivation among those who work, or whether they indicate that the experience itself helps develop human capital. Another is whether work experience as a planned program intervention produces the same benefits as "naturally occurring" work, and a third is whether the quality of the work experience affects the nature or degree of its benefits. To answer these questions, one must turn to studies of programs that have attempted to use work experience as a program intervention, as well as to ethnographic studies and studies of characteristics of work experience that address qualitative issues. Here, the picture becomes more complex.

Studies of summer jobs programs, CETA work experience and other programs in which work experience is the primary intervention have generally been inconclusive or found little or no economic benefit (Taggart, 1981; Fiahn and Lerman, 1985; Wolf, et al., 1987;

Bassi, et al., 1984; Betsey, et al., 1985). However, as Smith and Gambone argue,³ some studies, such as the Entitlement findings (Farkas, et al., 1984) noted earlier, found short-term gains in earnings, and other researchers suggest that work experience combined with other services (e.g., basic skills education and job training) may have benefits and should be further researched.

Most of the studies just cited focus on out-of-school youth, however. They cannot, accordingly, be generalized to in-school youth--the population whose apparent work experience benefits are captured by large surveys--especially since in-school youth who work are by definition receiving a combination of work experience and other services (albeit, not necessarily in a coherently planned, well-integrated program).

Cooperative education is the most widespread form of work/study education in secondary schools. Typically, co-op serves vocational education students with good school records who, in their senior year, receive school credit while working in part-time paid jobs in their field of study. Studies of co-op education's effectiveness show that large percentages of co-op graduates get jobs with their co-op employers, and co-op students, like EBCE students, tend to be more satisfied with school than comparison youth. But the studies have generally failed to find economic impacts (Stern, et al., 1989). Stern (1991) notes, however, that these studies are inconclusive because they fail to control for student work experience outside of school.

Other than studies of co-op education, evidence on the benefit of work experience as a school program is confined primarily to studies of programs that include work experience as a component of the program, such as the studies of EBCE and the High School Academies programs cited above. These studies, which vary in methodological rigor, tend to find modest educational benefits, and one (McMullan and Snyder, 1987b) showed modest economic benefits using a quasi-experimental method.

Taken as a whole, the research on in-school work experience suggests that it may contribute to dropout prevention and student satisfaction with school (presumably inter-related findings), but its long-term economic benefits are somewhere between modest and uncertain. As with out-of-school youth, it is the combination of work experience with other activities that appears most likely to yield benefits.

The question that remains is whether the quality of the work experience is important. Some (e.g., Hamilton, 1990) have argued that the secondary labor market jobs most commonly held by youth are likely to be miseducative. Greenberger and Steinberg

³ See Smith and Gambone, this volume.

(1986), in an influential study, found that many teenagers developed cynical attitudes about the meaningfulness of work from their experience in low-skill service and retail jobs, though, oddly, they found evidence as well of a strengthened work ethic.

However, others have found the contrary. For instance, Charner and Fraser (1984) found that youth employed in fast food jobs were generally positive about their experience and believed they learned important generic lessons about working and some useful skills from them. More recently, Stone, et al., (1989) have explored whether such qualitative features as the complexity of the job and range of opportunities to learn make a difference, with evidence that, at least in the perception of students, they do.

Pending more definitive research, one is left with the overall conclusion that work experience may be part--albeit a modest part--of the answer to the school-to-work transition, but its effectiveness may depend on both the nature of the program in which it is embedded and the nature of the job.

Employment and Training

While basic education was undergoing various waves of reform and vocational education was undergoing rethinking, disadvantaged youth continued as a major target population of JTPA, which replaced CETA in 1984. With a prime focus on out-of-school youth and a prevalence of short-term programs aimed at job placement or teaching work readiness competencies (GAO, 1990), JTPA does not cast much light on the school-to-work transition. Nor did research on youth employment and training programs in the 1980s produce much new knowledge.⁴

Although the JTPA youth experience as a whole is but marginally related to the issue of the school-to-work transition, two significant school-to-work initiatives that came of age in the eighties were Jobs for America's Graduates (JAG) and the Boston Compact and its replications.

JAG, an outgrowth of the YEDPA-funded Jobs for Delaware Graduates, provides job readiness training, job development and placement assistance, and other supportive services for high school seniors seeking employment. A quasi-experimental evaluation conducted for JAG by Sum (1987) found that JAG participants experienced at least short-term earnings and employment gains.

⁴ See Smith and Gambone, this volume.

The Compact's main features were the development of a school-based career service, run by the Boston Private Industry Council, and pledges by Boston employers to hire qualified graduates. The Compact appears to have helped improve access by public school graduates to jobs with major employers (McMullan and Snyder, 1987a). Spring (1988) argues it also played a role in Boston's achievement of equal employment-to-population ratios for black and white youth in the mid-1980s, though this may have been the result of a super hot economy.

Taken together, the experiences of JAG and the Compact suggest that programs that provide coaching and assistance in job placement for graduating seniors can help with the transition to work. However, such intervention is but a small part of the picture: it does not serve dropouts or improve preparation. Nor did the incentive of a "guaranteed" job in Boston seem to have any effect on dropout rates. Neither effort has good long-term data, and while JAG has been a successful replication, the pledge feature of the Compact was not adopted by employers in half the sites of a National Alliance of Business replication (National Alliance of Business, 1989).

Apprenticeship

Enthusiasm for apprenticeship-type programs that integrate academic and vocational education burgeoned in the late eighties, though the belief that we have something to learn about the school-to-work transition from other industrialized nations--especially Germany--is not new. The National Association of Manufacturers was the first major business group to argue that U.S. industry is disadvantaged in competing with German industry because we lack what the Germans have--a separate, well-developed system of vocational education. This was in 1911 (Wirth, 1986).

Eighty years later, many of the leading critics of our school-to-work transition system are also looking at Germany and, to a lesser extent, other industrialized nations, for much the same reason. A GAO report (1990), for example, notes that youth unemployment rates in Germany, Sweden and Japan are considerably below those in the United States, as are the differentials between youth and adult unemployment. All three are countries in which a much smaller percentage of students go on to college than in the United States.

In Germany, about 70 percent of youth enter the employer-based dual system at age 15 or 16, where a combination of government-financed classroom education (usually one day a week) and employer-financed apprenticeships, conducted in the work place, continues their education. About one-quarter of German firms sponsor apprenticeships, which are offered in a wide range of manufacturing, office and service jobs, and which are subject to national training standards developed by industry, labor and government

jointly. According to Nothdurft (1989), about half of apprentices receive jobs with the firms providing their employment and--when the economy is strong--most of the rest end up in training-related jobs.

In Sweden, about 90 percent of youth who complete compulsory schooling at age 16 enter "upper secondary" schools for programs that vary in length from two to four years. Most of those not planning to attend college are in vocational programs in five broad occupational categories. These are programs run by local school authorities, in which "the line between education and job training is intentionally blurred" (Nothdurft, 1991:13). For these youth, upper secondary schooling consists of a core curriculum of Swedish, English and math; course work in their chosen field; and work experience, which increases from between 10 and 20 percent to 60 percent of their time over three years. Business and labor provide work experience, curriculum advice and, in some cases, training. In addition, the Swedes have a Youth Guarantee that provides a wide range of stipended training and work experience for the 10 percent of youth who do not enter upper secondary schools.

In Japan, the basic structure of the system is not dissimilar to that in the United States, with students taking 12 years of basic education. According to the GAO (1990), about 30 percent then go to two- or four-year colleges, and nearly the same percentage go to proprietary vocational schools. About 35 percent go directly to employment. In addition to the high percentage of proprietary school enrollees, there are some critical differences between the United States and Japan that seem to ease the transition for Japanese students. One is higher school completion rates, which the GAO argues reflect a cultural belief that virtually all students have the ability to succeed in school if they apply themselves. The second is that many Japanese industries have well-established relationships with schools for recruiting employees, whom they then train.

What are the lessons from these nations? Bearing in mind that the evidence of their superiority to the U.S. system is largely anecdotal and descriptive, strengths appear to be fairly clearly demarcated paths from school to work, upper secondary and postsecondary training systems that do an effective job of blending work experience, occupational training and academics, and strong employer involvement. Nothdurft (1989) suggests that the existence of a widely recognized credentialing system helps in Germany, and argues further that in contrast to the English and French systems, which are less well-developed and appear less effective, the German and Swedish systems are able to work because youth enter them with a strong basic academic education.

Most commentators agree that none of these systems can be copied exactly in the United States because of different cultural traditions. One is resistance to the kind of tracking of youth that the German system, in particular, embodies (Stern, 1991; Hamilton, 1990).

Another is that U.S. employers have little tradition of investing in training of entry-level workers and, in a highly mobile society where workers frequently switch jobs, lack an incentive to make such investments (Stern, 1991).

Whether these systems can be adapted to the United States in ways that account for cultural differences is an open question. A further question, however, is whether these systems, duly adapted, would be more effective in serving the disadvantaged. Presumably they would not unless the basic educational performance of these youth is improved. The current literature offers no definitive information on this topic, though there are hints that these systems have problems dealing with the equivalent of our "at-risk" youth.

The Swedish second-chance system exists for what they call "difficult youth" who do not enter the upper secondary levels, but its effectiveness is not clear. The German dual system attempts to enroll children of foreign workers, but they are underrepresented; their presence in the system is resented by some Germans, especially when unemployment is high; language differences apparently create problems; and those who are enrolled may be overrepresented in training for lower-level jobs (Nothdurft, 1989). But all this is fragmentary, and the benefits of the Swedish and German systems for disadvantaged youth of those societies warrant further investigation.

THE IMPORTANCE OF IMPLEMENTATION: A CROSS-CUTTING ISSUE

Many practitioners believe in their bones that how well a program is designed, managed and staffed makes a big difference in results. Absent a coherent overall system spanning the terrain from school to work, good single programs are not the answer. Yet one cannot imagine a good system without good programs, and the question of implementation, while not totally ignored, is rarely given much attention in the literature. The focus is on types of programs and services, not the quality of their implementation. The program itself remains the proverbial "black box."

There are, of course, reasons for this. Policymakers have more control over the type of service or program that is funded than they do over the quality of implementation. Further, it is hard to develop simple measures of program quality that can be adequately incorporated into large-scale studies. The qualitative measures that can be incorporated in more intense, observational studies often rely on observer judgment, making them hard to validate, and it is difficult to generalize from such studies.

Nevertheless, probing beyond the generally modest or discouraging results of so many of the studies we have reviewed, the possibility emerges that quality of implementation makes as much difference--and perhaps more--than choice of model. There are several strands to this argument.

In basic education reform, some of the rationale for restructuring lies in the so-called "effective schools" research, which, taken as a whole, argues that school performance improves when schools have a strong leader and staff who share a clear and common vision of goals, a strong emphasis on instruction and an expectation that students will learn. These are characteristics of well-run schools, heavily dependent on the staff at those schools, and less dependent on the program model or systemwide policies. Hence, the emphasis on site-based management.

While restructuring has yet to prove itself, it at least has a strategy for implementation, as opposed to the academic excellence reforms, whose minimal impacts have been attributed in part to their reliance on legislating excellence with minimal attention to implementational concerns.

The studies of vocational education that found some signs of effectiveness have concluded not only that the number of vocational courses was important, but, in the only study to examine the issue, that whether or not the student took a coherent program was associated with economic benefits (Rumberger and Daymont, 1989). Likewise, studies of the effects of vocational education on academic skills development have found that a major factor in determining whether vocational students gained those skills was whether they took courses with a high degree of academic content (Bishop, 1989; Wirt, et al., 1989).

Studies of replication efforts of the High School Academies (Stern, et al., 1989) and EBCE (Bucknam and Brand, 1983) both found that results were strongest when the basic program model was most faithfully replicated. Further, it is commonplace in demonstration research to find that some sites do much better than others. While this may simply be a result of chance, as most statistical models assume, it may also be saying something about the importance of implementation.

Similarly, studies of career guidance reviewed by Campbell, et al., (1983) stress the importance to effectiveness of structured sequences of activities. The Career Beginnings evaluation, noting a very wide range of impacts among sites (from strongly positive to slightly negative), stresses the importance of attention to implementation.

None of these arguments are strictly conclusive, yet they join with common sense in suggesting that any effort to improve the school-to-work transition that fails to give careful attention and strong support to quality implementation will not succeed.

SUMMARY

From this review, three broad conclusions emerge, which are important to summarize not because they help to provide a clear road map for the future (indeed, they do not), but rather because they define the complex, elusive and disjointed nature of the school-to-work topic.

1. The thinking and policy initiatives that have emerged in the past 30 years drew on a range of intellectual sources and disciplines, seldom if ever meshed in useful ways, and have not yet converged in the kinds of consensus that might undergird coherent policy formulation in the future.
2. The diffuse and polycentric nature of these shifting emphases and ideas reflects a significant underlying point: a multiplicity of institutions (and their underlying viewpoints) are spanned in the school-to-work transition, and must be accommodated in any large-scale national policy.
3. Nevertheless, two significant points of agreement emerge and should find a place in any policy:
 - Education beyond high school probably looms as essential for the young worker and thus opportunities for such attainment must be found; and
 - The role of work experience in the school-to-work transition, while probably limited, is significant and needs more focused exploration and development.

IV. DEVELOPING AN AGENDA FOR THE FUTURE

The literature and experience of the past 30 years tell us a good deal about who has trouble making the school-to-work transition, and they help identify shortcomings that at least on the face of it appear to exacerbate problems. Unfortunately, however, evaluation research, while providing clues, yields little definitive information on what should be done, how best to do it, what the payoffs of an improved school-to-work transition system would be, or, indeed, why disadvantaged youth have such difficulty.

Further, criticisms of the school-to-work transition are varied in their specifics and therefore lead to different solutions. Each emphasizes failings in different areas: basic education (particularly education of the disadvantaged); America's economic position in international competition; and the social and economic structures and forces endemic to the country.

RESEARCH SHORTCOMINGS

Part of the problem lies in the nature of the research findings themselves. On questions about the effectiveness of programs, such as career education and vocational education, and specific program interventions, such as work experience and career guidance, the research often leaves one wondering whether the glass is half empty or half full. Positive findings of some studies are contradicted by others; what positive and significant findings exist are frequently either quite modest in degree or short-term in nature; and much of the literature is subject to criticism on methodological grounds--particularly the lack of well-designed, random assignment impact studies. The conclusion that combinations and well-articulated sequences of services are necessary seems a reasonable inference to draw from the research, but there is little guidance as to precisely what combinations or sequences.

The problem is compounded by the disjointed nature of much of the research (and much programming as well). Given the long-term, multifaceted and complex nature of the school-to-work transition, and the range of institutions involved in it, a degree of disjointedness is not surprising; but it remains a serious handicap in efforts to craft comprehensive policy initiatives and programs based on credible evidence about probable success.

The disjointedness appears in many ways. Most generally, quite different research traditions constitute the overall literature, making it difficult to splice findings into a unifying theory. Department of Labor studies have often been econometric, concerned with economic benefits, and employing random assignment models to determine impacts. While some education studies also fit this description, most are nonexperimental and are more likely to focus on soft outcome measures (e.g., changes in knowledge or attitudes).

A strength of the education research is a stronger tradition of qualitative studies, which have produced some provocative findings: for instance, Ogbu's (1978, 1986) argument that inner-city blacks do not seek to achieve in school because they believe a "job ceiling" limits the payoffs to education; Fine and Sandstrom's (1988) argument that dropouts are sometimes smarter and frequently more questioning of existing school practices than graduates; and studies reviewed in Gamoran and Berends (1987) of the negative effects of subtle tracking practices on student achievement.

Qualitative studies might help cast further light on causes of different race/ethnicity and gender experiences in the transition, though ultimately an effort is needed to reconcile qualitative and other research traditions. Existing ethnographic studies are sometimes in tension--if not outright conflict--with survey and quantitative studies that find that blacks and whites receive similar returns to education, that poor academic performance is the best predictor of dropping out, or that tracking produces uncertain effects.

Few efforts have been made to illuminate or reconcile either the conflicting findings about the effectiveness of program modalities or the apparent conflict between qualitative and quantitative findings, or to illuminate the importance of implementation to the effectiveness of program models. Similarly, most of the literature and almost all studies have been confined to examining a piece of the school-to-work transition system (e.g., school programs or transitional services) with little attention paid to the importance of precedent or antecedent services and experiences.

Finally, it is obvious that there is an interaction between characteristics of the labor market and program outcomes. It is common for econometric studies to include measures of gross demand (e.g., local unemployment rates) in their models, but a more detailed model of interactions is called for. For example, it seems highly probable that the consistent finding that vocational training in office occupations pays off for women (but not men) reflects not only benefits of the training itself, but also that most employers rely on the external labor market to provide trained secretarial and clerical staff; that high school remains a sufficient level of education to provide the entry-level skills needed in many of these jobs; and that the influence of gender--perhaps on both worker and employer decisions--remains strong in this labor market. But this is speculation, and further investigation of the interactions between the labor market and training could provide useful insights into the appropriate modes of training as well as levels at which training should occur for various occupations.

DEFINING THE ISSUES

The issues vary considerably, depending on the critical stance of the observer. As noted, there are three main schools of thought about shortcomings of the school-to-work transi-

tion system: criticisms of basic education, criticisms of both industry and education derived from concerns about international economic competitiveness, and criticisms rooted in broad societal analysis.

Reforming Public Education

The most venerable and voluminous criticism of the school-to-work transition focuses on the flaws in the education and training system. Commonly cited flaws are poor schools; low expectations for students; failure to teach basic skills; failure to provide sufficient emphasis on education for employment for the non-college-bound (e.g., lack of career counseling, work experience, employability development, job placement assistance, etc.); lack of programmatic linkages between schools and postsecondary training programs; lack of linkages between schools and employers; ill-defined or nonexistent pathways to employment and employer-based training after leaving school; and lack of incentive systems clearly relating school performance to employment opportunities. Finally, critics note that there is too little funding of "second-chance" programs (largely JTPA) to meet the needs of those whose schooling does not prepare them for employment (e.g., GAO, 1990; Hoyt, 1990; Barton, 1990; Reisner and Balasubramanian, 1989; Feichtner, 1989; Mangum, 1989).

Much of this criticism leads to recommendations to put more resources behind career-related educational programs in schools and to better coordinate existing services. Bishop (1988) concurs in the need for such services, but makes the provocative suggestion that to be effective they must be embedded in a system of incentives that make a connection between school performance and post-high school success for the non-college student. The connection is real and understood by the college-bound, for whom test scores and grades determine college admissions options. But the connection is accurately perceived as nonexistent by students heading for the work force, Bishop argues, reviewing five major studies that show little correlation between high school grades and wages received after high school. He suggests that a combination of new assessment measures that capture the competencies employers seek, and policies encouraging employers to use these records in making hiring decisions, are steps that would improve incentives.

Others argue that the problem is a more basic one of fundamental school reform. Recommendations range from improving basic skills, increased emphasis on problem-solving and higher-order thinking, and higher academic standards--all major themes of education reform in the last decade--to fully funding early childhood programs and restructuring schools and their governance systems. Still others argue the need to create fundamentally different educational options--such as apprentice-like programs inspired to some degree by the German dual system, which involves employers and educators in providing work-based learning (Hamilton, 1990; Lerman and Pouncy, 1990).

While much of the literature addresses schooling in general, some also focuses on vocational education in particular, citing lack of quality vocational programs and/or poor access to them for the disadvantaged (Bishop, 1988; Wirt, et al., 1989), and lack of career counseling, supportive services and transitional assistance to disadvantaged students participating in vocational education (Reisner and Basubramanian, 1989).

As Grubb (1989a) points out, such criticisms--and the recommendations they tend to generate for the elaboration and/or extension of training programs, either in school or out--have a history dating back to the turn of the century. The underlying syllogism is:

- Youth aren't developing the right skills (knowledge, attitudes, etc.) to succeed in the workplace.
- They aren't because the education and training institutions aren't doing the job.
- Therefore, fix the institutions and youth development will be fixed.

Critics of the school-to-work transition who fall in this camp frequently allude to the economic consequences of poorly prepared youth, but their major concerns tend to be social. Throughout the 1960s, 1970s and part of the 1980s, for example, concern for minority youth unemployment was a hallmark of federal employment and training policy as well as much local, state and federal education policy--but few were arguing that the future of the economy was bound up in improving the school-to-work transition.

Improving U.S. Economic Competitiveness

A farther reaching critique has recently emerged, rooted in concern that inadequate strategies for human resource development--in the work force as well as in the schools--are a major threat (some argue the major threat) to the competitiveness of the United States in the global economy (e.g., Commission on Workforce Quality and Labor Market Efficiency, 1989; Dertouzos, et al., 1989; Commission on the Skills of the American Workforce, 1990; Carnevale, 1991). While most of the earlier literature focused on high school inadequacies, these criticisms have placed new stress on inadequacies of postsecondary training systems. These criticisms, while not necessarily incompatible with those focused on the needs of disadvantaged youth, have a different genesis of concern--more economic than social--and tend toward a somewhat different set of recommendations.

A prime example is the influential report, America's Choice (Commission on the Skills of the American Workforce, 1990), which recommends greatly increased business investment in training and education of the work force and creation of an elaborate national system of training entry-level workers, loosely patterned after European practices but

operated on a decentralized basis. America's Choice speaks directly to the problem of dropouts and other low achievers, urging creation of youth centers and second-chance programs to help all students achieve a new credential, the "Certificate of Initial Mastery," which would open the door to skills training programs run by employers and others.

These recommendations are broadly compatible with proposals for apprentice-like systems, but they are not so sharply focused on the disadvantaged and others with low educational attainments. Rather, America's Choice claims that up to 70 percent of new American workers face low-wage futures unless dramatic changes in the existing school-to-work transition are effected. This argument is grounded not in traditional supply/demand concerns--indeed, the Commission departs from some studies in finding that most employers are relatively satisfied with current education and skill levels--but rather in a belief, grounded in human capital theory, that the United States must develop a more skilled work force to increase productivity if we are to compete in the global marketplace. (Some evidence that global competition in fact requires higher skills of workers is reviewed subsequently in this paper).

These two strands differ, then, in the degree to which they treat the issue of the school-to-work transition as social or economic, in their relative emphasis on post-high school training, and in the extent to which they view the issue as limited to a problem of the disadvantaged or as a broader problem of which the disadvantaged are a part. They share, however, the assumption that extensions, elaborations or new institutional arrangements of the education and training system can solve the problem.

Pursuing Basic Social Reforms

A third definition of the issues goes even further. It argues that the problems of low-income and minority youth are caused by forces outside the control of schools and training institutions, such as the effects of poverty and social inequality. Grubb (1989a) summarizes this viewpoint:

These forces include socialization within families, which tend to vary with class, race and gender; the cultural influences on youth from diverse sources, including the media; and the labor market itself. Squeezed among other powerful institutions, schools and other youth institutions have been relatively powerless to make the changes asked of them. The result is a set of programs that often seem ineffective and a sense that there has been no real progress against the enduring problems of youth.

Variations of this critique include analyses suggesting that minority youth, as a result of their position in the social structure, perceive no payoffs to education and may develop an antiachievement ethic (Ogbu, 1986; Berryman, 1987); that tracking students into vocational programs at both secondary and community college levels serves to socialize them to low expectations or "cool out" their aspirations (Lazerson and Grubb, 1974; Rosenbaum, 1976); and that the so-called secondary labor market constitutes, in effect, a kind of occupational quicksand into which large numbers of the disadvantaged fall (or are pushed) (studies reviewed in Rumberger, 1981; Hamilton, 1990; William T. Grant Foundation, 1988).

This critique, while not necessarily opposed to innovations and elaborations of the education and training system, leads to policy recommendations that focus on interventions in the labor force and other social institutions as prerequisite to the effectiveness of education and training strategies.

DEVELOPING AN EFFECTIVE SYSTEM

If one concludes there is a need to improve the school-to-work transition, which seems a reasonable conclusion, and if one further believes that improvements and elaborations of the education and training system are sufficient to the task (a somewhat problematic conclusion), the operational requirements of an effective school-to-work transition system seem fairly clear. They include:

- More effective basic education to increase the proportion of students who graduate from school with the academic and personal skills needed to participate in subsequent education, training and/or employment.
- Transitional assistance to help young people--especially the disadvantaged, who have the fewest familial and informal resources to draw on--to gain information about and access to the most appropriate post-high school options.
- Increased employer involvement in the school-to-work transition system, to improve access to opportunities and improve the relevance of education and training to emerging labor force needs.
- An expanded system of post-high school training opportunities for non-college youth, (including second-chance programs) to provide the kind and quality of cognitive and occupational skills development required for high-skill, high-wage jobs in industries faced with international competition.

Basic Education

How best to reform basic education is the most fundamental question, for it is difficult to imagine any set of school-to-work transition services that will make a major difference for large numbers of disadvantaged youth, absent a solid grounding in the old basic skills (three Rs) and the new higher-order skills (e.g., problem-solving and teamwork).

There are plenty of theories but little consensus and less evidence on how to effect such reforms. Dougherty, et al., (1989) make a case that fundamental restructuring and related changes in uses of time, staffing, curriculum, pedagogy, assessment, school-parent relationships and social organization of the school may all be necessary to benefit disadvantaged and "at-risk" youth. In any event, a strong argument can be made that, for reforms to be effective for disadvantaged and non-college-bound students, the content, the context and the incentives for achievement built into educational programs should be related to the theme of work.

This can be inferred from a number of different research perspectives, including that currently the only incentives for school performance exist for the college-bound (Bishop, 1988); that black youth perceive they are subject to a "job ceiling" that limits the payoff from education (Ogbu, 1978, 1986); and that the reason many youth who drop out return to high school or get a GED is that they have learned the hard way that opportunities are limited without more education (Morgan, 1984).

This argument gains added force from cognitive scientists' conclusion that the kinds of skills actually needed in the workplace are best taught in actual work contexts. While lacking experimental evidence, a small number of careful studies of such programs as the High School Academies in Philadelphia and California provide further support for the proposition that well-run programs that blend academics, skills training and work experience strengthen the holding power of schools and succeed in placing disadvantaged students in jobs or postsecondary education (Stone, et al., 1989; McMullan and Snyder, 1987b; Barton, 1990).

There are a number of ways one can attempt to use the connection to work as a vehicle for school reform. One approach, derived in part from the career education movement, is to attempt to infuse the school program with a continuum of career-related services at each grade level, arrayed in a developmental sequence from as early as seventh grade on. Typically, proposals for this approach suggest an early emphasis on career awareness and exposure activities; combinations of career development, career guidance and work-like experiences in ninth and tenth grades (including internships, community service, etc.); and, in the last two years of high school, a continuation of these activities combined with options for occupational education, work/study programs, such as cooperative

education or employer-based training, job readiness and job search training, and placement assistance. Both Hamilton (1990) and Lerman and Pouncy (1990), for example, suggest sequences of this sort leading into apprentice-like programs beginning in the 11th grade, as does Feichtner (1989), who adds social services to the mix and argues that individualized plans should hold the whole together.

While some such mix of services seems desirable, efforts to infuse them into the basic school program are complex. As Feichtner points out, most educators agree that employment preparation is one of the goals of schooling, but in most high schools--outside of the vocational arena--it is no one's specific responsibility to plan and coordinate this array of services. Further, even if staff are added to the school to coordinate these functions, there are barriers to infusion in the basic school structure of time, turf and content (e.g., see Orr, et al., 1990, for the evaluation of a recent New York City effort along these lines).

Virtually all high school teachers are subject specialists. They lack training or inclination and may resist efforts to incorporate occupational concerns into their classrooms. In fact, the subject orientation of the high school program can be a more general problem for at-risk students, since teachers of subject content do not feel attention to the basic skills or the personal needs of these students is their responsibility (Frymier and Gansneder, 1989).

The alternative to infusion is to restructure schools in a way that reorganizes the entire program around career or vocational themes, creating a more hospitable environment for education for employment than the typical comprehensive high school can provide.

The Pittsburgh Model

One model for this approach is provided by the Pittsburgh public schools, where over half of graduates are vocational students and which, in 1988, eliminated the "general track," renamed vocational education "applied technology" and began requiring all students to qualify for either an academic (college prep) or applied technology (vocational) certificate to graduate. (Students declare their choice at the end of tenth grade.) This policy, consistent with research showing that the coherence of the vocational program influences its payoff, was triggered by data collected by the school system showing that, over ten years, the average annual dropout rate for vocational students in Pittsburgh was 2.6 percent, compared with 13 percent for general education students (author's interview).

Pittsburgh's move to a two-track system was aided by a number of factors: the school system has been the recipient of most youth employment funds since the days of CETA;

it has an uncommonly strong tradition of vocational education, including strong linkages with employers and a range of innovative vocational programs; and these vocational programs have been complemented by strong career development and work experience programs, dating back to the days when Marland, the "father" of career education, was Pittsburgh's superintendent (Reisner and Balasubramanian, 1989; de Lone and Watson, 1988).

There is as yet no data on the effectiveness of Pittsburgh's reorganization. Should it prove effective, the uncommonly strong tradition of career and vocational education in that school district may be a prerequisite for such systemwide strategies to succeed. In other school systems, a more feasible approach may be to create magnet schools organized around industrial themes, such as New York's High School of Aviation and other "exemplary" programs studied by Mitchell, Russell and Benson (1988), or schools within schools, such as High School Academies.

The High School Academies Model

The Academies model, as initiated in Philadelphia and since replicated in California and other sites, is particularly attractive conceptually for several reasons. In most settings, Academies are school/business partnerships, run by a joint board. The business connection provides financial support (approximately \$500 per pupil in Philadelphia) and a ready means of employer involvement in program design, career awareness activities, provision of mentors, summer and school-year work experience, and jobs for graduates.

The school-within-a-school setting (150 to 200 students) means that a core group of teachers can be in continuous contact with a discrete group of students, creating much closer student/teacher relationships than are possible in a large comprehensive high school. Because academic and vocational teachers are working with the same students, they are well positioned to function as a team, not only integrating vocational and academic curricula but also individualizing their efforts for students they share in common. As such, the model provides a vehicle for implementing the reforms of vocational education embodied in the 1990 amendments to the Perkins Act as well as the curricular and pedagogic changes suggested by research in cognitive science.

The model is flexible: it has been adapted to a wide range of industries and occupations (e.g., health, office, hospitality and electrical trades) and its students go on not only to jobs but to college and other postsecondary options. As a school-within-a-school, it does not require wholesale change of the high school or the entire system. It has operated effectively in very different settings--e.g., Philadelphia and the Silicon Valley--and in Philadelphia, it has been replicated widely in recent years, so that all but a few comprehensive high schools now have one or more Academies, serving over 2,000 students in an

expansion targeted to serve 5,000 students (10 percent of the high school population) by 1994 (author's interviews).

In short, this model has shown itself to be capable of providing, with reasonable evidence of effectiveness, virtually every element that the school-to-work literature suggests is important, and many of its features--the strong connection to industry, the integration of vocational and academic education, and close personal attention--are particularly suited to the disadvantaged population which, indeed, it serves.

Transitional Assistance

Models for provision of transitional services also exist. They are built into guidance and placement functions performed in programs like the Academies and occupational theme high schools. Jobs for America's Graduates and school-based career services, such as those established by the Boston Compact, serve the broader population of high school seniors.

Priority attention and resources, not know-how, appear to be the main obstacles to expanding these services. Such services, however, are simply linchpins between school and work or further education. They are not substitutes for good preparation during school or good training and employment opportunities afterward.

Private Sector Involvement

It has become axiomatic that the private sector should be involved in employment and training programs, vocational education and school reform generally. There is no research, however, to clarify whether (or under what conditions) that involvement is most effective if it consists of advice, of policy control and evaluation, or of direct operational involvement. While some observers see hopeful signs of continuing and increasingly sophisticated business involvement in public education (Timpane and McNeill, 1991), others suggest that substantive involvement of business in educational programs for the disadvantaged is the exception, not the rule (McMullan and Snyder, 1987a).

Here, the key operational questions turn around the extent to which the employer role needs to be primarily one of providing opportunities (work experience, jobs for school or training program graduates); providing policy guidance, training advice and ancillary services (e.g., career day speakers) to schools and programs; or taking a more direct hand in training, whether through work-based learning, expanded apprenticeships, operation of classroom training programs or expanded in-house training of entry-level employees.

There are many examples of employers playing the first two roles, though there is much room for expansion. If employers are to become more directly involved in training of entry-level employees, the critical question is: What incentives can be created to persuade employers to do something, besides informal OJT, that relatively few do now?

Postsecondary Training Opportunities

The development of improved and expanded postsecondary training systems (and the involvement of employers in them) may be the biggest challenge facing an improved school-to-work transition, in part because it faces the toughest questions:

- Is a new system necessary, such as the expansion of apprentice-like training or the establishment of a new national system of standards, credentials and administrative bodies? Or can such innovations as "two plus two" programs, involving community colleges and occupational education programs, such as the Academies, suffice? Or will a large second-chance system, offering much more intensive education, work experience, training and social supports, such as the Swedish Youth Centers or the British Youth Employment scheme, be needed?
- Where will the resources come from to pay for such a system, which will be much more expensive than the existing short-term programs offered by underfunded second-chance systems? Is it realistic to expect substantial investments in training of new workers from employers who have traditionally been averse to investing in such training--expecting the schools or the external labor market to provide them the skilled workers they need? Is it even efficient in a society where worker mobility is a way of life?
- Will Americans resist a system that many may see as "tracking"? Would existing education and training organizations resist the new system?

These are not questions to which existing research provides any ready answers. In part, this is because the questions are ultimately political in nature. In part, it is because the questions are relatively new, forced on us by global competition, the declining value of a high school education, the increased skill requirements at lower levels in many industries, and the growing necessity of post-high school education for a stable, decent-paying career.

Faced with such basic questions, uncertainty about answers, scarcity of resources and the relative newness of the issue, a period of intense experimentation and research seems a prudent course to follow. Experimentation should test out the full range of possibilities

for expanding postsecondary training, including programs that begin in the high school years and move beyond.

Bearing in mind the very diverse education and labor market experiences of different races, ethnic groups and genders, experimentation should include efforts to determine the characteristics of approaches most effective with different groups, not simply through post hoc analysis, but through affirmative efforts to craft approaches that speak to the socioeconomic and cultural diversity of these groups. Further, rather than evaluating modalities of service (e.g., work experience, career guidance), as much research has done with ambiguous results, experiments and research should focus on multimodal, multiyear efforts with special attention to the transition points (e.g., from high school to postsecondary training to early employment experience) that seem especially problematic in our "haphazard" system.

Evaluation research should address experiments in the postsecondary years as well as provide better (i.e., experimental and longitudinal) evidence of the impacts of models, such as the Academies, occupational theme schools, and various attempts to integrate academic and vocational content in a range of contexts. Research should address not only impacts (educational and economic benefits to individuals) but issues of implementation, including not only program structure and management, but staff qualities, staff training, curriculum and pedagogy. The relative importance of models versus effective implementation in producing results should be a guiding question.

Attention should also be given to the interaction of labor market conditions with training program effectiveness. This should include not simply gross indicators of demand, such as unemployment rates in the locality or industry, but closer examinations of the structure of markets within firms: the skills required; the speed, nature and effect of technological change on occupational skills and occupational mix; antidiscrimination efforts; the relative reliance on training, recruiting or job exporting, and similar factors that are likely to influence the outcomes of training programs, the age or grade levels at which training should be offered, the content of effective training programs, and the extent to which employers are likely to become involved in entry-level training--in the workplace or in schools and training organizations.

Further, quantitative studies of impacts and qualitative studies of implementation should be augmented by ethnographic and other studies of the experiences of youth undergoing the transition, to develop a much richer understanding of the ways in which their aspirations, perceptions, cultural or sex-related belief systems, interactions with adults, reactions to institutional settings and responses to intended (or unintended) incentives influence results. Such information, while not necessarily usable by policymakers because it is so fine-grained, can nevertheless be of great value to program planners and staff.

Finally, in synthesizing findings from research, attention should be paid to the third major criticism of school-to-work transition efforts mentioned above--the argument that education and training may be necessary but are not sufficient to improve the school-to-work transition, because the real problems are so deeply embedded in larger issues of poverty, race, gender and the functioning of society. Successful efforts will disprove this hypothesis; unsuccessful efforts will not prove it, but they require that it be taken seriously.

SUMMARY OF FINDINGS

1. There is no adequate system for the school-to-work transition, other than for those who successfully complete college.

While elements of a system exist, the pieces are not well connected, pathways are unclear, "floundering" remains the norm, and the individual must build his or her own bridge to a career--a process that leaves many, especially the disadvantaged, on the wrong side of the river.

2. Policy attention has been erratic and disjointed.

The school-to-work transition has received considerable policy attention in the last 30 years, but attention has waxed, waned and shifted in approach and emphasis. In the lives of individuals, the transition takes place over many years--but efforts to improve it are generally short-lived and address only a small segment of the transition. Such partial and transitory efforts are doomed to limited effectiveness.

3. Improvements in the transition are entangled with broader issues of education reform and institutional change.

School-to-work transition issues are embedded in broader issues, such as basic school reform; creating a new culture of learning in the workplace (treating the employee as an asset to be developed, not a cost to be reduced); and creating a larger, more varied and more effective set of postsecondary training options. For example, the German and Swedish systems both build on a foundation of solid basic education and thrive in a culture of institutionalized business responsibility for occupational training. While inevitable, the entanglement of issues also poses a dilemma: how to focus on school-to-work issues in general (and school-to-work for the disadvantaged in particular) in the midst of broader education reforms, such as academic excellence reforms or the school restructuring movement.

4. Postsecondary education is increasingly important, but underdeveloped.

Changes in labor force requirements--particularly increased cognitive and interpersonal skills--have yielded increased requirements for postsecondary training and education. Thus, while high school remains important as the launchpad for the transition to work, postsecondary opportunities with employers and education or training institutions have become the rocket ship. Policy is just catching up with this new reality--for example, through efforts to create new versions of apprenticeship and "two plus two" programs linking high schools and community colleges. However, the postsecondary institutional linkages, programs and approaches needed for the new economy are underdeveloped.

5. The elements of effective high school programs are generally known, if rarely implemented.

There is knowledge approaching consensus about the service and programming elements that are needed at the high school level to begin an effective school-to-work transition process. The importance of these elements is supported by research, though in many instances the research is less than definitive because it is (a) nonexperimental, (b) short-term or (c) limited in scope. The necessary elements include:

- A strong academic base, whether achieved through traditional academic courses with challenging content or programs that, drawing on the findings of cognitive science, integrate vocational and academic studies. There is strong research support for this conclusion.
- A well-articulated, multiyear sequence of career guidance activities, including exposure to the range of occupations, general "world of work" demands, the educational and skill requirements of various careers, and counseling on course selection and postsecondary options. The quality of research support for this conclusion is at best fair.
- Work experience to develop the skills and maturity needed to succeed in the work force--offered as an integral part of a program, combined with other services (e.g., basic education, counseling, skills training). Here, research strongly supports the basic importance of work experience, but less conclusively indicates the best ways to provide it as a program intervention.
- Transitional services, such as job readiness, job placement and job development programs, which are effective in providing at least temporary advantages in employment and earnings to students who graduate from high school. Here, the

research evidence is limited but consistent with related findings on the effectiveness of job readiness and placement programs for out-of-school youth.

Except in fields where there is a clear employer demand for high school graduates with specific skills training--most notably, office occupations--secondary school training for specific jobs has little payoff and should, increasingly, be deferred to the postsecondary level. While some analysts would dispute this finding, a preponderance of research supports it. However, secondary school programs built around occupational themes can be an effective mode of delivering basic education, as the High School Academies and exemplary theme-oriented magnet schools show. Research for this proposition is primarily descriptive and quasi-experimental.

6. The broad principles of an effective system are understood, but the system itself--and some of its component parts--remains to be built.

A system must be long-term; must link employers, secondary schools and postsecondary schools interactively; must be sensitive to the diverse needs of different race/ethnicity and gender groups, as well as to the requirements of local labor markets; must provide a well-integrated sequence and array of services, in numbers consistent with labor market demands and population; and must provide both clear pathways to and clear rewards for success. This general conclusion emerges strongly from the literature as a whole--but it is equally clear that this system does not exist, and that there is little experience in putting the pieces together.

7. Implementation is as important as policy.

Issues of effective implementation rival issues of well-crafted policy and program design in determining results. There is typically as much variation in results among examples of one program model as there is between examples of different program models. This presumably reflects variations among programs in the quality of management and staff skills.

RECOMMENDATIONS TO THE DEPARTMENT OF LABOR

Based on the above findings and their fuller explication in this text, we make the following major recommendations:

1. If the Department of Labor is to make the school-to-work transition a major emphasis, it is self-evident that joint initiatives with the Department of Education will need to become a standard modus operandi.

2. If JTPA is to make major contributions to improving the school-to-work transition, it will either have to have much more funding, or consciously pursue a "niche" strategy.

With much greater funding, and supporting legislative changes, JTPA could potentially become a major force in the development of work-based training and other postsecondary options. Alternately, it could become the backbone of a full-blown "second-chance" system providing extensive, intensive and integrated services to its current target population. Absent such changes, it should be clear that JTPA may contribute to parts of the school-to-work transition system, but cannot drive or serve as the whole system. For example, funding transitional services for seniors--as JTPA dollars do in many Jobs For America's Graduates sites and the Boston Compact--is one example of a niche.

In general, JTPA as it now operates should stress use of federal dollars to support components of well-integrated, comprehensive school-to-work transition strategies, and encourage service delivery areas and Private Industry Councils interested in the school-to-work transition to pursue collaborative strategies in which they fill a niche based on local needs.

3. Identify viable strategies for the school-to-work transition.

An extensive, interrelated set of longitudinal studies should be undertaken to determine the effectiveness of alternative approaches to improving the transition from school to work, particularly for disadvantaged youth. The importance of this topic has been long recognized, and has now emerged as a pivotal issue for the coming decade.

Drawing on both efforts already underway and new demonstration programs, the project would identify and carefully describe diverse approaches that work with different target populations, and possibly for different occupational sectors. The project would seek to compile evidence about the value of such strategies as add-on services within schools; high school academies; basic school restructuring; employer hiring guarantees; linkages among high schools, employers, community colleges and other training entities; neo-German apprenticeship models; and new postsecondary training options, including the Swedish-like use of postsecondary education in cooperation with employers. This would need to be a multiyear project. Its aim would be to develop a solid basis of evaluative evidence about the impacts of alternative approaches on disadvantaged youth, to support the development of long-term policy in this area.

4. Invest more in improving program management and implementation.

Providing ample funding for adequate planning time, training and technical assistance, in the context of a strong emphasis on performance outcomes, is the best way to improve implementation and achieve a fast return on policy investments.

REFERENCES

- Applebee, Arthur N.; Langer, Judith A.; Mills, Ina V.S.
1989 Crossroads in American Education. Princeton, NJ: National Assessment of Educational Progress.
- Bailey, Thomas
1991 "School/Work: Economic Change and Education Reform" in Conservation of Human Resources. New York: Columbia University, Teachers College, Institute on Education and the Economy.
- Bailey, Thomas
1989 Changes in the Nature and Structure of Work: Implications For Employer-Sponsored Training. New York: Columbia University, Teachers College, Institute on Education and the Economy.
- Barnow, Burt S.
1989 "Government Training as a Means of Reducing Unemployment" in Bawden, Lee and Skidmore, Felicity (eds.) Rethinking Employment Policy. Washington, D.C.: Urban Institute Press.
- Barton, Paul
1990 From School to Work. Princeton, NJ: Educational Testing Service, Policy Information Center.
- Barton, P.E. and Kirsch, I.S.
1990 Policy Perspectives--Workplace Competencies: The Need to Improve Literacy and Employment Readiness. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Bassi, Laurie J.; Simms, Margaret C.; Burbridge, Lynn C.; Betsey, Charles L.
1984 Measuring the Effect of CETA on Youth and the Economically Disadvantaged. Washington, D.C.: Urban Institute Press.
- Becker, B.E. and Hills, S.M.
1983 "The Long-Run Effects of Job Changes and Unemployment Among Male Teenagers." The Journal of Human Resources, 17:197-211.

- Berlin, G. and Sum A.
1985 Toward a More Perfect Union: Basic Skills, Poor Families and Our Economic Future. New York: Ford Foundation.
- Berrueta-Clement, J.R.; Schweinhart, L.J.; Barnett, W.S.; Epstein, A.S.; Weikart, D.P.
1984 Changed Lives: The Effect of the Perry Pre-School Program on Youths through Age 19. Ypsilanti, MI: High Scope Educational Research Foundation.
- Berryman, Sue
1987 "Can Schools Change to Save Kids?" Presentation at the fall meeting of the Education Writers Association, Racine, WI.
- Betsey, Charles; Robinson, Hollister; Papageorgiou, Mary
1985 Youth Employment and Training Programs: The YEDPA Years. Washington, D.C.: National Academy Press.
- Bishop, John
1989 Vocational Education For At-Risk Youth: How Can It Be Made More Effective? New York: Cornell University, Vocational Education Analysis and Support Center.
- Bishop, John
1988 "The Motivation Problem in American High Schools." Cornell Working Paper No. 88-13. New York: Cornell University, Center for Advanced Human Resources Studies.
- Blackburn, McKinley L.; Bloom, David E.; Freeman, Richard B.
1990 "An Era of Falling Earnings and Rising Inequality?" The Brookings Review, Winter: 38-43.
- Bottoms, James E.
1989 Closing the Gap Between Vocational and Secondary Education. Washington, D.C.: Policy Studies Associated.
- Boyer, Ernest L.
1983 High School: A Report on Secondary Education in America. New York: Harper and Row.

- Bucknam, R. and Brand, S.
1983 "EBCE Really Works: A Meta-Analysis on Experience-Based Career Education." Educational Leadership, 40:66-71.
- Campbell, Robert; Connell, Janie; Boyle, Karen Kimmel; Bhaerman, Robert D.
1983 Enhancing Career Development: Recommendations for Action. A Review of Empirical Studies of the Effects of Career Guidance. Columbus, OH: Ohio State University, National Center for Research in Vocational Education.
- Carnegie Forum on Education and the Economy
1986 A Nation Prepared: Teachers for the 21st Century. The Report of the Task Force on Teaching as a Profession. New York: Carnegie Forum on Education and the Economy.
- Carnevale, Anthony P.
1991 America and the New Economy. San Francisco: Jossey-Bass.
- Cave, G. and Quint, J.
1990 Career Beginnings Impact Evaluation: Findings From a Program for Disadvantaged High School Students. New York: Manpower Demonstration Research Corporation.
- Charner, Ivan and Fraser, Bryner
1984 Fast Food Jobs. Washington, D.C.: National Institute for Work and Learning.
- Chubb, John and Moe, Terry
1990 Politics, Markets and America's Schools. Washington, D.C.: Brookings Institution.
- Clune, William; White, Paula; Patterson, Janice
1989 The Implementation and Effects of High School Graduation Requirements: First Steps Toward Curricular Reform. New Brunswick, NJ: Center for Policy Research in Education.
- Coleman, James
1965 Adolescents and the Schools. New York: Basic Books.

Paper No. 5

- Commission on the Skills of the American Workforce
1990 America's Choice: High Skills or Low Wages. Rochester, NY: National Center on Education and the Economy.
- Commission on Workforce Quality and Labor Market Efficiency
1989 Public Hearings: Analysis of Comments. Washington, D.C.: Technical Assistance and Training Corporation and U.S. Department of Labor, Office of the Secretary.
- D'Amico, Ronald and Baker, Paula
1984 "The Nature and Consequences of High School Employment" in Baker, Paula; Carpenter, Susan; Crowley, Joan; D'Amico, Ronald; Kim, Choongsoo; Morgan, William; Wielgosz, John (eds.) Pathways to the Future: A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982 (Vol. IV). Columbus, OH: Ohio State University, Center for Human Resource Research.
- David, Jane L.
1989 "Synthesis of Research on School-Based Management." Educational Leadership, May: 45-53.
- de Lone, Richard H.
1990 Replication: A Strategy to Improve the Delivery of Education and Job Training Programs. Philadelphia: Public/Private Ventures.
- de Lone, R.H. and Watson, B.
1988 "At-Risk Students and the Pittsburgh Public Schools." Case study prepared for the Education Commission of the States. Philadelphia: de Lone and Associates.
- Dertouzos, Michael; Lester, Richard; Solow, Robert
1989 Made In America: Regaining the Productive Edge. Cambridge, MA: MIT Press.
- Dougherty, Van; de Lone, Richard; Odden, Allan
1989 Current Practice: Is It Enough? Denver, CO: Education Commission of the States.

- Farkas, F.; Olsen, R.; Stromsdorfer, E.W.; Sharpe, L.C.; Skidmore, F.; Smith, D.A.; Merrill, S.
1984 Post-Program Impacts of the Youth Incentive Entitlement Pilot Projects. New York: Manpower Demonstration Research Corporation.
- Farrar, E; De Sanctis, J.; Cohen, D.K.
1979 Views from Below: Implementation Research in Education. Cambridge, MA: Huron Institute.
- Feichtner, Sheila
1989 School-to-Work Transition for At-Risk-Youth. Columbus, OH: ERIC Clearinghouse on Adult, Career and Vocational Education.
- Fine, Gary and Sandstrom, Kent
1988 Knowing Children: Participant Observations with Minors. Newbury Park, CA: Sage.
- Frymier, J. and Gansneder, B.
1989 "The Phi Delta Kappan Study of Students At Risk." Phi Delta Kappan, October: 142-146.
- Gamoran, Adam and Berends, Marek
1987 "The Effects of Stratification in Secondary Schools: Synthesis of Survey and Ethnographic Research." Review of Educational Research, 57:413-435.
- Ginzberg, Eli
1980 "Overview: 'The \$64 Billion Innovation' in Ginzberg, Eli (ed.) Employing the Unemployed. New York: Basic Books.
- Goodlad, John I.
1984 A Place Called School: Prospects for the Future. New York: McGraw-Hill.
- Grasso, J.T. and Shea, J.R.
1979 Vocational Education and Training: Impact on Youth. Berkeley, CA: University of California, Carnegie Council on Policy Studies in Higher Education.
- Greenberger, E. and Steinberg, L.
1986 When Teenagers Work: The Psychological and Social Costs of Adolescent Employment. New York: Basic Books.

Grubb, W. Norton

- 1989(a) "Preparing Youth for Work: The Dilemma of Education and Training Programs" in Stern, David and Eichorn, Dorothy (eds.) Social Structure, Labor Markets and Culture. Hillsdale, NJ: Lawrence Erlbaum Associates.

Grubb, W. Norton

- 1989(b) "Dropouts, Spells of Time, and Credits in Postsecondary Education: Evidence from Longitudinal Surveys." Economics of Education Review, 8:49-67.

Hahn, Andrew and Lerman, Robert

- 1985 What Works in Youth Employment Policy? Washington, D.C.: National Planning Association.

Halasz, Ida M.

- 1988 Trends and Issues in Career Education. Columbus, OH: ERIC Clearinghouse on Adult, Career and Vocational Education.

Hamilton, Stephen F.

- 1990 Apprenticeship For Adulthood: Preparing Youth for the Future. New York: Free Press.

Hamilton, Stephen F.

- 1986 "Excellence and the Transition from School to Work." Phi Delta Kappan, November: 239-242.

Household Economic Studies

- 1989 Spells of Job Search and Layoff and Their Outcomes. Current Population Reports, Series P-70, No. 16-RD-2. Washington, D.C.: U.S. Bureau of the Census.

Hoyt, Kenneth B.

- 1990 "A Proposal for Making Transition from Schooling to Employment an Important Component of Educational Reform." Future Choices, 2:73-83.

Hoyt, Kenneth B. and High, Sidney C.

- 1982 "Career Education" in Mitzel, H. (ed.) Encyclopedia of Educational Research, Vol. 1. New York: Free Press.

- Johnston, William B. and Packer, Arnold H.
 1987 Workforce 2000: Work and Workers for the Twenty First Century.
 Indianapolis, IN: Hudson Institute.
- Kang, Suk and Bishop, John
 1986 "The Effect of Curriculum on Labor Market Success Immediately after
 High School." Journal of Industrial Teacher Education, Spring.
- Kim, Choongsoo
 1984 "A Longitudinal Study of Reservation Wages, Duration of Job Search, and
 Subsequent Wages: An Empirical Econometric Analysis" in Baker, Paula;
 Carpenter, Susan; Crowley, Joan; D'Amico, Ronald; Kim, Choongsoo;
 Morgan, William; Wielgosz, John (eds.) Pathways to the Future: A Report
 on the National Longitudinal Surveys of Youth Labor Market Experience
 in 1982 (Vol. IV). Columbus, OH: Ohio State University, Center for
 Human Resource Research.
- Kutscher, Ronald E.
 1987 "Projections 2000: Overview and Implications of the Projections to 2000."
Monthly Labor Review, September: 3-9.
- Lazerson, M. and Grubb, W.N.
 1975 "Rally Round the Workplace: Continuities and Fallacies in Career
 Education." Harvard Education Review, 45:451-474.
- Lazerson, M. and Grubb, W.N. (eds.)
 1974 American Education and Vocationalism: A Documentary History, 1870-
 1970. New York: Teachers College Press.
- Lerman, Robert and Pouncy, Hillard
 1990 Why America Should Develop A Youth Apprenticeship System.
 Washington, D.C.: Progressive Policy Institute.
- Levin, Henry M.
 1985 "The State Youth Initiatives Project" in The Educationally Disadvantaged:
 A National Crisis. Philadelphia: Public/Private Ventures.
- Levin, Henry M. and Rumberger, Russell W.
 1987 "Educational Requirements for New Technologies: Visions, Possibilities
 and Current Realities." Educational Policy, 1:333-354.

Lund, L. and McGuire, E.P.

1984 The Role of Business in Precollege Education. New York: Conference Board.

Lynch, Lisa M.

1989 "The Youth Labor Market in the Eighties: Determinants of Reemployment Probabilities for Young Men and Women." The Review of Economics and Statistics, January: 37-45.

Mangum, Garth L.

1989 Youth Transition From Adolescence to the World of Work. Washington, D.C.: William T. Grant Foundation.

Mangum, Garth L.

1968 Reorienting Vocational Education. Ann Arbor, MI: Institute of Labor and Industrial Relations.

McClure, Larry and Buan, Carolyn (eds.)

1973 Essays on Career Education. Portland, OR: Northwest Regional Educational Laboratory.

McDonnell, Lorraine M.

1989 "Restructuring American Schools: The Promises and the Pitfalls." NCEE Brief No. 6. New York: Columbia University, Teachers College, National Center on Education and Employment.

McKey, R.H., et al.

1985 The Impact of Head Start on Children, Families and Communities. Washington, D.C.: U.S. Department of Education, Office of Education.

McMullan, Bernard and Snyder, Phyllis

1987(a) Allies in Education: Schools and Business Working Together for At-Risk Youth (Vol. 1). Philadelphia: Public/Private Ventures.

McMullan, Bernard and Snyder, Phyllis

1987(b) "A Profile of Philadelphia High School Academies, Philadelphia, Pennsylvania" in Allies in Education: Schools and Business Working Together for At-Risk Youth (Vol. 2). Philadelphia: Public/Private Ventures.

Meyer Robert

1981 "An Economic Analysis of High School Education" in The Federal Role in Vocational Education. Washington, D.C.: National Commission for Employment Policy.

Meyer, R.H. and Wise, D.A.

1982 "High School Preparation and Early Labor Force Experience" in Freeman, R.B. and Wise, D.A. (eds.) The Youth Labor Market Problem. Chicago: University of Chicago Press.

Mitchell, Vernay; Russell, Ellen; Benson, Charles

1988 Exemplary Urban Career-Oriented High Schools. Berkeley, CA: University of California, National Center for Research in Vocational Education.

Morgan, William

1984 "The High School Dropout in an Overeducated Society" in Baker, Paula; Carpenter, Susan; Crowley, Joan; D'Amico, Ronald; Kim, Choongsoo; Morgan, William; Wielgosz, John (eds.) Pathways to the Future: A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982 (Vol. IV). Columbus, OH: Ohio State University, Center for Human Resource Research.

National Alliance of Business

1989 The Compact Project: School Business Partnerships for Improving Education. Washington, D.C.: National Alliance of Business.

National Commission on Excellence in Education

1983 A Nation at Risk. Washington, D.C.: U.S. Department of Education.

National Institute of Education

1981 The Vocational Education Study: The Final Report. Washington, D.C.: National Institute of Education.

National Science Board, Commission on Precollege Education in Mathematics, Science and Technology

1983 Today's Problems, Tomorrow's Crisis. Washington, D.C.: National Science Foundation.

Paper No. 5

- Nothdurft, William E.
1991 Youth Apprenticeship, American Style: A Strategy for Expanding School and Career Opportunities. A Report of a Conference. Somerville, MA. Consortium on Youth Apprenticeship.
- Nothdurft, William E.
1989 SchoolWorks: Reinventing Public Schools to Create the Workforce of the Future. Washington, D.C.: St. Mary's Press.
- Noyelle, Thierry
1989 Skills, Skill Formation, Productivity and Competitiveness: A Cross-National Comparison of Banks and Insurance Carriers in Five Advanced Economies. New York: Columbia University.
- Ogbu, John
1986 "Stockton, California, Revisited: Joining The Labor Force" in Borman, Kathryn and Reisman, Jane (eds.) Becoming A Worker. Norwood, NJ: Ablex.
- Ogbu, John
1978 Minority Education and Caste: The American System in Cross-Cultural Perspective. New York: Academic Press.
- Orr, Terry; Cesvette, Carl; Alex, Wilkie
1990 Planning and Evaluation Study of the New York Working Program: The First Two Years of Six Pilot Schools. New York: Academy for Educational Development.
- Osterman, Paul
1989 "The Job Market for Adolescents" in Stern, David and Eichorn, Dorothy (eds.) Social Structure, Labor Markets and Culture. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Osterman, Paul
1980 Getting Started: The Youth Labor Market. Cambridge, MA: MIT Press.
- Owens, T.R.
1982 "Experience-Based Career Education: Summary and Implications of Research and Evaluation Findings." Child and Youth Services Journal, Vol. 4.

- Parnell, Dale
1985 The Neglected Majority. Washington, D.C.: Community College Press.
- Powell, A.; Farrar, E.; Cohen, D.K.
1985 The Shopping Mall High School: Winners and Losers in the Educational Market Place. Boston: Houghton Mifflin.
- Raizen, Senta A.
1989 Reforming Education For Work: A Cognitive Science Perspective. Berkeley, CA: University of California, National Center for Research in Vocational Education.
- Reisner, E. and Balasubramanian, M.
1989 School-To-Work Transition Services For Disadvantaged Youth Enrolled in Vocational Education. Washington, D.C.: U.S. Department of Education, National Assessment of Vocational Education.
- Research and Policy Committee of the Committee for Economic Development
1991 The Unfinished Agenda: A New Vision for Child Development and Education. New York: Committee for Economic Development.
- Resnick, L.B.
1987 "Learning In School and Out." Educational Researcher, 16:13-20.
- Rosenbaum, James E.
1976 Making Inequality: The Hidden Curriculum of High School Tracking. New York: Wiley.
- Rumberger, Russell W.
1981 Overeducation in the U.S. Labor Market. New York: Praeger.
- Rumberger, R.W. and Daymont, T.N.
1989 "The Economic Value of Academic and Vocational Training Acquired in High School" in Borus, M.E. (ed.) Youth and the Labor Market: Analyses of the National Longitudinal Survey. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Scribner, Silvia and Stephens, Joy
1989 "Experimental Studies on the Relationship of School Math and Work Math." New York: Columbia University, Teachers College, National Center on Education and Employment.

- Sizer, T.R.
1984 Horace's Compromise: The Dilemma of the American High School. Boston: Houghton Mifflin.
- Spring, William J.
1988 "Building a Network of Opportunity for the Majority of Our Young People" in School Success for Students At Risk: Analyses and Recommendations of the Council of Chief State School Officers. Orlando, FL: Harcourt Brace Jovanovich.
- Stern, David
1991 Combining School and Work: Options in High Schools and Two-Year Colleges. Washington, D.C.: U.S. Department of Education, Office of Vocational and Adult Education.
- Stern, David; Dayton, Charles; Paik, Il-Woo; Weisberg, Alan
1989 "Benefits and Costs of Dropout Prevention in a High School Program Combining Academic and Vocational Education: Third Year Results from Replications of the California Peninsula Academies." Education Evaluation and Policy Analysis, 11(4):405-416.
- Stone, James R.; Stern, David; Hopkins, Charles; McMillan, Martin
1989 Learning from School-Based Work Experience Programs. Berkeley, CA: National Center for Research in Vocational Education.
- Sum, A.
1987 The Longer-Term Impacts of Participation in Jobs for America's Graduates Programs: Findings of the 20-Month Follow-Up of the Class of 1984. Washington, D.C.: Jobs for America's Graduates.
- Taggart, R.A.
1981 A Fisherman's Guide: An Assessment of Remediation and Training Strategies. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Taggart, R.; Sum, A.; Berlin G.
1987 "Basic Academic Skills: Key to Youth's Future." Paper presented to the U.S. Senate Committee on Labor and Human Resources, January, 14.

Tan, Hong W.

- 1989 Private Sector Training in the United States: Who Get It and Why. New York: Rand Corporation and Columbia University, Teachers College, Institute on Education and the Economy.

Timpane, P.M. and McNeill, L.M.

- 1991 Business's Impact on Education and Child Development Reform. New York: Committee for Economic Development.

U.S. General Accounting Office

- 1990 Training Strategies: Preparing Non-College Youth for Employment in the U.S. and Foreign Countries. Washington D.C: U.S. General Accounting Office.

William T. Grant Foundation, Commission on Work, Family and Citizenship

- 1988 The Forgotten Half: Pathways to Success for America's Youth and Young Families. Washington, D.C.: William T. Grant Foundation.

Wirt, John G.

- 1991 A New Federal Law on Vocational Education: Will Reform Follow? Washington, D.C.: U.S. Department of Labor.

Wirt, John; Muraskin, Lana; Goodwin, David; Meyer, Robert

- 1989 Summary of Findings and Recommendations: Final Report (Vol. 1). Washington, D.C.: U.S. Department of Education, Office of Education, National Assessment of Vocational Education.

Wirth, Arthur, G.

- 1986 "Job and Work-Two Models For Society and Education" in Benson, Norman and Lyons, Richard (eds.) Controversies Over the Purposes of Schooling and the Meaning of Work. Lanham, MD: University Press of America.

Wolf, Wendy C.; Leiderman, Sally; Voith, Richard

- 1987 The California Conservation Corps: An Analysis of Short-Term Impacts on Participants. Philadelphia: Public/Private Ventures.

Youthwork, Inc.

- 1980 Youth Knowledge Development Report. Washington, D.C.: U.S. Department of Labor.

BIBLIOGRAPHY

PROGRAMS, SERVICES AND TECHNIQUES

Adler, Mortimer J.

1982 The Paideia Proposal. New York: Macmillan Publishing.

Alabama State Commission on Higher Education

1989 Academic Preparation for College: What Students Need to Know and Be Able To Do To Enter College in Alabama. Montgomery, AL: Alabama State Commission on Higher Education.

American Council on Education

1990 1990 Statistical Report. Washington, D.C.: American Council on Education.

Ames, Carole

1984 "Competitive, Cooperative, and Individualistic Goal Structures: A Cognitive-Motivational Analysis" in Ames, Carole and Ames, Russell (eds.) Research on Motivation in Education, Vol. 1. New York: Academic Press.

Ames, Carole

1981 "Competitive Versus Cooperative Reward Structures: The Influence of Individual and Group Performance Factors on Achievement Attributions and Affect." American Educational Research Journal, 18:273-287.

Ames, Carole

1978 "Children's Achievement Attributions and Self-Reinforcement: Effects of Self-Concept and Competitive Reward Structure." Journal of Educational Psychology, 70:345-355.

Ames, Carole

1976 "Achievement Attributions and Self-Instructions Under Competitive and Individual Goal Structure." Journal of Educational Psychology, 76:478-487.

Ames, Carole and Ames, Russell

1981 "Competitive Versus Cooperative Reward Structures: The Salience of Past Performance Information for Causal Attributions and Affect." Journal of Educational Psychology, 73:411-418.

Programs, Services and Techniques

- Ames, Carole and Archer, Jennifer
1988 "Achievement Goals in the Classroom: Student's Learning Strategies and Motivation Processes." Journal of Educational Strategies, 80:260-267.
- Anderson, Bernard E.
1980 "How Much Did the Program Help Minorities and Youth" in Ginzberg, Eli (ed.) Employing the Unemployed. New York: Basic Books.
- Anderson, Elijah
1989 "Neighborhood Influences on Inner-City Teenage Pregnancy." Preliminary paper, University of Pennsylvania, Department of Sociology.
- Applebee, Arthur N.; Langer, Judith A.; Mills, Ina V.S.
1989 Crossroads in American Education. Princeton, NJ: National Assessment of Educational Progress.
- Ascher, Carol
1990 "Linking Schools with Human Service Agencies." New York: ERIC Clearinghouse on Urban Education.
- Auspos, Patricia; Cave, George; Dolittle, Fred; Hoerz, Gregory
1989 Implementing JOBSTART: A Demonstration for School Dropouts in the JTPA System. New York: Manpower Demonstration Research Corporation.
- Bailey, Thomas
1991 "School/Work: Economic Change and Education Reform" in Conservation of Human Resources. New York: Columbia University, Teachers College, Institute on Education and the Economy.
- Bailey, Thomas
1989 Changes in the Nature and Structure of Work: Implications For Employer-Sponsored Training. New York: Columbia University, Teachers College, Institute on Education and the Economy.
- Baker, Paula; Carpenter, Susan; Crowley, Joan; D'Amico, Ronald; Kim, Choongsoo; Morgan, William; Wielgosz, John (eds.)
1984 Pathways to the Future: A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982 (Vol IV). Columbus, OH: Ohio State University, Center for Human Resource Research.

- Bakewell, Charles A.
1987 Evaluation of Job Corps' Pilot Project to Include 22- to 24-Year-Olds. Arlington, VA: Executive Resource Associates, Inc.
- Ball, Joseph; Gerould, David M.; Burstein, P.
1980 The Quality of Work in the Youth Entitlement Demonstration. New York: Manpower Demonstration Research Corporation.
- Bandura, Albert
1977 "Self-Efficacy: Toward a Unifying Theory of Behavioral Change." Psychological Review 84:191-215.
- Bandura, Albert and Schunk, Dale H.
1981 "Cultivating Competence, Self-Efficacy, and Intrinsic Interest through Proximal Self-Motivation." Journal of Personality and Social Psychology, 41:586-598.
- Barnow, Burt S.
1989 "Government Training as a Means of Reducing Unemployment" in Bawden, Lee D. and Skidmore, Felicity (eds.) Rethinking Employment Policy. Washington, D.C.: Urban Institute Press.
- Barron, Linda, et al.
1989 "Enhancing Learning in At-Risk Students: Applications of Video Technology." Syracuse, NY: ERIC Clearinghouse on Information Resources.
- Barton, Paul
1990 From School to Work. Princeton, NJ: Educational Testing Service, Policy Information Center.
- Barton, Paul E. and Kirsch, Irwin S.
1990 Workplace Competencies: The Need to Improve Literacy and Employment Readiness. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Bassi, Laurie J.; Simms, Margaret C.; Burbridge, Lynn C.; Betsey, Charles L.
1984 Measuring the Effect of CETA on Youth and the Economically Disadvantaged. Washington, D.C.: Urban Institute Press.

Programs, Services and Techniques

- Baumrind, Diana
1978 "Parental Disciplinary Patterns and Social Competence in Children." Youth and Society, 9:239-276.
- Becker, B.E. and Hills, S.M.
1983 "The Long-Run Effects of Job Changes and Unemployment Among Male Teenagers." The Journal of Human Resources, 17:197-211.
- Belle, D.
1984 "Inequality and Mental Health: Low-Income and Minority Women" in Walker, L. (ed.) Women and Mental Health Policy. Newbury Park, CA: Sage Publications.
- Bempechat, Janine and Wells, Amy
1989 "Trends and Issues in Urban and Minority Education: Promoting the Success of At-Risk Students." New York: ERIC Clearinghouse on Urban Education.
- Bennett, Teresa and Morgan, Robert L.
1988 "Teaching Interaction Skills to Adolescent Mothers." Social Work in Education, 10:143-151.
- Benson, Peter L. and Mangen, David J.
1986 "Help-Seeking for Alcohol and Drug Problems: To Whom Do Adolescents Turn?" in Benson, P.L.; Mangen, D.J.; Williams, D.L. (eds.) Adults Who Influence Youth: Perspectives from 5th-12th Grade Students. Minneapolis, MN: Search Institute.
- Benson, Peter L. and Mangen, David J.
1986 "Sources of Support for Young Adolescents" in Benson, P.L.; Mangen, D.J.; Williams, D.L. (eds.) Adults Who Influence Youth: Perspectives from 5th-12th Grade Students. Minneapolis, MN: Search Institute.
- Benson, Peter L. and Mangen, David J.
1986 "Young Adolescents' Concerns about Sexuality: Sources of Social Support" in Benson, P.L.; Mangen, D.J.; Williams, D.L. (eds.) Adults Who Influence Youth: Perspectives from 5th-12th Grade Students. Minneapolis, MN: Search Institute.

- Benson, Peter L.; Mangen, David J.; Williams, Dorothy L.
1986 Adults Who Influence Youth: Perspectives from 5th-12th Grade Students.
Minneapolis, MN: Search Institute.
- Berkeley Planning Associates and Public/Private Ventures
1992 Youth in JTPA: The Final Report. Berkeley, CA: Berkeley Planning
Associates. Forthcoming.
- Berlin, Gordon
1984 "Towards a System of Youth Development: Replacing Work, Service and
Learning Deficits With Opportunities." Testimony before the U.S.
Congress, Committee on Education and Labor, Subcommittee on
Employment Opportunities, March 26.
- Berlin, Gordon and Sum, Andrew
1988 Toward A More Perfect Union: Basic Skills, Poor Families, and Our
Economic Future. New York: Ford Foundation.
- Berrueta-Clement, J.R.; Schweinhart, L.J.; Barnett, W.S.; Epstein, A.S.; Weikart, D.P.
1984 Changed Lives: The Effect of the Perry Pre-School Program on Youths
through Age 19. Ypsilanti, MI: High Scope Educational Research
Foundation.
- Berryman, Sue E.
1991 "Cognitive Science: Indicting Today's Schools and Designing Effective
Learning Environments." Preliminary paper, Columbia University,
Teachers College, Institute on Education and the Economy.
- Berryman, Sue
1987 "Can Schools Change to Save Kids?" Presentation at the fall meeting of
the Education Writers Association, Racine, WI.
- Betsey, Charles; Hollister, Robinson; Papageorgiou, Mary (eds.)
1985 Youth Employment and Training Programs: The YEDPA Years.
Washington, D.C.: National Academy Press.
- Beyth-Marom, Ruth; Fischhoff, Baruch; Jacobs, Marilyn; Furby, Lita
1989 Teaching Decision-Making to Adolescents: A Critical Review.
Washington, D.C.: Carnegie Council on Adolescent Development.

Programs, Services and Techniques

Biester, Thomas W.

1976 Evaluation of Cumulative Effects of RBS Career Education, 1974-1976.
Philadelphia: Research for Better Schools, Inc.

Billy, John O.G.; Landale, Nancy S.; Grady, William R.; Zimmerle, Denise M.

1988 "Effects of Sexual Activity on Adolescent Social and Psychological
Development." Social Psychology Quarterly, 51(3):190-212.

Bishop, John

1989 Vocational Education For At-Risk Youth: How Can It Be Made More
Effective? New York: Cornell University, Vocational Education Analysis
and Support Center.

Bishop, John

1988 "The Motivation Problem in American High Schools." Cornell Working
Paper No. 88-13. New York: Cornell University, Center for Advanced
Human Resources Studies.

Blackburn, McKinley L.; Bloom, David E.; Freeman, Richard B.

1990 "An Era of Falling Earnings and Rising Inequality?" The Brookings
Review, Winter: 38-43.

Blank, Helen

1986 "The Special Needs of Single-Parent and Low-Income Families" in
Gunzenhauser, N. and Caldwell, B.M. (eds.) Group Care for Young
Children. Key Biscayne, FL: Johnson and Johnson Baby Products.

Blank, Rebecca

1987 "The Effect of Medical Need on AFDC and Medicaid Participation."
Discussion Paper No. 831-87. Madison, WI: University of Wisconsin,
Institute for Research on Poverty.

Bloch, Deborah Perlmutter

1989 "Using Career Information With Dropouts and At-Risk Youth." The
Career Development Quarterly, 38:160-171.

Blyth, Dale A.; Hill, John P.; Thiel, Karen Smith

1982 "Early Adolescents' Significant Others: Grade and Gender Differences in
Perceived Relationships with Familial and Nonfamilial Adults and Young
People." Journal of Youth and Adolescence, 11(6):425-450.

- Borus, Michael E.
1984 Youth and the Labor Market: Analysis of the National Longitudinal Study. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Borus, Michael E.
1983 Tomorrow's Workers. Lexington, MA: Lexington Books.
- Both, Deborah R. and Garduque, Laurie (eds.)
1989 Social Policy for Children and Families: Creating an Agenda. Washington, D.C.: National Academy Press.
- Bottoms, James E.
1989 Closing the Gap Between Vocational and Secondary Education. Washington, D.C.: Policy Studies Associated.
- Bowers, Bruce C.
1990 Meeting the Needs of At-Risk Students. Alexandria, VA: National Association of Elementary School Principals.
- Boyer, Ernest L.
1983 High School: A Report on Secondary Education in America. New York: Harper and Row.
- Bradley, Robert H.; Caldwell, Bettye M.; Rock, Stephen L.
1988 "Home Environment and School Performance: A Ten-Year Follow-Up and Examination of Three Models of Environmental Action." Child Development, 59:852-867.
- Branch, Alvia
1984 Building Self-Sufficiency in Pregnant and Parenting Teens. New York: Manpower Demonstration Research Corporation.
- Brickman, Arthur; Dey, Sheryl; Cuthbert, Pam
1991 "A Supervised Independent-Living Orientation Program for Adolescents." Child Welfare, LXX(1):69-80.
- Brooks-Gunn, J. and Furstenberg, Frank F., Jr.
1986 "The Children of Adolescent Mothers: Physical, Academic, and Psychological Outcomes." Developmental Review, 6:224-251.

Programs, Services and Techniques

- Brooks-Gunn, J.; Petersen, Anne C.; Eichorn, Dorothy
1985 "The Study of Maturation Timing Effects in Adolescence." Journal of Youth and Adolescence, 14(3):149-161.
- Brounstein, Paul J.; Hatry, Harry; Altschuler, David M.; Blair, Louis H.
1990 Substance Use and Delinquency Among Inner-City Adolescent Males. Washington, D.C.: Urban Institute.
- Brown, Bradford B.
1990 "Peer Groups and Peer Cultures" in Feldman, S.S. and Elliott, G.R. (eds.) At the Threshold: The Developing Adolescent. Cambridge, MA: Harvard University Press.
- Bryk, Anthony S. and Thum, Yeow M.
1989 "The Effects of High School Organization on Dropping Out: An Exploratory Investigation." American Educational Research Journal, 26:353-383.
- Bucknam, Ronald B. and Brand, Sheara G.
1983 "EBCE Really Works: A Meta-Analysis on Experience-Based Career Education." Educational Leadership, 40(6):66-71.
- Bullock, Paul
1985 Youth Training and Employment: From New Deal to New Federalism. Los Angeles, CA: Institute of Industrial Relations.
- Burbridge, Lynn C.
1983 Employment and Training Programs for Youth: An Interpretation and Synthesis of Measured Outcomes. Washington, D.C.: Urban Institute.
- Burt, Martha R. and Cohen, Barbara E.
1989 America's Homeless: Numbers, Characteristics and Programs That Serve Them. Washington, D.C.: Urban Institute Press.
- Burt, Martha; Kimmich, Madeleine; Goldmuntz, Jane; Sonenstein, Freya
1984 Helping Pregnant Adolescents: Outcomes and Costs of Service Delivery. Final report on the Evaluation of Adolescent Pregnancy Programs. Washington, D.C.: Urban Institute.

- Butler, Erik P. and Mangum, Garth L.
1983 Applying the Lessons of Youth Programs: Introduction to a Monograph Series. Salt Lake City, UT: Olympus Publishing Company.
- Caldwell, Robert M. and Heidl, John J., Jr.
1984 "Computer-Based Basic Skills Instruction in a CETA Funded Project: A Case Study." The Urban Review, 16:76-86.
- Campbell, Robert; Connell, Janie; Boyle, Karen Kimmel; Bhaerman, Robert D.
1983 Enhancing Career Development: Recommendations for Action. A Review of Empirical Studies of the Effects of Career Guidance. Columbus, OH: Ohio State University, National Center for Research in Vocational Education.
- Capuzzi, Dave and Gross, Douglas (eds.)
1989 Youth at Risk: A Resource for Counselors, Teachers and Parents. Alexandria, VA: American Association for Counseling and Development.
- Carnegie Corporation
1989 Early Adolescence: A Critical Time for Interventions in Education and Health. New York: Carnegie Corporation.
- Carnegie Council on Adolescent Development
1989 Turning Points: Preparing American Youth for the 21st Century. New York: Carnegie Corporation.
- Carnegie Forum on Education and the Economy
1986 A Nation Prepared: Teachers for the 21st Century. The Report of the Task Force on Teaching as a Profession. New York: Carnegie Forum on Education and the Economy.
- Carnevale, Anthony P.
1991 America and the New Economy. San Francisco: Jossey-Bass.
- Carnevale, Anthony P.; Gainer, Leila J.; Meitzer, Ann S.
1988 Workplace Basics: The Skills Employers Want. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration and American Society for Training and Development.

Programs, Services and Techniques

Case, Anne C. and Katz, Laurence F.

1990 "The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youth." Preliminary paper, Harvard University.

Cave, George and Quint, Janet

1990 Career Beginnings Impact Evaluation: Findings From a Program for Disadvantaged High School Students. New York: Manpower Demonstration Research Corporation.

Center for Remediation Design

1988 Survey of Basic Skills Remediation Practices in JTPA Youth Programs. Washington, D.C.: National Commission for Employment Policy.

Charner, Ivan and Fraser, Bryner

1984 Fast Food Jobs. Washington, D.C.: National Institute for Work and Learning.

Cherlin, Andrew J.

1988 The Changing American Family and Public Policy. Washington, D.C.: Urban Institute Press.

Children's Defense Fund

1991 The State of America's Children 1991. Washington, D.C.: Children's Defense Fund.

Children's Defense Fund

1989 The Lessons of Multi-Site Initiatives Serving High-Risk Youth. Washington, D.C.: Children's Defense Fund.

Children's Defense Fund

1986 Programs That Help Prevent Adolescent Pregnancy and Build Youth Self-Sufficiency. Washington, D.C.: Children's Defense Fund.

Chubb, John and Moe, Terry

1990 Politics, Markets and America's Schools. Washington, D.C.: Brookings Institution.

Clune, William; White, Paula; Patterson, Janice

1989 The Implementation and Effects of High School Graduation Requirements: First Steps Toward Curricular Reform. New Brunswick, NJ: Center for Policy Research in Education.

- Cohen, Barbara
1991 Evaluation of the Teenage Parent Employability Demonstration Projects. Report to the U.S. Department of Labor. Washington, D.C.: Urban Institute.
- Cohen, Barbara
1990 Implementation of Six DOL-Funded Teen Parent Employability Demonstration Programs. Washington, D.C.: Urban Institute.
- Cohen, Barbara and van Houten, Therese
1991 Follow-Up of Youth Using Runaway and Homeless Youth Centers. Report to the U.S. Department of Health and Human Services. Washington, D.C.: Urban Institute.
- Coie, John and Krehbiel, Gina
1984 "Effects of Academic Tutoring on the Social Status of Low-Achieving, Socially Rejected Children." Child Development, 55:1465-1478.
- Coleman, James
1965 Adolescents and the Schools. New York: Basic Books.
- Collins, Robert A. and Hann, Maymie K.
1991 Summative Evaluation Report. School-Based Management/Shared Decision-Making Project, 1987-1988 through 1989-1990. Miami: Dade County Public Schools, Office of Educational Accountability.
- Colletta, Nancy Donohue and Lee, Diane
1983 "The Impact of Support for Black Adolescent Mothers." Journal of Family Issues, 4(1):127-143.
- Comer, James P.
1988 "Educating Poor Minority Children." Scientific American, 259:42-48.
- Commission on the Skills of the American Workforce
1990 America's Choice: High Skills or Low Wages. Rochester, NY: National Center on Education and the Economy.
- Commission on Workforce Quality and Labor Market Efficiency
1989 Public Hearings: Analysis of Comments. Washington, D.C.: Technical Assistance and Training Corporation and U.S. Department of Labor, Office of the Secretary.

Programs, Services and Techniques

- Cooper, Ann M.
1990 "Fallacy of a Single Model for School Achievement: Consideration for Ethnicity." Sociological Perspectives, 33(1):159-184.
- Corno, Lyn and Mandinach, Ellen B.
1983 "The Role of Cognitive Engagement in Classroom Learning and Motivation." Educational Psychologist, 18:88-109.
- Council of Chief State School Officers
1988 School Success for Students At Risk: Analyses and Recommendations of the Council of Chief State School Officers. Orlando, FL: Harcourt Brace Jovanovich.
- Coyle-Williams, Maureen
1989 What Works in Vocational Education for Students Who Are at Risk. Champaign, IL: TASPP.
- Crouter, Ann C.; MacDermid, Shelly M.; McHale, Susan M.; Perry-Jenkins, Maureen
1988 "Parental Monitoring and Perceptions of Children's School Performance and Conduct in Dual- and Single-Earner Families." Developmental Psychology, 26(40):649-657.
- Csikszentmihalyi, Mihaly and Nakamura, Jeanne
1989 "The Dynamics of Intrinsic Motivation: A Study of Adolescents" in Ames, Carole and Ames, Russell (eds.) Research on Motivation in Education, Vol. 3. New York: Academic Press.
- Cutright, P. and Jaffe, F.S.
1977 Impact of Family Planning Programs on Fertility: The U.S. Experience. New York: Praeger Press.
- D'Amico, Joseph
1982 "Each Effective School May Be One of a Kind." Educational Leadership, December: 61-62.
- D'Amico, Ronald
1984 "Does Employment During High School Impair Academic Progress?" Sociology of Education, 57:152-164.

- D'Amico, Ronald and Baker, Paula
1984 "The Nature and Consequences of High School Employment" in Baker, Paula; Carpenter, Susan; Crowley, Joan; D'Amico, Ronald; Kim, Choongsoo; Morgan, William; Wielgosz, John (eds.) Pathways to the Future: A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982 (Vol. IV). Columbus, OH: Ohio State University, Center for Human Resource Research.
- Darling-Hammond, Linda and Green, Joslyn
1990 "Teacher Quality and Equality" in Goodlad, John I. and Keating, Pamela (eds.) Access to Knowledge: An Agenda for Our Nation's Schools. New York: College Entrance Examination Board.
- David, Jane L.
1989 "Synthesis of Research on School-Based Management." Educational Leadership, May: 45-53.
- de Lone, Richard H.
1990 Replication: A Strategy to Improve the Delivery of Education and Job Training Programs. Philadelphia: Public/Private Ventures.
- de Lone, R.H. and Watson, B.
1988 "At-Risk Students and the Pittsburgh Public Schools." Case study prepared for the Education Commission of the States. Philadelphia: de Lone and Associates.
- Dertouzos, Michael; Lester, Richard; Solow, Robert
1989 Made In America: Regaining the Productive Edge. Cambridge, MA: MIT Press.
- Deschner, Jeanne P.
1980 "Critical Aspects of Institutional Programs for Youth." Children and Youth Services Review, 2(3):271-290.
- Diaz, William A.; Ball, Joseph; Wolfhagen, Carl
1982 Linking School and Work for Disadvantaged Youths. The YIEPP Demonstration: Final Implementation Report. New York: Manpower Demonstration Research Corporation.

Programs, Services and Techniques

- Diener, Carol I. and Dweck, Carol S.
1980 "An Analysis of Learned Helplessness: The Processing of Success." Journal of Personality and Social Psychology, 39:940-952.
- Diener, Carol I. and Dweck, Carol S.
1978 "An Analysis of Learned Helplessness: Continuous Changes in Performance, Strategy and Achievement Cognitions Following Failure." Journal of Personality and Social Psychology, 36:451-462.
- Dornbusch, Sanford M.; Ritter, Philip L.; Leiderman, P. Herbert; Roberts, Donald F.; Fraleigh, Michael J.
1987 "The Relation of Parenting Style to Adolescent School Performance." Child Development, 58:1244-1257.
- Dornbusch, Sanford M.; Carlsmith, J. Merrill; Bushwall, Steven J.; Ritter, Philip L.; Leiderman, Herbert; Hastorf, Albert H.; Gross, Ruth T.
1985 "Single Parents, Extended Households, and the Control of Adolescents." Child Development, 56:326-341.
- Dougherty, Van; de Lone, Richard; Odden, Allan
1989 Current Practice: Is It Enough? Denver, CO: Education Commission of the States.
- Dressler, William M.
1985 "Extended Family Relationships, Social Support, and Mental Health in a Southern Black Community." Journal of Health and Social Behavior, 26:39-48.
- Dryfoos, Joy
1990 Adolescents at Risk. New York: Oxford University Press.
- Duncan, Greg J. and Rodgers, Willard L.
1988 "Longitudinal Aspects of Childhood Poverty." Journal of Marriage and the Family, 50:1007-1021.
- Dunham, Richard M.; Kidwell, Jeannie S.; Portes, Pedro R.
1988 "Effects of Parent-Adolescent Interaction on the Continuity of Cognitive Development from Early Childhood to Early Adolescence." Journal of Early Adolescence, 8(3):297-310.

- Dweck, Carol S.
1975 "The Role of Expectations and Attributions in the Alleviation of Learned Helplessness." Journal of Personality and Social Psychology, 31:674-685.
- Dweck, Carol S. and Leggett, Ellen L.
1988 "A Social-Cognitive Approach to Motivation and Personality." Psychological Review, 95:256-273.
- Ekstrom, R.B.; Goetz, M.G.; Pollock, J.M.; Rieck, D.A.
1986 "Who Drops Out of School and Why? Findings from a National Study." Teachers College Record, 87(3):356-373.
- Elliott, Elaine S. and Dweck, Carol S.
1988 "Goals: An Approach to Motivation and Achievement." Journal of Personality and Social Psychology, 54:5-12.
- Ellwood, David
1982 "Teenage Unemployment: Permanent Scars or Temporary Blemishes" in Freeman, R.B. and Wise, D.A. (eds.) The Youth Labor Market Problem. Chicago: University of Chicago Press.
- Entwisle, Doris R.
1990 "Schools and the Adolescent" in Feldman, S.S. and Elliott, G.R. (eds.) At the Threshold: The Developing Adolescent. Cambridge, MA: Harvard University Press.
- Farkas, F.; Olsen, R.; Stromsdorfer, E.W.; Sharpe, L.C.; Skidmore, F.; Smith, D.A.; Merrill, S.
1984 Post-Program Impacts of the Youth Incentive Entitlement Pilot Projects. New York: Manpower Demonstration Research Corporation.
- Farkas, G.; Smith, D.A.; Stromsdorfer, E.W.; Trask, G.; Jerrett, R.
1982 Impacts from the Youth Incentive Entitlement Pilot Projects: Participation, Work, and Schooling Over the Full Program Period. New York: Manpower Demonstration Research Corporation.
- Farrar, E.; De Sanctis, J.; Cohen, D.K.
1979 Views from Below: Implementation Research in Education. Cambridge, MA: Huron Institute.

Programs, Services and Techniques

Feichtner, Sheila

1989 School-to-Work Transition for At-Risk Youth. Columbus, OH: ERIC Clearinghouse on Adult, Career and Vocational Education.

Felson, Richard B. and Zielinski, Mary A.

1989 "Children's Self-Esteem and Parental Support." Journal of Marriage and the Family, 51:727-735.

Ferguson, Ronald F.

1990 The Case for Community-Based Programs That Inform and Motivate Black Male Youth. Washington, D.C.: Urban Institute.

Fine, Gary and Sandstrom, Kent

1988 Knowing Children: Participant Observations with Minors. Newbury Park, CA: Sage.

Florentine, Robert and Grusky, Oscar

1990 "When Case Managers Manage the Seriously Mentally Ill: A Role-Contingency Approach." Social Service Review, March: 79-93.

Fletcher, J.D.

1990 Effectiveness and Cost of Interactive Videodisc Instruction in Defense Training and Education. Alexandria, VA: Institute for Defense Analysis.

Florida State Department of Education

1982 Reading, Writing, and Mathematics: Beginning Grades 3, 5, 8, and 11. Minimum Student Performance Standards for Florida Schools, 1985-1990. Tallahassee, FL: Florida State Department of Education.

Ford Foundation Project on Social Welfare and the American Future

1989 The Common Good: Social Welfare and the American Future. New York: Ford Foundation.

Fowler, Joseph W. and Peterson, Penelope L.

1981 "Increasing Reading Persistence and Altering Attributional Style of Learned Helpless Children." Journal of Educational Psychology, 73:251-260.

- Fraker, Thomas; Maynard, Rebecca; Nelson, Lyle
1984 An Assessment of Alternative Comparison Group Methodologies for Evaluating Employment and Training Programs. Princeton, NJ: Mathematica Policy Research.
- Freedman, Marc
1988 Partners in Growth: Elder Mentors and At-Risk Youth. Philadelphia: Public/Private Ventures.
- Frymier, J. and Gansneder, B.
1989 "The Phi Delta Kappan Study of Students At Risk." Phi Delta Kappan, October: 142-146.
- Gage, N.L.
1990 "Dealing with the Dropout Problem." Phi Delta Kappan, December: 280-285.
- Galbo, Joseph J.
1989 "Nonparental Significant Adults in Adolescents' Lives: Literature Overview, Theory and Issues." Paper presented at the biennial meeting of the Society for Research in Child Development, Kansas City.
- Galbo, Joseph J.
1986 "Adolescents' Perceptions of Significant Adults: Implications for the Family, the School and Youth-Serving Agencies." Children and Youth Services Review, 8:37-51.
- Galbo, Joseph J.
1983 "Adolescents' Perceptions of Significant Adults." Adolescence, XVIII(70):417-427.
- Galler, J.R.; Ramsey, F.; Solimano, G.; Lowell, W.; Mason, E.
1983 "The Influence of Early Malnutrition on Subsequent Behavioral Development: Degree of Impairment in Classroom Behavior." Journal of the American Academy of Child Psychiatry, 22(1):16-22.
- Galler, J.R.; Ramsey, F.; Solimano, G.; Lowell, W.; Mason E.
1983 "The Influence of Early Malnutrition on Subsequent Behavioral Development: Degree of Impairment in Intellectual Performance." Journal of the American Academy of Child Psychiatry, 22(1):8-15.

Programs, Services and Techniques

- Gamoran, Adam and Berends, Marek
1987 "The Effects of Stratification in Secondary Schools: Synthesis of Survey and Ethnographic Research." Review of Educational Research, 57:413-435.
- Garbarino, James and Sherman, Deborah
1980 "High-Risk Neighborhoods and High-Risk Families: The Human Ecology of Child Maltreatment." Child Development, 51:188-198.
- Garbarino, James; Burstop, Nancy; Crouter, Ann; Kops, Pamela
1978 Adults' Involvement in the Social Maps of Youth: The Transition from Elementary to Secondary School. Ithaca, NY: Cornell University.
- Gardner, Howard and Hatch, Thomas
1989 "Multiple Intelligences Go to School." Educational Researcher, 18:4-10.
- Gardner, Howard and Hatch, Thomas
1983 "The Impact of Computer-Assisted Instruction on Disadvantaged Young Adults in a Non-Traditional Educational Environment." Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Garnezy, Norman
1987 "Stress, Competence, and Development: Continuities in the Study of Schizophrenic Adults, Children Vulnerable to Psychopathology, and the Search for Stress-Resistant Children." American Journal Orthopsychiatry, 57(2):159-174.
- Garn, Stanley M.
1980 "Continuities and Change in Maturation Timing" in Brim, Orville G., Jr., and Kagan, Jerome (eds.) Constancy and Change in Human Development. Cambridge, MA: Harvard University Press.
- Gecas, Viktor
1981 "Contexts of Socialization" in Rosenberg, M. and Turner, R.H. (eds.) Social Psychology: Sociological Perspectives. New York: Basic Books.
- Gecas, Viktor
1979 "Contexts of Socialization" in Burr, Wesley R. (ed.) Contemporary Theories About the Family, Vol. 1. New York: Free Press.

- Gecas, Viktor
1979 "The Influence of Social Class on Socialization" in Burr, Wesley R. (ed.) Contemporary Theories About the Family, Vol. 1. New York: Free Press.
- Gecas, Viktor and Seff, Monica A.
1990 "Families and Adolescents: A Review of the 1980s." Journal of Marriage and the Family, 52:941-958.
- Gibboney, Richard A. and Langsdorf, Michael G.
1979 "The Career Intern Program: An Experiment in Career Education That Worked." Journal of Research and Development in Education, 12:103-105.
- Gilchrist, Lewayne D.; Schinke, Steven Paul; Maxwell, Josie Solseng
1987 "Life Skills Counseling for Preventing Problems in Adolescence." Progress in Behavioral Social Work, 73-84.
- Ginzberg, Eli
1980 "Overview: The \$64 Billion Innovation" in Ginzberg, Eli (ed.) Employing the Unemployed. New York: Basic Books.
- Glasscote, Raymond M.; Raybin, James B.; Reifler, Clifford B.; Kane, Andrew W.
1975 The Alternate Services: Their Role in Mental Health. A Field Study of Free Clinics, Runaway Houses, Counseling Centers and the Like. Washington, D.C.: American Psychiatric Association.
- Goldsmith, Robert G.
1987 Students Concerned About Tomorrow: A Dropout Intervention Program. Abingdon, VA: People, Incorporated.
- Goodlad, John I.
1984 A Place Called School: Prospects for the Future. New York: McGraw-Hill.
- Goodlad, John I. and Keating, Pamela (eds.)
1990 Access to Knowledge: An Agenda For Our Nation's Schools. New York: College Entrance Examination Board.
- Gordon, Anne and Burghardt, John
1990 The Minority Female Single Parent Demonstration: Short-Term Economic Impacts. New York: Rockefeller Foundation.

Programs, Services and Techniques

- Gottfredson, Denise C.
1985 "Youth Employment, Crime, and Schooling: A Longitudinal Study of a National Sample." Developmental Psychology, 21(3):419-432.
- Grasso, J.T. and Shea, J.R.
1979 Vocational Education and Training: Impact on Youth. Berkeley, CA: University of California, Carnegie Council on Policy Studies in Higher Education.
- Green, David L.
1990 "High School Student Employment in Social Context: Adolescents' Perceptions of the Role of Part-Time Work." Adolescence, XXV(98):425-434.
- Greenberger, E. and Steinberg, L.
1986 When Teenagers Work: The Psychological and Social Costs of Adolescent Employment. New York: Basic Books.
- Greenberger, Ellen and Steinberg, Laurence D.
1981 "The Workplace as a Context for the Socialization of Youth." Journal of Youth and Adolescence, 10(3):185-210.
- Greenwood, Peter W.
1986 Correctional Supervision of Juvenile Offenders: Where Do We Go From Here? Santa Monica, CA: Rand Corporation.
- Griffin, Edward; Hoffman, Lee; Hunter, Donald
1984 "Behavioral Outcomes of an Alternative Program for Junior High School Students at Risk of Dropping Out." Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Grubb, W. Norton
1989 "Dropouts, Spells of Time, and Credits in Postsecondary Education: Evidence from Longitudinal Surveys." Economics of Education Review, 8:49-67.
- Grubb, W. Norton
1989 "Preparing Youth for Work: The Dilemma of Education and Training Programs" in Stern, David and Eichorn, Dorothy (eds.) Social Structure, Labor Markets and Culture. Hillsdale, NJ: Lawrence Erlbaum Associates.

- Grubb, W. Norton; Brown, Cynthia; Kaufman, Phillip; Lederer, John
1990 Order Amidst Complexity: The Status of Coordination Among Vocational Education. Berkeley, CA: University of California, National Center for Research in Vocational Education.
- Gruber, David and Davidson, Frazierita
1986 State Employment Initiatives For Youth: An Assessment of the Demonstration. Philadelphia: Public/Private Ventures.
- Gurin, Gerald
1969 Inner-City Negro Youth in a Job Training Project: A Study of Factors Related to Attrition and Job Success. Washington, D.C.: U.S. Department of Labor.
- Guthrie, Larry F.
1989 What Schools Can Do for Students At Risk. San Francisco: Far West Laboratory for Educational Research and Development.
- Gutman, Marjorie A.
1987 Review of Innovative State Maternal Health Programs in the United States. Trenton, NJ: New Jersey Department of Health.
- Hahn, Andrew
1987 "Reaching Out to America's Dropouts: What to Do?" Phi Delta Kappan, 67:256-263.
- Hahn, Andrew and Lerman, Robert
1985 What Works in Youth Employment Policy. Washington, D.C.: National Planning Association.
- Halasz, Ida M.
1988 Trends and Issues in Career Education. Columbus, OH: ERIC Clearinghouse on Adult, Career and Vocational Education.
- Hall, V.C.; Howe, A.; Markel, S.; Lederman, N.
1986 "Behavior, Motivation, and Achievement in Desegregated Junior High School Science Classes." Journal of Educational Psychology, 78(2):108-115.
- Hamilton, Stephen F.
1990 Apprenticeship for Adulthood: Preparing Youth for the Future. New York: Free Press.

Programs, Services and Techniques

- Hamilton, Stephen F.
1986 "Excellence and the Transition from School to Work." Phi Delta Kappan, November: 239-242.
- Hamilton, Stephen F.
1986 "Raising Standards and Reducing Dropout Rates." Teachers College Record, 87:410-429.
- Hamilton, Stephen F. and Crouter, Ann C.
1980 "Work and Growth: A Review of Research on the Impact of Work Experience on Adolescent Development." Journal of Youth and Adolescence, 9(4):323-338.
- Hamilton, Stephen F. and Darling, Nancy
1989 "Mentors in Adolescents' Lives" in Horrelmann, Klauss and Engel, Uwe (eds.) The Social World of Adolescents: International Perspectives. Hawthorne, NY: Walter de Gruyter.
- Hamilton, Stephen F. and Hamilton, Mary Agnes
1990 Linking Up: Final Report on a Mentoring Program for Youth. Ithaca, NY: Cornell University, College of Human Ecology, Department of Human Development and Family Studies.
- Hamilton, S.F. and Hamilton, M.A.
1989 "Teaching and Learning on the Job: A Framework for Assessing Workplaces as Learning Environments." Paper prepared for the U.S. Department of Labor, Bureau of Apprenticeship and Training. Ithaca, NY: Cornell University, College of Human Ecology.
- Hamilton, Stephen F. and Powers, Jane Levine
1990 "Failed Expectations: Working-Class Girls' Transition From School to Work." Youth and Society, 22(2):241-262.
- Hammack, Floyd Morgan
1986 "Large School Systems' Dropout Reports: An Analysis of Definitions, Procedures and Findings." Teachers College Record, 87:324-341.
- Harris, Bruce and Harrison, Grant
1987 "An Evaluation of an Innovative Use of Computers and Volunteers in 7th Grade Math Instruction." Paper presented at the annual meeting of the California Educational Research Association, San Jose.

- Hart, Craig H.; Ladd, Gary W.; Burlison, Brant R.
1990 "Children's Expectations of the Outcomes of Social Strategies: Relations with Sociometric Status and Maternal Disciplinary Styles." Child Development, 61:127-137.
- Harter, Susan
1974 "Pleasure Derived by Children from Cognitive Challenge and Mastery." Child Development, 45:661-669.
- Hartford Public Schools
1984 Higher Horizons 100, 1983-84: An Evaluative Report. Hartford, CT: Hartford Public Schools.
- Heath, Shirley Brice and McLaughlin, Milbrey Wallin
1987 "A Child Resource Policy: Moving Beyond Dependence On School and Family." Phi Delta Kappan, April: 576-580.
- Heintz, Stephan
1986 Investing in Poor Families and Their Children: A Matter of Commitment. Washington, D.C.: American Public Welfare Association.
- Hernstein, Richard J.; Nickerson, Raymond; de Sanchez, Margarita; Swets, John A.
1986 "Teaching Thinking Skills." American Psychologist, 41(11):1279-1289.
- Hershey, Alan
1988 The Minority Female Single Parent Demonstration: Process/Analysis of Program Operations. Princeton, NJ: Mathematica Policy Research.
- Hetherington, E. Mavis; Stanley-Hagan, Margaret; Anderson, Edward R.
1989 "Marital Transitions: A Child's Perspective." American Psychologist, 44(2):303-312.
- Hier, Sally J. and Korboot, Paula J.
1990 "Social Adjustment and Symptomatology in Two Types of Homeless Adolescents: Runaways and Throwaways." Adolescence, XXV(100):761-771.
- Higgins, Catherine
1988 Youth Motivation: At-Risk Youth Talk to Program Planners. Philadelphia: Public/Private Ventures.

Programs, Services and Techniques

Hofferth, Sandra L.

1984 "Kin Networks, Race, and Family Structure." Journal of Marriage and the Family, November: 791-806.

Holzer, H.J.

1987 "Informal Job Search and Black Youth Unemployment." Paper presented at the Urban Poverty Seminar, University of Chicago, May.

Horn, John L. and Donaldson, Gary

1980 "Cognitive Development in Adulthood" in Brim, Orville G., Jr., and Kagan, Jerome (eds.) Constancy and Change in Human Development. Cambridge, MA: Harvard University Press.

Howe, Robert W. and Warren, Charles R.

1989 Teaching Critical Thinking Through Environmental Education. Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.

Hoyt, Kenneth B.

1990 "A Proposal for Making Transition from Schooling to Employment an Important Component of Educational Reform." Future Choices, 2:73-83.

Hoyt, Kenneth B. and High, Sidney C.

1982 "Career Education" in Mitzel, H. (ed.) Encyclopedia of Educational Research, Vol. 1. New York: Free Press.

Hunkins, Francis P.

1991 "Educating for Critical Awareness: A Curricular Challenge." Education and Urban Society, 23(3):302-312.

Isralowitz, Richard E. and Singer, Mark

1986 "Unemployment and Its Impact on Adolescent Work Values." Adolescence, XXI(81):145-158.

Iwanicki, Edward F. and Gable, Robert K.

1982 Hartford Project Concern Program. Final Evaluation Report, 1981-1982. Hartford, CT: Hartford Public Schools.

- Jargowsky, Paul A. and Bane, Mary Jo
1990 "Ghetto Poverty: Basic Questions" in Lynn, L.E. and McGeary, M.G. (eds.) Inner-City Poverty in the United States. Washington, D.C.: National Academy Press.
- Jencks, C. and Meyer, S.E.
1990 "The Social Consequences of Growing Up in a Poor Neighborhood" in Lynn, L.E. and McGeary, M.G. (eds.) Inner-City Poverty in the United States. Washington, D.C.: National Academy Press.
- Johnson, Carl I.
1986 New Jersey High School Proficiency Test: Identification of the Skills and Development of the Items. Trenton, NJ: New Jersey State Department of Education.
- Johnson, Lary
1973 Minneapolis Edison High School Employability Skills Program: An Evaluation, 1972-73. Minneapolis, MN: Minneapolis Public Schools, Department of Research and Evaluation.
- Johnston, William B. and Packer, Arnold H.
1987 Workforce 2000: Work and Workers for the Twenty-First Century. Indianapolis, IN: Hudson Institute.
- Kammerman, Sheila B. and Kahn, Alfred
1990 "Social Services for Children, Youth and Families in the United States." Children and Youth Services Review, 12(1-2).
- Kandel, D.B.
1986 "Processes of Peer Influences in Adolescence" in Silbereisen, R.K.; Eyferth, K.; Rudinger, G. (eds.) Development as Action in Context. Berlin: Springer-Verlag.
- Kang, Suk and Bishop, John
1986 "The Effect of Curriculum on Labor Market Success Immediately after High School." Journal of Industrial Teacher Education, Spring.
- Karniol, Rachel and Ross, Michael
1977 "The Effect of Performance-Relevant and Performance-Irrelevant Rewards on Children's Intrinsic Motivation." Child Development, 48:482-487.

Programs, Services and Techniques

- Keating, Daniel P. and Bobbitt, Bruce L.
1978 "Individual and Developmental Differences in Cognitive-Processing Components of Mental Ability." Child Development, 49:155-167.
- Keating, Daniel P. and Clark, Lawrence V.
1980 "Development of Physical and Social Reasoning in Adolescence." Developmental Psychology, 16(1):23-30.
- Kelly, Robert F.
1988 "The Urban Underclass and the Future of Work-Family Relations Research." Journal of Social Behavior and Personality, 3(4):45-54.
- Kim, Choongsoo
1984 "A Longitudinal Study of Reservation Wages, Duration of Job Search, and Subsequent Wages: An Empirical Econometric Analysis" in Baker, Paula; Carpenter, Susan; Crowley, Joan; D'Amico, Ronald; Kim, Choongsoo; Morgan, William; Wielgosz, John (eds.) Pathways to the Future: A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982 (Vol. IV). Columbus, OH: Ohio State University, Center for Human Resource Research.
- Kimmich, Madeleine H.
1985 America's Children: Who Cares? Washington, D.C.: Urban Institute.
- Kirsch, Irwin and Jungeblut, Ann
1986 Literacy: Profiles of America's Young Adults. Princeton, NJ: National Assessment of Educational Progress.
- Kirst, Michael W.
1991 "Toward a Focused Research Agenda" in Voices From the Field. Washington, D.C.: William T. Grant Foundation and Institute for Educational Leadership.
- Klerman, L.
1986 Health Care Component of the New Chance Demonstration. New York: Manpower Demonstration Research Corporation.
- Klerman, L. and Jeckel, J.F.
1983 School-Age Mothers: Problems, Programs, and Policy. Hamden, CT: Linnet Books.

- Knapp, Michael S. and Shields, Patrick M. (eds.)
1990 Better Schooling for the Children of Poverty: Alternatives to Conventional Wisdom. Washington, D.C.: U.S. Department of Education, Office of Planning, Budget and Evaluation.
- Knox, George
1980 "Educational Upgrading for Youthful Offenders." Children and Youth Services Review, 2(3):291-314.
- Kohn, M.
1977 Class and Conformity: A Study in Values. Chicago: University of Chicago Press.
- Kohn, M. and Schooler, C.
1978 "The Reciprocal Effects of the Substantive Complexity of Work and Intellectual Flexibility: A Longitudinal Assessment." American Journal of Sociology, 84(1):24-52.
- Kohn, M. and Schooler, C.
1973 "Occupational Experience and Psychological Functioning: An Assessment of Reciprocal Effects." American Sociological Review, 38:97-118.
- Koppel, Ross
1990 Pennsylvania Employers' Perceptions of Workers' Skills, Abilities, and Attitudes. Report to the Pennsylvania Occupational Information Coordinating Committee. Philadelphia: Social Research Corporation.
- Kruger, Louis J.
1990 "The Individualized Contingency Contract for Students: A Collaborative Approach" in Kruger, Louis J. (ed.) Promoting Success with At-Risk Students. Binghamton, NY: Haworth Press.
- Kutner, Mark A.; Furey, Sandra; Webb, Lenore; Gadsden, Vivian
1990 Adult Education: Programs and Services: A View From Nine States (draft). Washington, D.C.: Pelavin Associates.
- Kutscher, Ronald E.
1987 "Projections 2000: Overview and Implications of the Projections to 2000." Monthly Labor Review, September: 3-9.

Programs, Services and Techniques

Kyle, John E. (ed.)

1987 Children, Families, and Cities: Programs That Work at the Local Level.
Washington, D.C.: National League of Cities.

Lah, David and Wolf, Wendy

1985 The California Conservation Corps: A Report on Implementation.
Philadelphia: Public/Private Ventures.

Lazerson, M. and Grubb, W.N.

1975 "Rally Round the Workplace: Continuities and Fallacies in Career
Education." Harvard Education Review, 45:451-474.

Lazerson, M. and Grubb, W.N. (eds.)

1974 American Education and Vocationalism: A Documentary History, 1870-
1970. New York: Teachers College Press.

Lempers, Jacques D.; Clark-Lempers, Dania; Simons, Ronald L.

1989 "Economic Hardship, Parenting, and Distress in Adolescence." Child
Development, 60:25-39.

Lepper, Mark R. and Greene, David

1975 "Turning Play into Work: Effects of Adult Surveillance and Extrinsic
Rewards on Children's Intrinsic Motivation." Journal of Personality and
Social Psychology, 31:479-486.

Lepper, Mark R. and Hodell, Melinda

1989 "Intrinsic Motivation in the Classroom" in Ames, Carole and Ames, Russell
(eds.) Research on Motivation in Education, Vol. 3. New York: Academic
Press.

Lepper, Mark R.; Greene, David; Nisbett, Richard E.

1973 "Undermining Children's Intrinsic Interest with Extrinsic Reward: A Test
of the 'Overjustification' Hypothesis." Journal of Personality and Social
Psychology, 28:129-137.

Lerman, Robert and Pouncy, Hillard

1990 Why America Should Develop A Youth Apprenticeship System.
Washington, D.C.: Progressive Policy Institute.

- Levin, Henry M.
1988 Accelerated Schools for At-Risk Students. New Brunswick, NJ: Center for Policy Research in Education.
- Levin, Henry M.
1985 "The State Youth Initiatives Project" in The Educationally Disadvantaged: A National Crisis. Philadelphia: Public/Private Ventures.
- Levin, Henry M. and Rumberger, Russell W.
1987 "Educational Requirements for New Technologies: Visions, Possibilities and Current Realities." Educational Policy, 1:333-354.
- Levitan, Sar A. and Gallo, Frank
1988 A Second Chance: Training for Jobs. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Licht, Barbara G. and Dweck, Carol S.
1984 "Determinants of Academic Achievement: The Interaction of Children's Achievement Orientations with Skill Area." Developmental Psychology, 20:628-636.
- Lieberman, Janet E.
1979 Career Education for 9th Graders in a Community College Setting. New York: City University of New York Research Foundation.
- Linder, Brian and Taggart, Robert (eds.)
1980 A Review of Youth Employment Problems, Programs and Policies, Vol. 1. Washington, D.C.: U.S. Department of Labor.
- Loomis, Amy
1987 A Formula for School Dropout Prevention. Manual for the Teenage Pregnancy and Parenting Program (TAPP). San Francisco: California State Department of Education.
- Lorence, Jon and Mortimer, Jeylan T.
1985 "Job Involvement Through the Life Course: A Panel Study of Three Age Groups." American Sociological Review, 50:618-638.

Programs, Services and Techniques

- Love, Kevin G. and O'Hara, Kirk
1987 "Predicting Job Performance of Youth Trainees Under a Job Training Partnership Act (JTPA) Program: Criterion Validation of a Behavior-Based Measure of Work Maturity." Personnel Psychology, 40:323-340.
- Lucas, Ann F.
1990 "Using Psychological Models to Understand Student Motivation." New Directions for Teaching and Learning, 42:103-114.
- Lucas, Tamara; Henze, Rosemary; Donato, Ruben
1990 "Promoting the Success of Latino Language-Minority Students: An Exploratory Study of Six High Schools." Harvard Educational Review, 60:315-340.
- Lund, L. and McGuire, E.P.
1984 The Role of Business in Precollege Education. New York: Conference Board.
- Luthar, Suniya S. and Zigler, Edward
1991 "Vulnerability and Competence: A Review of Research on Resilience in Childhood." American Journal of Orthopsychiatry, 61(1):6-22.
- Lynch, Lisa M.
1989 "The Youth Labor Market in the Eighties: Determinants of Reemployment Probabilities for Young Men and Women." The Review of Economics and Statistics, January: 37-45.
- Maccoby, Eleanor E. and Martin, John A.
1983 "Socialization in the Context of the Family: Parent-Child Interaction" in Mussen, Paul H. (ed.) Handbook of Child Psychology, Vol. 4. New York: Wiley and Sons.
- Mace, F. Charles and Shea, Michael C.
1990 "Behavioral Self-Management with At-Risk Children" in Kruger, Louis J. (ed.) Promoting Success with At-Risk Students. Binghamton, NY: Haworth Press.
- Madden, Nancy A. and Slavin, Robert E.
1987 Effective Pull-Out Programs for Students at Risk. Baltimore: Center for Research on Elementary and Middle Schools.

- Maehr, Martin L.
1976 "Continuing Motivation: An Analysis of a Seldom Considered Educational Outcome." Review of Educational Research, 46:443-462.
- Mainquist, Sheri and Eichorn, Dorothy
1989 "Competence in Work Settings" in Stern, David and Eichorn, Dorothy (eds.) Adolescence and Work: Influences of Social Structure, Labor Markets, and Culture. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Mallar, Charles; Kerachsky, Stuart; Thorton, Craig; Long, David
1982 Evaluation of the Economic Impact of the Job Corps Program: Third Follow-Up Report. Princeton, NJ: Mathematica Policy Research.
- Malmberg, Steven Robert
1983 A New Beginning: A Case Study of the Establishment of a Rural Community-Based Alternative High School, Emphasizing Basic Academic Skills, with a High Native American Minority Student Population. Sault Ste. Marie, MI: Department of Compensatory Education Services.
- Malouf, David
1983 "Do Rewards Reduce Student Motivation?" School Psychology Review, 12:1-11.
- Mangum, Garth
1988 Youth Transition from Adolescence to the World of Work. Washington, D.C.: William T. Grant Foundation.
- Mangum, Garth
1982 "CETA As a 'Second Chance' System for Disadvantaged Youth" in Taylor, Robert; Rosen, Howard; Pratzner, Frank (eds.) Job Training for Youth. Columbus, OH: National Center for Research in Vocational Education.
- Mangum, Garth L.
1968 Reorienting Vocational Education. Ann Arbor, MI: Institute of Labor and Industrial Relations.
- Mangum, Garth and Walsh, John
1980 Employment and Training Programs for Youth: What Works Best for Whom. Washington, D.C.: U.S. Department of Labor.

Programs, Services and Techniques

- Mangum, S.; Mangum, G.; Hansen, G.
1990 "Assessing the Returns to Training" in New Developments in Worker Training: A Legacy for the 1990s. Madison, WI: University of Wisconsin, Industrial Relations Research Association.
- Mann, Dale
1986 "Dropout Prevention--Getting Serious About Programs That Work." NASSP Bulletin, April: 66-73.
- Mann, Leon; Harmoni, Ros; Power, Colin; Beswick, Gery; Ormond, Cheryl
1988 "Effectiveness of the GOFER Course in Decision-Making for High School Students." Journal of Behavioral Decision Making, 1:159-168.
- Manpower Demonstration Research Corporation
1991 "Synthesis of Literature Related to the Evaluation of the JOBS Program." New York: Manpower Demonstration Research Corporation.
- Manpower Demonstration Research Corporation
1990 Project Overview: New Chance Initiative for Adolescent Mothers and Their Children. New York: Manpower Demonstration Research Corporation.
- Manpower Demonstration Research Corporation
1980 Enhanced Work Projects--The Supported Work Approach for Youth. Youth Knowledge Development Report 7.3. Washington, D.C.: U.S. Government Printing Office.
- Manpower Demonstration Research Corporation
1980 Summary and Findings of the National Supported Work Demonstration. New York: Ballinger.
- Mardon, Steven
1991 "On Board, Not Behind Bars." Corrections Today, 53(1):32-38.
- Martinson, R. and Riccio, J.
1989 GAIN: Child Care in a Welfare Employment Initiative. New York: Manpower Demonstration Research Corporation.
- Masters, S. and Maynard, R.
1981 The Impact of Supported Work on Long-Term Recipients of AFDC Benefits. New York: Manpower Demonstration Research Corporation.

- Mathematica Policy Research
1980 Evaluation of the Economic Impact of the Job Corps Program: Second Follow-Up. Princeton, NJ: Mathematica Policy Research.
- Mathematica Policy Research
1978 Evaluation of the Economic Impact of the Job Corps Program: An Examination of Job Corps Participation. Princeton, NJ: Mathematica Policy Research.
- Mayer, Susan E. and Jencks, Christopher
1989 "Growing Up in Poor Neighborhoods: How Much Does It Matter?" Science, 243:1441-1445.
- Maynard, Rebecca
1980 The Impact of Supported Work on Young School Dropouts. New York: Manpower Demonstration Research Corporation.
- McClure, Larry and Buan, Carolyn (eds.)
1973 Essays on Career Education. Portland, OR: Northwest Regional Educational Laboratory.
- McDonnell, Lorraine M.
1989 "Restructuring American Schools: The Promises and the Pitfalls." NCEE Brief No. 6. New York: Columbia University, Teachers College, National Center on Education and Employment.
- McKey, R.H., et al.
1985 The Impact of Head Start on Children, Families and Communities. Washington, D.C.: U.S. Department of Education, Office of Education.
- McLoyd, Vonnie C.
1990 "The Impact of Economic Hardship on Black Families and Children: Psychological Distress, Parenting, and Socioemotional Development." Child Development, 61:311-346.
- McMullan, Bernard and Snyder, Phyllis
1987 "A Profile of Philadelphia High School Academies, Philadelphia, Pennsylvania" in Allies in Education: Schools and Business Working Together for At-Risk Youth (Vol. 2). Philadelphia: Public/Private Ventures.

Programs, Services and Techniques

- McMullan, Bernard and Snyder, Phyllis
1987 Allies in Education: Schools and Business Working Together for At-Risk Youth (Vol. 1). Philadelphia: Public/Private Ventures.
- McPartland, James M. and Slavin, Robert E.
1990 Increasing Achievement of At-Risk Students at Each Grade Level. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Means, Barbara and Knapp, Michael
1991 Teaching Advanced Skills to Educationally Disadvantaged Students. Washington, D.C.: U.S. Department of Education, Office of Planning, Budget and Evaluation.
- Mei, Dolores M.
1990 Institute for Career Exploration, the Basic Skills Academy/Comprehensive Competency Program, and the Career Employment Center Summer School Program. New York: New York City Board of Education.
- Mei, Lori
1990 Chapter 1 Pupils with Compensatory Educational Needs: 1989-90 Peer Tutoring Program End-of-Year Report. New York: New York City Board of Education.
- Mertens, D.; McElwain, D.; Garcia, G.; Whitmore, M.
1985 The Effects of Participating in Vocational Education: Summary of Studies Conducted Since 1968. Columbus, OH: Ohio State University, National Center for Research in Vocational Education.
- Meyer, Katrina A.
1987 "The Work Commitment of Adolescents: Progressive Attachment to the Work Force." Career Development Quarterly, December: 141-147.
- Meyer Robert
1981 "An Economic Analysis of High School Education" in The Federal Role in Vocational Education. Washington, D.C.: National Commission for Employment Policy.

- Meyer, R.H. and Wise, D.A.
1982 "High School Preparation and Early Labor Force Experience" in Freeman, R.B. and Wise, D.A. (eds.) The Youth Labor Market Problem: Its Nature, Causes and Consequences. Chicago: University of Chicago Press.
- Mihaly, Lisa Klee
1991 Homeless Families: Failed Policies and Young Victims. Washington, D.C.: Children's Defense Fund.
- Miller, Mark J.; Springer, Thomas P.; Wells, Don
1988 "Which Occupational Environments Do Black Youth Prefer? Extending Holland's Typology." The School Counselor, 36:103-107.
- Milliner, Julita and Higgins, Catherine
1989 The Bridge Demonstration: An In-School Program For At-Risk Youth. Philadelphia: Public/Private Ventures.
- Milton S. Eisenhower Foundation
1990 Youth Investment and Community Reconstruction: Street Lessons on Drugs and Crime for the Nineties. Washington, D.C.: Milton S. Eisenhower Foundation.
- Mincy, Ronald and Wiener, Susan
1990 A Mentor, Peer Group, Incentive Model for Helping Underclass Youth. Washington, D.C.: Urban Institute.
- Mirengoff, William and Rindler, Lester
1978 CETA: Manpower Programs Under Local Control. Washington, D.C.: National Academy of Sciences.
- Mirengoff, William; Rindler, Lester; Greenspan, Harry; Harris, Charles
1982 CETA: Accomplishments, Problems, Solutions. A report by the Bureau of Social Science Research. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Mirman, Jill; Swartz, Robert; Barrell, John
1988 "Strategies to Help Teachers Empower At-Risk Students" in Presseisen, Barbara Z. (ed.) At-Risk Students and Thinking: Perspectives from Research. Washington, D.C.: National Education Association.

Programs, Services and Techniques

- Mishel, Lawrence and Teixeira, Ruy
1991 The Myth of the Coming Labor Shortage: Jobs, Skills and Incomes of America's Workforce 2000. Washington, D.C.: Economic Policy Institute.
- Mitchell, John J.; Chadwin, Mark L.; Nightingale, Demetra Smith
1980 Implementing Welfare-Employment Programs: An Institutional Analysis of the Work Incentive (WIN) Program. Washington, D.C.: U.S. Department of Labor.
- Mitchell, Vernay; Russell, Ellen; Benson, Charles
1988 Exemplary Urban Career-Oriented High Schools. Berkeley, CA: University of California, National Center for Research in Vocational Education.
- Moffitt, R. and Wolfe, B.
1989 The Effects of Medicaid on Welfare Dependency and Work. Washington, D.C.: U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation.
- Moore, James
1991 "Kansas Youth Center Treats Sexually Abused Female Offenders." Corrections Today, 53(1):40-46.
- Moore, K. and Caldwell, S.
1977 "The Effect of Government Policies on Out-of-Wedlock Sex and Pregnancy." Family Planning Perspectives, 9:164-169.
- Moore, Kristin A.; Hofferth, Sandra; Caldwell, Steven B.; Waite, Linda J.
1979 Teenage Motherhood: Social and Economic Consequences. Washington, D.C.: Urban Institute.
- Morgan, William R.
1984 "The High School Dropout in an Overeducated Society" in Baker, Paula; Carpenter, Susan; Crowley, Joan; D'Amico, Ronald; Kim, Choongsoo; Morgan, William; Wielgosz, John (eds.) Pathways to the Future. A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982 (Vol. IV). Columbus, OH: Center for Human Resources Research.

- Morrow, George
1986 "Standardizing Practice in the Analysis of School Dropouts." Teachers College Record, 87:342-355.
- Mortimer, Jeylan T.
1990 "Introduction." Youth and Society, 22(2):131-136.
- Mortimer, J.T. and Finch, M.D.
1986 "The Effects of Part-Time Work on Adolescent Self-Concept and Achievement" in Borman, K.M. and Reisman, J. (eds.) Becoming a Worker. Norwood, NJ: Ablex Publishing Corporation.
- Mortimer, J.T. and Lorence, J.
1981 "Work Experience and Work Involvement." Sociology of Work and Occupations, 8:297-326.
- Mortimer, J.T. and Lorence, J.
1979 "Work Experience and Occupational Value Socialization: A Longitudinal Study." American Journal of Sociology, 84:1361-1385.
- Mortimer, Jeylan T.; Finch, Michael D.; Owens, Timothy J.; Shanahan, Michael
1990 "Gender and Work in Adolescence." Youth and Society, 22(2):201-224.
- Mullis, Ina V.S.; Owen, Eugene H.; Phillips, Gary W.
1990 America's Challenge: Accelerating Academic Achievement. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Nathan, Richard P.; Cook, Robert F.; Rawlins, V. Lane
1981 Public Service Employment: A Field Evaluation. Washington, D.C.: Brookings Institution.
- National Alliance of Business
1990 Lessons Learned: Job Skills Education Program Final Report. Washington, D.C.: National Alliance of Business.
- National Alliance of Business
1989 The Compact Project: School Business Partnerships for Improving Education. Washington, D.C.: National Alliance of Business.

Programs, Services and Techniques

- National Commission for Employment Policy
1988 Another Ounce of Prevention: Education and Employment Interventions for 9 to 15 Year Olds. Washington, D.C.: National Commission for Employment Policy.
- National Commission for Employment Policy
1987 The Job Training Partnership Act. Washington, D.C.: National Commission for Employment Policy.
- National Commission for Employment Policy
1979 Expanding Employment Opportunities for Disadvantaged Youth. Washington, D.C.: National Commission for Employment Policy.
- National Commission for Manpower Policy
1976 From School to Work: Improving the Transition. Washington, D.C.: National Commission for Manpower Policy.
- National Commission on Excellence in Education
1983 A Nation at Risk. Washington, D.C.: U.S. Department of Education.
- National Governors' Association
1991 Quality Assessment in the JOBS Program. Washington, D.C.: National Governors' Association.
- National Governors' Association
1990 Educating America: State Strategies for Achieving the National Education Goals. Washington, D.C.: National Governors' Association.
- National Institute of Education
1981 The Vocational Education Study: The Final Report. Washington, D.C.: National Institute of Education.
- National Science Board, Commission on Precollege Education in Mathematics, Science and Technology
1983 Today's Problems, Tomorrow's Crisis. Washington, D.C.: National Science Foundation.
- Natriello, G.; Pallas, A.; Alexander, J.
1989 "On the Right Track? Curriculum and Academic Achievement." Sociology of Education, 62:109-118.

- New Jersey Department of Health
1987 Healthstart Program Description. Trenton, NJ: New Jersey Department of Health.
- New York City Board of Education
1989 The Cohort Report: Four-Year Results for the Class of 1988 and Follow-Ups of the Classes of 1986 and 1987. Brooklyn, NY: New York City Board of Education, Office of Research, Evaluation and Assessment.
- Nicholls, John G.
1984 "Achievement Motivation: Conceptions of Ability, Subjective Experience, Task Choice, and Performance." Psychological Review, 91:328-346.
- Nickerson, Raymond S.
1988 "On Improving Thinking Through Instruction" in Rothkopf, Ernst Z. (ed.) Review of Research in Education, Vol. 15. Washington, D.C.: American Educational Research Association.
- Nightingale, Demetra and Burbridge, Lynn
1987 The Status of State Work-Welfare Programs in 1986: Implications for Welfare Reform. Washington, D.C.: Urban Institute.
- Nightingale, Demetra S.; Cammisa, A.; Cohen, B.; Holcomb, P.; O'Brien, C.; Seefeldt, K.; Yudd, R.
1991 Services to Clients in the Washington State Family Independence Program (FIP): Second Process Analysis from the Evaluation of the Family Independence Program. Washington, D.C.: Urban Institute.
- Nightingale, Demetra S.; Burbridge, Lynn C.; Bawden, D. Lee; Jeffries, Neal O.
1990 Evaluation of the Massachusetts Employment and Training (ET) Choices Program. Washington, D.C.: Urban Institute.
- Nightingale, Demetra S.; Holcomb, Pamela A.; O'Brien, Carolyn Taylor
1990 The General Structure and Operation of the Washington State Family Independence Program (FIP). Washington, D.C.: Urban Institute.
- Nightingale, Demetra Smith; Yudd, Regina; Anderson, Stacey; Barnow, Burt
1990 The Learning Disabled in Employment and Training Programs. Washington, D.C.: Urban Institute.

Programs, Services and Techniques

- Nisbett, Richard E.; Fong, Geoffrey T.; Lehman, Darrin R.; Cheng, Patricia W.
1987 "Teaching Reasoning." Science, 238:625-631.
- Northrup, Herbert R.; Perry, Charles R.; Anderson, Bernard E.; Rowan, Richard L.
1976 The Impact of Government Manpower Programs: In General, and on Minorities and Women. Philadelphia: University of Pennsylvania, Wharton School.
- Nothdurft, William E.
1991 Youth Apprenticeship, American Style: A Strategy for Expanding School and Career Opportunities. A Report of a Conference. Somerville, MA: Consortium on Youth Apprenticeship.
- Nothdurft, William E.
1989 SchoolWorks: Reinventing Public Schools to Create the Workforce of the Future. Washington, D.C.: St. Mary's Press.
- Noyelle, Thierry
1989 Skills, Skill Formation, Productivity and Competitiveness: A Cross-National Comparison of Banks and Insurance Carriers in Five Advanced Economies. New York: Columbia University.
- Oakes, Jeannie
1985 Keeping Track: How Schools Structure Inequality. New Haven: Yale University Press.
- Ogbu, John
1986 "Stockton, California, Revisited: Joining The Labor Force" in Borman, Kathryn and Reisman, Jane (eds.) Becoming A Worker. Norwood, NJ: Ablex.
- Ogbu, John
1985 "A Cultural Ecology of Competence Among Inner-City Blacks" in Spencer, M.; Brookins, G.; Allen, W. (eds.) Beginnings: The Social and Affective Development of Black Children. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ogbu, John
1978 Minority Education and Caste: The American System in Cross-Cultural Perspective. New York: Academic Press.

- Organization for Economic Cooperation and Development
1980 Youth Unemployment: The Causes and Consequences. Paris:
Organization for Economic Cooperation and Development.
- Orland, Martin E.
1990 "Demographics of Disadvantage: Intensity of Childhood Poverty and Its
Relationship to Educational Achievement" in Goodlad, John and Keating,
Pamela (eds.) Access to Knowledge: An Agenda for Our Nation's Schools.
New York: College Entrance Examination Board.
- Orr, Terry; Cesvette, Carl; Alex, Wilkie
1990 Planning and Evaluation Study of the New York Working Program: The
First Two Years of Six Pilot Schools. New York: Academy for
Educational Development.
- Ortiz, Elizabeth Thompson and Bassoff, Betty Z.
1987 "Adolescent Welfare Mothers: Lost Optimism and Lowered Expectations."
The Journal of Contemporary Social Work, September: 400-405.
- Osterman, Paul
1989 "The Job Market for Adolescents" in Stern, David and Eichorn, Dorothy
(eds.) Social Structure, Labor Markets and Culture. Hillsdale, NJ:
Lawrence Erlbaum Associates.
- Osterman, Paul
1980 Getting Started: The Youth Labor Market. Cambridge, MA: MIT Press.
- Owens, T.R.
1982 "Experience-Based Career Education: Summary and Implications of
Research and Evaluation Findings." Child and Youth Services Journal,
Vol. 4.
- Oz, Sheri and Fine, Marshall
1988 "A Comparison of Childhood Backgrounds of Teenage Mothers and Their
Non-Mother Peers: A New Formulation." Journal of Adolescence, 11:251-
261.
- Parnell, Dale
1985 The Neglected Majority. Washington, D.C.: Community College Press.

Programs, Services and Techniques

- Parsons, Jacquelynne Eccles; Kaczala, Caroline M.; Meece, Judith L.
1982 "Socialization of Achievement Attitudes and Beliefs: Classroom Influences." Child Development, 53:322-339.
- Patterson, Charlotte J.; Kupersmith, Janis B.; Vaden, Nancy A.
1990 "Income Level, Gender, Ethnicity, and Household Composition as Predictors of Children's School-Based Competence." Child Development, 61:485-494.
- Pearse, Beverly and Chabassol, David J.
1976 "Relationship of Adolescent Problems to Sex, Socioeconomic Status, School Achievement, Intelligence Quotient, and Grade." Psychological Reports, 39:1137-1138.
- Pennsylvania State Board of Education
1991 Draft Regulations of the State Board of Education of Pennsylvania. Harrisburg, PA: Pennsylvania State Board of Education.
- Peterson, Gary W. and Rollins, Boyd C.
1987 "Parent-Child Socialization" in Sussman, M.B. and Steinmetz, S.K. (eds.) Handbook of Marriage and the Family. New York: Plenum Press.
- Peterson, Gary W.; Stivers, Mary Elizabeth; Peters, David F.
1986 "Family Versus Nonfamily Significant Others for the Career Decisions of Low-Income Youth." Family Relations, 35:417-424.
- Pharis, Mary and Levin, Victoria
1991 "A Person to Talk to Who Really Cared: High-Risk Mothers' Evaluations of Services in an Intensive Intervention Research Program." Child Welfare, LXX(3): 307-320.
- Piersel, Wayne C. and Lee, Steven W.
1990 "Individualized Education and Applied Behavior Analysis" in Kruger, Louis J. (ed.) Promoting Success with At-Risk Students. Binghamton, NY: Haworth Press.
- Polit, Denise F.
1989 "Effects of a Comprehensive Program for Teenage Parents: Five Years After Project Redirection." Family Planning Perspectives, 21(4):164-187.

- Polit, Denise
1986 Building Self-Sufficiency: A Guide to Vocational and Employment Services for Teenage Parents. Saratoga Springs, NY: Humanalysis, Inc.
- Polit, Denise
1986 Comprehensive Programs for Pregnant and Parenting Teens. New York: Manpower Demonstration Research Corporation.
- Polit, Denise and O'Hara, Joseph J.
1989 "Support Services" in Cottingham, Phoebe H. and Ellwood, David T. (eds.) Welfare Policy for the 1990s. Cambridge, MA: Harvard University Press.
- Polit, D. and White, C.M.
1987 Parenting Among Low-Income Teenage Mothers. Saratoga Springs, NY: Humanalysis, Inc.
- Polit, Denise; Kahn, Janet; Stevens, David
1985 Final Impacts in Project Redirection. New York: Manpower Demonstration Research Corporation.
- Polit, D.F.; Kahn, J.R., Murray, C.A.; Smith, K.W.
1982 Needs and Characteristics of Pregnant and Parenting Teens. New York: Manpower Demonstration Research Corporation.
- Porter, Kathryn
1990 Making JOBS Work: What the Research Says About Effective Employment Programs for AFDC Recipients. Washington, D.C.: Center for Budget and Policy Priorities.
- Portes, Pedro R.; Dunham, Richard M.; Williams, Shavon
1986 "Assessing Child-Rearing Style in Ecological Settings: Its Relation to Culture, Social Class, Early Age Intervention and Scholastic Achievement." Adolescence, XXI(83):723-735.
- Powell, Arthur; Farrar, Eleanor; Cohen, David K.
1985 The Shopping Mall High School: Winners and Losers in the Educational Market Place. Boston: Houghton Mifflin.

Programs, Services and Techniques

- Presser, H. and Baldwin, W.
1980 "Child Care as a Constraint on Employment: Prevalence, Correlates, and Bearing on the Work and Fertility Nexus." American Journal of Sociology, 85(5):1202-13.
- Price, Richard H.; Cowen, Emory L.; Lorion, Raymond P.; Ramos-McKay, Julia
1989 "The Search for Effective Prevention Programs: What We Learned Along the Way." American Journal of Orthopsychiatry, 59(1):48-58.
- Price, Virginia Ann
1990 Characteristics and Needs of Street Youth. Boston: Bridge, Inc., Bridge Over Troubled Waters.
- Pritz, Sandra
1989 The Role of Vocational Education in the Development of Students' Academic Skills. Columbus, OH: ERIC Clearinghouse.
- Public/Private Ventures
1991 "Curriculum Development: When, What and Why We Do It." Public/Private Ventures News, Fall.
- Public/Private Ventures
1990 "The City Volunteer Corps: An Interim Report." New York: City Volunteer Corps.
- Public/Private Ventures
1990 The Practitioner's View: New Challenges in Serving High-Risk Youth. Philadelphia: Public/Private Ventures.
- Public/Private Ventures
1988 A Practitioner's Guide: Strategies, Programs, and Resources for Youth Employability Development. Philadelphia: Public/Private Ventures.
- Quint, J. and Riccio, J.
1985 The Challenge of Serving Pregnant and Parenting Teens: Lessons from Project Redirection. New York: Manpower Demonstration Research Corporation.

Raizen, Senta A.

- 1989 Reforming Education For Work: A Cognitive Science Perspective. Berkeley, CA: University of California, National Center for Research in Vocational Education.

Reamer, Frederic G.

- 1990 "Review of Juvenile Justice in Double Jeopardy: The Distance Community and Vengeful Retribution--Justine Wise Polier." Social Service Review, December: 664-665.

Reamer, Frederic G.

- 1990 "Review of Juvenile Correctional Reform: Two Decades of Policy and Procedural Change--Edmund F. McGarrell." Social Service Review, March: 164-166.

Regional Institute of Social Welfare Research

- 1977 The Case Management Model: Concept and Process Definition. Athens, GA: Regional Institute of Social Welfare Research.

Reisner, E. and Balasubramanian, M.

- 1989 School-To-Work Transition Services For Disadvantaged Youth Enrolled in Vocational Education. Washington, D.C.: U.S. Department of Education, National Assessment of Vocational Education.

Research and Policy Committee of the Committee for Economic Development

- 1991 The Unfinished Agenda: A New Vision for Child Development and Education. New York: Committee for Economic Development.

Resnick, L.B.

- 1987 "Learning In School and Out." Educational Researcher, 16:13-20.

Richardson, Philip; Burghardt, John; Rosenthal, Arlen; Irion, Albert; Elliott, John

- 1985 Job Corps Process Analysis Final Report. Silver Spring, MD: Macrosystems.

Risko, Victoria; Kinzer, Charles; Vie, Nancy; Rowe, Deborah

- 1990 "Effects of Videodisc Macrocontexts on Comprehension and Composition of Causally Coherent Stories." Paper presented at the annual meeting of the American Educational Research Association, Boston.

Programs, Services and Techniques

- Robbins, Cynthia; Kaplan, Howard B.; Martin, Steven S.
1985 "Antecedents of Pregnancy Among Unmarried Adolescents." Journal of Marriage and the Family, 47:567-583.
- Rosenbaum, James E.
1976 Making Inequality: The Hidden Curriculum of High School Tracking. New York: Wiley.
- Ruggiero, M.
1984 "Work as an Impetus to Delinquency: An Examination of Theoretical and Empirical Connections." Ph.D. dissertation, University of California.
- Ruggiero, M.; Greenberger, E.; Steinberg, L.
1982 "Occupational Deviance Among First-Time Workers." Youth and Society, 13:423-448.
- Rumberger, Russell W.
1987 "High School Dropouts: A Review of Issues and Evidence." Review of Educational Research, 57:101-121.
- Rumberger, Russell W.
1981 Overeducation in the U.S. Labor Market. New York: Praeger.
- Rumberger, R.W. and Daymont, T.N.
1984 "The Economic Value of Academic and Vocational Training Acquired in High School" in Borus, M.E. (ed.) Youth and the Labor Market: Analyses of the National Longitudinal Survey. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Rutter, Michael
1984 "Family and School Influences on Behavioral Development." Journal of Child Psychology and Psychiatry, 26(3):349-368.
- Saltiel, John
1986 "Segmental Influence: The Case of Educational and Occupational Significant Others." Adolescence, XXI(83):615-622.
- Samson, Gordon; Niemiec, Richard; Weinstein, Thomas; Walberg, Herbert
1986 "Effects of Computer-Based Instruction on Secondary School Achievement: A Quantitative Synthesis." AEDS Journal, 19(4):312-324.

- Samuelson, Robert J.
1991 "Gibberish on Job Skills." Washington Post, July 11.
- Sawhill, Isabel V.
1989 "Rethinking Employment Policy" in Bowden, Lee D. and Skidmore, Felicity (eds.) Rethinking Employment Policy. Washington, D.C.: Urban Institute Press.
- Sawhill, Isabel and Ricketts, Erol
1986 Defining and Measuring the Underclass. Washington, D.C.: Urban Institute.
- Schill, William; McCartin, Rosemarie; Meyer, Katrina
1985 "Youth Employment: Its Relationship to Academic and Family Variables." Journal of Vocational Behavior, 26:155-163.
- Schunk, Dale H.
1989 "Self-Efficacy and Cognitive Skill Learning" in Ames, Carole and Ames, Russell (eds.) Research on Motivation in Education, Vol. 3. New York: Academic Press.
- Schunk, Dale H.
1981 "Modeling and Attributional Effects on Children's Achievement: A Self-Efficacy Analysis." Journal of Educational Psychology, 73:93-105.
- Scott-Jones, Diane and Turner, Sherry L.
1990 "The Impact of Adolescent Childbearing on Educational Attainment and Income of Black Females." Youth and Society, 22(1):35-53.
- Scribner, Silvia and Stephens, Joy
1989 "Experimental Studies on the Relationship of School Math and Work Math." New York: Columbia University, Teachers College, National Center on Education and Employment.
- 7001 Training and Employment Institute
1988 Believing Once Again: Solutions Addressing the Plight of Challenged Youth. Washington, D.C.: 70001 Training and Employment Institute.
- Shapiro, Edna and Biber, Barbara
1972 "The Education of Young Children: A Developmental-Interaction Approach." Teachers College Record, 74(1):55-79.

Programs, Services and Techniques

- Shapiro, Jonathan; Gaston, Susan; Hebert, Janet; Guillot, Dewey
1986 LSYOU (Louisiana State Youth Opportunities Unlimited): Project Evaluation. Baton Rouge, LA: Louisiana State University, College of Education.
- Shrum, Wesley and Cheek, Neil H.
1987 "Social Structure During the School Years: Onset of the Degrouping Process." American Sociological Review, 52:218-223.
- Sims, Edith R.
1988 "Successful Programs, Policies, and Practices Employed at Corliss High School." Journal of Negro Education, 57:394-407.
- Simutis, Zita M.
1988 ARI Research in Basic Skills Education: An Overview. Alexandria, VA: Army Research Institute for the Behavioral and Social Sciences.
- Sipe, Cynthia L.; Grossman, Jean Baldwin; Milliner, Julita A.
1988 Summer Training and Education Program (STEP): Report on the 1987 Experience. Philadelphia: Public/Private Ventures.
- Sizer, T.R.
1984 Horace's Compromise: The Dilemma of the American High School. Boston: Houghton Mifflin.
- Slavin, Robert
1989 School and Classroom Organization. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Slavin, Robert E.
1984 "Students Motivating Students to Excel: Cooperative Incentives, Cooperative Tasks, and Student Achievement." The Elementary School Journal, 85:53-63.
- Slavin, Robert E.
1983 "When Does Cooperative Learning Increase Student Achievement?" Psychological Bulletin, 94:429-445.
- Slavin, Robert E. and Madden, Nancy A.
1989 "What Works for Students at Risk: A Research Synthesis." Educational Leadership, 47:4-13.

- Slavin, Robert E. and Madden, Nancy A.
1987 Effective Classroom Programs for Students at Risk. Baltimore, MD: Center for Research on Elementary and Middle Schools.
- Smith, Steven
1991 "Detention Is an Invaluable Part of the System, But It's Not the Solution to All Youths' Problems." Corrections Today, 53(1):56-60.
- Smith, Thomas; Walker, Gary; Baker, Rachel
1987 Youth and the Workplace: Second-Chance Programs and the Hard-to-Employ. Philadelphia: Public/Private Ventures.
- Sonenstein, Freya and Wolf, Douglas
1988 "Caring for the Children of Welfare Mothers." Paper presented at the annual meeting of the Population Association of America.
- Sonenstein, Freya, et al.
1991 Prevention Programs for Children. Report to the United Way of America. Washington, D.C.: Urban Institute.
- Sonenstein, Freya; Ku, Leighton; Adam, E. Kathleen; Orloff, Tracey
1990 Potential Research Strategies for Evaluating the Effects of Transitional Medicaid and Child Care Benefits. Lexington, MA: Systemetrics/McGraw-Hill.
- South Carolina State Department of Education
1989 South Carolina Exit Examination: Questions and Answers. A Basic Skills Assessment Publication. Columbia, SC: South Carolina State Department of Education, Office of Research.
- Spring, William J.
1988 "Building a Network of Opportunity for the Majority of Our Young People" in School Success for Students At Risk: Analyses and Recommendations of the Council of Chief State School Officers. Orlando, FL: Harcourt Brace Jovanovich.
- Steinberg, Laurence and Dornbusch, Sanford M.
1991 "Negative Correlates of Part-Time Employment During Adolescence: Replication and Elaboration." Developmental Psychology, 27(2):304-313.

Programs, Services and Techniques

- Steinberg, Laurence; Elmen, Julie D.; Mounts, Nina S.
1989 "Authoritative Parenting, Psychosocial Maturity, and Academic Success Among Adolescents." Child Development, 60:1424-1436.
- Steinberg, Laurence D.; Greenberger, Ellen; Garduque, Laurie; Ruggiero, Mary; Vaux, Alan
1982 "Effects of Working on Adolescent Development." Developmental Psychology, 18(3):385-395.
- Stepanik, Ron
1991 "The Eckerd Youth Program: Challenging Juveniles to Change." Corrections Today, 53(1):48-50.
- Stern, David
1991 Combining School and Work: Options in High Schools and Two-Year Colleges. Washington, D.C.: U.S. Department of Education, Office of Vocational and Adult Education.
- Stern, David and Nakata, Yoshi-fumi
1989 "Characteristics of High School Students' Paid Jobs and Employment Experience after Graduation" in Stern, David and Eichorn, Dorothy (eds.) Adolescence and Work: Influences of Social Structure, Labor Markets, and Culture. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Stern, David; Stone, James R.; Hopkins, Charles; McMillion, Martin
1990 "Quality of Students' Work Experience and Orientation Toward Work." Youth and Society, 22(2):263-282.
- Stern, David; McMillion, Martin; Hopkins, Charles; Stone, James
1990 "Work Experience for Students in High School and College." Youth and Society, 21(3):355-389.
- Stern, David; Dayton, Charles; Paik, Il-Woo; Weisberg, Alan
1989 "Benefits and Costs of Dropout Prevention in a High School Program Combining Academic and Vocational Education: Third Year Results from Replications of the California Peninsula Academies." Education Evaluation and Policy Analysis, 11(4):405-416.

- Stevens, Wayne
1980 "The Relationship Between Youth Employment and Future Employability and Earnings" in Youth Unemployment--Its Measurement and Meaning. Youth Knowledge Development Report 2.1. Washington, D.C.: U.S. Department of Labor.
- Sticht, Thomas G.
1982 Basic Skills in Defense. Alexandria, VA: Human Resources Research Organization.
- Sticht, Thomas G. and Mikulecky, Larry
1984 Job-Related Basic Skills: Cases and Conclusions. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.
- Sticht, Thomas; Armstrong, William; Hickey, Daniel; Caylor, John
1987 Cast-Off Youth: Policy and Training Methods from the Military Experience. New York: Praeger.
- Stickney, Benjamin D. and Plunkett, Virginia R.L.
1982 "Has Title I Done Its Job?" Educational Leadership, 39(5):378-383.
- Stone, Calvin R.
1989 Considerations in the Design of the Work and Learning Center. Washington, D.C.: Policy Studies Associates.
- Stone, James R.; Stern, David; Hopkins, Charles; McMillan, Martin
1989 Learning from School-Based Work Experience Programs. Berkeley, CA: National Center for Research in Vocational Education.
- Stromsdorfer, Ernst W.
1980 "The Effectiveness of Youth Programs: An Analysis of the Historical Antecedents of Current Youth Initiatives" in Anderson, Bernard E. and Sawhill, Isabel V. (eds.) Youth Employment and Public Policy. Englewood Cliffs, NJ: Prentice-Hall.
- Strumpf, Lori; Friedman, Pamela; Rickard, Patricia; Egeuz, Jane
1989 Improving Workplace Skills: Lessons From JTPA. Washington, D.C.: Center for Remediation Design.

Programs, Services and Techniques

- Sum, A.
1987 The Longer-Term Impacts of Participation in Jobs for America's Graduates Programs: Findings of the 20-Month Follow-Up of the Class of 1984. Washington, D.C.: Jobs for America's Graduates.
- Summers, Anita A. and Johnson, Amy W.
1991 "A Review of the Evidence on the Effects of School-Based Management Plans." Paper prepared for the panel on the Economics of Educational Reform and Teaching.
- Sussman, Marvin B. and Steinmetz, Suzanne K. (eds.)
1987 Handbook of Marriage and the Family. New York: Plenum Press.
- Systemetrics/McGraw-Hill
1989 Significant Problems Facing American Children, Youth and Families. Lexington, MA: Systemetrics/McGraw-Hill.
- Taggart, Robert
1981 A Fisherman's Guide: An Assessment of Training and Remedial Strategies. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Taggart, R.; Sum, A.; Berlin G.
1987 "Basic Academic Skills: Key to Youth's Future." Paper presented to the U.S. Senate Committee on Labor and Human Resources, January 14.
- Tan, Hong W.
1989 Private Sector Training in the United States: Who Get It and Why. New York: Rand Corporation and Columbia University, Teachers College, Institute on Education and the Economy.
- Taylor, Lottie L. and Pinard, Joan R.
1988 "Success Against the Odds: Effective Education of Inner-City Youth in a New York City Public High School." Journal of Negro Education, 57:347-361.
- Timpane, P.M. and McNeill, L.M.
1991 Business's Impact on Education and Child Development Reform. New York: Committee for Economic Development.

- Timpane, M.; Abramowitz, S.; Bobrow, S.B.; Pascal, A.
1976 Youth Policy in Transition. Santa Monica, CA: Rand Corporation.
- Turiel, Elliot
1989 "Domain-Specific Social Judgments and Domain Ambiguities." Merrill-Palmer Quarterly, 35(1):89-114.
- Turner, Susan and Conradus, Carolyn
1978 Supportive Services: CETA Program Models. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.
- U.S. Congress
1988 Family Support Act. P.L. 100-485. October 13, 1988.
- U.S. Congress, Committee on Ways and Means
1991 Overview of Entitlement Programs (1991 Green Book) Washington, D.C.: U.S. Government Printing Office.
- U.S. Congress, Joint Economic Committee
1984 Economic Change, Physical Illness, Mental Illness and Social Deviance. Washington, D.C.: U.S. Government Printing Office.
- U.S. Congress, Office of Technology Assessment
1986 Children's Mental Health: Problems and Services. Washington, D.C.: U.S. Government Printing Office.
- U.S. Congress, Select Committee on Children, Youth and Families
1986 Teen Pregnancy: What Is Being Done? A State-By-State Look. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Commerce
1989 Spells of Job Search and Layoff and Their Outcomes. Current Population Reports, Series P-70, No. 16-RD-2. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Commerce
1985 Marital Status and Living Arrangements. Current Population Reports, Series P-20. Washington, D.C.: U.S. Government Printing Office.

Programs, Services and Techniques

U.S. Department of Education

1989 Digest of Education Statistics: 1989. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education

1989 1989 Education Indicators. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education

1988 Dropout Rates in the United States: 1988. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education and U.S. Department of Labor

1988 The Bottom Line: Basic Skills in the Workplace. Washington, D.C.: U.S. Department of Education and U.S. Department of Labor.

U.S. Department of Labor, Employment and Training Administration

1990 Training and Employment Report of the Secretary of Labor. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Labor, Employment and Training Administration

1989 Work-Based Learning: Training America's Workers. Washington, D.C.: U.S. Department of Labor.

U.S. Department of Labor, Employment and Training Administration

1980 Assessments of the Job Corps Performance and Impacts: Volume I. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills

1991 What Work Requires of Schools. A SCANS Report for America 2000. Washington, D.C.: U.S. Department of Labor.

U.S. General Accounting Office

1991 Job Training Partnership Act: Racial and Gender Disparities in Services. Testimony of Lawrence H. Thompson before the U.S. House Committee on Government Operations, Subcommittee on Employment and Housing. Washington, D.C.: U.S. General Accounting Office.

- U.S. General Accounting Office
 1991 Within School Demonstration: Inadequate Title VI Enforcement by Education Office for Civil Rights. Testimony of Lawrence H. Thompson before the U.S. Senate Committee on Labor and Human Resources. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
 1990 Job Training Partnership Act: Youth Participant Characteristics, Services and Outcomes. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
 1990 Training Strategies: Preparing Non-College Youth for Employment in the U.S. and Foreign Countries. Washington D.C: U.S. General Accounting Office.
- U.S. General Accounting Office
 1988 Summer Youth Jobs Program: Congressional Action Has Increased Emphasis on Remedial Education. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
 1986 Job Corps: Its Costs, Employment Outcomes, and Service to the Public. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
 1985 The Job Training Partnership Act: An Analysis of Support Cost Limits and Participant Characteristics. Washington, D.C.: U.S. General Accounting Office.
- United Way of America
 1990 Wrap-Around Services for High-Risk Children and Their Families. Alexandria, VA: United Way of America.
- Vecchiolla, Francine J. and Maza, Penelope L.
 1989 Pregnant and Parenting Adolescents: A Study of Services. Washington, D.C.: Child Welfare League of America.
- Voith, Richard and Leiderman, Sally
 1986 The California Conservation Corps: A Report on Attrition. Philadelphia: Public/Private Ventures.

Programs, Services and Techniques

Voydanoff, Patricia

1990 "Economic Distress and Family Relations: A Review of the 1980s." Journal of Marriage and the Family, 52:1099-1115.

Walberg, Herbert J.

1988 "Productive Educational Practices For At-Risk Youth" in School Success for Students At Risk: Analyses and Recommendations of the Council of Chief State School Officers. Orlando, FL: Harcourt Brace Jovanovich.

Walther, R.H.

1976 Analysis and Synthesis of Department of Labor Experience in Youth Transition to Work Programs. Springfield, VA: National Technical Information Service.

Washington, D.C., Public Schools

1981 The Fresh Start Minischool E.S.E.A. Title IV-C. Final Evaluation Report. Washington, D.C.: Washington, D.C., Public Schools.

Watson, Bernardine and Jaffe, Natalie

1990 The Practitioner's View: New Challenges in Serving High-Risk Youth. Philadelphia: Public/Private Ventures.

Weatherley, Richard A.

1990 "Review Essays: What to Do About Teen Pregnancy." Journal of Health, Politics, Policy and Law, 15(1):211-220.

Wehlage, G.G.; Stone, C.R.; Lesko, N.

1982 Effective Programs for the Marginal High School Student: A Report to the Wisconsin Governor's Employment and Training Office. Madison, WI: Wisconsin Center for Education Research.

Weidman, John C. and Friedmann, Robert R.

1984 "The School-To-Work Transition for High School Dropouts." The Urban Review, 16(1):25-42.

Weiner, Bernard

1985 "An Attributional Theory of Achievement Motivation and Emotion." Psychological Review, 92:548-573.

- Weiner, Bernard
1979 "A Theory of Motivation for Some Classroom Experiences." Journal of Educational Psychology, 71:3-25.
- Wells, Shirley E.
1990 At-Risk Youth. Identification, Programs, and Recommendations. Englewood, CO: Teacher Ideas Press.
- Werner, Emmy E.
1989 "High-Risk Children In Young Adulthood: A Longitudinal Study from Birth to 32 Years." American Journal of Orthopsychiatry, 59(1):72-81.
- Werner, Emmy E. and Smith, Ruth S.
1989 Vulnerable But Invincible. A Longitudinal Study of Resilient Children and Youth. New York: McGraw-Hill.
- Westat, Inc.
1987 Review of Participant Characteristics and Program Outcomes for the First Eleven Quarters of JTPA Operation. Rockville, MD: Westat, Inc.
- Wetzel, James
1987 American Youth: A Statistical Snapshot. Washington, D.C.: William T. Grant Foundation.
- White, Robert
1959 "Motivation Reconsidered: The Concept of Competence." Psychological Review, 66:297-333.
- William T. Grant Foundation, Commission on Work, Family and Citizenship
1988 The Forgotten Half: Non-College Youth in America. Washington, D.C.: William T. Grant Foundation.
- William T. Grant Foundation, Commission on Work, Family and Citizenship
1988 The Forgotten Half: Pathways to Success for America's Youth and Young Families. Washington, D.C.: William T. Grant Foundation.
- Wilms, Wellford W.
1984 "Vocational Education and Job Success: The Employer's View." Phi Delta Kappan, 65:347-350.

Programs, Services and Techniques

- Wilson, William J.
1988 The Truly Disadvantaged: The Inner City and Public Policy. Chicago, IL: University of Chicago Press.
- Winters, Karen; Rubenstein, Mark; Winters, Raymond
1988 An Investigation of Education Options for Youth At Risk, Ages 9 to 15: Demographics, Legislation, and Model Programs. Washington, D.C.: National Commission for Employment Policy.
- Wirt, John G.
1991 A New Federal Law on Vocational Education: Will Reform Follow? Washington, D.C.: U.S. Department of Labor.
- Wirt, John; Muraskin, Lana; Goodwin, David; Meyer, Robert
1989 Summary of Findings and Recommendations: Final Report (Vol. 1). Washington, D.C.: U.S. Department of Education, Office of Education, National Assessment of Vocational Education
- Wirth, Arthur, G.
1986 "Job and Work-Two Models For Society and Education" in Benson, Norman and Lyons, Richard (eds.) Controversies Over the Purposes of Schooling and the Meaning of Work. Lanham, MD: University Press of America.
- Wolf, Wendy; Sideman, Sally; Voith, Richard
1987 The California Conservation Corps: An Analysis of Short-Term Impacts on Participants. Philadelphia: Public/Private Ventures.
- Woodson, Robert L.
1981 Youth Crime and Urban Policy: A View from the Inner City. Washington, D.C.: American Enterprise Institute for Public Policy Research.
- Yagi, Kan
1987 State Disadvantaged Child Project in the Portland Public Schools. Portland, OR: Portland Public Schools, Department of Research, Evaluation, and Testing.
- Yamoor, Catherine M. and Mortimer, Jeylan T.
1990 "Age and Gender Differences in the Effects of Employment on Adolescent Achievement and Well-Being." Youth and Society, 22(2):225-240.

- Young, M.B.; Hipps, J.; Hanberry, G.; Hopstock, P.; Goldsamt, M.R.
1980 An Assessment of State-Administered Programs of the Adult Education Act. Report submitted to the U.S. Department of Education, Office of Program Evaluation. Washington, D.C.: Development Associates.
- Youthwork, Inc.
1980 Youth Knowledge Development Report. Washington, D.C.: U.S. Department of Labor.
- Yudd, Regina and Nightingale, Demetra Smith
1990 The Availability of Information for Defining and Assessing Basic Skills Required for Specific Occupations. Washington, D.C.: Urban Institute.
- Zambrana, Ruth E. and Aguirre-Molina, Marilyn
1987 "Alcohol Abuse Prevention Among Latino Adolescents: A Strategy for Intervention." Journal of Youth and Adolescence, 16(2):97-113.
- PROGRAM GOVERNANCE AND MANAGEMENT
- Abt Associates
1986 An Assessment of Funding Allocation Under the Job Training Partnership Act. Cambridge, MA: Abt Associates.
- Abt Associates
1984 Measuring the Costs of JTPA Program Participation. Cambridge, MA: Abt Associates.
- Agranoff, Robert
1991 "Human Services Integration: Past and Present Challenges in Public Administration." Public Administration Review, 51:533-542.
- Aiken, Michael, et al.
1975 Coordinating Human Services. San Francisco: Jossey-Bass.
- Alampresse, Judith and Hughes, Donna
1990 Study of Federal Funding Sources and Services for Adult Education: Phase I Preliminary Report. Washington, D.C.: U.S. Department of Education.

Program Governance and Management

Alegria, Fernando and Figueroa, Jose

- 1986 Study of the JTPA Eight Percent Education Coordination and Grants Set-Aside and the Three Percent Set-Aside Training Program for Older Individuals. Washington, D.C.: National Governors' Association, Center for Policy Research and Analysis.

American Psychiatric Association

- 1980 Diagnostic and Statistical Manual of Mental Disorders. Washington, D.C.: American Psychiatric Association.

American Vocational Association

- 1990 AVA Guide to the Carl D. Perkins Vocational and Applied Technology Education Act. Alexandria, VA: American Vocational Association.

Appleby, Paul

- 1949 Policy and Administration. Tuscaloosa, AL: University of Alabama Press.

Bailey, Thomas R.

- 1988 "Market Forces and Private Sector Processes in Government Policy: The Job Training Partnership Act." Journal of Policy Analysis and Management, 7(2):300-315.

Bailis, Lawrence Neil

- 1991 "Case Management: The Key to Coordination of Employment and Training Programs for Homeless People." Paper prepared for Streamlining the Business of Government: Toward a State Human Investment System, a National Governors' Association conference.

Bailis, Lawrence Neil

- 1991 "Coordinate Unto Others as You Would Have Them Coordinate Unto You: The Importance of Self-Interest as a Key to Effective Collaboration." Paper prepared for Making the Connection: Coordinating Education and Training for a Skilled Workforce, a U.S. Department of Education conference.

Bailis, Lawrence Neil

- 1991 Evaluation of the Minnesota At-Risk Youth Demonstration Project. Saint Paul, MN: State Job Training Office.

Bailis, Lawrence Neil

- 1991 "Metamorphosis versus Modest Changes: A Balanced Approach to Promoting Coordination among Federal Agencies that Administer Public Assistance Programs." Paper prepared for the National Commission on Employment Policy's Seminar on Improving Coordination in Government-Sponsored Public Assistance Programs.

Bailis, Lawrence Neil

- 1989 An Assessment of the JTPA Role in State and Local Coordination Activities: Report on the Literature Review. Arlington, VA: James Bell Associates, Inc.

Bailis, Lawrence Neil

- 1987 The More Things Change--A Study of the Status of PY 85 JTPA Coordination and PY 84 JTPA Program Activities. Washington, D.C.: National Commission for Employment Policy.

Baj, John and Trott, Charles E.

- 1988 "State-Based Performance Standards Models for JTPA." Washington, D.C.: National Governors' Association.

Barnow, Burt S.

- 1990 "The Effects of Performance Standards on State and Local Programs: Lessons for the Job Opportunities and Basic Skills Program." Conference paper. Madison, WI: University of Wisconsin-Madison, Institute for Research on Poverty.

Barnow, Burt S. and Constantine, Jill

- 1988 Using Performance Management to Encourage Services to Hard-to-Serve Individuals in JTPA. Washington, D.C.: National Commission for Employment Policy.

Barnow, Burt S.; Chasanov, Amy B.; Pande, Abhay

- 1990 Financial Incentives for Employer-Provided Worker Training: A Review of Relevant Experience in the U.S. and Abroad. A report prepared for the U.S. Department of Labor, Employment and Training Administration. Washington, D.C.: Urban Institute.

Program Governance and Management

Bartel, Ann P.

1989 Formal Employee Training Programs and Their Impact on Labor Productivity: Evidence From a Human Resources Survey. Cambridge, MA: National Bureau of Economic Research.

Barton, Paul E.

1990 From School to Work. Princeton, NJ: Educational Testing Service.

Bendor, Jonathan

1985 Parallel Systems: Redundancy in Government. Berkeley, CA: University of California Press.

Berkeley Planning Associates

1990 JTPA Staffing and Staff Training at the State and SDA Levels: Final Report. Washington, D.C.: U.S. Department of Labor.

Berwick, Donald and Knapp, Maria

1987 "Theory and Practice for Measuring Health Care Quality." Health Care Financing Review, Annual Supplement: 49-55.

Berwick, Donald; Godfrey, A. Blanton; Roessner, Jane

1991 Curing Health Care: New Strategies for Quality Improvement. San Francisco: Jossey-Bass Publishers.

Betsey, Charles L.; Hollister, Robinson G., Jr.; Papageorgiou, Mary R. (eds.)

1985 Youth Employment and Training Programs. Washington, D.C.: National Academy Press.

Binner, Paul R.

1986 "DRGs and the Administration of Mental Health Services." American Psychologist, 41(1):64-69.

Bishop, John H.

1989 "Incentives for Learning: Why American High School Students Compare So Poorly to their Counterparts Overseas" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.

- Blum, Barbara and Blank, Susan
1991 Children in the U.S. City: Opportunities, Problems, and Possibilities for Change. New York: Foundation for Child Development.
- Borus, Michael E.
1978 "Indicators of CETA Performance." Industrial and Labor Relations Review, 32:1-14.
- Brady, Elaine
1985 Is the Job Training Partnership Act Working? The 1985 NAB Survey of PIC Chairs and SDA Administrators. Washington, D.C.: National Alliance of Business.
- Brady, Elaine and Balfe, Kevin
1987 JTPA Operations at the Local Level: Coordination or Discord? Survey on the Relationships between Service Delivery Areas and Selected Human Service Agencies. Washington, D.C.: National Alliance of Business.
- Brewer, G.D.
1973 Politicians, Bureaucrats, and the Consultant. New York: Basic Books.
- Bruner, Charles
1991 Thinking Collaboratively: Ten Questions and Answers to Help Policy Makers Improve Children's Services. Washington, D.C.: William T. Grant Foundation.
- Brustein, Michael
The Legal and Fiscal Disjunction between the Carl Perkins Vocational Education Act and the Job Training Partnership Act. Washington, D.C.: National Commission for Employment Policy.
- Bullock, Paul
1985 Youth Training and Employment: From New Deal to New Federalism. Los Angeles, CA: University of California, Institute of Industrial Relations.
- Caiden, Gerald
1969 Administrative Reform. Chicago, IL: Aldine.

Program Governance and Management

- Cain, H.P.
1971 "Confidential Presidential Task Forces." Ph.D. dissertation, Brandeis University, Heller Graduate School.
- Carnevale, Anthony P.
1991 America and the New Economy. Alexandria, VA: American Society for Training and Development and U.S. Department of Labor, Employment and Training Administration.
- Carnevale, Anthony P. and Gainer, Leila J.
1989 The Learning Enterprise. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.
- Carnevale, Anthony P.; Gainer, Leila J.; Meltzer, Ann S.
1988 Workplace Basics: The Skills Employers Want. Alexandria, VA: American Society for Training and Development and U.S. Department of Labor, Employment and Training Administration.
- Center for Human Resources
1991 "Assessing Skills Through Performance." Youth Programs, Summer: 11-14.
- Center for Human Resources
1991 "Focusing on Employability: The Michigan Employment Skills System." Youth Programs, Summer: 1-10.
- Center for Human Resources
1991 "Performance Assessment: Examples From the Field." Youth Programs, Summer: 15-17.
- Center for Human Resources
1989 Working It Out: An Anthology of State and Local Performance Management Strategies Designed to Increase Services to Youth At Risk of Chronic Unemployment. Waltham, MA: Brandeis University, Center for Human Resources.
- Choate, Patrick
1982 Retooling the American Workforce: Toward a National Training Strategy. Washington, D.C.: Northeast-Midwest Institute.

- Commission on the Skills of the American Workforce
1990 America's Choice: High Skills or Low Wages. The Report of the Commission on the Skills of the American Workforce. Rochester, NY: National Center on Education and the Economy.
- Committee for Economic Development
1985 Investing in Our Children: Business and the Public Schools. New York: Committee for Economic Development.
- Cook, Robert, et al.
1985 Implementation of the Job Training Partnership Act: Final Report. Rockville, MD: Westat.
- Council of Chief State School Officers
1991 "Students At Risk of School Failure." Washington, D.C.: Council of Chief State School Officers.
- Council of Chief State School Officers, Resource Center on Educational Equity
1991 Concerns.
- Creticos, Peter A. and Sheets, Robert G.
1990 Evaluating State-Financed, Workplace-Based Retraining Programs: A Report on the Feasibility of a Business Screening and Performance Outcome Evaluation System. Washington, D.C.: National Commission for Employment Policy.
- Darling-Hammond, Linda and Ascher, Carol
1991 Creating Accountability in Big City Schools. New York: ERIC Clearinghouse on Urban Education and National Center for Restructuring.
- Dement, Edward F.
1985 Final Report: State Job Training Coordinating Councils. Washington, D.C.: National Commission for Employment Policy.
- Deming, W. Edwards
1986 Out of the Crisis. Cambridge, MA: Massachusetts Institute of Technology.

Program Governance and Management

Dickinson, Katherine; West, Richard; Kogan, Deborah; Drury, David; Franks, Marlene; Schlichtmann, Laura; Vencill, Mary

1988 Evaluation of the Effects of JTPA Performance Standards on Clients, Services, and Costs. Washington, D.C.: National Commission for Employment Policy.

Dobyns, Lloyd and Crawford-Mason, Clare

1991 Quality or Else: The Revolution in World Business. Boston: Houghton-Mifflin.

Donahedian, Avedis

1992 "The Quality of Medical Care" in Graham, Nancy (ed.) Quality Assurance in Hospitals: Strategies for Assessment and Implementation. Rockville, MD: Aspen Systems Corporation.

Downs, George W. and Larkey, Patrick D.

1986 The Search for Government Efficiency: From Hubris to Helplessness. Philadelphia: Temple University Press.

Dryfoos, Joy G.

1991 States Responses to Youth At Risk Issues. New York: Carnegie Corporation.

Dryfoos, Joy G.

1990 Adolescents At Risk: Prevalence and Prevention. New York: Oxford University Press.

Eccles, Robert G.

1991 "The Performance Measurement Manifesto." Harvard Business Review, January-February: 131-137.

Education and Human Services Consortium

1991 What It Takes: Structuring Interagency Partnerships to Connect Children and Families with Comprehensive Services. Washington, D.C.: William T. Grant Foundation.

Education Writers Association

1990 Training for Work. What the U.S. Can Learn from Europe. Washington, D.C.: Education Writers Association.

- Eggers, Paul W.
1987 "Prospective Payment System and Quality: Early Results and Research Strategy." Health Care Financing Review, Annual Supplement: 29-37.
- Ellwood, Paul M., et al.
1973 Assuring the Quality of Healthcare. Minneapolis, MN: Interstudy.
- Figueroa, Jose
1986 "Bridges to Self-Sufficiency: A Study of Work and Welfare Programs and Their Linkages with the Employment and Training System." Washington, D.C.: National Governors' Association, Center for Policy Research and Analysis.
- Figueroa, Jose and Ganzglass, Evelyn
1988 Using JPTA Performance Standards as a State Policy Tool. Washington, D.C.: National Governors' Association.
- Frawley, Sandra J.
1977 "Bureaucratic Competition and Policy Implementation." Ph.D. dissertation, Brandeis University, Heller Graduate School.
- Friedlander, Daniel
1988 Subgroup Impacts and Performance Indicators for Selected Welfare Employment Programs. New York: Manpower Demonstration Research Corporation.
- Friedlander, Daniel and Long, David
1987 A Study of Performance Measures and Subgroup Impacts in Three Welfare Employment Programs. New York: Manpower Demonstration Research Corporation.
- Gainer, William J.
1986 Job Training Partnership Act Amendments of 1986. Washington, D.C.: U.S. Government Printing Office.
- Gay, Robert and Borus, Michael E.
1980 "Validating Performance Indicators in Employment and Training Programs." Journal of Human Resources, 15:30-48.
- Geigle, Ron and Jones, Stanley B.
1990 "Outcome Measurement: A Report from the Front." Inquiry, 27:7-13.

Program Governance and Management

- George, Rosemary
1987 Youth Policies and Programs in Selected Countries. Washington, D.C.: William T. Grant Foundation.
- Geraci, Vincent J.
1984 "Short-Term Indicators of Job Training Program Effects on Long-Term Participant Earnings." Austin, TX: University of Texas-Austin, Center for Economic Research.
- German Marshall Fund of the United States
1990 "A Winning European Formula: Schools + Industry = Work-Readiness." Transatlantic Perspectives, No. 21.
- Glover, Robert W.
1988 Expanding the Use of Apprenticeship. Washington, D.C.: U.S. Department of Labor, Bureau of Apprenticeship and Training.
- Gormley, William, Jr.
1989 Taming the Bureaucracy: Muscles, Prayers, and Other Strategies. Princeton, NJ: Princeton University Press.
- Graham, Nancy (ed.)
1982 Quality Assurance in Hospitals: Strategies for Assessment and Implementation. Rockville, MD: Aspen Systems Corporation.
- Grinker Associates, Inc.
1986 An Independent Sector Assessment of the Job Training Partnership Act. Final Report: Program Year 1985. Prepared for the National Commission for Employment Policy, The Ford Foundation, Charles Stewart Mott Foundation and The Rockefeller Foundation. New York: Grinker Associates.
- Grubb, W. Norton
1985 Preparing Youth for Work: The Dilemmas of Education and Training Programs. Paper presented at the Symposium of Adolescents' Orientation Toward Work. Berkeley, CA: University of California, Institute for Human Development.

- Grubb, W. Norton; Kallman, Judith; Castellano, Marisa; Brown, Cynthia; Bradby, Denise
1991 Readin', Writin', and 'Rithmetic One More Time: The Role of Remediation in Vocational Education and Job Training Programs. A report to Congress, the Secretary of Education and the Secretary of Labor. Berkeley, CA: National Center for Research in Vocational Education.
- Grubb, W. Norton; McDonnel, Lorraine; Brown, Cynthia; Kaufman, Phillip; Lederer, John
1990 Local Systems of Work-Related Education and Training: Diversity, Interdependence, and Questions of Effectiveness. A report for the Office of Vocational and Adult Education. Berkeley, CA: National Center for Research in Vocational Education.
- Grubb, W. Norton; McDonnel, Lorraine; Brown, Cynthia; Kaufman, Phillip; Lederer, John
1990 Order Amidst Complexity: The Status of Coordination Among Vocational Education, Job Training Partnership Act, and Welfare-to-Work Programs. Berkeley, CA: National Center for Research in Vocational Education.
- Grubb, W. Norton; Brown, Cynthia; Kaufman, Phillip; Lederer, John
1989 Innovation Versus Turf: Coordination Between Vocational Education and Job Training Partnership Act Programs. Berkeley, CA: National Center for Research in Vocational Education.
- Gula, Annette and King, Christopher
1990 Welfare-to-Work Program Coordination in Texas. Austin, TX: Center for the Study of Human Resources.
- Guterman, Stuart and Dobson, Allen
1986 "Impact of Medicare Prospective Payment System for Hospitals." Health Care Financing Review, 7(3):97-114.
- Hahn, Andrew and Lerman, Robert
1984 What Works in Youth Employment Policy? Washington, D.C.: National Planning Association.
- Hamilton, Stephen F.
1990 Essential Elements of the European Apprenticeship System and American Adaptation. Presentation at the Conference on Youth Apprenticeship, American Style. Washington, D.C.: William T. Grant Foundation.

Program Governance and Management

- Hamilton, Stephen F.
1990 "Is There Life After High School? Developing Apprenticeship in America." The Harvard Education Letter, 6(4):1-5.
- Haney, Walter and Madaus, George
1989 "Searching for Alternatives to Standardized Tests: Whys, Whats, and Withers." Phi Delta Kappan, May.
- Haveman, Robert H.
1977 A Decade of Federal Antipoverty Programs: Achievements, Failures, and Lessons. New York: Academic Press.
- Heidenheimer, Arnold J.; Hecl, Hugh; Adams, Carolyn Teich
1983 Comparative Public Policy: The Politics of Social Choice in Europe and America. New York: St. Martin's Press.
- Hickey, Delina R.
1986 Coordination Between JTPA and Vocational Education: A Case Study of the Eight Percent Set-Aside. Columbus, OH: National Center for Research in Vocational Education.
- Hirsch, Werner and Sonenblum, Sidney (eds.)
1973 Governing Urban America in the 1970s. New York: Praeger.
- Honadle, Beth and Howitt, Arnold
1986 Perspectives on Management Capacity Building. Albany, NY: State University of New York Press.
- Hoyt, Kenneth B.
1990 "A Proposal for Making Transition From Schooling to Employment an Important Component of Educational Reform." Future Choices: Toward a National Youth Policy, 2(2):73-86.
- Jennison, Kathleen
1992 "Total Quality Management--Fad or Paradigmatic Shift?" in Couch, J.B. (ed.) Health Care Quality Management for the 21st Century. Forthcoming.
- Jennison, Kathleen and Jordan, Harmon
1991 "A Quality Information System for Health Care TQM." Presented at the Juran Institute Conference, Atlanta. Brookline, MA: Harvard Community Health Plan.

Johnston, Janet W.

- 1987 "The Job Training Partnership Act--A Report by the National Commission for Employment Policy." Washington, D.C.: National Commission for Employment Policy.

Johnston, William B. and Packer, Arnold

- 1987 Workforce 2000: Work and Workers for the 21st Century. Indianapolis, IN: Hudson Institute.

Jones, Robert

- 1985 Oversight Hearing on the Implementation of the Job Training Partnership Act. Testimony in the U.S. Congress, House Committee on Education and Labor, Subcommittee on Employment Opportunities. Washington, D.C.: U.S. Government Printing Office.

Joyce, Peter J.

- 1991 "Are We Prepared for a Skills Mismatch? An Analysis of the Job Training Partnership Act's Performance Standards System in Washington and Connecticut." Ph.D. dissertation, Harvard University, Graduate School of Education.

Kammerman, Sheila and Kahn, Alfred

- 1976 Social Services in the United States. Philadelphia: Temple University Press.

Kane, Rosalie

- 1990 Case Management: What Is It Anyway? Minneapolis, MN: University of Minnesota, Medical School, Long-Term Care Decisions Resource Center.

King, Christopher T.

- 1988 Cross-Cutting Performance Management Issues in Human Resource Programs. Washington, D.C.: National Commission for Employment Policy.

King, Christopher T. and Pittman, Laura L.

- 1987 Performance Standards in Job Training and Job Placement Programs. Washington, D.C.: National Association of Counties.

Kingsley, Christopher

- 1989 A Guide to Case Management for At-Risk Youth. Waltham, MA: Brandeis University, Center for Human Resources.

Program Governance and Management

Kirst, Michael W.

1990 Accountability: Implications for State and Local Policymakers.
Washington, D.C.: U.S. Government Printing Office.

Kogan, Deborah; Dickinson, Katherine; Means, Barbara; Strong, Marlene

1990 Improving the Quality of Training Under JTPA. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.

Kusserow, Richard P.

1991 Services Integration: A Twenty Year Retrospective. Washington, D.C.: U.S. Department of Health and Human Services, Office of Inspector General.

Laventhol and Horwath

1988 Using Performance Management to Achieve Quality Program Results.
Washington, D.C.: National Commission for Employment Policy.

Laventhol and Horwath

"Improving the Success of JTPA Coordination Efforts: An Idea Paper for the Florida Job Training System." Washington, D.C.: National Commission for Employment Policy.

Leemans, Arne (ed.)

1976 The Management of Change in Government. The Hague: Martinus Nuhoff.

Leichter, Howard M.

1979 A Comparative Approach to Policy Analysis: Health Care Policy in Four Nations. New York: Cambridge University Press.

Lerman, Robert I. and Pouncy, Hillard

1990 "The Compelling Case for Youth Apprenticeships." The Public Interest, No. 101.

Lerman, Robert I. and Pouncy, Hillard

1990 Why America Should Develop A Youth Apprenticeship System.
Washington, D.C.: Progressive Policy Institute.

Levin, Henry

1983 "Individual Entitlements" in Financing Recurrent Education. Newbury Park, CA: Sage Publications.

- Levin, Henry M.
1977 "Post-Secondary Entitlements: An Exploration" in Entitlement Studies. Washington, D.C.: National Institute of Education.
- Levitan, Sar and Gallo, Frank
1988 A Second Chance: Training for Jobs. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Levitan, Sar A. and Mangum, Garth L. (eds.)
1981 The T in CETA. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Levitan, Sar A. and Taggart, Robert
1976 The Promise of Greatness. Cambridge, MA: Harvard University Press.
- Levitan, Sar A.; Mangum, G.; Pines, M.
1989 A Proper Inheritance: Investing in the Self-Sufficiency of Poor Families. Washington, D.C.: George Washington University.
- Levy, Janet
1989 Joining Forces: A Report from the First Year. Alexandria, VA: National Association of State Boards of Education.
- Lewis, Morgan
1988 Vocational Education-Job Training Partnership Act Coordination--Second Annual Report. Columbus, OH: National Center for Research in Vocational Education.
- Lewis, Morgan; Ferguson, Marilyn; Card, Michael
1987 Vocational Education-Job Training Partnership Act Coordination--First Annual Report. Columbus, OH: National Center for Research in Vocational Education.
- Liebert, Roland
1976 Disintegration and Political Action: The Changing Functions of City Government. New York: Academic Press.
- Lindblom, Charles
1968 The Policy-Making Process. Englewood Cliffs, NJ: Prentice-Hall.

Program Governance and Management

Lohr, Kathleen

1985 Peer Review Organizations: Quality Assurance in Medicare. Santa Monica, CA: Rand Corporation.

Lynch, Lisa M.

1989 Private Sector Training and Its Impact on the Earnings of Young Workers. Cambridge, MA: National Bureau of Economic Research.

MacDonald, Don

1987 "Norway" in Rowat, Donald (ed.) Public Administration in Developed Democracies: A Comparative Study. New York: Dekker.

Mangum, Garth L.

1973 A Decade of Manpower Development and Training. Salt Lake City, UT: Olympus Publishing Company.

McDonnell, Lorraine M. and Elmore, Richard F.

1987 Alternative Policy Instruments. Santa Monica, CA: Rand Corporation.

MDC, Inc.

1982 "Tracking the Transition--Summary and Analysis: Early State-Level Preparations for JTPA Implementation." Washington, D.C.: National Governors' Association.

Melaville, Atelia and Blank, Martin

1991 What It Takes: Structuring Interagency Partnerships to Connect Children and Families with Comprehensive Services. Washington, D.C.: William T. Grant Foundation.

Millon, Theodore

1983 "The DSM-III: An Insider's Perspective." American Psychologist, July: 804-814.

Mirengoff, William; Rindler, Lester; Greenspan, Harry; Harris, Charles

1982 CETA: Accomplishments, Problems, Solutions. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Mucci, John

1984 Neighborhood Services: Making Big Cities Work. New Haven: Yale University Press.

Murray, Charles

1984 Losing Ground: American Social Policy, 1950-1980. New York: Basic Books.

National Alliance of Business

1986 Is the Job Training Partnership Working? Washington, D.C.: National Alliance of Business.

National Alliance of Business

1986 Making the Link: Coordinating Economic Development and Employment and Training. Washington, D.C.: National Alliance of Business.

National Alliance of Business

1985 What's Happening with JTPA? Washington, D.C.: National Alliance of Business.

National Association of Counties, National Governors' Association and National Association of Private Industry Councils

1986 Beyond the Model: An Approach to Negotiating JTPA Performance Standards. Washington, D.C.: National Association of Counties.

National Commission for Employment Policy

1990 Training Hispanics: Implications for the JTPA System. Washington, D.C.: National Commission for Employment Policy.

National Commission for Employment Policy

1988 Developing Effective JTPA Performance Standards Incentive Policies: A Technical Assistance Guide. Washington, D.C.: National Commission for Employment Policy.

National Commission for Employment Policy

1988 Who is Served by JTPA Programs? Washington, D.C.: National Commission for Employment Policy.

National Commission for Employment Policy

1981 Seventh Annual Report: The Federal Interest in Employment and Training. Washington, D.C.: National Commission for Employment Policy.

Program Governance and Management

- National Commission on Excellence in Education
1983 A Nation At Risk: The Imperative for Education Reform. Washington, D.C.: U.S. Government Printing Office.
- National Commission on Testing and Public Policy
1990 From Gatekeeper to Gateway: Transforming Testing in America. Chestnut Hill, MA: Boston College, National Commission on Testing and Public Policy.
- National Conference on Social Welfare
1985 Report to the President of the Committee on Economic Security. 50th Anniversary Edition. Washington, D.C.: National Conference on Social Welfare.
- National Governors' Association
1990 Educating America: State Strategies for Achieving the National Education Goals. A report of the Task Force on Education. Washington, D.C.: National Governors' Association.
- National Governors' Association
1987 Making America Work: Bringing Down the Barriers. Washington, D.C.: National Governors' Association.
- National Governors' Association
1983 The Role of Training in A Changing Economy. Washington, D.C.: National Governors' Association.
- National Governors' Association and National Alliance of Business
1985 Report on Joint Survey of State Provision of JTPA Technical Assistance. Washington, D.C.: National Alliance of Business.
- Nightingale, Demetra Smith
1985 Federal Employment and Training Policy Changes During the Reagan Administration: State and Local Responses. Washington, D.C.: Urban Institute.
- Nothdurft, William E.
1990 SchoolWorks: Reinventing Public Schools to Create the Workforce of the Future. Washington, D.C.: German Marshall Fund of the United States.

- Nothdurft, William E.
1990 Youth Apprenticeship, American Style: A Strategy for Expanding School and Career Opportunities. A report of a conference. Somerville, MA: Jobs for the Future.
- Orfield, Gary and Slessarev, Helene
1986 Job Training Under the New Federalism. Chicago: University of Chicago.
- Osterman, Paul
1991 "Is There a Problem with the Youth Labor Market and If So How Should We Fix It?" A paper prepared for the Joint Center for Political and Economic Studies.
- Osterman, Paul
1989 "Training People for Real Jobs: Europe's Investment in Worker Education." Transatlantic Perspectives, No. 19.
- Osterman, Paul
1988 Employment Futures: Reorganization, Dislocation, and Public Policy. New York: Oxford University Press.
- Panel on Quality Control of Family Assistance Programs
1988 From Quality Control to Quality Improvement in AFDC and Medicaid. Washington, D.C.: National Academy Press.
- Panel on Quality Control of Family Assistance Programs
1987 Rethinking Quality Control: A New System for the Food Stamp Program. Washington, D.C.: National Academy Press.
- Peters, Thomas J. and Waterman, Robert H., Jr.
1982 In Search of Excellence: Lessons from America's Best-Run Companies. New York: Harper and Row.
- Public/Private Ventures
1990 A Practitioner's View. Philadelphia: Public/Private Ventures.
- Resnick, Lauren B. and Resnick, Daniel
1989 Assessing the Thinking Curriculum: New Tools for Education Reform. Prepared for the National Commission on Testing and Public Policy. Pittsburgh, PA: University of Pittsburgh, Learning Research and Development Center.

Program Governance and Management

- Reubens, Beatrice G.
1983 Youth at Work: An International Survey. Totowa, NJ: Rowman and Allanheld, Publishers.
- Reubens, Beatrice G.; Harrison, John A.C.; Rupp, Kalman
1981 Youth Labor Force, 1945-1995: A Cross-National Analysis. Totowa, NJ: Rowman and Allanheld, Publishers.
- Richardson, Philip, et al.
1985 "Assessment of the Implementation and Effects of the JTPA Title V Wagner-Peyser Amendments: Phase II Final Report." Silver Spring, MD: Macro Systems, Inc.
- Richardson, Philip, et al.
1985 "Assessment of the Implementation and Effects of the JTPA Title V Wagner-Peyser Amendments: Phase I Final Report." Silver Spring, MD: Macro Systems, Inc.
- Ridgeway, V.F.
1956 "Dysfunctional Consequences of Performance Measures." Administrative Science Quarterly, Vol. 1.
- Robinson, Estelle R. and Mastny, Aleta Y.
1989 Linking Schools and Community Services: A Practical Guide. New Brunswick, NJ: Rutgers University, School of Social Work, Center for Community Education.
- Rodriguez, Alex R.
1983 "Psychological and Psychiatric Review at CHAMPUS." American Psychologist, August: 941-947.
- Rogers, David and Whetten, David
1982 Interorganizational Coordination: Theory, Research and Implementation. Ames, IA: Iowa State University Press.
- Rosenbaum, James E.
1990 "What If Good Jobs Depended on Good Grades?" American Educator, 13:4.

- Rosenbaum, James E.
1989 "Empowering Schools and Teachers: A New Link to Jobs for the Non-College Bound" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, National Commission on Workforce Quality and Labor Market Efficiency.
- Rubin, Mary and Zornitsky, Jeff
1988 Serving AFDC Recipients: Initial Findings on the Role of Performance Standards. Washington, D.C.: National Commission for Employment Policy.
- Sandell, Steven H. and Rupp, Kalman
1988 Who is Served in JTPA: Patterns of Participation and Intergroup Equity. Washington, D.C.: National Commission for Employment Policy.
- Schlechty, Phillip
1991 Schools for the 21st Century. San Francisco: Jossey-Bass.
- Schorr, Lisbeth B.
1988 Within Our Reach: Breaking the Cycle of Disadvantage. New York: Doubleday.
- Schorr, Lisbeth B., et al. (eds.)
1991 Effective Services for Young Children: Report of a Workshop. Washington, D.C.: National Academy Press.
- Sheets, Robert; Hahn, Andrew; Lerman, Robert; Butler, Erik
1988 Who Will Train and Educate Tomorrow's Workers? The Financing of Non-College-Bound Young Workers' Recurrent Education. Washington, D.C.: William T. Grant Foundation, Commission on Work, Family and Citizenship.
- Skocpol, Theda
1989 "Targeting Within Universalism: Politically Viable Policies to Combat Poverty in the United States." A paper prepared for the Conference on the Truly Disadvantaged, Evanston, IL, sponsored by the Social Science Research Council, Committee for Research on the Urban Underclass.

Program Governance and Management

- Smith, Thomas; Moorhouse, Mary; Trist, Carolyn
1988 A Practitioner's Guide: Strategies, Programs, and Resources for Youth Employability Development. Philadelphia: Public/Private Ventures.
- Snedeker, Bonnie and Snedeker, David
1978 CETA: Decentralization on Trial. Salt Lake City, UT: Olympus.
- Solow, Katherine
1986 The Job Training Partnership Act Service to Women. New York: Grinker, Walker and Associates.
- Southern Institute for Human Resources
1978 Coordination: WIN and CETA. A Guide to Increasing the Enrollment of AFDC Recipients in CETA Programs. Atlanta: Southern Institute for Human Resources.
- SRI International and Berkeley Planning Associates
1990 Developing Effective JTPA Performance Standards Incentive Policies: A Technical Assistance Guide. Washington, D.C.: National Commission for Employment Policy.
- Strumpf, Lori
1991 "Speech [on TQM] to the North Central Indiana Annual Dinner," October 4, 1991. Washington, D.C.: Center for Remediation Design.
- Strumpf, Lori
1988 "Program Standards: A New Chance for Employability." Youth Programs, Spring: 8-15.
- Strumpf, Lori
1986 A PIC Member's Guide to Performance Standards: A Framework for Success. Washington, D.C.: National Association of Private Industry Councils.
- Svenson, Ray and Brown, Mark G.
1990 "What Total Quality Management Really Means." Prepared for the Journal for Quality and Participation. Naperville, IL: Svenson and Wallace.

- Taggart, Robert
1981 A Fisherman's Guide. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Teitel, L.
1989 Coordinating Education and Employment Training. Boston: State Council on Vocational Education.
- Treanor, William
1988 Barriers to Developing Comprehensive and Effective Youth Services. Washington, D.C.: William T. Grant Foundation, Commission on Work, Family and Citizenship.
- Trott, Charles E. and Baj, John
1987 Development of JTPA Title II-A Performance Standards Models for the States of Region V. DeKalb, IL: Northern Illinois University, Center for Governmental Studies, Human Resource Policy Program.
- Trutko, John; Bailis, Lawrence; Barnow, Burt; French, Stephen
1990 An Assessment of the JTPA Role in State and Local Coordination Activities: Final Report. Arlington, VA: James Bell Associates, Inc.
- U.S. Conference of Mayors
1991 "A Human Resource Investment Policy--A Challenge to Mayors." Washington, D.C.: U.S. Conference of Mayors.
- U.S. Congress, Committee on Labor and Public Welfare
1964 Toward Full Employment: Proposals for a Comprehensive Employment and Manpower Policy in the United States. A report prepared for the U.S. Congress. Washington, D.C.: U.S. Government Printing Office.
- U.S. Congress, Office of Technology Assessment
1990 "Human Resources for Competitiveness" in Worker Training: Competing in the New International Economy. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Education
1991 America 2000: An Education Strategy. Washington, D.C.: U.S. Department of Education.

Program Governance and Management

U.S. Department of Education

1981 The Vocational Education Study: The Final Report. Washington, D.C.: U.S. Department of Education.

U.S. Department of Health and Human Services

1987 Report on the Progress and Status of Services Integration Pilot Projects: First Year Planning Phase. Washington, D.C.: U.S. Department of Health and Human Services, Office of Policy Planning and Legislation, Office of Human Development Services.

U.S. Department of Labor

1991 Proposals to Amend JTPA: H.R. 2496. Washington, D.C.: U.S. Department of Labor.

U.S. Department of Labor

1990 Guide for Setting JTPA Title II-A and Title III Performance Standards for PY 1990. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.

U.S. Department of Labor

1990 "Job Training Partnership Act: Titles II-A and III Performance Standards for Program Years (PY) 1990-91." Federal Register, 55(72):7252-7256.

U.S. Department of Labor

1990 "Job Training Partnership Act: Proposed Performance Standards for Program Years (PY) 1990 and 1991." Federal Register, 55(4):514-517.

U.S. Department of Labor

1989 "Performance Standards for PY 1990 and Beyond: Summary of Technical Issues and Options." Washington, D.C.: U.S. Department of Labor, Employment and Training Administration, Adult and Youth Performance Standards Unit.

U.S. Department of Labor

1989 Working Capital: JTPA Investments for the 90s. A report of the Job Training Partnership Act Advisory Committee. Washington, D.C.: U.S. Department of Labor.

- U.S. Department of Labor
1988 Guide for Setting JTPA Title II-A Performance Standards for PY 1988. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration, Office of Strategic Planning and Policy Development.
- U.S. Department of Labor
1988 "Job Training Partnership Act: Review of Experience." Federal Register, 53(156):30483-30490.
- U.S. Department of Labor
1988 "JTPA Annual Status Report Instructions for PY 1988." Federal Register, 53(44):7256.
- U.S. Department of Labor
1988 "Job Training Partnership Act: Performance Standards for Program Years (PY) 1988-89." Federal Register, 53(44):7252-7256.
- U.S. Department of Labor
1987 "Job Training Partnership Act: Proposed Performance Standards for Program Year (PY) 1988." Federal Register, 52(241):47771-47774.
- U.S. Department of Labor
1986 "Issues in Establishing Performance Standards for JTPA Title II-A Youth Programs for PY 1986." Washington, D.C.: U.S. Department of Labor, Office of Performance Management and Evaluation, Adult and Youth Standards Unit.
- U.S. Department of Labor
1984 "Performance Standards for PY 1984." Federal Register, 49(22):4052-4056.
- U.S. Department of Labor, Office of Inspector General
1990 Semiannual Report, October 1, 1989-March 31, 1990. Washington, D.C.: U.S. Department of Labor, Office of Inspector General.
- U.S. Department of Labor, Office of Inspector General
1989 Semiannual Report, April 1-September 30, 1989. Washington, D.C.: U.S. Department of Labor, Office of Inspector General.
- U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills
1991 What Work Requires of Schools: A SCANS Commission Report for America 2000. Washington: D.C.: U.S. Department of Labor.

Program Governance and Management

U.S. General Accounting Office

1991 Job Training Partnership Act: Inadequate Oversight Leaves Program Vulnerable to Waste, Abuse, and Mismanagement. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1991 Overlapping Federal Employment and Training Programs. Briefing for the U.S. Senate Committee on Labor and Human Resources. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1990 Job Training Partnership Act: Youth Participant Characteristics, Services, and Outcomes. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1990 Management Practices: U.S. Companies Improve Performance Through Quality Efforts. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1990 Training Strategies. Preparing Noncollege Youth for Employment in the U.S. and Foreign Countries. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989 Job Training Partnership Act: Comments on H.R. 2039, the JTPA Amendments of 1989. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989 Job Training Partnership Act: Information on Training, Placements, and Wages of Male and Female Participants. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989 Job Training Partnership Act: Services and Outcomes for Participants with Differing Needs. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989 Senate Bill 543: The Job Training Partnership Act Youth Employment Amendments of 1989. Washington, D.C.: U.S. General Accounting Office.

- U.S. General Accounting Office
1989 Training Programs. Information on Fiscal Years 1989 and 1990 Appropriations. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1989 Vocational Education: Opportunity to Prepare for the Future. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1988 Job Training Partnership Act: Participants, Services, and Outcomes. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1987 Youth Job Training: Problems Measuring Attainment of Employment Competencies. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985 Concerns Within the Job Training Community Over Labor's Ability to Implement the Job Training Partnership Act. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985 Job Training Partnership Act: An Analysis of Support Cost Limits and Participant Characteristics. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985 Job Training Partnership Act: Initial Implementation of Program for Disadvantaged Youth and Adults. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985 Strong Leadership Needed to Improve Management at the Department of Labor. Washington, D.C.: U.S. General Accounting Office.
- U.S. House of Representatives, Committee on Education and Labor
1982 Job Training Partnership Act: Conference Report, Report No. 97-889. Washington, D.C.: U.S. Government Printing Office.

Program Governance and Management

- U.S. House of Representatives, Committee on Education and Labor
1982 Job Training Partnership Act: Report, Report No. 97-537. Washington, D.C.: U.S. Government Printing Office.
- Urban Management Consultants of San Francisco
1976 CETA and HEW Programs. Washington, D.C.: U.S. Department of Health, Education and Welfare.
- Vaughan, Roger
1983 Education and Training for Industrial Policy. Testimony before the U.S. House Banking Committee, Subcommittee on Economic Stabilization. Washington, D.C.: U.S. Government Printing Office.
- Vaughan, Roger and Berryman, Sue E.
1989 "Employer-Sponsored Training: Current Status, Future Possibilities." National Center on Education and Employment Brief, No. 4.
- Vaughan, Roger; Pollard, Robert; Dyer, Barbara
1984 "Investing in Human Capital" in The Wealth of States: Policies for a Dynamic Economy. Washington, D.C.: Council for State Planning Agencies.
- Vickers, Margaret
1991 Building a National System for School to Work Transition: Lessons from Britain and Australia. Somerville, MA: Jobs for the Future.
- Victor, Kirk
1990 "Helping the Haves." National Journal, April 14.
- Walker, Gary; Feldstein, Hilary; Solow, Katherine
1985 An Independent Sector Assessment of the Job Training Partnership Act. Washington, D.C.: National Commission for Employment Policy.
- Walker, Gary C.; Grinker, William; Seessel, Thomas; Smith, R.C.; Cama, Vincent
1985 An Independent Sector Assessment of the Job Training Partnership Act. Phase II: The Initial Implementation. Prepared for the National Commission for Employment Policy, The Ford Foundation, Charles Stewart Mott Foundation and The Rockefeller Foundation. Washington, D.C.: National Commission for Employment Policy.

- Walker, Gary C.; Grinker, William; Seessel, Thomas; Smith, R.C.; Cama, Vincent
1984 An Independent Sector Assessment of the Job Training Partnership Act. Phase I: The Initial Transition. Prepared for the National Commission for Employment Policy, The Ford Foundation, Charles Stewart Mott Foundation and The Rockefeller Foundation. Washington, D.C.: National Commission for Employment Policy.
- Watson, Bernardine and Jaffe, Natalie
1990 The Practitioner's View: New Challenges in Serving High-Risk Youth. Philadelphia: Public/Private Ventures.
- Weiss, Janet
1981 "Substance Versus Symbol in Administrative Reform: The Case of Human Service Integration." Policy Analysis, 7(1):21-46.
- Westat, Inc.
1984 State-Level Implementation of the Job Training Partnership Act. Rockville, MD: Westat, Inc.
- William T. Grant Foundation
1991 New Partnerships. Education's Stake in the Family Support Act of 1988. Washington, D.C.: William T. Grant Foundation.
- William T. Grant Foundation, Commission on Work, Family and Citizenship
1988 The Forgotten Half: Non-College Youth in America. Washington, D.C.: William T. Grant Foundation.
- William T. Grant Foundation, Commission on Work, Family and Citizenship
1988 The Forgotten Half: Pathways to Success for America's Youth and Young Families. Washington, D.C.: William T. Grant Foundation.
- Wills, Joan L.
1991 "Cracks in the Foundation" in Voices from the Field: 30 Expert Opinions on America 2000, the Bush Administration Strategy to "Reinvent" America's Schools. Washington, D.C.: William T. Grant Foundation and Institute for Educational Leadership.
- Wilson, William Julius
1987 The Truly Disadvantaged. Chicago: University of Chicago Press.

Youth and the Labor Market

Zornitsky, Jeffrey and Rubin, Mary

1988 Establishing a Performance Management System for Targeted Welfare Programs. Washington, D.C.: National Commission for Employment Policy.

Zornitsky, Jeffrey, et al.

1986 Establishing a Post-Program Performance Management System for Employment and Training Programs. Cambridge, MA: Abt Associates.

YOUTH AND THE LABOR MARKET

Abraham, Katherine

1983 "Structural/Frictional versus Demand-Deficient Unemployment." American Economic Review, September.

Acs, Gregory and Danziger, Sheldon

1990 "Educational Attainment, Industrial Structure, and Male Earnings, 1973-1987." Unpublished paper, University of Michigan.

Altonji, Joseph and Card, David

1989 "The Effects of Immigration on the Labor Market Outcomes of Natives" in Abowd, J. and Freeman, R. (eds.) Immigration, Trade, and the Labor Market. Chicago, IL: University of Chicago Press.

Anderson, Elijah

1991 "Neighborhood Effects on Teenage Pregnancy" in Jencks, Christopher and Peterson, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.

Bailey, Thomas

1990 "Changes in the Nature and Structure of Work: Implications for Skill Requirements and Skill Formation." Berkeley, CA: University of California, National Center for Research in Vocational Education.

Baily, Martin N. and Blair, Margaret

1988 "Productivity and American Management" in Litan, Robert E. and Lawrence, Robert Z. (eds.) American Living Standards. Washington, D.C.: Brookings Institution.

- Ballen, John and Freeman, Richard
1986 "Transitions Between Employment and Nonemployment" in Freeman, Richard B. and Holzer, Harry J. (eds.) The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.
- Barnow, Burt and Aron, Laudan
1989 "Survey of Government-Provided Training Programs" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.
- Bartel, Ann and Lichtenberg, Frank
1987 "The Comparative Advantage of Educated Workers in Implementing New Technology." Review of Economics and Statistics, February.
- Barton, Paul and Kirsch, Irwin
1990 "Workplace Competencies: The Need to Improve Literacy and Employment Readiness." Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Bassi, Lauri and Ashenfelter, Orley
1986 "The Effect of Direct Job Creation and Training Programs on Low-Skill Workers" in Danziger, Sheldon and Weinberg, Daniel (eds.) Fighting Poverty: What Works and What Doesn't. Cambridge, MA: Harvard University Press.
- Becker, Brian and Hills, Stephen
1983 "The Long-Run Effects of Job Changes and Unemployment Among Male Teenagers." Journal of Human Resources, Spring.
- Bendick, Marc and Egan, Mary Lou
1988 "JOBS: Employment Opportunities in the Washington Metropolitan Area for Persons with Limited Employment Qualifications." Washington, D.C.: Greater Washington Research Center.
- Bishop, John
1990 "The Deskillling versus Upskilling Debate: The Role of BLS Projections." Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies.

Youth and the Labor Market

- Bishop, John
1990 "The Productivity Consequences of What Is Learned in High School." Journal of Curriculum Studies, 22(2):101.
- Bishop, John
1989 "Incentives for Learning: Why American High School Students Compare So Poorly to Their Overseas Counterparts" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.
- Bishop, John
1989 "Is the Test Score Decline Responsible for the Productivity Growth Decline?" American Economic Review, March.
- Bishop, J. and Carter, S.
1991 "The Worsening Shortage of College Graduate Workers." Education Evaluation and Policy Analysis, 13(3):221.
- Blackburn, McKinley; Bloom, David; Freeman, Richard
1989 "The Declining Economic Position of Less-Skilled American Males." NBER Working Paper No. 3186. Cambridge, MA: National Bureau of Economic Research.
- Borjas, George
1986 "The Demographic Determinants of the Demand for Black Labor" in Freeman, Richard B. and Holzer, Harry J. (eds.) The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.
- Bound, John and Freeman, Richard
1990 "What Went Wrong? The Erosion of the Relative Earnings of Young Black Men in the 1980s." Unpublished paper, Harvard University.
- Bound, John and Holzer, Harry
1991 "Industrial Shifts, Skill Levels, and the Labor Market for White and Black Males." Unpublished paper, Michigan State University.
- Bound, John and Johnson, George
1989 "Changes in the Structure of Wages During the 1980s: An Evaluation of Alternative Explanations." NBER Working Paper No. 2983. Cambridge, MA: National Bureau of Economic Research.

- Bureau of National Affairs
 1988 "Recruiting and Selection Procedures." Personnel Policies Forum Survey No. 146, May.
- Burtless, Gary
 1985 "Are Targeted Wage Subsidies Harmful? Evidence from a Wage Voucher Experiment." Industrial and Labor Relations Review, 39(1):105-114.
- Campbell, Paul; Basinger, Karen; Dauner, Mary Beth; Parks, Marie
 1986 Outcomes of Vocational Education for Women, Minorities, the Handicapped, and the Poor. Columbus, OH: Ohio State University, National Center for Research in Vocational Education.
- Carnevale, Anthony; Gainer, Leila; Meltzer, Ann
 1990 Workplace Basics: The Essential Skills Employers Want. San Francisco: Jossey-Bass Publishers.
- Case, Ann and Katz, Lawrence
 1990 "The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youths." Unpublished paper, Harvard University.
- Commission on the Skills of the American Workforce
 1990 America's Choice: High Skills or Low Wages. Rochester, NY: National Center on Education and the Economy.
- Corcoran, Mary; Datcher, Linda; Duncan, George J.
 1980 "Most Workers Find Jobs Through Word of Mouth." Monthly Labor Review, August.
- Council of Economic Advisers
 1990 Economic Report of the President: 1990. Washington, D.C.: U.S. Government Printing Office.
- Crane, Jonathan
 1991 "Effects of Neighborhoods on Dropping Out of School and Teenage Childbearing" in Jencks, Christopher and Peterson, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.
- Cross, Harry; Kenney, G.; Mell, Jane; Zimmerman, Wendy
 1989 "Employer Hiring Practices: Differential Treatment Between Hispanic and Anglo Job Seekers." Washington, D.C.: Urban Institute.

Youth and the Labor Market

D'Amico, Ronald

- 1984 "Does Employment During High School Impair Academic Progress?"
Sociology of Education, 57:152-164.

D'Amico, Ronald and Maxwell, Nan

- 1990 "Black-White Employment Differences During the School-to-Work
Transition: An Explanation for Between and Within Race Wage
Differences." Unpublished paper, SRI International.

Dryfoos, Joy

- 1990 Adolescents At Risk. New York: Oxford University Press.

Duncan, Beverly

- 1965 "Dropouts and the Unemployed." Journal of Political Economy, April: 121-
134.

Duncan, Greg J. and Hoffman, Saul D.

- 1991 "Teenage Underclass Behavior and Subsequent Poverty: Have the Rules
Changed?" in Jencks, Christopher and Peterson, Paul (eds.) The Urban
Underclass. Washington, D.C.: Brookings Institution.

Eggebeen, David; Crockett, Lisa J.; Hawkins, Alan J.

- 1990 "Patterns of Adult Male Coresidence Among Young Children of
Adolescent Mothers." Family Planning Perspectives, 22:219-223.

Ellwood, David

- 1989 "Poverty Through the Eyes of Children." Unpublished paper, Harvard
University.

Ellwood, David

- 1982 "Teenage Unemployment: Permanent Scars or Temporary Blemishes?" in
Freeman, Richard B. and Wise, David (eds.) The Youth Labor Market
Problem: Its Nature, Causes, and Consequences. Chicago, IL: University
of Chicago Press.

Fagan, Jeffrey and Pabon, Edward

- 1990 "Contributions of Delinquency and Substance Use to School Dropout
Among Inner-City Youth." Youth and Society, 21(3):306-354.

Farber, Henry

1987 "The Recent Decline of Unionization in the United States." Science,
November.

Farkas, George; Olsen, Randall; Stromsdorfer, Ernst; Sharpe, Linda; Skidmore, Felicity;
Smith, D. Alton; Merrill, Sally

1984 Post-Program Impacts of the Youth Incentive Entitlement Pilot Projects.
New York: Manpower Demonstration Research Corporation.

Ferguson, Ronald

1990 "Racial Patterns in How School and Teacher Quality Affect Achievement
and Earnings." Unpublished paper, Harvard University, J.F. Kennedy
School.

Forrest, Jacqueline and Singh, Susheela

1990 "The Sexual and Reproductive Behavior of American Women." Family
Planning Perspectives, 22:206-214.

Freeman, Richard

1991 "Crime and the Economic Status of Disadvantaged Young Men." Paper
presented at the Conference on Urban Labor Markets and Labor Mobility,
Airlie House, Virginia.

Freeman, Richard

1991 "Employment and Earnings of Disadvantaged Young Men in a Labor
Shortage Economy" in Jencks, Christopher and Peterson, Paul (eds.) The
Urban Underclass. Washington, D.C.: Brookings Institution.

Freeman, Richard

1989 "On the Divergence in Unionism among Developed Countries." NBER
Working Paper No. 2817. Cambridge, MA: National Bureau of Economic
Research.

Freeman, Richard

1986 "Who Escapes? The Relationship of Church-Going and Other Factors to
Outcomes for Inner-City Black Youth" in Freeman, Richard and Holzer,
Harry (eds.) The Black Youth Employment Crisis. Chicago, IL: University
of Chicago Press.

Youth and the Labor Market

- Freeman, Richard
1983 "Crime and the Labor Market" in Wilson, J.Q. (ed.) Crime and Public Policy. San Francisco: ICS Press.
- Freeman, Richard
1981 "Black Economic Progress Since 1964: Who Has Gained and Why?" in Rosen, S. (ed.) Studies in Labor Markets. Chicago, IL: University of Chicago Press.
- Freeman, Richard
1979 "The Effect of Demographic Factors On Age-Earnings Profiles." Journal of Human Resources, Spring.
- Freeman, Richard
1971 The Market for College-Trained Manpower. Cambridge, MA: Harvard University Press.
- Freeman, Richard and Holzer, Harry J. (eds.)
1986 The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.
- Freeman, Richard and Medoff, James
1982 "The Youth Labor Market Problem in the U.S.: An Overview" in Freeman, Richard and Wise, David (eds.) The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago: University of Chicago Press.
- Freeman, Richard and Wise, David (eds.)
1982 The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago: University of Chicago Press.
- Freeman, Richard; Borjas, George; Katz, Lawrence
1991 "On the Labor Market Effects of Immigration and Trade." New York: Russell Sage Foundation.
- Frey, William
1985 "Mover Destination Selectivity and the Changing Suburbanization of Whites and Blacks." Demography, 22(2):223-243.

- Fullerton, Howard
1989 "New Labor Force Projections, Spanning 1988 to 2000." Monthly Labor Review, November.
- Greenberger, Ellen and Steinberg, Laurence
1986 When Teenagers Work: The Psychological and Social Costs of Adolescent Employment. New York: Basic Books.
- Grogger, Jeffrey
1992 "Crime, Persistent Youth Joblessness, and Black/White Employment Differentials." Review of Economics and Statistics, Forthcoming.
- Gueron, Judith
1984 "Findings on Youth Employment: Lessons from MDRC Research." New York: Manpower Demonstration Research Corporation.
- Gustman, Alan and Steinmeier, Thomas
1981 "The Impact of Wages and Unemployment on Youth Enrollment and Labor Supply." Review of Economics and Statistics, 63(4):553-560.
- Hamilton, Steve
1990 Apprenticeship for Adulthood. New York: Free Press.
- Harris, Ron
1991 "Childhood: Fearing for Your Life." The Los Angeles Times, May 13.
- Hauser, R.M.
1991 "Trends in College Entry Among Whites, Blacks and Hispanics, 1972-1988." Discussion Paper No. 958-91. Madison, WI: University of Wisconsin, Institute for Research on Poverty.
- Hauser, R.M.
1991 "Measuring Adolescent Educational Transition Among Black Americans, Hispanics, and Whites." Discussion Paper No. 951-91. Madison, WI: University of Wisconsin, Institute for Research on Poverty.
- Heneman, Herbert; Schwab, Donald; Fossum, John; Dyer, Lee
1986 Personnel-Human Resource Management. Homewood, IL: Irwin.

Youth and the Labor Market

- Henshaw, Stanley K. and Van Vort, Jennifer
1989 "Teenage Abortion, Birth, and Pregnancy Statistics: An Update." Family Planning Perspectives, 21:85-88.
- Hill, M. Anne and O'Neill, June
1990 Underclass Behaviors in the United States: Measurement and Analysis of Determinants. Report to the U.S. Department of Health and Human Services. New York: Baruch College, Center for the Study of Business and Government.
- Hofferth, S.L.; Kahn, J.R.; Baldwin, W.
1987 "Premarital Sexual Activity Among U.S. Teenage Women Over the Past Three Decades." Family Planning Perspectives, 19:46-53.
- Hollister, Robinson
1989 "Black Male Youth: Their Employment Problems and Training Programs" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.
- Holzer, Harry
1991 "The Spatial Mismatch Hypothesis: What Has the Evidence Shown?" Urban Studies, Spring.
- Holzer, Harry
1990 "The Labor Market for Young Males: Trends, Causes, and Policy Implications." Research in Labor Economics, Vol. XI.
- Holzer, Harry
1988 "Structural/Frictional and Demand-Deficient Unemployment in Local Labor Markets." Cambridge, MA: National Bureau of Economic Research.
- Holzer, Harry
1987 "Hiring Procedures in the Firm: Their Economic Determinants and Outcomes" in Block, Richard; Kleiner, Morris; Roomkin, Myron; Salsburg, Sydney (eds.) Human Resources and Firm Performance. Madison, WI: Industrial Relations Research Association.

- Holzer, Harry
1987 "Informal Job Search and Black Youth Unemployment." American Economic Review, June.
- Holzer, Harry
1986 "Reservation Wages and Their Labor Market Effects for Black and White Male Youth." Journal of Human Resources, Spring.
- Holzer, Harry
1982 "Informal Job Search in Black Youth Unemployment." American Economic Review, June.
- Holzer, Harry and Vroman, Wayne
1991 "Mismatches and the Urban Labor Market." Unpublished paper, Urban Institute.
- Howell, David and Wolff, Edward
1991 "Trends in the Growth and Distribution of Skills in the U.S. Workplace." Industrial and Labor Relations Review, April.
- Hughes, Mark
1991 "Emerging Settlement Patterns: Implications for Antipoverty Strategy." Unpublished paper, Princeton University.
- Ihlanfeldt, Keith and Sjoquist, David
1991 "The Effect of Job Access on Black Youth Employment: A Cross-Sectional Analysis." Urban Studies, 28(2):255-265.
- Ihlanfeldt, Keith and Sjoquist, David
1990 "Job Accessibility and Racial Differences in Youth Employment Rates." American Economic Review, March.
- Jencks, Christopher and Mayer, Susan
1990 "The Social Consequences of Growing Up in a Poor Neighborhood: A Survey" in McGahey, Michael and Lynn, Lawrence (eds.) Concentrated Urban Poverty in America. Washington, D.C.: National Academy Press.
- Johnston, William and Packer, Arnold
1987 Workforce 2000: Workers and Work for the Twenty-First Century. New York: Hudson Institute.

Youth and the Labor Market

- Juhn, Chinhui; Pierce, Brook; Murphy, Kevin
1989 "Accounting for the Slowdown in Black-White Wage Convergence."
Unpublished paper, University of Chicago.
- Kandel, Denise B. and Davies, Mark
1990 "Labor Force Experiences of a National Sample of Young Adult Men: The Role of Drug Involvement." Youth and Society, 21(4):411-445.
- Kasarda, John
1989 "Urban Industrial Transition and the Underclass." The Annals of the American Academy of Political and Social Science, January.
- Katz, Lawrence and Murphy, Kevin
1992 "Changes in Relative Wages, 1963-87: The Role of Supply and Demand Factors." Quarterly Journal of Economics, Forthcoming.
- Kirschenman, Joleen and Neckerman, Katherine
1990 "Hiring Strategies, Racial Bias, and Inner-City Workers." Unpublished paper, University of Chicago.
- Kogan, John F.
1982 "The Decline in Black Teenage Employment: 1950-1970." The American Economic Review, September: 621-638.
- Korenman, Sanders and Neumark, David
1991 "Does Marriage Really Make Men More Productive?" Journal of Human Resources, Spring: 282-307.
- LaLonde, Robert and Topel, Robert
1989 "Labor Market Adjustments to Increased Immigration" in Abowd, J. and Freeman, Richard B. (eds.) Immigration, Trade, and the Labor Market. Chicago, IL: University of Chicago Press.
- Leonard, Jonathan
1990 "What Was Affirmative Action?" Journal of Economic Perspectives, Fall.
- Lerman, Robert
1990 "Fatherhood, Child Support, and Earnings: A Report on the Links Between Family Responsibilities and Job Market Outcomes." Paper prepared for the U.S. Department of Health and Human Services.

- Lerman, Robert
 1986 "Do Welfare Programs Affect the Schooling and Work Patterns of Young Black Men?" in Freeman, Richard and Holzer, Harry (eds.) The Black Youth Employment Crisis. Chicago: University of Chicago Press.
- Lerman, Robert
 1972 "Some Determinants of Youth School Activity." Journal of Human Resources, 7(3):366-383.
- Lerman, Robert and Pouncy, Hillard
 1990 "The Compelling Case for Youth Apprenticeship." Public Interest, Fall.
- Levitan, Sar and Gallo, Frank
 1988 A Second Chance: Training for Jobs. Kalamazoo, MI: W.E. Upjohn Institute.
- Levy, Frank
 1988 "Incomes, Families, and Living Standards" in Litan, Robert E. and Lawrence, Robert Z. (eds.) American Living Standards. Washington, D.C.: Brookings Institution.
- Levy, Frank and Murnane, Richard
 1992 "Earnings Levels and Earnings Inequality: A Review of Recent Trends and Proposed Explanations." Journal of Economic Literature, Forthcoming.
- Lillard, Lee and Tan, Hong
 1986 "Private Sector Training: Who Gets It and What are Its Effects?" Los Angeles: Rand Corporation.
- Lynch, Lisa
 1989 "Private Sector Training and Its Impact on the Earnings of Young Workers." NBER Working Paper No. 2872. Cambridge, MA: National Bureau of Economic Research.
- Lynch, Lisa
 1989 "The Youth Labor Market in the Eighties: Determinants of Reemployment Probabilities for Young Men and Women." Review of Economics and Statistics, 71(1):37-45.

Youth and the Labor Market

- Manski, Charles; Sandefur, Gary; McLanahan, Sara; Powers, Daniel
1990 "Alternative Estimates of the Effect of Family Structure During Adolescence on High School Graduation." Madison, WI: Institute for Research on Poverty.
- Massey, Douglas and Denton, Nancy
1988 "Suburbanization and Segregation in U.S. Metropolitan Areas." American Journal of Sociology, 94(3):592-626.
- Mayer, Susan
1991 "How Much Does a High School's Racial and Socioeconomic Mix Affect Graduation and Teenage Fertility Rates" in Jencks, Christopher and Peterson, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.
- McLanahan, Sara
1985 "Family Structure and the Reproduction of Poverty." American Journal of Sociology, 90:873-901.
- McLanahan, Sara
1985 "Single Mothers and Psychological Well-Being: A Test of the Stress and Vulnerability Hypotheses." Research in Community and Mental Health, 5:253-266.
- McLanahan, Sara and Bumpass, Larry
1988 "Intergenerational Consequences of Family Disruption." American Journal of Sociology, 94:130-152.
- Mensch, Barbara and Kandel, Denise
1988 "Dropping Out of High School and Drug Involvement." Sociology of Education, 61(2):95-113.
- Meyer, Robert and Horn, Robin
1990 "Reform of Secondary Vocational Education in the United States." Madison, WI: Institute for Research on Poverty.
- Meyer, Robert and Wise, David
1982 "High School Preparation and Early Labor Force Experience" in Freeman, Richard and Wise, David (eds.) The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago: University of Chicago Press.

Miller, Louisa and Moorman, Jeanne

1989 "Married Couple Families with Children" in Studies in Marriage and the Family. Current Population Reports, Series P-23, No. 162. Washington, D.C.: U.S. Government Printing Office.

Mincer, Jacob

1991 "Human Capital, Technology, and the Wage Structure: What Do Time Series Show?" NBER Working Paper No. 3581. Cambridge, MA: National Bureau of Economic Research.

Mincer, Jacob

1989 "Job Training: Costs, Returns, and Wage Profiles." NBER Working Paper No. 3208. Cambridge, MA: National Bureau of Economic Research.

Mincy, Ronald and Wiener, Susan

1990 A Mentor, Peer Group, Incentive Model for Helping Underclass Youth. Washington, D.C.: Urban Institute.

Mishel, Lawrence and Tuxeira, Ruy

1991 "The Myth of the Coming Labor Shortage." Unpublished paper, Economic Policy Institute.

Montgomery, James

1989 "Social Networks and Labor Market Outcomes." Unpublished paper, Northwestern University.

Mortimer, J.T. and Finch, M.D.

1986 "The Effects of Part-Time Work on Adolescent Self-Concept and Achievement" in Borman, K.M. and Reisman, J. (eds.) Becoming a Worker. Norwood, NJ: Ablex Publishing Corporation.

Mortimer, Jeylan and Shanahan, Michael

1990 "Adolescent Work Experience and Relations With Peers." Unpublished paper, University of Minnesota.

Mortimer, Jeylan; Finch, Michael; Shanahan, Michael; Ryu, Seongyeol

1991 "Adolescent Work History and Behavioral Adjustment." Unpublished paper, University of Minnesota.

Youth and the Labor Market

- Mott, Frank L. and Haurin, R. Jean
1988 "Linkages Between Sexual Activity and Alcohol and Drug Use Among American Adolescents." Family Planning Perspectives, 20:128-136.
- Murphy, Kevin and Welch, Finis
1988 "The Structure of Wages." Unpublished paper, Unicon Research.
- National Assessment of Educational Progress
1990 America's Challenge: Accelerating Academic Achievement. Princeton, NJ: National Assessment of Educational Progress.
- O'Neill, June
1990 "The Role of Human Capital in Earnings Differences Between White and Black Men." Journal of Economic Perspectives, Fall.
- Organization for Economic Cooperation and Development
1985 Education and Training After Basic Schooling. Paris: Organization for Economic Cooperation and Development.
- Osterman, Paul
1988 Employment Futures. New York: Oxford University Press.
- Personick, Valerie
1989 "Industry Output and Employment: A Slower Trend for the Nineties." Monthly Labor Review, November.
- Phillips, Sarah and Sandstrom, Kent
1990 "Parental Attitudes Toward Youth Work." Youth and Society, 22(1):160-183.
- Rosenbaum, James and Kariya, Takehiko
1991 "Do School Achievements Affect the Early Jobs of High School Graduates in the United States and Japan?" Sociology of Education, 64(2):78-95.
- Sawhill, Isabel
1989 "The Underclass." The Public Interest, Summer.
- Silvestri, George and Lukasiewicz, John
1989 "Projections of Occupational Employment, 1988-2000." Monthly Labor Review, November.

- Simms, Margaret
1989 "The Effectiveness of Government Training Programs" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.
- Skorneck, Carolyn
1991 "Crime Rise Not Tied Solely to Hard Economic Times." The Philadelphia Inquirer, January 13.
- Sonenstein, Freya L.; Pleck, Joseph H.; Ku, Leighton C.
1989 "Sexual Activity, Condom Use, and AIDS Awareness Among Adolescent Males." Family Planning Perspectives, 21:152-158.
- Steel, Lauri
1991 "Early Work Experience Among White and Non-White Youths." Youth and Society, 22(4):419-447.
- Stern, David; McMillion, Martin; Hopkins, Charles; Stone, James
1990 "Work Experience for Students in High School and College." Youth and Society, 21(3):355-389.
- Stern, David; Dayton, Charles; Paik, Il-Woo; Weisberg, Alan
1989 "Benefits and Costs of Dropout Prevention in a High School Program Combining Academic and Vocational Education: Third-Year Results from Replications of the California Peninsula Academies." Educational Evaluation and Policy Analysis, 11:405-416.
- Trent, Katherine and Harlan, Sharon
1990 "Household Structure Among Teenage Mothers in the United States." Social Science Quarterly, 71(3):439-457.
- Turner, Marjorie; Fix, Michael; Struyk, Raymond; Reed, Victor; Elmi, A.; Zimmerman, Wendy; Edwards, John
1991 "Opportunities Denied, Opportunities Diminished: Discrimination in Hiring." Washington, D.C.: Urban Institute.
- U.S. Department of Commerce
1991 Money Income of Households, Families, and Persons in the United States: 1988 and 1989. Current Population Reports, Series P-60, No. 172. Washington, D.C.: U.S. Government Printing Office.

Youth and the Labor Market

U.S. Department of Commerce

1990 Household and Family Characteristics: March 1990 and 1989. Current Population Reports, Series P-20, No. 447. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1990 Marital Status and Living Arrangements: March 1989. Current Population Reports, Series P-20, No. 445. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1990 School Enrollment--Social and Economic Characteristics of Students: October 1988 and 1987. Current Population Reports, Series P-20, No. 443. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1990 Statistical Abstract of the United States: 1990 (110th edition). Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1989 Projections of the Population of the United States, by Age, Sex, and Race: 1988 to 2080. Current Population Reports, Series P-25, No. 1018. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1988 Projections of the Population of States, by Age, Sex, and Race: 1988 to 2010. Current Population Reports, Series P-25, No. 1017. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1981 Statistical Abstract of the United States: 1981 (101st edition). Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1975 Household and Family Characteristics: March 1974. Current Population Reports, Series P-20, No. 276. Washington, D.C.: U.S. Government Printing Office.

- U.S. Department of Commerce
1973 Money Income in 1972 of Families and Persons. Current Population Reports, Series P-60, No. 90. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Education
1990 Digest of Educational Statistics: 1990. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Family Support Administration
1989 Characteristics and Financial Circumstances of AFDC Recipients, FY 1989. Washington, D.C.: U.S. Department of Health and Human Services.
- U.S. Department of Labor
1991 Employment and Earnings. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Labor
1990 Employment and Earnings. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Labor
1989 Handbook of Labor Statistics, 1989. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Labor
1982 Employment and Training Report of the President. Washington, D.C.: U.S. Department of Labor.
- U.S. Department of Labor
1981 Employment and Earnings. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Labor
1978 Employment and Training Report of the President. Washington, D.C.: U.S. Department of Labor.
- U.S. Department of Labor
1971 Employment and Earnings. Washington, D.C.: U.S. Government Printing Office.

Youth and the Labor Market

U.S. General Accounting Office

1991 Teenage Drug Use: Uncertain Linkages With Either Pregnancy or School Dropout. Report to the Chairman, Select Committee on Narcotics Abuse and Control (House of Representatives). Washington, D.C.: U.S. General Accounting Office.

U.S. House of Representatives, Committee on Ways and Means

1990 Overview of Entitlement Programs: Green Book. Washington, D.C.: U.S. Government Printing Office.

Upchurch, Dawn and McCarthy, James

1989 "Adolescent Childbearing and High School Completion in the 1980s: Have Things Changed?" Family Planning Perspectives, 21(5):199-202.

Viscusi, W. Kip

1986 "Market Incentives for Criminal Behavior" in Freeman, Richard B. and Holzer, Harry J. (eds.) The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.

Welch, Finis

1990 "Employment of Black Males." Journal of Labor Economics, January.

Welch, Finis

1979 "Effects of Cohort Size on Earnings: The Baby Boom Babies' Financial Bust." Journal of Political Economy, 87:565-597.

Wilson, William J.

1987 The Truly Disadvantaged. Chicago: University of Chicago Press.

Wolfgang, Marvin; Thornberry, Terence; Figlio, Robert

1987 From Boy to Man, from Delinquency to Crime. Chicago: University of Chicago Press.

Zuboff, Shoshana

1988 In the Age of the Smart Machine. New York: Basic Books.

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Volume II



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Dilemmas in Youth Employment Programming: Findings from the Youth Research and Technical Assistance Project

Volume II



Research and Evaluation Report Series 92-C

U.S. Department of Labor
Lynn Martin, Secretary

Employment and Training Administration
Roberts T. Jones, Assistant Secretary
For Employment and Training

Office of Strategic Planning and Policy Development
Raymond J. Uhaide, Administrator

1992

Research and Evaluation Report Series

The Research and Evaluation Report Series presents information about and results of projects funded by the Office of Strategic Planning and Policy Development (OSPPD) of the U.S. Department of Labor's Employment and Training Administration. OSPPD's research and evaluation program deals with a wide range of training, employment, workplace literacy, labor market and related issues.

The papers presented in both Volume I and Volume II of this series were prepared under Department of Labor Contract No. 99-0-1879-75-053-01, by Brandeis University, Waltham, Massachusetts, and Public/Private Ventures (P/PV), Philadelphia, Pennsylvania.

P/PV oversaw the production of the 10 papers in the series and had responsibility for developing paper topics, assigning and reviewing papers and preparing the final publication versions for the Department. The project was managed by Thomas J. Smith and Michelle Alberti Gambone of P/PV, who worked closely with Susan P. Curnan (principal investigator for the overall contract) and Alan Melchior, both of Brandeis University, throughout the project.

Each volume contains five issue papers. The full table of contents for the series, the introduction to the series and the bibliography are contained in both volumes.

Contractors conducting research and evaluation projects under federal sponsorship are encouraged to express their own judgment freely. Therefore, this report does not necessarily represent the official opinion or policy of the Department of Labor.

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CONTENTS

VOLUME II

INTRODUCTION	1
6. COORDINATION, COLLABORATION AND LINKAGES <i>Lawrence Neil Bailis</i>	
I. INTRODUCTION: THE SEARCH FOR PRACTICAL GUIDANCE	15
The Scope of the Paper	16
Youth-Specific and Generic Issues Pertaining to Collaboration, Coordination and Linkages	16
Sources of Information	17
Organization and Content of the Paper	17
II. FRAMEWORK FOR ANALYSIS: UNDERSTANDING, DEFINING AND MEASURING COORDINATION, COLLABORATION AND LINKAGES	19
The Old and the New Conventional Wisdom	19
Defining the Terms Coordination, Collaboration and Linkage	26
Issues in Measuring Coordination	27
Special Issues in Measuring Coordination in Youth-Serving Programs	31
III. THE DYNAMICS AND OUTCOMES OF THE COORDINATION PROCESS AMONG FEDERAL, STATE AND LOCAL AGENCIES	32
The Barriers to Coordination	33
Promising Strategies	37
Assessment of Coordination Strategies Among Federal Agencies	42
Issues in Assessing the Effectiveness of Given Strategies to Promote Coordination in Given Contexts	43
Issues in Assessing the Effectiveness of Coordination in Promoting Improvements in Service Delivery	44
Special Issues Pertaining to the Youth Employment	45
IV. DYNAMICS AND OUTCOMES OF EFFORTS TO PROMOTE "TOP DOWN" COORDINATION	48
Overview of Federal Efforts to Promote Coordination at the State and Local Levels	48

	Overview of State Efforts to Promote Coordination at the	
	Local Level	50
	Assessment of Specific Strategies	52
	Conclusion	59
V.	SUMMARY OF CONCLUSIONS AND PRELIMINARY RESEARCH	
	AGENDA	60
	The Prevalence of Examples of Coordination	60
	The Need for Empirical Data on Coordinated Activities,	
	Outcomes and Contexts	61
	The Central Role of Organizational Dynamics	62
	The Importance of Voluntary Coordination as Opposed to	
	Mandates	63
	The Overarching Importance of Context	63
	Keeping Coordination in Perspective	65
	Priority Topics for Future Research	66
7.	PERFORMANCE STANDARDS AND PERFORMANCE MANAGEMENT	
	<i>Alan Melchior</i>	
I.	INTRODUCTION	77
II.	FROM ACCOUNTABILITY TO PERFORMANCE MANAGEMENT:	
	JTPA's EVOLVING PERFORMANCE STANDARDS SYSTEM	79
	CETA Origins of Performance Standards	79
	The JTPA Performance Standards System	80
	Moving Toward Performance Management	85
	Performance Standards in the 1990s	89
III.	THE EFFECTIVENESS OF THE JTPA PERFORMANCE	
	STANDARDS SYSTEM AS AN ACCOUNTABILITY SYSTEM	91
	Measuring JPTA's Goals	92
	Accuracy and Problems of Measurement	94
	Unintended Effects	97
	Validity	105
IV.	THE EFFECTIVENESS OF THE JTPA PERFORMANCE	
	STANDARDS AS A PERFORMANCE MANAGEMENT	
	SYSTEM	108
	Incentives for State and Local Decision-Making	108
	Provider Involvement	114
	The Influence of Local Factors	115
	Performance Standards and Performance Management	117

V.	INVESTING IN QUALITY: LESSONS FROM ALLIED FIELDS ..	118
	Total Quality Management (TQM)	118
	Performance Management in Health Care	121
	Measuring "Higher-Order" Skills in Education	125
	Moving From Performance to Quality	126
VI.	SUMMARY OF RECOMMENDATIONS	128
	Evaluation of the Performance Standards System and Alternatives	128
	Improving the Quality of Data	129
	Strengthening Skills Measures and Competency Systems	129
	Refining the Performance Standards Model	130

APPENDIX

	Table A-1: Summary of Estimated Impacts of State Performance Standards Policies on Percentage of JTPA Terminees with Various Characteristics	131
	Table A-2: Summary of Estimated Impacts of State Performance Standards Policies on Percentage of JTPA Services in Various Program Activities	133

**8. THE MISSION AND STRUCTURE OF NATIONAL HUMAN RESOURCE
POLICY FOR DISADVANTAGED YOUTH: A SYNTHESIS WITH
RECOMMENDATIONS**

Andrew Hahn, Evelyn Ganzglass and Gloria Nagle

I.	INTRODUCTION	145
II.	YOUTH EMPLOYMENT AND TRAINING IN THE MODERN ERA	147
III.	UNDERSTANDING AMERICAN YOUTH EMPLOYMENT AND TRAINING POLICY: A FRAMEWORK	155
	Choices of Scope	155
	Choices of Distribution	160
	Choices of Policy Instruments	164
	The Choice Between Restraint and Innovation	167
IV.	CAPACITY-BUILDING ACTIVITIES AND SYSTEM-CHANGING INITIATIVES	172
V.	RESEARCH AND DEMONSTRATION IMPLICATIONS: THE NEED FOR A COMPARATIVE FRAMEWORK	176

VI.	CONCLUSION AND RECOMMENDATIONS	180
9.	YOUTH IN THE NINETIES: RECENT TRENDS AND EXPECTED PATTERNS <i>Robert I. Lerman</i>	
I.	INTRODUCTION	193
II.	A PROFILE OF THE YOUTH COHORT	196
	Population Patterns	196
	Living Arrangements of Youth	201
	Education and Employment Status of Parents	205
	Education Levels and Basic Skills of Today's Youth	207
	Marriage, Sexual Activity and Early Parenthood	212
	Criminal Activity	215
	Drug and Alcohol Usage	217
	Employment and Earnings	217
	Concentration of Youth Problems	220
III.	CAUSES AND CONSEQUENCES OF PROBLEM BEHAVIORS ...	223
	Consequences	223
	Causes	224
IV.	JOBS AND YOUTH DEVELOPMENT	226
V.	CONCLUSIONS AND RECOMMENDATIONS	233
	Conclusions	233
	Policy Recommendations	233
	Research Recommendations	235
10.	YOUTH AND THE LABOR MARKET IN THE NINETIES <i>Harry J. Holzer</i>	
I.	INTRODUCTION	245
II.	LABOR MARKET OUTCOMES FOR YOUTH AND THEIR CAUSES	247
	Recent Outcomes	247
	Projected Outcomes for the 1990s	254
	Other Data on Employers and Skill Requirements	255
	Conclusion: A Skill Mismatch for the Disadvantaged?	259

III. MINORITY AND DISADVANTAGED YOUTH: OTHER
SOURCES OF PROBLEMS 264
Suburbanization and Spatial Mismatch 264
Early Work Experience and Contacts 265
Neighborhood Effects and Crime 266

IV. CONCLUSIONS AND RECOMMENDATIONS 269

BIBLIOGRAPHY 287

CONTENTS

VOLUME I

INTRODUCTION	1
1. EFFECTIVENESS OF FEDERALLY FUNDED EMPLOYMENT TRAINING STRATEGIES FOR YOUTH <i>Thomas J. Smith and Michelle Alberti Gambone</i>	
I. THE PROBLEM	15
The Strategies: A Brief History	15
Issues to be Investigated	20
II. PROGRAM EFFECTIVENESS	22
The Findings	23
The Major Strategies	29
III. WORK EXPERIENCE	35
IV. DEVELOPMENTAL NEEDS OF DISADVANTAGED YOUTH ...	40
V. CONCLUSIONS AND RECOMMENDATIONS	49
APPENDIX	
Table A-1: Major Sources of Evidence Regarding Youth Employment Program Effects	56
Table A-2: Subgroup Analyses Reported by Selected Youth Program Evaluations	57
2. SUPPORTIVE SERVICES FOR YOUTH <i>Demetra Smith Nightingale, Barbara Cohen and Pamela Holcomb</i>	
I. INTRODUCTION	69
II. CHARACTERISTICS OF THE POPULATION	71
Family Structure and Geographic Distribution	71
Education	72
Health	73
Multiproblem Youth	73

III.	SUPPORTIVE SERVICES IN EMPLOYMENT AND TRAINING PROGRAMS	75
	The Role of Supportive Services	75
	Inventory of Supportive Services	76
	Objectives of Supportive Services	80
	Summary of Supportive Services	84
IV.	PROVISION OF SUPPORTIVE SERVICES	85
	Effectiveness of Supportive Services	87
	Summary	89
V.	SUPPORTIVE SERVICES IN OTHER PROGRAMS	91
	Role of Supportive Services	91
	Types of Supportive Services	93
	Delivering Supportive Services: Case Management	97
	Summary	100
VI.	CONCLUSIONS AND RECOMMENDATIONS	102
	Conclusions	102
	Policy Recommendations	103
	Research Recommendations	103
3.	STRUCTURE AND SEQUENCE: MOTIVATIONAL ASPECTS OF PROGRAMMATIC STRUCTURE IN EMPLOYMENT AND TRAINING INTERVENTIONS FOR DISADVANTAGED YOUTH <i>Catherine Higgins</i>	
I.	INTRODUCTION	113
II.	STRUCTURE AND OUTCOMES	119
	Participants and Structure	120
	Length of Stay, Educational Attainment and Employment Impacts	127
	Conclusion and Implications	136
III.	ACHIEVEMENT MOTIVATION: PROCESS AND STRUCTURE	139
	Background	139
	Theory and Experimental Findings	140
	Summary	146
IV.	CONCLUSIONS AND RECOMMENDATIONS	148
	Review of Findings	148

Motivational Aspects of Existing Programs	150
Recommendations	152
Concluding Remarks	154

APPENDIX: PROGRAM AND SITE DESCRIPTIONS

Supported Work	155
The Minority Female Single Parent (MFSP) Demonstration	155
JOBSTART	156
Urban and Conservation Corps	158
The Summer Training and Education Program (STEP)	159

4. CRITICAL SKILLS FOR LABOR MARKET SUCCESS: WHAT ARE THEY AND HOW CAN AT-RISK YOUTH ACQUIRE THEM?
Amy W. Johnson and Michelle Alberti Gambone

I. THE PROBLEM	167
II. IDENTIFYING CRITICAL SKILLS	171
Lack of Agreement	173
Hierarchy	175
National Standards for Skills Attainment	176
Conclusions	179
III. SHORTCOMINGS OF THE TRADITIONAL SCHOOL SYSTEM	181
IV. EVIDENCE FROM IN-SCHOOL EFFORTS	185
Current Approaches	185
Single-Component Strategies	186
Comprehensive Programs	194
V. COMPREHENSIVE NEEDS CALL FOR COMPREHENSIVE PROGRAMS	202
Instruction	206
Development	206
Leadership	207
School Ethos	207
Notes of Caution	207
VI. CONCLUSIONS AND RECOMMENDATIONS	209

5. SCHOOL-TO-WORK TRANSITION: FAILINGS, DILEMMAS AND POLICY OPTIONS
Richard H. de Lone

I. INTRODUCTION 223

II. THE PROBLEM 226
 The Limits of Postsecondary Options 227
 What the Data Show 228
 Implications of the Data 239

III. RECENT HISTORY OF THE SCHOOL-TO-WORK TRANSITION
 AS A POLICY ISSUE: INITIATIVES AND RESEARCH
 FINDINGS 240
 The Sixties 241
 The Seventies 243
 The Eighties 247
 The Importance of Implementation: A Cross-Cutting Issue 259
 Summary 261

IV. DEVELOPING AN AGENDA FOR THE FUTURE 262
 Research Shortcomings 262
 Defining the Issues 263
 Developing an Effective System 267
 Summary of Findings 274
 Recommendations to the Department of Labor 276

BIBLIOGRAPHY 293

INTRODUCTION

Since the 1960s, the U.S. Department of Labor has underwritten a variety of programs and strategies designed to help youth make firm connections with the labor market. These programs have been enacted under a succession of policy mandates, administrative structures, funding levels and political philosophies. Thus, their focus, scope and results have shifted, often dramatically, over the years.

In the sixties, the programs were, in many ways, experiments; their impetus ranged from labor market concerns to interest in poverty reduction. In the mid-seventies, widespread youth unemployment emerged as a full-fledged policy issue, and major resources were expended through the Youth Employment and Demonstration Projects Act (YEDPA) to explore systematically the potential of federal/local programming to combat youth employment problems.

In the late eighties and early nineties, the focus shifted to issues of international competitiveness and the capacity of the nation to produce new workers capable of meeting the challenges of the workplace.

Attempts to develop useful knowledge about how well youth employment programming has succeeded reflect the relative newness of the field and the varied environments in which such programming has grown up. Although the field has benefitted from research efforts of varying intensity and quality, the base of knowledge on which policy, legislative and program decisions are built remains incomplete, and is often not well known among decision-makers and practitioners.

The nineties will see continued and, indeed, heightened interest in finding effective ways to connect youth to the labor market--particularly the economically disadvantaged youth who are the major target of federally funded employment training efforts. Thus, it is essential to take stock of what we know, to view our current knowledge clearly and realistically, and to use it to forge better policies for the future.

This was the aim of the U.S. Department of Labor's Employment and Training Administration when it undertook a project to conduct a broad review of what is known in the field, and contracted with Brandeis University's Center for Human Resources and Public/Private Ventures (P/PV) to design and carry out the work. Within this joint contract, P/PV assumed responsibility for organizing and overseeing the production of this review.

The Department sought not only an exploration of studies and evaluations related to youth training and employment programs, but a broader synthesis of evidence, findings and research from related fields and disciplines, including sociology, education and

Dilemmas in Youth Employment Programming

psychology, as well as from the numerous reports and studies that have been commissioned by foundations and interest groups in the field. This wider examination was to identify research and evidence in other disciplines that would enrich the youth employment training findings and help us interpret them more fully and realistically; and to produce ideas and guidance for both future research and future programming.

A secondary aim of the review was to identify findings of interest not just to policy and research analysts but to practitioners as well. Wherever possible, the work was to crystallize recommendations, based on research findings, that practitioners might adopt in their day-to-day design and management decisions. This latter aim was somewhat more difficult to attain than the first. Due to limitations in information on specific program practices, the review tended to focus more on theory and policy than on practice, though a number of papers recommend specific improvements or modifications in programming.

Finally, the Department wanted the review to identify areas where future research should concentrate. One product of the review was a multiyear research strategy paper, prepared for the Department's use, identifying major policy areas that might be the focus of research efforts in future years.

The Department gave P/PV latitude in how the review was to be carried out, within agreed-upon parameters. The work was cast in a manner that would produce pragmatic findings relevant to program planning and policy considerations. Thus, the history and the major legislative and programmatic structures of employment training programs in the United States were a starting point and focus for the review.

To carry out the retrospective research review effectively, it was necessary to be selective. "Youth" is a complex subject, one that is treated extensively (and not always with complete agreement) in a number of different disciplines. With limited time and resources, it was impossible to be exhaustive. Rather, the aim was to frame the most critical questions in a manner that would permit them to be addressed thoroughly, and to summarize the major findings in a pragmatic fashion that would produce insights and directions that could be used in a "live" policy and programming context.

An Advisory Group, composed of both research experts and practitioners in the youth employment field, aided the project and was periodically consulted about the research agenda and the actual work of the project.

The organizing framework for the research and the products to be delivered rested on three broad questions:

- What programs, services and techniques best prepare youth for jobs and careers?
- What strategies of governance and management offer greatest opportunity for effective delivery of these services?
- What factors regarding youth, their environment and the labor market must be addressed in providing these services?

RESEARCH PAPERS

Under each of these broad questions, the key issues were identified. The issues in turn generated additional questions of concern to both research and practice in youth employment and training. Most of the issues and questions were organized to form the basis for ten research syntheses, which are presented in these two volumes. The following topics were selected:

Programs, Services and Techniques

1. Effectiveness of youth employment training strategies
2. Supportive services in youth employment programs
3. Program length and sequence
4. Educational skills
5. The school-to-work transition

Governance and Management

6. Program coordination and collaboration
7. Performance measures and standards
8. National laws and local programs

Youth, Their Environment and the Labor Market

9. Youth in the nineties
10. Youth and the labor market

As part of the process leading to the development of the individual papers, P/PV worked with Brandeis University in defining their broad parameters. Experts in the relevant fields were identified, consulted and hired as needed for specific papers. Early attention

Dilemmas in Youth Employment Programming

to the organization of individual papers by the contract staff minimized overlap (a critical consideration, for the topics tend to be fairly closely related),¹ and provided individual authors with a well-defined area to study and analyze. Such an approach also permitted authors flexibility in interpreting and presenting conclusions.

Each paper was prepared using the same guidelines, which called for the issue to be identified and elaborated on, then analyzed; evidence and research from allied fields to be incorporated; and conclusions and recommendations to be presented. The papers largely adhere to this design. There are exceptions--reflecting the complexity of the subject and the variety of authorship--which make summarization of the major findings difficult, especially where the papers' findings and conclusions reflect multiple perspectives and varying emphases. The diversity of ideas in the papers highlights the complex nature of youth employment and the scarcity of easy, unambiguous answers to basic problems.

It should then come as no surprise that the review uncovered no "magic bullets"--no unequivocal guideposts to following "these" rather than "those" strategies. But the ten papers together reflect one theme: we have much yet to learn about the task of building a resilient and effective youth employment system in the United States.

MAJOR FINDINGS

Most of the papers contain summary sections that draw together their major findings. These sections should be reviewed to gain a full understanding of the scope of the findings and recommendations made by the authors. This introduction is intended only to present several key findings echoed in many of the papers, in order to give readers a sense of the cross-cutting themes affecting youth research.

1. The Current State of Knowledge. The point most consistently raised in the papers concerns the limitations of our current knowledge. Eight of the ten papers report a scarcity of data and reliable research on which to base firm conclusions about the best directions for future policy and programming.

Smith and Gambone, and Nightingale, Cohen and Holcomb are perhaps the most sobering in this regard. They review the specifics of programs for youth and the evidence regarding their effectiveness. They conclude that evidence is sparse, generally focused on short-term effects and sometimes inconsistent. Even reliable descriptive

¹ The intention was to minimize redundancy in the major areas of research. There is, however, overlap in certain areas--such as the history of employment training, the multiple problems of at-risk youth, etc.--that form the critical context in which the issues are considered.

information about participants and actual program services is often missing. Similar conclusions are echoed in most of the other papers.

In part, the limitations in knowledge stem from limitations inherent in evaluation methodology. Net impact evaluation is expensive and deals with relatively few issues in depth; thus, comparatively few programs benefit from the results. But several papers also note that research and data on disadvantaged youth populations (especially ages 14 to 21) are also scarce. Existing research on topics of concern to this project (e.g., education and adolescent psychology) is often limited to populations that are primarily middle-class and white, and thus provides little solid evidence or guidance in thinking about the economically disadvantaged and often minority youth who receive federally sponsored services.

2. Program Effectiveness. The existing research on the training strategies, program structures and supportive services tried in the past leads to sobering conclusions. Smith and Gambone, in their review of employment training programs, conclude that "excluding findings from the Job Corps, there is no evidence that any of the programs [evaluated in the 1980s had] more than a modest and short-term effect" on young participants. These findings are amplified in Higgins, who reviews a variety of well-researched programs and concludes that different program structures have comparatively little effect on youth's length of stay in programs, or on the impacts programs produce.

3. Reasons for Limited Program Effectiveness. The most commonly cited reasons for the limited results, a number of papers argue, are the serious problems of the youth who come to them. Lerman provides a detailed portrait of at-risk youth in the nineties (as do Holzer, Nightingale, et al., and Smith and Gambone), and he places special emphasis on youth with multiple problems.

These authors conclude that the intersecting problems of poverty, inadequate housing, dysfunctional families and poor education have powerfully negative effects on youngsters drawn to employment training programs, effects the programs often cannot overcome or simply do not seek to address. Limitations in our knowledge about which programs work, and for whom, make it difficult to determine how programs might better respond to multiproblem youth and foster sound development in such participants.

4. Strengthening Program Effectiveness. Many authors argue that multicomponent programs, programs that combine a range of strategies and services, represent the best hope for enhancing the effectiveness of program offerings for youth. Because of the limited information on combining training strategies and support services, the authors are not able to offer firm recommendations about what particular combinations should be tried. However, Nightingale, et al., argue for both wider inclusion and careful testing of

Dilemmas in Youth Employment Programming

"supportive" services in the employment training regimen. The papers by de Lone, by Johnson and Gambone, and by Smith and Gambone explore the issue of multiple-strategy interventions and how they might be tested.

A major obstacle to such approaches has been cost. Thus, one approach to enriched services may be through coordination of service agencies--particularly, closer linkages with programs sponsored by the U.S. Department of Education. Bailis reviews the historical difficulties government agencies have had in finding common ground on which to collaborate. He recognizes a critical need for interagency coordination but also notes that, beyond common assumptions, there is little evidence to support conclusions about whether or not such coordination produces tangible benefits.

Finally, the potential of performance incentives for boosting performance (discussed in Melchior), as well as the lessons to be gleaned from closer scrutiny of how other countries approach the youth employment problem (a major theme of Hahn, Ganzglass and Nagle) represent other directions worthy of further pursuit.

5. The Potential of Work Experience. The U.S. approach to employment training has mainly centered on the notion of training--skills training and instruction on how to fill out resumes, seek jobs and behave properly in the workplace. Work experience has a reputation that is at best mixed, and often negative. This clouded reputation has extended to work experience programs for youth.

The evidence from youth employment program evaluations, reported in Smith and Gambone, indeed is generally negative. Yet they, as well as Lerman, summarize social science research from the past decade that paints a far more complex picture and underscores the need to examine the quality, quantity and developmental potential of work experience more carefully.

These authors (joined by de Lone) cite the potential of work experience in the school-to-work transition and in the "apprenticeship" schemes now being discussed as tools for building more capable workers in the future. Together, the papers reflect the controversies that continue to reign in considering the issue; and they reflect, too, a belief that work experience for youth may merit reconsideration in employment training policy in the future.

6. Funding Needs and Availability. Although none of the papers addresses the issue directly, a number touch on the question of whether the limited funding now available for youth employment training efforts is sufficient to meet the needs the papers identify, particularly to undertake the costly, multicomponent programming approaches recommended for youth with multiple needs. No clear evidence is presented; indeed, the issue

is a political as much as a research question, and hence the authors stop short of clear-cut recommendations. Nonetheless, several papers imply that, if more intensive programs and more research to understand them are to be undertaken, the current funding base will have to be expanded.

In short, the papers as a group focus more on needs than solutions, though none shies away from offering recommendations about new directions or initiatives the authors regard as promising and worthwhile. Two broad conclusions arise from reading all the papers together.

The first is that this young field has much yet to learn. Its base of findings is substantial and impressive, in view of the varied political and administrative contexts in which programs have been launched and scrutinized. Yet there remain significant gaps in our capacity to answer the question that has dominated the field since its inception: What works best for whom? Thus far, the available evidence provides only limited encouragement. Few programs seem to have marked and enduring effects. There remain many unanswered questions about how to serve youth effectively.

The second conclusion is that we must continue searching in a variety of different areas. We need to find ways of enriching current employment training efforts with better theory--about how poverty affects young people and how it can be addressed; how programs can shape youth into resilient adults, not just better-trained workers; and how employment training programs can be better integrated into schooling and other services that most authors argue are needed--even if the precise form and nature of those services is not yet understood.

In short, both research and program efforts must be viewed as part of a larger, unfinished agenda to strengthen all youth-serving institutions and to provide them with better tools for enabling youth to grow as individuals, as learners, as workers and as citizens in our society.

The remainder of this introduction presents brief descriptions of each of the papers, which are published in two volumes. The first volume contains the five papers on program services and techniques. The second contains the papers on program governance and management, and youth and the labor market. Both volumes include a bibliography that lists the extensive literature reviewed in the course of this project. Anyone interested in further reading on any of the topics covered here will find this a valuable resource, since it represents the best and most recent work published on many of these issues.

Dilemmas in Youth Employment Programming

PAPER SUMMARIES

In Paper No. 1, "Effectiveness of Federally Funded Employment Training Strategies for Youth," Thomas J. Smith and Michelle Alberti Gambone examine the findings from multiple program sources: a comprehensive review conducted by the National Research Council of 28 YEDPA research projects; an analysis by the Urban Institute of the Continuous Longitudinal Manpower Survey; and research on the California Conservation Corps (CCC), JOBSTART and the Summer Training and Education Program (STEP).

They conclude that the knowledge of program effectiveness produced from these research and demonstration projects is of limited value to either the policy or the practice of youth employment training. The findings are often highly qualified, provide evidence of only short-term outcomes and seldom offer insight into program implementation.

The authors suggest that programs providing a combination of employment and training strategies--work experience, on-the-job training, labor market preparation, job placement and occupational training--may be more effective in producing results. Multiple strategies are seen as necessary if programs are to address the multiple problems faced by minority and disadvantaged youth.

Smith and Gambone argue that, due to their adult focus, federally funded employment and training programs have ignored the developmental needs of youth. Evidence from social science research (sociology and psychology) provides support for the authors' argument that impeded cognitive and socioemotional growth results from the psychological and emotional deprivation often associated with negative environmental influences in the family, neighborhood and school.

Smith and Gambone maintain that such negative influences inhibit the ability of minority and disadvantaged youth to derive maximum benefit from employment and training programs. The authors assert, therefore, that to be effective, youth interventions must develop a broader range of services to better address the full range of developmental and social needs of program participants.

The paper makes a strong argument--one that foreshadows the findings and conclusions of several of the papers that follow--concerning the need for long-term research efforts in order to expand current knowledge about the effectiveness of federally funded youth employment training programs. For example, while the number of hours worked has been considered important for program effectiveness, the quality of the work has yet to be entered into the equation. The work experience debate is one area that could benefit from further study.

In Paper No. 2, "Supportive Services for Youth," Demetra Smith Nightingale, Barbara Cohen and Pamela Holcomb provide a useful discussion of the purposes of, need for and possible impact of supportive services on youth in employment and training programs. They review 14 employment and training programs or projects from the Manpower Development and Training Act, the Comprehensive Employment and Training Act and the Job Training Partnership Act (JTPA). The authors are critical of the paucity of detailed information and evaluation findings necessary to measure the need for, receipt of and potential effectiveness of such services for producing positive program outcomes.

Despite this lack of empirical evidence, however, many employment and training practitioners argue that such services are needed if programs for youth with multiple problems are to be effective. The authors call for further investigation of this critical link. Their analysis supports a movement away from limited supportive services, such as child care and transportation, toward a more comprehensive model that includes postprogram services.

A comprehensive model of supportive services is viewed as a response to the growing awareness that youth entering employment and training programs bring with them multiple problems related to family and neighborhood structure, education and health. Nightingale, et al., echoing Smith and Gambone, provide a good discussion of the multiple problems facing minority and disadvantaged youth and argue that such problems, if not addressed, constitute formidable barriers to positive program outcomes.

Perhaps the most significant contribution of this paper is its comparison of the objective and content of supportive services found in employment and training programs with those in non-employment and training programs, i.e., juvenile justice and delinquency programs, homeless and runaway youth programs and adolescent pregnancy programs. The authors argue that the role of supportive services in employment and training programs has been supplementary; non-employment and training programs are more likely to view supportive services as essential.

Finally, Nightingale, et al., discuss the use of case management, an approach to service delivery widely used in non-employment and training programs dealing with the most disadvantaged or multiple-problem youth. Increasingly viewed by practitioners in allied fields as an effective way of delivering supportive services to this population, this approach--characterized by needs assessment, coordination of services, and monitoring of client progress by a supportive advocate--is proposed as an option to be pursued by youth employment and training programs. The authors also advocate interagency dialogue to address the multiple supportive service needs of disadvantaged youth.

Dilemmas in Youth Employment Programming

Paper No. 3, "Structure and Sequence: Motivational Aspects of Programmatic Structure in Employment and Training Interventions for Disadvantaged Youth," by Catherine Higgins, probes the problem of attrition from youth employment and training programs by examining the structural variation of such programs. She surveys the findings from 15 sites in four employment and training demonstrations--Minority Female Single Parent, Supported Work, JOBSTART and STEP--and two independent programs--CCC and the New York City Volunteer Corps--and concludes that there exists no clear successful alternative to the traditional high school model, a didactic training model that has already been rejected by, or proven unsuccessful with, disadvantaged youth.

The solution to the problem of attrition, the author maintains, does not lie in issues of program structure and sequence. Despite diversity, programs have produced a narrow range of outcomes--a six-month average length of stay, a 30 percent attainment rate for participants undergoing GED preparation, and impacts limited to education or training. Practitioners are urged, therefore, to investigate the lessons from academic psychology on achievement motivation.

Higgins' review of recent literature from this field provides important insights into both the maladaptive thinking patterns of low achievers, which often compromise the motivation of such students to address new and challenging tasks, and the strategies that have been used to revise such patterns. By way of example, Higgins analyzes a particular program, the Center for Employment and Training. While success has usually been attributed to the program's practical orientation (i.e., the guarantee of a job motivates a program participant to learn a skill), the author argues that emphasis on the process of mastering a skill may increase participants' belief that their efforts can help them achieve their goals.

The author thus joins with others in this series who argue for broadening the range of professional disciplines involved in program planning. She concludes that knowledge from academic psychology should be considered in the design of second-chance programs for its potential to reduce attrition rates for disadvantaged youth facing multiple problems.

Paper No. 4 seeks answers to two central questions: "Critical Skills for Labor Market Success: What Are They and How Can At-Risk Youth Acquire Them?" While a review of the literature reveals a serious lack of consensus among educators and employers regarding the skills required to enter productive employment (core academic skills and a broader range of competencies, respectively), Amy W. Johnson and Michelle Alberti Gambone echo the findings of Higgins regarding the failure of the traditional approach to educating at-risk youth. Similarly, the authors encourage the employment and training

field to learn from and avoid mistakes made by the traditional school structure--segregation of the lowest achievers, low expectations and inadequate resources, among others.

Instead, comprehensive program models are needed to address the multiple developmental needs of disadvantaged youth. The current school restructuring movement--emphasizing instruction, development, leadership and school ethos--provides a systemwide model that incorporates components rarely addressed by employment and training programs but which have proven effective with at-risk youth.

The authors conclude that policy efforts should be directed toward a preventive rather than a remediation approach, i.e., the focus should be on school retention now, rather than remediation later. They also argue that, when remediation is needed, more effective strategies for providing it should be identified.

In Paper No. 5, "School-to-Work Transition: Failings, Dilemmas and Policy Options," Richard H. de Lone presents a critical, in-depth historical analysis of the past three decades of school-to-work transition as a policy issue. He provides ample evidence of the bias of basic education toward college preparation and the lack of coherent policy and program attention paid to the school-to-work transition system, more accurately dubbed a "non-system" by the author. In addition to more effective basic education, de Lone argues that an effective school-to-work transition system requires transitional assistance, increased employer involvement and an expanded system of post-high school training opportunities for non-college youth.

Opportunities for education beyond high school are essential for young workers, and ways must be found to provide such opportunities. Apprenticeship systems in other industrialized nations are discussed as examples of school-to-work systems that provide non-college-going youth with such opportunities.

The author outlines the three major approaches to improving the school-to-work transition that have characterized the period--reform of basic education, reform of vocational education, and the development of employment and training programs for youth. While questioning the value of research findings associated with the three major approaches that constitute this "non-system," de Lone concludes that lessons to guide program development can be extracted from the maze. For example, multiple-strategy approaches combining work and other activities are again recommended, following a review of the debate over the benefits of work experience. Like others in the series, de Lone calls for further exploration and development of the school-work link.

The author also makes a strong case for effective program implementation, noting that positive effects are found more often among programs characterized by fidelity to

Dilemmas in Youth Employment Programming

coherent program models, implemented by strong leadership and with dedicated staff involvement. The current school restructuring movement is again identified as a model based on such concepts. The model is seen as a resource for the school-to-work transition system to tap.

In Paper No. 6, "Coordination, Collaboration and Linkages," Lawrence Neil Bailis reviews the literature on the dynamics and outcomes of coordination. While maintaining that fragmentation and duplication of services are not always equally harmful, the author offers an analytic framework by which to organize what is known about the dynamics and outcomes of the coordination process.

Federal, state and local agencies seeking to coordinate services must gain an understanding of (a) the technical and nontechnical barriers that retard entry into collaborative relations; (b) the strategies employed to overcome these barriers; and (c) the extent to which efforts to promote coordination succeed in changing organizational relationships and lead to improved quality, accessibility and/or cost-effectiveness of services to young people.

Bailis's paper represents a useful resource for agencies seeking to build collaborative programs and research projects. Stressing the importance of context, the author cautions against mandating a given approach. While "top down" mandates have proven useful in creating opportunities for collaboration, they are atypical. Financial incentives are one strategy that has been used successfully to encourage community agencies with turf concerns to work together. Voluntary efforts forged out of self-interest appear to be the best approach.

In Paper No. 7, "Performance Standards and Performance Management," Alan Melchior provides an overview of the history of the JTPA performance standards system. He outlines its key elements and argues that the role of the system has shifted from accountability to performance management, reflecting a change in policy goals that has occurred at the national level.

Melchior reviews the limited research on the current JTPA performance standards system as an accountability tool, addressing issues of the accuracy, validity and impact of the system. He concludes that performance standards have "unintended effects," i.e., that they encourage less-intensive services as well as reduced services to the hard-to-serve population.

The author also discusses the effectiveness of the system as a performance management tool aimed at shaping local behavior. He determines that incentive grants designed to

reward the performance of local service delivery areas (SDAs) are too small and that the sanctions designed to punish SDAs are weak and ineffective.

In addition to a review of the 1988 national evaluation of the performance standards system, the paper provides a brief examination and assessment of recent changes to performance management systems in the business, health care and education fields.

For example, Melchior argues that JTPA could benefit from peer-review organizations (PROs) similar to those mandated by Congress to ensure that publicly funded health care services are medically necessary and meet quality standards. PROs in JTPA could review enrollments to prevent creaming; review placements to ensure provision of appropriate services; and review pre- and posttest data to ensure that competency deficiencies are real and certifications valid.

Similarly, the growing recognition of the importance of accurate data as a basis for effective performance management is a consistent theme across all three allied fields and has resulted in attempts to address data inadequacies. These and other changes are designed to address many of the same concerns raised about JTPA and may suggest ways for correcting flaws in the current JTPA performance standards system.

In Paper No. 8, "The Mission and Structure of National Human Resource Policy for Disadvantaged Youth: A Synthesis with Recommendations," Andrew Hahn, Evelyn Ganzglass and Gloria Nagle present a historical overview of American youth manpower policy. They use a political science framework to elaborate on the way in which choices--choices of scope, distribution, policy instruments, and restraint and innovation--made by national governments affect their youth manpower systems. The authors' intent is to frame the issues for future discussion and to demonstrate the need for additional research in the area of human resource policy for disadvantaged youth.

Hahn, et al., offer insights into the youth manpower systems of other industrial nations and call on the federal government to assume a greater role in system oversight by investigating and implementing innovative strategies--developed both in alternative service delivery fields at home as well as in the employment and training systems of other countries--directed toward capacity-building and system change.

In Paper No. 9, "Youth in the Nineties: Recent Trends and Expected Patterns," Robert I. Lerman examines the social and demographic characteristics of the current youth population and the implications of these characteristics for future employment and training policy. He draws from the literature to describe and explain the concentration of problem behaviors among certain groups. The field of sociology provides Lerman with important insights into the importance of negative influences--family and neighbor-

Dilemmas in Youth Employment Programming

hood instability, early parenthood, criminal activity, drug and alcohol abuse, and the absence of role models--on the development of young people.

Like other authors in the series, Lerman examines the mixed evidence regarding the merits of part-time work for in-school youth. His review of the research leads him to conclude that the weight of the evidence points to benefits for in-school youth who work a maximum of 20 hours a week. He advocates, therefore, second-chance programs built on the school-work link but cautions that, in order to be effective, such programs must address the multitude of family and other environmental influences that affect youth at an early age.

In Paper No. 10, Harry J. Holzer examines the changes in supply and demand that have occurred in the labor market over the past two decades and evaluates the effects of these changes on the employment prospects of young people. "Youth and the Labor Market in the Nineties" builds a strong case for the evolution of a serious skill mismatch: high school dropouts and inner-city blacks from low-income neighborhoods lack the necessary skills for today's labor market. Spatial mismatch, discrimination, lack of work experience and networking opportunities, negative family and neighborhood influences, and the availability of alternative income sources, especially crime, are also discussed as forces contributing to the disadvantaged employment status of minority youth.

Reviewing the literature on growing wage inequality among young workers, Holzer presents a number of possible explanations for the sharp deterioration in income and labor force activity for high school dropouts and black youth overall. Contributing factors include demographic changes, which have led to shifts in labor supply; occupational and industrial shifts, which have led to shifts in labor demand; and declining growth in productivity.

Thus, while shifts in the economy are in part responsible for the deterioration of employment opportunities for young black males, Holzer offers support for the position, taken in earlier papers, that expresses concern about deleterious neighborhood and other environmental influences on the motivation of at-risk youth.

Holzer concurs with de Lone, Hahn, et al., and Lerman in criticizing the limited apprenticeship and on-the-job training opportunities available in this country compared with those in other industrial countries. In the absence of such opportunities, the author argues, improving the high school dropout rate must be a priority; a high school diploma may be the only predictor of job performance and trainability available to an employer evaluating job candidates who lack referrals and previous job experience.

COORDINATION, COLLABORATION AND LINKAGES

**Lawrence Neil Bailis
Brandeis University**

I. INTRODUCTION: THE SEARCH FOR PRACTICAL GUIDANCE

As one young bureaucrat expressed it, what we need is to make a mesh of things (Appleby, 1949:74).

The youth development program literature is replete with truisms about coordination. We often read that "no single system can meet all of the needs of disadvantaged youth" and "the key to effective programming is drawing upon the strengths of all relevant systems." We instinctively feel that "more coordination is better than less." We read reports telling us that "turf problems and certain federal regulations can hamper coordination" and calling for communitywide coordinating bodies. We are told that "you have to be creative to overcome the problems."

This paper intends to transcend these truisms. It brings together theoretical and practical lessons about factors that promote and retard coordination, benefits that can accrue to properly implemented coordination and linkage mechanisms, and steps that tend to prove effective in building and maintaining coordinated relationships among youth-serving agencies.

In recent years, a number of literature reviews have attempted to pull together coordination lessons from the employment and training literature (e.g., Bailis, 1987, 1989). This paper summarizes the relatively well-known findings and conclusions of this literature, and places this information in a broader context by incorporating theoretical and empirical material from the political science and public administration literature and the results of recent empirical studies of youth development and related social and human service programs.

Lawrence Neil Bailis is a Senior Research Associate at the Center for Human Resources at Brandeis University. This paper is a revision of an earlier version submitted to the Department of Labor in the summer of 1991 and has benefitted from the comments and suggestions provided by the Department's reviewers. Additional comments and suggestions were provided by Lisa LaCava, Terry Grobe and Alan Melchior of the Center for Human Resources at Brandeis University and Michelle Alberti Gambone of Public/Private Ventures. However, responsibility for the contents of this paper remains with the author.

THE SCOPE OF THE PAPER

First, the paper focuses on efforts to promote collaboration among publicly funded programs. Many of the dynamics of public/private partnerships are similar to those addressed in this paper, and the topic is worthy of a separate issue paper in itself.

Further, this paper deals with broad systems issues, in particular, efforts to link employment and training, welfare-employment, education and vocational education programs. While youth programming is the central focus, lessons from related employment and training programs for disadvantaged adults, such as Title II-A participants and homeless people, are also included.

The paper presents an overview of coordination issues arising in the past ten years at the federal, state and local levels, incorporating information from the 1970s and early 1980s only sparingly. Since the paper focuses on broad analyses relevant to youth-serving and related human service programs across the board, it does not generally address specific provisions of federal or state legislation except to provide examples of more general patterns.

YOUTH-SPECIFIC AND GENERIC ISSUES PERTAINING TO COLLABORATION, COORDINATION AND LINKAGES

Many of the issues pertaining to coordination in youth programming are common to programs for any hard-to-place client group. The most important issues include:

- A client population with multiple problems that extend far beyond education and training deficits, and hence beyond the purview of any given education or employment and training agency; and
- A fragmented and categorical social welfare system characterized by "turfism" among programs and agencies with their own goals, focus, accountability systems and sources of funding, all confounding efforts to promote collaboration.

Furthermore, virtually all efforts to promote coordination among youth-serving programs have to deal with special challenges presented by the education system. As noted in a publication of the Council of Chief State School Officers (CCSSO) Resource Center on Educational Equity (1991:2): "The school [system]'s unparalleled access to youth makes

it an ideal location for providing, or at least coordinating, health and human services."¹ Therefore, wherever appropriate, this paper pays special attention to school-related issues, highlighting, for example, discussions of factors that promote and retard coordination with schools, and models of coordination/collaboration with schools that appear to be showing promise.

SOURCES OF INFORMATION

The employment and training literature has addressed coordination issues for more than two decades and produced at least three different types of materials:

- Program evaluations and reports on demonstration projects that touch on coordination as one element of their overall thrust,
- Studies that focus on coordination among discrete groups of programs, and
- Reviews of the literature that attempt to pull all relevant studies together.

All three elements were reviewed. However, wherever possible, emphasis has been placed on studies that have become available since the earlier literature reviews were completed, and on studies that deal explicitly with youth programs.

In addition to the employment and training literature, the paper also draws on experience with coordination/collaboration in programs that focus on the needs of low-income children and youth, including in particular welfare and education programs. Finally, the vast academic literature that touches on issues related to interagency coordination and draws from political science, public administration, business administration, economics, sociology and organizational sciences was reviewed quickly. This literature was not addressed in depth unless it yielded specific ideas about approaches that may or may not work and/or avenues for future research and demonstration activity.

ORGANIZATION AND CONTENT OF THE PAPER

Section II of the paper provides a framework for the analysis by reviewing the classic arguments in favor of improved coordination, clarifying what we mean by such terms as coordination and collaboration and how they relate to other goals in the youth develop-

¹ The same publication (1991:1) also points out: "In areas where youth and their families are facing multiple problems that are being addressed in a fragmented fashion, if at all, the school site can provide a sustained contact point for providing or coordinating whatever other health and social services the community has available to assist youth and their families."

ment field, then reviewing the issues associated with defining and measuring coordination. The current state of knowledge about the dynamics and outcomes of coordination is summarized in Section III. Lessons learned about "top down" efforts to promote coordination of youth development programs at lower levels of government and among agencies are presented in Section IV. Finally, Section V recapitulates the major conclusions in the paper and offers recommendations for further research by the Department of Labor and others.

II. FRAMEWORK FOR ANALYSIS: UNDERSTANDING, DEFINING AND MEASURING COORDINATION, COLLABORATION AND LINKAGES

[In the provision of social services, the] extreme and irrational fragmentation of both tasks and clientele means that attempts to coordinate services at the local agency level and make them available to families in some integrated way are so time-consuming, costly, and difficult that they are unlikely to succeed

What is perhaps most striking about programs that work for children and families in the shadows is that all of them find ways to adapt or circumvent traditional professional and bureaucratic limitations when necessary to meet the needs of those they serve (Schorr, 1988:265).

Webster's New World Dictionary defines the word "collaborate" as follows: 1. To work together, especially in some literary, artistic, or scientific undertaking. 2. To cooperate with an enemy invader (Bruner, 1991:6).

It is impossible to analyze empirical data about coordination, collaboration and linkages (terms that are used interchangeably in this paper) or to develop policy-relevant action or research recommendations on this topic without a clear understanding of what the terms mean and how they can be measured. This section first presents a framework for looking at the terms, then lays out a definition based on this framework, and finally reviews the problems faced in measuring coordination and proposes a solution.

THE OLD AND THE NEW CONVENTIONAL WISDOM

Over the years, several generations of conventional wisdom have developed on the topic of coordination. The "old conventional wisdom" stresses coordination as an obvious avenue to program improvement, without paying much attention to the costs of coordination or the extent to which it is likely to result in measurable improvements in program outcomes. The elements of this conventional wisdom are all logical, and all seem plausible. But they do not provide practical insights to those who try to understand why there is not more coordination, and they yield little practical guidance to those who seek to promote it.

On the other hand, in recent years a "new conventional wisdom" has emerged, stating that "coordination is a means and not an end." This also seems unarguable, but the full implications of this statement have rarely been spelled out or understood. This section

of the paper reviews the key elements of both the old and the new conventional wisdom, their relevance to analyses of existing coordination and, in particular, the implications of this point of view for defining coordination in ways that make it a useful tool in efforts to improve youth services.²

Three Decades of Old Conventional Wisdom

Two recent reviews of efforts to link education and human services summarize the fragmentation problem in now familiar ways:

Program definitions, eligibility rules, and financing patterns limit organizational actions and perspectives to a narrow focus. Systems essentially function in isolation from one another, and virtually none see the individual or the family unit as a whole, with all its interrelated problems and strengths (Levy, 1989:1).

Unfortunately, most youth-serving systems already struggling to meet narrow agency mandates seem able to do little more than provide fragmented, poorly coordinated services. Because limited resources often dictate that agencies limit themselves to responding to acute problems (i.e., teen pregnancy, HIV infection, drug abuse), often the only services available are problem-specific as well

Youth with multiple problems typically receive labels--substance abuser, teen parent, dropout--that oversimplify the nature of their troubles. This categorical approach . . . makes it too easy for each agency to relinquish responsibility for the overall well-being of youth and their families (CCSSO, 1991:2).

However, review of the literature makes it clear that criticisms about fragmentation of services in the 1990s are merely echoes of similar complaints over the past few decades. For example, Bendor (1985) cites a study of antipoverty efforts in the mid-1970s that showed that over 40 percent of those receiving aid from an antipoverty program were

² The examples presented in this paper are drawn primarily from the employment and training and related youth development fields. However, authors like Mudd (1984) make it clear that similar patterns exist for all municipal services in America, and Rogers and Whetten (1982) extend the analysis to the rural American context. Moreover, studies of social welfare programs in other national contexts reveal patterns of concern with fragmentation and calls for improved coordination that are indistinguishable from those with which American social policy analysts are familiar.

assisted by at least three programs and nearly 20 percent were helped by at least five programs.

Fragmentation clearly exists. There can be little doubt that clients would, in general, be better served by care-givers who address them as human beings with a variety of strengths and weaknesses rather than addressing one problem at a time. However, those who adopt the old conventional wisdom would argue that once we document fragmentation, no further analysis is needed. Given this situation, broad-based efforts should be undertaken to promote coordination wherever, whenever and however possible.

This kind of thinking appears to have formed the basis of most public policy discussion and most efforts to promote coordination in the youth development, employment and training, and related human service fields for the past few decades. The 1960s witnessed the birth of a large number of separately authorized and separately funded employment and training programs under the Manpower Development and Training Act and the Economic Opportunity Act. As noted in Mirengoff and Rindler (1976), there were numerous efforts to promote coordination of these programs, such as the Cooperative Area Manpower System, but little success except in cities where concentrated employment programs and similar efforts existed.

Those who drafted the Comprehensive Employment and Training Act (CETA) hoped that the newly created prime sponsors would be able to pull the existing categorical employment and training programs together into integrated service delivery systems. Many of the precursors of current Job Training Partnership Act (JTPA) requirements to coordinate with other programs originated under CETA, including local planning councils, state services councils and various state-level set-asides to promote coordination. In addition to these statutory requirements, the Departments of Labor (DOL) and Health, Education and Welfare (HEW), as well as other federal agencies, instituted a range of training and technical assistance efforts that were also designed to promote coordination.

However, progress in promoting this coordination was generally conceded to be limited at best under CETA, and therefore improvement of coordination was one of the major goals of JTPA, whose language has over a dozen references (Trutko, et al., 1990) to coordination requirements, including the creation of State Job Training Coordinating Councils (SJTCCs), which are expected to develop statewide coordination plans and to review local service delivery area (SDA) plans to implement these plans. Lewis, et al., (1987) have listed parallel requirements for coordination in other legislation, most notably the Carl Perkins Vocational Education Act.

Despite these efforts, studies conducted toward the end of the 1980s, such as Bailis (1987) and Levitan and Gallo (1988), report two apparently paradoxical findings: although there are examples of success in every conceivable kind of coordination, the overall record of progress in promoting coordination was dismal in most places for most programs.

As a result of these kinds of assessments, we can still hear the same calls for coordination that were heard more than two decades ago. For example, the JTPA Advisory Committee (1989b:5) reports:

The fragmentation of human resource programs remains one of the major unmet challenges to domestic policy in America. This challenge of coordinating similar, but separately authorized and delivered, social programs has been a perennial problem in public administration. While it is not unique to the United States, the problem is--in large measure--a by-product of our particular political system and approach to public policy development The thrust of the Committee's deliberations and recommendations became the pursuit of a more rational, coherent, and outcome-driven human investment system characterized by coordinated service delivery at the local level.

A similar point of view is expressed in a recent U.S. Conference of Mayors position paper (1991).

This kind of thinking is also reflected in the 1991 version of the proposed amendments to JTPA that were developed by DOL. These amendments call for strengthening coordination between JTPA and other programs through such steps as expanding the SJTCCs into broader human resource investment councils and requiring local SDAs to establish, where feasible, linkages with programs assisted under the Adult Education Act, the Carl D. Perkins Vocational and Applied Technology Education Act, the Rehabilitation Act of 1973, the Wagner-Peyser Act, the Family Support Act, the Food Stamp Act, the National Apprenticeship Act, the United States Housing Act and the Head Start Act.

If the logic behind the old conventional wisdom is so obvious, why has the "coordination problem" persisted? Why have continued efforts to legislate coordination and promote it through incentives, training and technical assistance had limited success? The answer appears to be that arguments like "the more coordination the better" lead to a scatter-shot approach that drains limited time and resources from any given initiative.

Advocates of the old conventional wisdom sometimes seem to be arguing that coordination should be seen as a necessary administrative function, much like accounting and management information systems, and therefore "good by definition" even if it is unlikely to produce measurable improvements in outputs. That is not the position taken here.

This paper argues that efforts to promote coordination use up scarce administrative time and other resources that could, at least in theory, be devoted to alternative ways to improve the accessibility, quality, quantity or comprehensiveness of services. It is not obvious that all forms of fragmentation and duplication are equally harmful. If barriers to coordination are overwhelming in some settings, it may not make sense to try to promote coordination with equal vigor everywhere. To put it differently, targeted efforts to promote given kinds of coordination in given kinds of settings are far more likely to be cost-effective than broad-brush, across-the-board strategies that arguments based on logic cannot accomplish. Therefore, despite its longevity, the old conventional wisdom can provide only limited guidance to those who wish to improve service delivery through improvements in coordination.

The New Conventional Wisdom

Over the years, repeated efforts to understand the coordination process have begun to yield new insights into the processes and results of collaboration. In particular, any analysis of lessons learned about coordination of youth development and related human service programs must take place within the context of a statement that is now widely repeated, but whose implications have never been fully explored: "Coordination is a means to an end, and not an end in itself."

It should be recognized that adopting this new conventional wisdom means that both analyses of coordination and steps to promote it need to be undertaken with the following in mind:

- Planning and administrative structures to promote coordination are only meaningful if they can be reasonably expected to bring about changes in the amount and quality (including intensity and relevance) of the services clients get. Therefore, activities designed to promote coordination are unlikely to have their intended effects unless they are well thought out and implemented.
- Efforts to promote coordination should be thought of as only one of several avenues that can be taken to further the overall goals of improving the quality, comprehensiveness and/or cost-effectiveness of services for young people.

- There are no universal panaceas. Efforts to improve coordination among two or more agencies may divert scarce administrative time and resources away from other program improvement endeavors, drive a wedge between these agencies and others in the community, or even succeed but not be followed by tangible improvements in services to clients.
- JTPA and many other human service programs serve fewer than a tenth of the eligible population. Therefore, efforts to promote coordination cannot, in themselves, meet the needs of the majority of young people who are in need of help.

In particular, we must be realistic about what improved coordination can and cannot accomplish in an era of shrinking resources. As noted by Melaville and Blank (1991:11):

Interagency partnerships hold great potential for the large-scale delivery of comprehensive services It is important to remember, however, that the extent of this capacity will depend on the scope of existing funds. Collaboration enables providers to get as much mileage as possible out of available resources, and to improve the quality and range of services. What interagency coordination cannot do is to deliver all of the prevention, treatment, and support services without additional resources.

The most intriguing implication of the new conventional wisdom is that it leads one to question whether all "duplication" is automatically harmful. The literature contains a small but convincing set of arguments that make this point. For example, Grubb, et al., (1989:14) have pointed out that a certain amount of duplication is necessary if true competition is to occur in a marketplace, and that competition is widely thought to promote greater efficiency:

The competitive aspect emerges most clearly in the request for proposal process by which many SDAs allocate their funds, and by which both Perkins funds and JTPA 8-percent funds are allocated in many states. Eligible institutions compete for funds and the "best" projects win Competition requires a certain amount of redundancy among the "producers" . . . [of] employment and training services. In addition, this redundancy fosters variety because the training provided by a community-based organization--a black or Hispanic organization, for example--may be effective for some clients who will not attend a community college or adult school. The fear of duplication ignores the effects of redundancy on both competition and variety, which can make the employment and training system more effective under the right conditions.

This point is made most clearly in a book-length analysis by Bendor (1985). The argument recognizes the multiple goals and objectives that we have for government programs:

Americans do not only want government to be inexpensive. They demand effectiveness as well. Effectiveness implies reliability; it means dependable performance in the face of the inevitable blunders that attend all complex ventures. And as the Iranian expedition [to rescue the American Embassy hostages in 1980] clearly reveals, reliability may entail having more than one thinks necessary. More than one computer in a command and control system. More perhaps than one public agency in a given policy area (1985:2).

Bendor cites three important virtues associated with duplication: it can provide reliability through the availability of backup agencies/programs to fill in when other agencies fail; it can stimulate agencies to become more efficient than they would be if they were monopolies; and it may increase the total amount of public support for programs.

Similarly, Rogers and Whetten (1982:vii) note that some organizational theorists have argued that duplication and competition are more likely than coordination to promote improved service delivery:

Public organizations [sometimes] use the recommendation to increase interorganizational coordination to mask organizational ineffectiveness and administrative ineptitude. Coordination is viewed as a legitimating mechanism used by those involved to divide up the territory and mutually work to prevent the entry of competition, and to dampen costly innovation.

Finally, such authors as Liebert (1976) go even further and argue that formal coordination may serve to reduce pressures for substantive change and improvement in programs.

To reiterate, the new conventional wisdom teaches us that policymakers should not automatically assume that promotion of more coordination should be the highest priority in all instances or that scarce resources should always be invested in difficult efforts to create coordination in those instances where it does not now exist. Instead, informed policymaking and program administration at the federal, state and local levels must directly address the following questions:

- Are efforts to promote coordination the best possible investment of scarce resources (in specific contexts)?

- What kinds of efforts to promote coordination are most likely to bear fruit (in specific circumstances)?

The remainder of this paper discusses these questions.

DEFINING THE TERMS COORDINATION, COLLABORATION AND LINKAGE

The terms coordination, collaboration and linkage are widely used--almost always as positive attributes and goals. However, there is no consensus on what these terms mean. For example, one study involving over 100 hours of discussion with key actors in the states of Alaska, Colorado, Florida, New Hampshire, Ohio, Texas and Washington found no consensus regarding usage of the terms coordination, cooperation and collaboration (Hickey, 1986).

Some research studies and program documents fail to define the terms, presumably because the authors assume that readers will understand what is being referred to. Moreover, no two studies that define coordination seem to use the same definition. In addition, studies often define coordination in excessively theoretical terms that nonacademics may find difficult to relate to, or add subtle distinctions that tend to confuse the average reader. For example, Melville and Blank (1991) distinguish between cooperation and collaboration. In the former, partners help each other to meet their respective goals without making substantial changes in the basic services they provide or in the rules and regulations that govern their agencies.

While the terms coordination, collaboration and linkage are typically thought of for pairs of agencies or relatively small groupings, an alternative model of "communitywide" coordination is also emerging. The communitywide model calls for designating a "lead agency" that, in turn, is expected to bring together all relevant services within a given jurisdiction. This model can be found in both publicly funded initiatives, such as the New York State Community Services Program aimed at preventing adolescent pregnancy, and such foundation-funded initiatives as The Annie B. Casey Foundation's New Futures Initiative. The San Diego County New Beginnings program offers yet another model of this type of coordination: it created a communitywide partnership involving the city school system, the county departments of social services and health, and a number of other public and private agencies; and it will establish a multiservice center at a public school to serve both students and their families.

While useful for some purposes, distinctions between cooperation and coordination or between interagency coordination and communitywide coordination tend to complicate rather than simplify efforts to get staff in related agencies to work together; therefore, the term coordination is used to refer to both of these approaches in this paper.

Progress in achieving the goals of coordination is possible as long as there is a general idea of what the term means and general agreement that, according to the new conventional wisdom, coordination is a means and not an end in itself.

As a working definition, we offer one found in a paper by Laventhol and Horwath titled "Improving the Success of JTPA Coordination Efforts: An Idea Paper for the Florida Job Training System" (undated:2), with a modification (in parentheses):

Coordination is the means to decrease an organization's unit cost of accomplishing an important service goal (e.g., reaching selected target groups, providing effective services, increasing the range or variety of services to clients, and/or making services accessible and available at minimum burden to clients) through collaboration with other organizations.

This definition makes it clear that steps taken to promote "coordination" should be thought of as ways to achieve better service, equal service for lower costs, improved access to service, or similar benefits. If these results are unlikely, diverting scarce resources to promote coordination is unlikely to be worth the trouble. Adopting this point of view makes it clear that it does not matter what the precise relationships between two agencies are, or whether the goal is promoting coordination between pairs of agencies or communitywide. An effort to promote coordination, collaboration and linkage can be judged successful only if it promotes improvements in the service delivery system.

ISSUES IN MEASURING COORDINATION

During the past few decades, federal, state and local policymakers have enacted multitudinous coordination requirements and have taken countless steps to promote improved services through increased coordination. However, it is impossible for policymakers and researchers to assess the effectiveness of these efforts without viewing them as a two-step process. In order for these efforts to work, two different things have to happen. First, the interventions must be effective in promoting coordination, and, second, the coordination must be effective in improving service delivery.

Thus, we cannot expect to provide useful, systematic, empirically based guidance to policymakers and agency managers without having a clear picture of the effectiveness of the first step, i.e., without having a broadly accepted way to measure the extent to which coordination is or is not present in a given setting at a given time. It is unlikely that there will ever be total consensus on these measures, but this section of the paper attempts to promote the development of such a consensus by drawing on the available literature and practical experience of youth-serving and related human service agencies.

First, it is necessary to clarify a concept's major dimensions. Once this is done, one can come up with ways of assessing the extent to which a dimension is present. Unfortunately, there are dozens of generally recognized dimensions of coordination or types of coordinated activities. In particular, the term coordination is usually used to encompass discrete initiatives, such as collocating education, employment and human services. In the realm of youth services, the school building is a frequently considered site. But the term coordination is also sometimes used to refer to major systemic changes that create "integrated seamless systems" in which agencies are not only colocated, but clients are expected to move from one agency to the next in carefully planned sequences of services without even knowing which agency is providing them. For example, students may not realize that some of the health, social and job-related services provided in their schools are funded and administered by other agencies.

In addition to this, people sometimes consider only formal interagency collaboration that is documented in written agreements, and at other times they point out that the most effective forms of coordination are informal personal relationships among staff of different agencies without any formal agreements. Finally, and perhaps most intriguing, there is the distinction described by Grubb, et al., (1989). They introduced the term "substantial coordination" to refer to "coordination that goes beyond standard requirements to confer and consult among programs, and which instead develops new ways of delivering education and training services that would not exist in the absence of coordination" (1989:4). This is similar to the Melville and Blank (1991) distinction between cooperative and collaborative, with only the latter addressing situations in which there are "fundamental" changes in the way services are designed and delivered.

This very partial listing of dimensions of coordination leads to an important conclusion. Given the variety of dimensions of activity that falls under the rubric of coordination, it is difficult--if not impossible--to develop one or two simple measures of coordination and use them to take stock of the amount of coordination at a single point in time or to chart changes in coordination over time. The approach that makes the most sense is dividing coordination into more cohesive subcategories and finding ways to measure whether or not a specific type of coordination is present in a given setting.

As a first step, it is necessary to distinguish between two broad types of collaborative relationships: planning and service delivery. Many efforts to promote coordination focus on collaborative planning, with a stated or unstated premise that this will, in turn, lead to changes in service delivery that will lead to improved outcomes. However, changes in planning procedures cannot result in improved effectiveness, cost-effectiveness or access without affecting the way that services are delivered. Collaborative planning can only be considered successful (or effective) if it in fact results in changes in the way services are

delivered; and collaborative service delivery can only be considered to be better than disjointed and "fragmented" systems if it results in improved outcomes.

Efforts to measure whether or not collaborative planning is taking place should address such specific interagency activities as periodic meetings of high-level program administrators, appointment of agency leaders to each other's boards, reciprocal review and approval of agency service plans, and institution of common service boundaries. In addition, they need to address creation of new community-level planning bodies, such as the Tulsa Metropolitan Human Services Commission and the Dayton Human Services Partnership (Agranoff, 1991). The New York State GATEWAY initiative illustrates that agencies can move beyond joint or community planning and begin to create shared management tools, such as management information systems that share data and use common forms to promote collaborative planning and oversight of service delivery.

The steps to promote collaborative planning outlined above can lead to achievement of the goals of coordination only if they are followed by changes in the way services are delivered, such as:

- Collocation of offices in the same building in order to ease client burden and promote formal and informal efforts at coordination among staff in different agencies;
- Formal written agreements to refer clients to and from SDAs, thereby increasing the likelihood that clients will receive services from the most appropriate agencies;
- Formal agreements to provide feedback on clients referred to other agencies;
- Formal agreements in which job developers from two agencies agree to contact different employers or specialize in different types of jobs at the same firm in order to reduce the burden on personnel officers in firms that deal with more than one government agency or program;
- Formal agreements to share information about job development and on-the-job training experience that agencies have had with specific firms;
- Reduced duplication of services between an SDA and another agency by eliminating funding for one of the programs and referring clients to the remaining service provider;

- Joint funding of programs by two or more agencies, thereby providing services that would not be possible if the resources of only one agency were available;
- Shared staff;
- Development of case management procedures or provision for case conferences involving providers from different agencies; and
- Contracts or nonfinancial agreements that provide for services for agency clients from other agencies/programs that already provide them.

The Trutko, et al., (1990) study of JTPA coordination notes that collaborative efforts can affect client flow through such vehicles as joint intake and eligibility determination, joint assessment, case management/enhanced referrals, joint delivery of training, and joint job development/placement. Since youth development services typically go beyond the standard menu of employment and training offerings, coordinated service delivery in this area can also include:

- Joint counseling on pregnancy prevention and related health issues, substance abuse, and other adolescent issues;
- Joint recreation and related services;
- Jointly run community service initiatives; and
- Jointly run efforts to provide academic remediation and/or efforts to prevent dropouts or promote returning to school.

This approach implies that the most useful way to measure coordination lies in disaggregating the term into smaller, more cohesive subunits (types of coordination), then measuring whether they are present in given situations. This would enable researchers to collect data on the extent to which types of coordination are present in types of agencies, among different types of programs and so forth.

This method has, in fact, been adopted by many studies in the past (e.g., Brady and Balfe, 1987; Bailis, 1987), but it has several important shortcomings. First of all, many key steps toward coordination have not been operationally defined. It is by no means clear how frequently "periodic meetings" have to occur, what "meaningful input into the plans of another agency" might mean or what constitutes a "meaningful" referral agreement. In addition, policymakers and researchers still need to distinguish between coordination procedures that are "on paper" and those that are affecting clients. In

principle, there would be no difficulty in developing operational definitions of the key terms, but in fact it would be difficult to develop definitions that are more than arbitrary.

Second, disaggregating coordination provides no insights into which of the many subtypes of activities is the most important in terms of promoting desired improvements in program effectiveness, cost-effectiveness and/or access. In order to provide practical guidance to policymakers and administrators, researchers would have to do more than declare that "there are 48 major types of coordination, and during the past year coordination increased on 23 of them, stayed the same on 19 and declined on 6."

SPECIAL ISSUES IN MEASURING COORDINATION IN YOUTH-SERVING PROGRAMS

This discussion is explicitly generic, applying equally well to efforts to measure the amount of coordination among youth-serving and all other programs. However, there are at least two important youth-specific issues that need to be addressed:

- The large size of school systems (relative to that of most human service agencies) makes it necessary to clarify the subunit within the system with which other agencies are coordinating, and in particular to distinguish among efforts that focus on the classroom or the school versus the entire district or community; and
- The number of family-related issues affecting young people often requires an even broader array of agency participants before one can say that the needed levels of coordination have been achieved.

III. THE DYNAMICS AND OUTCOMES OF THE COORDINATION PROCESS AMONG FEDERAL, STATE AND LOCAL AGENCIES

Q. What problems is collaboration designed to solve?

A. Collaborative strategies may help to (1) provide better assistance to families already receiving services in several systems; (2) keep children from falling through the cracks and ensure that they receive needed services; and (3) reduce environmental risks that affect all children in a given neighborhood or community (Bruner, 1991:6).

It is difficult to get a man to understand something when his salary depends upon his not understanding it (Upton Sinclair, as quoted in Downs and Larkey, 1986:91).

What is known and not known about the dynamics and outcomes of the coordination process suggests that a full understanding of the process would require knowledge of three areas:

- The factors that promote or retard entry into collaborative relationships among human resource development programs ("barriers");
- The ways agencies have tried to overcome these problems ("strategies"); and
- The extent to which efforts to promote coordination have in fact succeeded in changing organizational relationships and eventually improving the quality, quantity, accessibility and/or cost-effectiveness of services for young people (or adults).

The research literature is rich in lists of barriers to coordination among youth development and related programs, and in strategies to overcome them. However, if one's objective is a search for practical guidance rather than knowledge for its own sake, many of the items on the list are of limited use. For example, it is clear from many sources:

- Coordination is more likely to occur when there are active commitments to improved coordination on the part of elected officials, good personal relationships among the key policymakers and managers, and a previous history of collaborative efforts.
- Providing funding for demonstration projects that require coordination tends to promote (what appear to be) coordinated efforts among the grantees.

The literature provides ample support for these unsurprising conclusions and exhortations to act on them. However, it is unclear how a policymaker could use this kind of advice to develop an action program. What, for example, does one do with the knowledge that high-level political support is useful, if no such support is likely to come from the incumbents in elected or appointive office? What advice do we have for an agency head who is trying to figure out how to get his or her elected officials interested in coordination?

Similarly, where can one go to find the new funding to support additional demonstration initiatives or coordination set-asides? How can we promote close personal ties among the heads of agencies that should coordinate? The answers are not obvious. Therefore, the challenge facing those who would try to improve coordination is to find barriers that are amenable to manipulation by federal, state and local officials, and to clarify the kinds of strategies that are useful in dealing with them in specific contexts.

In addition to this, the literature contains few--if any--reports that focus on failures of given efforts to promote coordination. Without a reasonable number of analyses of why given strategies failed, efforts to base future actions on the literature will be handicapped by a lack of presumably insightful material.

THE BARRIERS TO COORDINATION

The barriers to coordination faced by youth-serving and related programs can be divided into (a) program-specific ("technical") issues that relate to legislation, regulations, performance standards and related issues, and (b) issues that pertain to any efforts to get independent organizations to agree on and implement a common agenda.

Technical Barriers

State and local barriers to interagency coordination among youth development and related human service programs have been documented in numerous studies. The JTPA Advisory Committee subcommittee on welfare-JTPA coordination addressed the usual topics of misperceptions and "turf" issues, but also listed the following program-specific problems: overlapping but not identical goals and performance measures; different financing mechanisms and governance; and administrative differences. The subcommittee on coordinating programs administered by DOL's Employment and Training Administration came up with a similar list, but sliced the pie somewhat differently:

- Legislative barriers, such as varying eligibility requirements, variations in funding, planning and operating timetables, and different financial requirements; and

- Administrative barriers, including widely varying reporting requirements, definitions of key terms, information flows, varying communications networks, and institutional rigidities and entrenched practices.

There is no intrinsic reason to believe that any given listing is better than any other. Moreover, the quest for practical guidance requires identification of ways to overcome specific barriers, not just comprehensive listings.

In an ideal world, one could prioritize the barriers, then focus the efforts of policymakers and managers on overcoming the most important ones. However, given the critical importance of context, it seems most likely that different barriers will have different importance in given situations. For example, it seems self-evident that varying definitions of key terms and differences in eligibility across programs hamper efforts of agencies to collaborate. However, the literature does not provide any guidance about what the interagency landscape would look like if these differences were eliminated, and thus does not inform a decision on how much scarce staff time and energy to invest in efforts to get legislative bodies to change eligibility rules and definitions.

It is certainly harder to get two programs in a community to collaborate if one of them has broad autonomy and the other is controlled at the state level. The literature does address this issue. But it unfortunately provides contradictory conclusions. At one extreme, Brustein (undated:5) seems to feel that legislative and regulatory differences are the central problems facing those who would try to promote coordination:

There are provisions in the laws and federal agency practices which are possibly creating such chilling effects on the activities of responsible public administrators that what appears to be concern over "turf" may well be intelligent hesitancy to become involved with administrative complexities and potential costs beyond the value of the coordinated activity

On the other hand, such authors as Bailis (1989) argue the opposite position, i.e., that the importance of many of the commonly cited problems of differences in goals, purposes and target groups is overstated, and that many of the alleged differences are based on misperceptions rather than reality.

So what does one conclude? Clearly, congressional action to rectify some of these discrepancies would help to overcome such barriers. However, neither the research literature nor the experience of practitioners to date provides clear guidance on how much priority should be given to promoting changes in legislation and related technical issues as opposed to other strategies.

Nontechnical Barriers

Turf Issues and Organizational Culture

Several decades of experience in promoting local-level coordination in youth and adult employment and training programs have made it clear that the barriers to effective collaboration are as much political as technical, and that staff concerns about agency autonomy and serving clients with standard procedures are at least as important as discontinuities in funding cycles and mechanisms.

It is impossible to read a book about coordination or attend a conference on this topic without coming across numerous references to "turf" issues, or, as they are sometimes more formally called, "issues of organizational autonomy." Four of the six major administrative barriers to coordination cited in the Trutko, et al., (1990) study of JTPA coordination related to these kinds of issues: different perspectives on performance and service to clients, fear of loss of agency autonomy, distrust of other agencies, and lack of ownership.

Moreover, the findings of this study of exemplary coordination in several hundred locations suggest that "turf" is at least as critical a barrier to coordination as the often cited legislative and regulatory barriers:

The most common[ly cited] barriers [to coordination] are "turf" issues and ignorance or dislike of the philosophy or operations of other agencies Legal issues [such as eligibility restrictions, restrictions on the uses of funds and client confidentiality requirements] were not commonly cited as barriers [by respondents at exemplary coordination sites] (Trutko, et al., 1990:vi-vii).

Leemans' (1976:11) international perspective on management of change in government supports a conclusion that the issue goes way beyond the JTPA program in the 1980s and 1990s, since all organizations have "built-in protective devices to maintain stability which make it notoriously difficult to change organizations in the desired direction."

Efforts to get agencies that have previously acted in an independent fashion to work together clearly require changes in the structure and/or functioning of the affected organizations. Numerous students of public administration have catalogued the barriers to organizational change. The list in Leemans (1976) is typical:

- The perceived benefits of regularity to the functioning of the organization (a reformer may be considered a deviant who should be silenced);

- Calculated opposition by groups inside (and sometimes outside) the organization who expect their interests to be hurt by the proposed new structures;
- The considerable psychic costs of change (accommodation to new relationships, processes and methods causes stress to individuals and groups in the organization);
- Blindness to the defects of the organization and lack of knowledge about the needs and possibilities of organizational change and adaptation (this is closely related to the issue of the degree of openness of the organization as a system);
- Limited resources; and the complexity of large organizations.

Following the lead of Schlechty (1991) and Caiden (1969), it appears that the issues go even further--to the very culture of organizations. Writing about changes in schools, Schlechty argues:

Changing the structure of schools--or of any other organization--is no simple task. Social structures are embedded in systems of meaning, value, belief, and knowledge; such systems comprise the culture of an organization. To change an organization's structure, therefore, one must attend not only to rules, roles, and relations, but to systems of beliefs, values, and knowledge as well. Structural change requires cultural change (1991:xvi).

This assessment echoes one made by Caiden more than two decades earlier:

Administrative subcultures are quite different and when they come together without any overriding uniformity or preparedness to compromise for mutual goals, the results are often haphazard, sometimes tragically comic. For a start, people cannot communicate with one another, even when one common language is accepted Language is important simply because the bulk of reforms are achieved by talking and response to word evocation (1969:173).³

In order to be successful, efforts to bring about coordination at any level must deal with the tendency of organizations to resist change and maintain autonomy. This, in turn,

³ To cite one dramatic example of this, it took at least three two-day meetings of the welfare-JTPA coordination subcommittee of the JTPA Advisory Committee before the officials from the two systems realized they were using the term "placement" differently. JTPA officials tended to think of placement into unsubsidized jobs, and welfare officials tended to think of placement into employment and training programs.

presumably requires efforts to work with agency staff at all levels and convince them that the changes are in their own interests.

Political Forces Supporting the Status Quo

Since implementation of coordinated service delivery systems means changes in patterns of funding, agencies that stand to lose under such changes are likely to use whatever political influence they have to fight them. This point is discussed in some detail in Grubb, et al., (1989:37) with respect to the funding of community-based organizations (CBOs) under JTPA:

In many large cities, JTPA programs subcontract with community-based organizations that represent specific constituencies These special-interest CBOs often have considerable political clout, and use this power to win and keep JTPA contracts, effectively constraining how an SDA spends its money Such CBOs may be very effective in recruiting and training members of their particular target populations, and they often have staffs which are enormously energetic and dedicated. However, their existence hampers efforts to coordinate JTPA and public education because the allocation of JTPA funds to high school and vocational programs would require diverting resources away from special-interest CBOs, which is often politically impossible.

It is important to note that the authors of this study do not argue that funding CBOs is necessarily less effective than shifting funds to joint efforts with educational institutions, and it is by no means obvious that CBOs are any more "political" than school districts or other educational institutions. But in any event, the absence of research information on what types of services are most effective for specific types of clients makes it impossible to decide whether these pressures to support the status quo are barriers to change or whether they are efforts to maintain effective systems.

PROMISING STRATEGIES

The research literature and the experiences of federal, state and local policymakers suggest that there is a wide range of strategies widely believed (though not proven) to be effective in promoting coordination, collaboration and linkage.

"Getting to Know You"

The existence of literally dozens of examples of exemplary coordination makes it clear that the "turf" barrier (and all of the other barriers) is not insurmountable. In particular,

the literature provides explicit evidence that "turf" issues can be overcome by such approaches as persistent efforts to improve communication between and among agencies. Both common sense and Trutko, et al., (1990:vii) suggest an obvious remedy for this problem:

These ["turf"] barriers are generally overcome in the successful projects by getting to know and understand the other agencies involved.

Focusing on Self-Interest

Those who have engaged in exemplary efforts at coordination tend to feel that the benefits of their collaborative efforts have outweighed the costs, and those who do not engage in collaborative efforts in the face of mandates to do so presumably feel that the costs outweigh the benefits. Therefore, it would seem reasonable to conclude that efforts to convince others that the benefits of coordination outweigh the costs could play a key role in promoting coordination.

Support for this position can be found in the testimony of a key manager in a program to coordinate services for youthful offenders in rural Minnesota. As described in Bailis (1991b:2-13), his recollection of the process of putting together a case management system based on an interagency team showed that self-interest is a far more efficient motivator than coordination requirements or incentives to coordinate that are imposed from above.

We have learned one lesson: you can't mandate coordination and make it happen. There has to be something in it for everyone involved. There has to be benefit for their own clients and ways to make their own staff's life easier.

Implementing this approach therefore means structuring situations so that potential collaborators feel that it is in their own interest to engage in collaborative relationships, i.e., that the benefits are likely to outweigh the costs.

The research and public policy literature frequently contains lists of the benefits of coordination to the local agencies that engage in collaborative endeavors. The list in Trutko, et al., (1990) is one of the most comprehensive, suggesting that agencies that engage in (effective) coordination benefit in the following ways: access to additional resources; ability to secure additional public and/or private funding; greater flexibility in using funds; ability to offer a wide range of services targeted on client needs; increased knowledge and communication among agency staff; ability to share credit for client outcomes; ability to place clients (through other agencies) at little or no additional cost;

increased operational efficiency and reduction of duplicative agency efforts; better tracking of services received by clients and client outcomes; enhanced ability to serve mandated target groups; improved image with clients, employers and the community; specialization in areas of expertise; enhanced performance outcomes; and cost savings through the elimination of duplicative efforts. The disadvantages that were uncovered in the study include loss of autonomy in decision-making; need to resolve interagency conflicts; need to maintain new operational procedures, client flows and information systems; and potential inefficiencies of outstationed staff.

However, the authors argue that disadvantages to the local agencies engaging in collaborative efforts are "relatively minor," mostly the time and effort in planning and sustaining the coordinated efforts. Bailis (1991b:5-11) reports, for example:

The interagency team approach adopted in the . . . program appears to be a promising mechanism to achieve system-level coordination of services, but it requires substantial amounts of time and resources in order to operate at its fullest potential. Both conversations with [SDA] staff and . . . written [SDA] reports make it clear that planning and operating an interagency team was worthwhile, but the "valuable work of networking and team-building" took considerably more time than expected.

This discussion makes it clear that the broader issue facing policymakers and managers who wish to promote coordination is finding ways to convince their counterparts in other agencies that the balance sheet for properly planned and implemented coordination does lie on the benefit side rather than the cost side. This will involve educating them to this fact when it is the case and providing incentives when it is not.

Monetary incentives are the most obvious kind of "carrot." However, the increasingly tight budgets of the 1990s and the organizational development and behavior literature that stresses the limits of money as a motivator both lead us to conclude there will be an increasing need to find nonmonetary incentives, such as recognition.⁴ Further research is needed, however, to determine the kinds of perceived self-interest that appear to be the most effective motivators in given contexts, and the most effective ways of communicating this information.

⁴ The use of coordination grants and demonstration projects as well as other monetary incentives as a strategy by federal and state governments to promote coordination at lower levels of government is discussed in Section IV of this paper.

Entrepreneurism/Facilitation

Guidebooks to promoting coordination sometimes make reference to the need to be entrepreneurial. For example, Robinson and Mastny (1989) stress that a facilitator of collaborative efforts needs to have "an ability to 'seize the moment.'" They justify this position in the following way:

When a discussion has taken place and many views have been heard, someone often makes a statement that clearly defines the next step to be taken. The facilitator who is carefully listening will seize the opportunity to repeat the suggestion, obtain consensus on it, and [conclude the discussion by summarizing the suggestion] There is a fine line between allowing free discussion and sensing the right time to bring it to resolution (1989:6).

The literature on coordination does not go into much detail in discussing what happens at the "moment of truth" when representatives of different agencies get together to carry out coordination mandates. Nevertheless, discussions with practitioners make it clear that it usually takes a creative act on the part of at least one of the participants to develop a vision that will turn "paper coordination" into real changes in either planning or service delivery systems. It is an open (and researchable) question whether or not these kinds of entrepreneurial skills can be taught, and hence whether training and technical assistance in this area can indeed further the coordination agenda.

A Neutral Convener

All too often, people in a given agency look to other organizations to coordinate with them, rather than trying to find common ground. Given this situation, none of the agencies that could engage in collaboration may be willing to look to each other to take the lead. Therefore, as noted by Robinson and Mastny (1989:4) in Linking Schools and Community Services: A Practical Guide:

Any person or group of people who are interested in creative approaches to help children and youth can initiate a collaboration. [But] it is most helpful if the initiator remains neutral and speaks the "language" of both the educational communities and human service agencies The person or persons who initiate the collaboration may or may not also assume the role of a facilitator The ideal situation is one in which the facilitator is a person from neither the school nor social agency. One advantage of this is that the facilitator is perceived as neutral with no vested interest.

The logic behind this point of view is impeccable. Further empirical research is needed to explore the extent to which such neutral conveners can indeed be found or developed in most community contexts.

Case Management

The term case management means many things to different people. It is often thought about as the job done by an entrepreneurial worker trying to pull services together on his or her own, client by client. For example, Kane (1990:2) notes that the 1985 Coordinated Omnibus Budget Reconciliation Act (COBRA) defines case management as being "commonly understood to be a system under which responsibility for locating, coordinating, and monitoring services rests with a designated person or organization."

However, as discussed in Kingsley (1989:2), "well-conceived case management activities occur at both the client level and the systems level," and at the latter level, "case management may be defined as a strategy for coordinating the provision of services to clients within a system."

Put more simply, if this personalized, client-centered strategy is to work, case managers can't be left alone to do their stuff. They need to be backed up by a group of youth-serving institutions that have banded together through formal interagency agreements in a way that ensures that the broad selection of services commonly needed by young people are available to the case manager when the young people need them; enables case managers to know, in advance, what they can and cannot promise to their clients; empowers case managers to "requisition" services and resources across institutional lines; and revises traditional modes of operation if these modes do not work in the best interests of the young people they purport to serve (1989:3).

Both common sense and experience with case management efforts support this broad outlook as a productive direction in which to move. However, much still remains to be done to specify the kinds of activities that should be undertaken to utilize case management in efforts to promote coordination and the contexts in which each is most desirable.

ASSESSMENT OF COORDINATION STRATEGIES AMONG FEDERAL AGENCIES

State and local officials frequently suggest that the best thing their federal counterparts could do to promote coordination among their agencies would be to improve coordination among HEW, Labor, Education, Agriculture, Housing and Urban Development

(HUD) and other relevant agencies. In recent years, a variety of steps have been taken at the federal level to accomplish this objective by promoting coordination of employment and training, human service and related programs. Some new coordinating structures have been established at the White House staff level, such as the Low Income Opportunity Board created in 1987 and replaced by the Economic Empowerment Task Force in 1990. While these bodies have the standing to play a major coordinating role, there is no documentation of their impact, and they may be too political to be seen as neutral conveners.

On a less formal level, implementation of the Family Support Act and its Job Opportunities and Basic Skills (JOBS) training program has promoted a new wave of collaborative activities among the staffs of DOL, HEW and Education. At a November 1989 meeting of the secretaries, an interagency agreement was signed, and there have been follow-up meetings of assistant secretaries and their staffs, and a jointly overseen training and technical assistance effort.

All of these efforts seem reasonable and appear to be laying a solid foundation for integration of policymaking and program oversight among the three departments. However, as noted in Bailis (1991a:14), the tangible benefits from these efforts have been slow to appear:

Two of the three Secretaries that signed this agreement are no longer in office [sixteen months later], and their collaborative effort does not seem to have altered the broad differences in perspective that the three agencies bring to employment programs. The ongoing collaboration around a JOBS technical assistance contract does not seem to have avoided at least some duplication of effort in the planning for a major conference on coordination of vocational-technical education, adult education, JTPA, and JOBS programs scheduled for this July . . . [and] as seen from the state and local level, [the Secretaries'] agreement has yet to produce many tangible results in terms of changes in program policy and regulatory frameworks.

Some studies have found other structures, such as presidential task forces, to be useful devices to promote coordination at the federal level, but none that we are aware of has affected state and local programming.

Another approach would be to reorganize federal agencies in a way that minimizes the need for interagency coordination effort. For example, the National Commission for Employment Policy has recently called for restructuring federal employment and training programs to unite JTPA, JOBS and the Food Stamp Employment and Training Program under a single organizational roof. This kind of reorganization would have many obvious

benefits; but, as in so many other instances, its expectation of improved services tends to be based on logic rather than on empirical evidence of success.

ISSUES IN ASSESSING THE EFFECTIVENESS OF GIVEN STRATEGIES TO PROMOTE COORDINATION IN GIVEN CONTEXTS

What have we learned about the effectiveness of given strategies to promote coordination in given settings? In particular, what do we know about measuring and/or predicting the success of efforts to increase the amount of coordination among JTPA, other youth development and related human service programs from year to year in different kinds of settings? The research literature has rarely addressed this kind of issue explicitly, and rarely contains enough description of context to allow readers to make independent judgments. This problem may prove insurmountable because of the wide variety of contexts in which coordination takes place and the absence of agreement on measuring it. Thus, it is unlikely that we will be able to move beyond informed judgments that "in general, strategy X seems like a good idea."

However, even if methodological barriers could be overcome, the crucial importance of context would still constrain the effectiveness of federal efforts to impose specific coordination approaches on states and of state efforts to impose approaches on local officials. Since higher-level officials cannot be expected to be aware of all of the relevant contextual issues at lower levels, they cannot be expected to know when given strategies are and are not likely to bear fruit. Mandating a given approach across the board (nationwide or statewide) might be helpful in some jurisdictions and counterproductive in others. This line of reasoning leads to a call for deemphasis on efforts to impose specific coordination structures and procedures from above, and instead argues that more emphasis needs to be placed on finding ways to get local officials together to realize the ways coordination can be helpful.

Gula and King (1990:94) apply this insight directly to employment and training programs in Texas by elaborating on the traditional "carrot and stick" dichotomy:

Positive reinforcement will typically produce better results [in terms of coordination] than more negative approaches. For example, the provision of joint (interagency) technical assistance on effective program models is preferred to monitoring reports on the insufficient numbers of joint staff meetings taking place.

On the other hand, strategies that require representatives of different agencies to get together on a periodic basis--such as required membership on planning committees and requirements for joint sign-offs--do appear to have a role to play; they are reasonable

ways to create the preconditions for coordination. But they will not be enough to promote meaningful coordination without the kind of entrepreneurial activity that allows each participant to see what is in it for his or her agency.

ISSUES IN ASSESSING THE EFFECTIVENESS OF COORDINATION IN PROMOTING IMPROVEMENTS IN SERVICE DELIVERY

If coordination is indeed a means to an end rather than an end in itself, it cannot be assumed that all efforts to promote coordination are worthwhile; it is not enough to document the institution of coordination mechanisms and assume that this means clients are being better served. Documentation of the benefits of coordination needs to go beyond the implementation of collaborative relationships to consider the effects on services. The research and program literature clearly spells out the kinds of benefits we expect coordination to achieve, including improved quality, improved cost-effectiveness and improved access.

However, as noted in several reviews of the coordination literature (Bailis, 1989; Grubb, et al., 1990), almost all extant studies focus on the coordination process and thus leave readers to assume that the observed collaboration is in fact producing better services at appropriate costs.

The research literature, the experience of more than two decades of employment and training programs, and common sense all warn us to differentiate between the institution of formal coordination mechanisms and the bringing about of real change in services. As Liebert (1976:81) puts it:

Formal coordination of an inclusive set of diverse parts does not in itself necessarily alter the distribution of services and rewards in any consensually intended direction, or significantly reduce the autonomy of functioning programs, nor is there evidence to support that it does so in practice Formal coordination of the sort optimally attained in the American context is often a symbolic response Coordination is [often] feigned by its sponsors to be a satisfactory substance response [to unmet needs] in and of itself even without making any tangible changes in circumstances for anyone but the new cadre of coordinators.

Rogers and Whetten (1982:vii) make a similar point (emphasis added):

Coordination among organizations and agencies in the public sector has increasingly been defined as desirable. The assumption is that concerted decision-making and cooperative program implementation will lead to

more successful outcomes than will independent actions of the same agencies.

Logic alone, then, cannot resolve the issues. Facts are needed. How can we get the needed empirical data? It is silly even to think of randomized experiments to demonstrate the impact of coordination. Therefore, assessments of the cause and effect relationship of coordination and improved outcomes would have to be quasi-experimental, seeking to demonstrate that coordination has in fact produced improvements in quality, cost-effectiveness and/or access. A "before/after" approach would mean first documenting changes over time, then eliminating all other plausible explanations (other than improved coordination) that might account for them. "Comparison group" studies would try to find pairs of agencies with similar programs, similar clients and similar contexts that differed only in the degree to which they were coordinated, then compare outcomes.

Neither of these approaches is 100 percent achievable and neither will produce definitive results. However, if one accepts the idea that coordination is a means and not an end, and if one's focus is practical guidance rather than academic rigor, research-based designs that utilize the two approaches would be helpful in assembling the facts that policymakers and managers could review and make their own judgements about. In any event, efforts to document the resources that have gone into specific efforts to promote coordination as well as the benefits of coordination would be useful in two important regards. First, they would help clarify the amount of resources that should be devoted to promotion of coordination (since the costs of coordination promotion should not exceed its benefits); and second, documented benefits would promote voluntary efforts to coordinate.

SPECIAL ISSUES PERTAINING TO YOUTH EMPLOYMENT

While the situation in each community is unique, there are a number of issues generically relevant to understanding--and hence fostering--coordination among agencies that promote youth development. In particular, coordination with schools inevitably lies at the heart of efforts to develop comprehensive services.

In recent years, many efforts have been made to link school systems and human service agencies. Some, like the New Jersey Department of Human Services's School Based Youth Services Program, aim to provide services at sites either in or near schools. Others include schools as partners in broader communitywide initiatives, such as those supported by Maryland's Office for Children, Youth and Families.

What are the elements that affect the dynamics and outcomes of efforts to promote coordination among youth-serving agencies that include elementary, secondary and postsecondary school systems? There are few--if any--unique factors involving outcomes when school systems play a key role in collaborative efforts, but many aspects of the education system shape the dynamics of efforts to promote coordination. For example, the discussion of barriers to coordination in Robinson and Mastny (1989:3) is not that different from those in sources that focus on other policy areas:

Questions about turf, differences in professional language, philosophy, and organizational style all point to potential pitfalls that must be addressed in order for a school-community partnership to be effective.

However, efforts to involve school systems in broader community collaboration efforts have been successful only when they are able to overcome such specific barriers as:

- Differences in jurisdictions between school districts and the catchment areas of other agencies;
- The variety of constituencies within school systems, including administrators, counselors, teachers and nurses;
- The severe limits on available space within schools for noneducational activities, and the problems in keeping buildings open after regular hours; and
- The need for teacher cooperation in releasing students from class for other activities.

The Dryfoos (1991) analysis of recent efforts to promote the community school approach provides an excellent illustration of these points. In particular, she notes barriers that have impeded efforts to import community services to the school setting:

- Jurisdictional issues--a city or county with only one social services or health district may have more than a dozen locally controlled school districts, or a rural school district may cover several cities or counties;
- Problems between school and service agency staff relating to differences in pay and benefits;
- Difficulty in finding space (and privacy) for community agency staff in the school;

- Unwillingness of some teachers to excuse students from classes to participate in activities offered by other agencies in the school; and
- Confidentiality of records.

Issues of administrative capacity and priorities also come up. As noted by Dryfoos (1991:27):

Most schools are not set up to operate clinics, treatment programs, job placement, after-school recreation, social service units or child care, and most school administrators feel that they have a large enough challenge just improving the quality of education.

Nevertheless, there are numerous examples of states and localities that have overcome these and other barriers in working with school systems. Therefore, the task for analysts and those who are trying to promote community schools and other youth-centered coordination schemes remains the same as in the generic case: understanding the specific elements of context that affect the likelihood that given strategies and approaches will bear fruit.

IV. DYNAMICS AND OUTCOMES OF EFFORTS TO PROMOTE "TOP DOWN" COORDINATION

We are about as coordinated at the local level as we can be until the big shots at the state and federal level get their acts together (adolescent services provider quoted in Dryfoos, 1991:2).

Strategies to promote coordination can be divided into two broad groupings: (a) efforts to force or induce agencies to coordinate through the use of authority from higher levels of government and/or incentives, and (b) voluntary efforts among equals to find and implement ways to work collaboratively. Gormley (1989) calls the choice between coercive controls and catalytic controls "muscles versus prayers;" other terms are "top down" and "bottom up" (Trutko, et al., 1990), and "top down" versus "bubbling up" (Dryfoos, 1991).

In general, those at high levels of government can set up rules to require coordination, can offer incentives to promote coordination, and/or can try to structure local perceptions and reality. This section summarizes what is known about these strategies and their effectiveness in upgrading services to young people.

OVERVIEW OF FEDERAL EFFORTS TO PROMOTE COORDINATION AT THE STATE AND LOCAL LEVELS

A 1989 report of the JTPA Advisory Committee (1989b) is perhaps the most prominent of numerous recent calls for a greater federal role in promoting coordination among education, employment and training, and human service programs at the state and local levels. As noted in one of its recommendations:

Collaborative efforts among schools, business communities, and JTPA to keep at-risk youth in school and get out-of-school youth back in school or in training programs should be encouraged through incentive awards, technical assistance and joint planning requirements (1989b:21).

The literature presents a clear picture of increasing efforts by federal officials to respond to these kinds of recommendations by taking steps to promote coordination of employment and training and related services at the state and local levels. As was discussed in Section II, these efforts have included:

- Enactment of mandates to coordinate in JTPA, the Carl Perkins Act, the JOBS program and most other major legislative initiatives, and enhancement of these mandates in the accompanying regulations and guidelines;

- Taking steps to identify and remove legislative and regulatory barriers to coordination;
- Provision of monetary incentives to coordinate by setting aside "pots of money" for projects involving coordination and joint operation of demonstration projects; and
- Provision of training and technical assistance to promote coordination.

Have these steps been enough? Can DOL and other federal agencies do more? Most major studies and numerous practitioners have concluded that the federal track record in using these techniques to bring about change at the state and local levels has been uneven at best. Some, like Grubb, et al., (1990:4), explain that these federal efforts to promote coordination are severely constrained by existing legislative frameworks:

Given the nature of effective coordination, which is now largely a local activity, [and] the structure of federal legislation, which delegates considerable authority to states, there are unavoidable limits to what federal policy can accomplish in the area of coordination.

Others, like Levitan and Gallo (1988:viii), appear to be somewhat less charitable:

JTPA has made little progress in achieving better coordination with related social programs, dashing exaggerated congressional expectations that efficient interprogram cooperation could compensate for radical budget cuts.

A similar pattern of limited success in the field of human service programs for children, youth and families is outlined in the Agranoff (1991) review of the history of "service integration." After vigorous efforts to promote better linkages among human service programs through such HEW and Health and Human Services (HHS) initiatives as Service Integration Targets of Opportunity, the review notes that service integration efforts at the federal level appeared to have receded by the late 1970s and early 1980s. While several service integration and partnership projects continued in similar or refined form, there were no more federal initiatives.

Thus, the overall pattern seems clear across a broader spectrum than the JTPA world: previous successes have been limited at best, and there is room for improvement in the effectiveness of federal efforts to promote coordination among state youth development and related human service agencies.

OVERVIEW OF STATE EFFORTS TO PROMOTE COORDINATION AT THE LOCAL LEVEL

State government has two important roles to play in the promotion of coordination of youth development and related human service programs: (a) enforcement of federal coordination mandates, and (b) development and implementation of coordination strategies that go beyond federal mandates. The resources states have to carry out these strategies include all those available at the federal level, as well as direct line authority over some local agencies.

How frequently do these top down initiatives occur? The literature typically contains dozens of examples of exemplary efforts but always leaves the impression that they are atypical. For example, Dryfoos (1991) provides a long list of child-oriented state initiatives that appear to show promise, including the Oregon State and County Youth Services Commissions, the Connecticut State Legislative Commission on Children, the Massachusetts Commonwealth Futures Program, the New Jersey School Based Youth Services Program, the Kentucky Education Reform Act that calls for creation of family resource centers in or near schools where disadvantaged youth are educated, the Florida Full Service Schools legislation, the New York Department of Education Community Schools Program and its State Council on Children and Families, and the Maryland Subcabinet for Children, Youth and Families.

This list (and other statewide initiatives) makes it clear that many states have already taken meaningful steps to promote coordination. However, the fact that most states are not listed leaves the impression that those on the list constitute a vanguard. In addition to this, most of the cited efforts are so new that rigorous evaluations of local-level changes they may have brought about are not yet widely available. Finally, the demise of the Massachusetts Commonwealth Futures Program and cutbacks at the New York State Council on Children and Families warn that it is one thing to develop innovative ideas and quite another to institutionalize them--especially in an era of continued government cutbacks in funding for service programs.

Studies that focus on JTPA have tended to present negative to lukewarm assessments. Levitan and Gallo (1988:56) are typically the most negative:

Several key assumptions by JTPA's designers regarding coordination have proven to be erroneous. Elevating the role of the states, JTPA relies upon the governors to guarantee better interprogram cooperation, but state agencies do little to promote coordination.

Grubb, et al., (1989:3) concur but state their conclusion in terms of the relative robustness of local-level "bubbling up" coordination efforts:

In general, we found both the state initiatives and the coordination requirements in the federal Acts to be less important than local initiatives. The real innovation in both JTPA and vocational education occurs, in our view, at the local level, where the amount of creativity, entrepreneurship, and doggedness in searching for solutions to the education and training needs of various groups is impressive.

Brady and Balfe (1989:17) say that the record is mixed--some progress and much disappointment:

Notable exceptions [to the rule of limited state promotion of coordination] do occur in states that have taken federal mandates seriously and vigorously pursued a coordination agenda by reforming the planning and service delivery process.

However, the Trutko, et al., (1990) study cites hundreds of (apparently) exemplary instances of coordination. The JTPA synthesis conducted by the National Commission for Employment Policy (Johnston, 1987), and the Grubb, et al., (1989) study provide numerous additional examples, including projects funded in Florida, Massachusetts, Michigan and Wisconsin.

A similar pattern exists in the literature that describes welfare-employment programs. There are numerous examples of innovations in coordinated welfare-employment programs that have taken place at the state level, both nationally recognized efforts in Massachusetts and California and lesser-known efforts in Florida, New Jersey and Pennsylvania. However, many of these efforts preceded the passage of the Family Support Act and cannot, therefore, be considered responses to this particular federal initiative. (On the other hand, many of them can be seen as a response to the Work Incentive (WIN) demonstration, which gave states the option to pursue these kinds of innovations if they so chose.)

How can one sum up this complex pattern of results? One may conclude that the potential for state leadership is there. The research issues facing us today revolve mostly around how to promote and channel it. In particular, policymakers and researchers would be well advised to abandon efforts to quantify the extent to which coordination does and does not exist, and instead try to specify the kinds of top down strategies that are most likely to bear fruit under specific circumstances.

The review of state coordination strategies focusing on education conducted by Dryfoos (1991) offers some excellent examples of possible answers to this research challenge, arguing that success is likely to occur only when certain preconditions are present, including legitimation by legislative or other authority, defined and shared cross-system goals, explicit mechanisms to promote coordination, and new money.

ASSESSMENT OF SPECIFIC STRATEGIES

A recent Council of Chief State School Officers publication (1991:4) summarizes the emerging consensus on the role of states in promoting coordination in youth development programs by underplaying mandatory approaches in favor of a combination of a range of voluntary approaches:

While effective collaboration cannot be mandated or forced upon a community by well-meaning state officials, state education agencies, in concert with other state-level child-serving agencies, can provide leadership, technical assistance, and incentives that will facilitate a community's efforts to deliver services more effectively and efficiently to children and adolescents.

The remainder of this section of the paper reviews each of the major strategies.

Mandates to Coordinate

As noted earlier in this section and in Section II, there is a good deal of language in JTPA, the Carl Perkins Vocational Education Act, the Wagner-Peyser Act and the Family Support Act designed to promote specific types of coordination with JTPA. Typically, these requirements focus on coordinated planning rather than coordinated service delivery, mandating input from one agency into the planning cycle of others and, at times, participation in governing or planning bodies. For example, according to Brustein (undated), there are 8 references to vocational education in JTPA and 22 references to JTPA in the Carl Perkins Vocational Education Act, including requirements in both to coordinate with each other.

The literature varies considerably in its assessment of the effectiveness of these provisions but tends to stress the shortcomings rather than the accomplishments. For example, Brady and Balfe (1987:16-17) have concluded:

The provisions in JTPA and the Carl Perkins Vocational Education Act mandating coordination are only vaguely known by a substantial proportion of respondents and have been ignored by many others Paper agree-

ments [that certify that coordination has taken place] are [often] a pro forma exercise without much genuine substance.

Lewis, et al., (1988:20) put it even more starkly:

From the local perspective, the provisions in the Perkins Act that require state-level coordination have not affected the local level.

The Melaville and Blank (1991:19) study of programs for children and families comes to a similar conclusion, namely that many "first generation" state-level initiatives have had an uneven effect on local communities because they "imposed rather than facilitated local action and were frequently seen as intrusive and counterproductive." In doing so, it cites a Public/Private Ventures study that concludes that virtually all youth service providers saw "mandated coordination as unrealistic and paper producing" (Watson and Jaffe, 1990). Bailis (1989:42) also has used the term "uneven" to describe the impact of mandates:

The research literature . . . suggests that the effectiveness of these provisions has been mixed, apparently making a difference in some instances and not in others.

The fact that the coordination provisions have been unevenly implemented leaves one inescapable conclusion: provisions of federal law can be helpful in promoting ends such as coordination, but they are not sufficient. It is therefore necessary to look beyond the laws to isolate other federal, state, and local-level factors that tend to reinforce or negate the coordination mandates in the Act.

The conclusion that can be drawn from all of these examples across the different policy spheres is that it would be helpful--but not sufficient--to promote more specific coordination mandates in all future legislation involving JTPA and the programs with which JTPA is expected to coordinate. Tightening the language in federal legislation would strengthen the hand of state and local officials who are already advocates of increased coordination, but this strategy cannot be depended on to bring about significant change in all states on its own.

Creation of Central Coordinating Bodies

One major approach to promoting or mandating coordination of programs at the local level is creation of coordinating bodies. Federal law has mandated the creation of SJTCCs to promote coordination of employment and training programs. Many recent

efforts to reauthorize employment and training and related programs have provided for expansion of these bodies to take on responsibilities beyond the JTPA system. Similarly, many of the community-based family and children's services initiatives supported by states and foundations use neighborhood or community coordinating structures as their linchpins.

There is little evidence that coordinating bodies imposed from the outside can make a difference. Indeed, some theoretical literature calls the centralizing instinct into question. In particular, the seminal political science analyses of Lindblom outline an alternative to centralized hierarchical planning called partisan mutual adjustment, and express the view that groups of agencies can effectively work together without the central direction that coordinating bodies can provide. Lindblom notes in one of his best-known works (1968:82):

On a naive view, cooperation requires a central coordinating authority. For if men need to cooperate, how better to do it than through a supervisory authority? The fact is, however, that proximate policymakers, like any other men, can arrange cooperation through central supervision, or through negotiation, bargaining, and other forms of mutual adjustment

Fear of concentrated power aside, central coordination is sometimes less desirable than mutual agreement on efficiency grounds. For central coordination may impose analytic and regulatory tasks on a central authority beyond its capacities. Each limit [on man's analytical capacities] is also a limit on a central coordinator's capacity to analyze the desired relations among subordinate policymakers and to regulate them.

Taken together, the evidence on central coordinating bodies is that they appear to be a sensible idea that can bear fruit. In particular, they can provide the framework in which managers and staff from different agencies can come together and take actions to promote coordination. But the expectations for such bodies should be limited, and there is no reason to put all the coordination "eggs" in this "basket."

Providing Incentives to Coordinate

The literature does not provide any clear guidance on the most effective ways to provide "pots of money" and other incentives to promote coordination activities, nor the circum-

stances under which incentives are most likely to be productive.⁵ However, virtually all references to efforts to provide financial and other incentives suggest that this approach is worthy of further attention and emphasis.

For example, several leading studies emphasize the changes that funding from higher levels of government can promote. In particular, Levy (1989) cites the financial incentives associated with the collaborative efforts of DOL and HHS in the Youth 2000 campaign, the grant awards by the Council of Chief State School Officers, The Ford Foundation's Urban Dropout Prevention Collaboratives and The Annie E. Casey Foundation's New Futures Initiative. The same report addresses state-level efforts that have collaborated at the local level, including the Maryland Investment in Job Opportunities program and the New Jersey School Based Youth Services Program (SBYSP).

Although formal evaluations are not yet available, SBYSP provides what appears to be an excellent example of the effectiveness of offering funding as an incentive for community agencies to work together. SBYSP limited its funding to communities that demonstrated the support and participation of a broad coalition of local community groups, businesses, public agencies and nonprofit organizations as well as the relevant school districts. In particular, applications had to be filed jointly by a school district and one or more local nonprofit or public agency.

This example notwithstanding, the Bailis literature review (1989:42) is not upbeat on this approach:

The logic behind earmarking a portion of a program's funds to promote an objective such as coordination is impeccable: if an agency is unlikely to do something with unrestricted funds, then the only way to make sure that they take the intended actions is to provide funds that can only be used for this purpose. In the JTPA program, this idea has been implemented through the legislative creation of "set-asides" or "pots of money" to promote coordination and a number of additional purposes.

⁵ Dryfoos (1991:28) provides an exception to this rule by pointing out that the request for proposal (RFP) process often used to promote local initiatives may sometimes unwittingly divert resources from the areas with the greatest need:

One problem with the simple RFP approach is that the most needy communities may fail to win grants because of th[e] competitive process. They do not have the grantsmanship skills required or there may be a shortage of potential collaborators. Yet in the long run, the solution to the problems in the highest-risk communities may be tied inextricably to their gaining greater resources.

However, the research literature to date suggests that the track record of the JTPA set-asides (including the 3 percent, 6 percent, 8 percent and Wagner-Peyser 10 percent monies) in promoting coordination has been mixed at best. As is the case in many other aspects of coordination, the record shows that this approach seems to have borne fruit in some circumstances and not in others.

On the other hand, Grubb, et al., (1989:19-20) describe a somewhat more optimistic picture:

[In some instances], the JTPA requirements are adhered to, and the individuals who receive the training are all in need of special assistance, but the central purpose of the 8-percent funds to encourage cooperation of vocational education and JTPA has been circumvented

Overall, however, our interviews showed a general agreement at both the state and local levels that the 8-percent funds have stimulated programs and experiments that would never have been established without this set-aside

The 8-percent funds . . . have been welcome as a more positive way of enhancing coordination than the usual administrative prescriptions and they have clearly supported some cooperation and some experimentation that would otherwise never have taken place. But the uses to which 8-percent funds have been put have sometimes been inconsistent with the purpose of fostering better coordination between vocational education and JTPA.

Again, the most sensible conclusion to be drawn is that this approach can make a difference, but further research and analysis is needed before one can identify the factors that systematically contribute to and/or detract from its efficacy.⁶

⁶ A Council of Chief State School Officers publication (1991:5) provides an unusual insight into the context in which incentives are more or less likely to be effective:

Knowing that they could not mandate school district participation, the State Department of Education agreed to solicit the participation of [districts in the Kentucky KIDS program] that had already enjoyed a good working relationship with local health and human service providers.

This example seems to suggest that it may be more effective to use incentives to try to build on existing cooperation than to use this approach to overcome barriers to coordination that had previously been insurmountable.

Provision of Training and Technical Assistance

For decades, federal agencies have sponsored meetings to promote coordination, have developed training and technical assistance materials to help those funded by one agency to learn about programs funded by others, and have convened meetings at which state and/or local officials can get to know each other better.

These written materials go back at least as far as the series of reports prepared to "provide specific guidance as to how HEW manpower and manpower-related programs may be coordinated with CETA to the mutual benefit of each program" (Urban Management Consultants, 1976) and Coordination: WIN and CETA (Southern Institute for Human Resources, 1978), prepared under contract to HEW. More recent materials in the youth development field include Linking Schools and Community Services: A Practical Guide by the Rutgers University Center for Community Education (Robinson and Mastny, 1989).

There is a widespread belief that the dozens of conferences and other structured opportunities for staff from different agencies to meet and share experiences have provided a good means of getting collaborative efforts off the ground. Relatively recent examples of these kinds of meetings include the Wingspread Conferences on Adolescent Pregnancy sponsored by the American Public Welfare Association and The Johnson Foundation, the Education Commission of the States' 1987 Forum on At-Risk Youth, the Council of State Policy and Planning Agencies' Dropout Prevention Academies (all cited in Levy, 1989) and the July 1991 conference, Making the Connection: Coordinating Education and Training for a Skilled Workforce, sponsored by the U.S. Department of Education in cooperation with HHS and DOL, which brought together teams of five officials from each state.⁷

The idea that training and technical assistance can promote desired changes at the state and local levels seems unarguable. However, there has been little follow-up to determine which training sessions and/or technical assistance materials have made a difference in the way state and local agencies carry out their responsibilities.

Jointly Funded Demonstration Projects

DOL and other agencies have begun making joint awards for selected discretionary programs, such as the joint DOL and HHS efforts to provide both family life education

⁷ Each state was invited to send the top five administrators of the Carl Perkins Vocational Education Act, the Adult Education Act, JTPA, and the JOBS program of the Family Support Act.

and employability development services to teenagers. Similarly, officials from HUD have recently participated in a joint effort to upgrade the housing components of DOL's Job Training for the Homeless Demonstration Project.

However, as some see it, DOL's efforts to develop joint demonstration projects with other agencies have often been hampered by the lack of flexibility and discretionary funds at the federal agencies with which DOL wishes to collaborate. According to one DOL official, there is virtually no discretionary money for use in demonstrations at HUD, and very little at HHS, the Department of Education and the Justice Department.

Identifying and Removing Legislative and Regulatory Barriers to Coordination

A number of studies of coordination have concluded that the most useful things federal or state officials can do to promote coordination are identifying legislative and regulatory barriers at lower levels of government and eliminating them. For example, the New Jersey Department of Human Services has promoted the functioning of its School Based Youth Services Program by certifying participating schools as Medicaid providers so they can be readily reimbursed for providing health care services to eligible students.

This point of view is expanded upon in a somewhat pungent fashion by Grubb, et al., (1990:4):

Rather than continuing to rail about the state of coordination at the local level, we suggest that federal policymakers could accomplish more by putting their own house in order. Common suggestions include clarifying the intent of federal legislation, including coordination set-asides; simplifying client eligibility, accounting procedures, and other regulations that local administrators perceive as burdensome; and improving coordination among federal programs.

Although it has not yet received systematic attention in the literature, attendees at meetings to promote coordination often cite the caution that results from uncertain federal auditing practices, which discourages them from planning and adopting innovative service delivery approaches based on interagency collaboration.

CONCLUSION

Some states have been far more responsive to federal coordination mandates and incentives than others. Similarly, cities, counties and other local government bodies have varied considerably in their responses to coordination initiatives from the state level or from private foundations. The central issue in our search for practical guidance involves

determining why this is so, so that the factors that have promoted greater responsiveness in particular contexts can be identified and replicated. This issue cannot be resolved until we are clear about whether these patterns are the result of random effects of personality and history or whether we can identify "levers for change" that can be practically implemented by higher levels of government (and others). As noted in this section, the research literature and the experience of youth practitioners over the past few decades provide many clues as to the answers, but the search for practical guidance in this area is far from over.

V. SUMMARY OF CONCLUSIONS AND PRELIMINARY RESEARCH AGENDA

It lies within our reach, before the end of the twentieth century, to change the futures of disadvantaged children Highest priority must go to efforts to combine disparate programs into coherent combinations of services in neighborhoods where persistent poverty and social dislocation are concentrated. Government agencies must review their funding policies and regulations to identify the most important impediments to providing coordinated services and seek their removal (Schorr, 1988:292-293).

A fourth and final challenge for planners of [coordinated] community-based initiatives is to measure the success of these undertakings more by outcomes than by process. Given the complexity of effecting changes in how well children develop, it is tempting to ignore the issue of whether families are healthier once a community-based initiative has been in place and instead, to focus on less elusive improvements—for example, in the level of services provided or the number of children reached by services. To an extent, such an approach seems justified because without elaborate and expensive experimental studies, it is impossible to pinpoint the extent to which changes in children's well-being are attributable to a specific intervention On the other hand, outcome indicators, while an imperfect measure of effectiveness, provide more dynamic clues to how the intervention should be reshaped (Blum and Blank, 1991:19).

Rather than recapitulate each of the findings and conclusions of the previous sections, we have chosen to elaborate on a handful of overarching themes, then proceed to a discussion of the research agenda suggested by the findings and gaps in knowledge that now exist.

THE PREVALENCE OF EXAMPLES OF COORDINATION

Much of the public policy literature dwells on barriers to coordination and calls for new steps to overcome these barriers—including new laws and regulations that create mandates and incentives, new organizational structures and leadership from high-ranking officials. However, the examples listed in this paper (and the many more in the literature that are not cited) make it clear that these barriers can be overcome in at least some instances. Levy (1989:57) reports that a survey of collaboration between education and human services in 47 states noted a "great deal of collaboration underway, perhaps not yet as broad-based or deep-reaching as will develop, but nonetheless exciting and instructive in the promise that it holds for future efforts."

These kinds of findings reiterate the importance of the "new conventional wisdom" perspective and strongly suggest that both policymakers and researchers need to focus on the specific circumstances under which efforts to promote coordination are likely to succeed and produce improvements in service delivery and client outcomes.

THE NEED FOR EMPIRICAL DATA ON COORDINATED ACTIVITIES, OUTCOMES AND CONTEXTS

Most analyses of coordination have been based on case studies, logic and common sense rather than on empirical findings. Researchers and policymakers have:

- Identified factors that seem to present barriers to efforts to collaborate, based on the testimony of people in youth development and related human service agencies;
- Identified strategies that seem effective in overcoming these barriers, and cited examples of people in youth development and related human service agencies who have carried out these strategies and found them to work; and
- Documented changes in specific types of collaboration and assumed they have resulted in better programming, i.e., services that are more effective, cost-effective or accessible.

However, all of these activities are of limited value for those seeking practical guidance. First of all, lists of barriers to coordination, such as the ones presented earlier in this paper, do little or nothing to explain the exceptions to the rule, where the barriers have been overcome.

Similarly, if they mean anything at all, arguments that "coordination is a means and not an end" mean one cannot assume that implementation of a referral agreement, a shared planning effort or a case management system will improve service delivery and hence outcomes. No generalization is likely to help us to decide what kind of coordination is most likely to improve programming in given settings and what strategies are most likely to promote coordination in these contexts.

In essence, it is time to move beyond talking about what kinds of barriers exist in general and what kind of facilitators exist in general, and to begin to assemble and analyze empirical data to clarify (1) the circumstances under which potential barriers are important factors in the decisions of state and local decision-makers to engage in collaborative planning and service delivery--or to refrain from such activities; (2) the situations in which given strategies seem effective; and (3) the contexts in which given

forms of coordination seem to make a difference in improving services, and hence outcomes.

THE CENTRAL ROLE OF ORGANIZATIONAL DYNAMICS

Implementation of coordinated service delivery often implies major changes in the ways agencies select, serve and follow up on clients. Experience with the initial efforts to build coordinating mechanisms under both DOL's Youth Opportunities Unlimited demonstration and the Job Training for the Homeless Demonstration Project illustrates the difficulties that occur when staff in participating agencies have to learn and internalize new ways of doing business.

The numerous references to "turf" concerns throughout the literature on coordination make it clear that management and staff of collaborating agencies are likely to resist change imposed on them unless the change is clearly in their own interests. Agencies tend to keep doing what they have always done unless given persuasive reasons not to. This is precisely the situation that often yields "paper compliance" with mandates rather than real change.

The centrality of organizational and other nontechnical issues to the promotion of coordination is illustrated by the listing of factors said to inhibit collaboration between schools and community services in Robinson and Mastny (1989): competitiveness; dominating rather than shared leadership, which discourages group decision-making; inflexibility in scheduling meetings and activities; lack of understanding about how schools and community agencies operate; hidden agendas for personal advancement; cynicism about the advantages of sharing information; pressure to "push things through" without adequate time for discussion or for working through conflicts; more emphasis on talking than listening; preferring to do things alone rather than negotiate with others; closed participation with only a select few invited to participate; and prescribing actions for a partnership from the top down rather than taking the necessary time to involve participants at the local level. Each of these issues could have just as easily turned up on a list of factors inhibiting coordination of services for dislocated workers, homeless people or older Americans.

This point of view, in turn, means that the theory and practice of organizational change needs to take on increased importance in efforts to promote coordination, and that efforts to overcome organizational inertia through appeals to self-interest among agency staff must represent a key element in successful strategies to promote coordination.

THE IMPORTANCE OF VOLUNTARY COORDINATION AS OPPOSED TO MANDATES

As noted above, despite all of the well-known barriers to coordination, there are numerous examples of apparently effective collaboration between virtually every conceivable youth development and related human service agency. This implies that barriers can be overcome if state and local officials feel it is worth the effort to do so--the organizational inertia problem notwithstanding.

Thus, review of both the literature and the track record of coordination in employment and training and related fields suggests there has been relatively too much emphasis on mechanical steps toward coordination and relatively too little emphasis on motivating local program managers and staff to coordinate in their own interest. In particular, the research seems to show:

- If people are willing to collaborate and to commit time and resources to doing so, there are few absolute limits to the ability to develop coordinated programs under current legislative and regulatory authority.
- If people are unwilling to collaborate and to commit time and resources to doing so, there is little that can be accomplished through mandates to take such steps as "coordinated planning" or "interagency case management."

This point is generally more often made by practitioners than found in the literature, but its most blunt and colorful expression can be found in Gula and King (1990:93):

Mandating effective program coordination from the federal or state level is impossible. Unless conditions happen to be right, mandating coordination would probably be like pushing on a very heavy object with a limp rope.

Thus, in some ways, the most important value of the mandates for joint planning and the like are the opportunities they provide for personal contact and interaction that can lead to development of innovative changes in service delivery systems. Just as coordination itself should be viewed as a means toward other ends, mandating occasions for staff from different agencies to get together lays a foundation on which future efforts to work together may be built.

THE OVERARCHING IMPORTANCE OF CONTEXT

No one in the 1990s would argue that a single approach to employment and training is appropriate for all disadvantaged youth. Yet some people persist in looking for "the"

best ways to coordinate and "the" best ways to enter into interagency collaborative relationships. Both the research literature and the experience of more than two decades of practice suggest there are numerous examples of agencies that have entered productive collaborative relationships under the same institutional frameworks that others call barriers to coordination, and there are even more examples of cases where "mandated" coordination never occurs.

In order to transcend this "one size fits all" thinking, policymakers and researchers need to focus on context, addressing such questions as "What kinds of coordination are most likely to help achieve program goals in specific circumstances?" and "What strategies are most likely to promote and sustain interagency collaboration in given settings?" It is one thing for authors of guidebooks like Robinson and Mastny (1989:8) to say:

Sufficient time should be spent in the planning stage to work through the significant differences in philosophies and methods of implementation.

But it is quite another to provide guidance about how much time is "sufficient" in a given situation. Similarly, the authors note that "monthly meetings should take place during the academic year at the school site." Monthly meetings may in fact be a good idea in most cases, but in order to be useful, guidebooks need to help a policymaker or manager decide how frequently meetings should take place in the specific planning process in which he or she is participating.

The research literature is only beginning to provide practical guidance with respect to these contextual issues. The insightful study of welfare-employment programs in Texas by Gula and King (1990:94) provides one of the best analyses of the implications of an approach that recognizes the importance of context:

[State] policies on coordination should be sensitive to variations in local conditions. In areas which already have well-coordinated programs and an existing foundation of mutual trust, requiring greater and more specific coordination behaviors may well be counterproductive; the best state policies in this case simply support and nurture what is already in place and otherwise stay well out of the way. In areas without such relationships, additional coordination activity might be directed and tracked over time.

The Council of Chief State School Officers publications (1991:4) make this same point for youth-serving programs that are centered on schools:

The services that should be offered or coordinated at any given school site will vary depending on the degree to which health and human services

needs are already being met effectively elsewhere in the community
The particulars of establishing integrated school-linked services will necessarily vary from community to community; there is no "master plan" for linking services.

Perhaps the key contextual factor in analyzing efforts to promote coordination is the limited amount of funding available for most youth-serving (and other human service) programs. In particular, even if we were able to develop mechanisms to ensure perfect coordination among all existing programs, we would still be in a position to provide comprehensive packages of quality services to only a small fraction of those who could benefit, unless additional funding became available. Without additional funds, efforts to promote high levels of coordination will probably be limited to demonstration efforts that focus on limited numbers of sites and/or small geographic areas within individual cities and towns, such as the ongoing DOL Youth Opportunities Unlimited (YOU) initiative and The Annie E. Casey Foundation's New Futures Initiative.

KEEPING COORDINATION IN PERSPECTIVE

As noted at the beginning of the paper, no one argues that we need less coordination among employment and training and related programs. In fact, A Practitioner's Guide for youth employability development professionals issued by Public/Private Ventures (Smith, et al., 1988:64) puts increased coordination at the top of the priority list: "Developing a system to improve the coordination of youth services is thus the most important single task facing states and communities that wish to improve their approach to youth employment and training."

However, there is a danger that excessive emphasis on the potential benefits of coordination will distract us from other important program development and improvement goals. This paper has attempted to place the emphasis on coordination in a proper context by spelling out what can and cannot be expected to occur when efforts to promote coordination are undertaken. Among other things, it has noted:

- A literature that advances the possibility that significant benefits can occur from "duplication" and redundancy, and that potential losses can accompany improved coordination.
- The limited success that has followed most mandates to get agencies to collaborate, and the importance of barriers to coordination related to organizational politics and culture as opposed to such technical issues as differing funding cycles. Most successful efforts at coordination reflect a long history of efforts to evolve systems.

- The fact that perfect coordination of underfunded employment and training programs would probably mean that fewer than 10 percent of eligibles would be getting services, albeit perfectly coordinated services.
- The fact that coordination does not overcome the need to be sure the services being coordinated are as effective and responsive as they can be.

Thus, this paper attempts to walk a fine line. It recognizes the critical need for increased coordination, collaboration and linkages, and seeks to further a research strategy to support this end. But it also views coordination as only one of several "tools" that can be used to promote increased comprehensiveness, effectiveness, quality and cost-effectiveness of programs that serve young people (and their older counterparts). In the words of a state education official cited in Dryfoos (1991:28):

State agencies can coordinate, target, and reprogram until everyone is blue in the face, but if the basic school aid formulae leave poor school districts with 70 percent less per capita funding than wealthy districts, high-risk kids will never be adequately served.

Broader analyses of the impact of efforts to promote coordination therefore need to consider possible trade-offs between the achievement of coordination objectives and other agency objectives. At minimum, this means assessments of efforts to coordinate must take into account the costs (including opportunity costs) of these activities along with the benefits, and the likelihood of these benefits in the face of certain costs.

PRIORITY TOPICS FOR FUTURE RESEARCH

The analyses presented in this paper suggest four broad directions that DOL should and should not take in planning future research on coordination, collaboration and linkages. Each is summarized below.

1. The Department of Labor should fund research to better understand and promote voluntary efforts to coordinate publicly funded youth programs. Specific areas that might be explored include: (a) the costs and measurable benefits of particular efforts to coordinate; (b) the controllable factors that promote voluntary collaboration; (c) the effectiveness and replicability of the most promising efforts to promote coordination at the local level; and (d) instances in which promising strategies did not work out.

As addressed earlier in this paper, the theoretical literature on interagency coordination distinguishes between collaboration that is the result of mandates from above and collaboration that results from interagency negotiation. The former has received

extensive attention and the latter has not. The Department could foster efforts to coordinate at the local level by documenting the benefits of coordinating, and clarifying what it takes to get agencies to do so voluntarily.

Much of the literature (and much of the world) seems to assume there are always great benefits for agencies that enter collaborative efforts, and for their clients. While much of the available research on coordination was designed to address the issue of costs and benefits, researchers have not generally been successful in developing quantifiable estimates. As was illustrated in Section III, efforts to address costs and benefits are typically confined to lists of factors like those in Trutko, et al., (1990). Such lists appear to reiterate what common sense would suggest without any empirical research; they make little or no effort to prioritize the factors or to determine which are the most critical in which contexts.

If the Department could move beyond the "obvious" and "common sense" benefits and document actual benefits in given contexts, this information might be useful in encouraging local agencies to take and respond to initiatives to coordinate. While rigor in measuring costs and benefits would be ideal, any efforts that provide specific information would be helpful.

Similarly, the Department should try to document the costs and benefits of the current system, in which duplication and overlap are said to occur. Even the most vigorous defender of the position that there are benefits to the current system would agree that more research needs to be done in this area. As Bendor (1985:30) puts it:

The unmitigated wastefulness of bureaucratic redundancy is an untested axiom, sometimes explicitly stated . . . , sometimes implied, but in neither case doubted or tested. Thus there is no evidence that bureaucratic competition has the drawbacks attributed to it

Other theoretical arguments in favor of duplication that could be explored include the idea that "letting a hundred flowers bloom" makes sense at a time when we do not have any proven "methodologies" for dealing with the problems faced by disadvantaged youth and other hard-to-place Americans, and the idea that having competing programs and agencies increases the total "pot of resources" that is available to agencies trying to meet the same social need. The research would ideally transcend such general terms as "coordination" and address specific costs and benefits of specific varieties of coordinated planning and service delivery. While some would argue that coordination is a "good" by definition, it seems clear that efforts to marshal evidence about the measurable benefits of coordination would be more likely to motivate policymakers and managers.

It is unlikely that researchers will ever be able to develop methodologically pure quantitative studies that compare changes in program outputs as coordination increases and statistically control for the impact of all other variables. However, it would still be useful to assemble "before/after" studies that provide convincing evidence that "coordination matters." At minimum, case studies and mini-case studies might address the proportion of clients who have all (or most) needs met through a coordinated or collaborative mechanism without which a package of services would not have been available.

As noted in Section III, the literature has shown that many of the factors most effective in promoting coordination--most notably, previous histories of coordination and the personalities of higher-level officials--are beyond the control of federal, state and local agency staff. However, further research might identify and document the controllable factors, such as state plans and interventions, that bring key administrators from agencies together for planning sessions.

At the federal level, current efforts to plan and deliver coordinated technical assistance for the JOBS program are widely regarded as precedent-making. Once these efforts have had a chance to mature, they and similar efforts of other federal agencies should be explored to determine (a) the extent to which they have brought agency policymakers together on an ongoing basis and (b) the degree to which they have resulted in documentable changes at the federal, state and/or local levels.

The literature contains a wide range of recommendations about steps that can--or, more precisely, should--be taken to promote coordination but have not yet been subjected to rigorous research and evaluation. The specific strategies that might be explored include:

- Creation of community collaborative oversight bodies, such as those for YOU and the six-city New Futures Initiative;
- Foundation (or government) efforts to promote coordination at the national level, such as The Ford Foundation-supported Joining Forces initiative being carried out by the National Association of State Boards of Education (Levy, 1989) and other well-publicized state agency collaborative initiatives in youth employment, welfare-employment and related fields;
- Utilization of case management as the linchpin of coordination efforts, as is discussed in Kingsley (1989);
- Utilization of central coordinating bodies at the local level, such as expanded Private Industry Councils like the Massachusetts Regional Employment Boards;

- Creation of shared management information systems that cross program boundaries, as has been planned in a number of states (e.g., the Opportunity card initiative in Michigan and New York State's GA TWAY system);
- Efforts of businesses to enter and institutionalize collaborative relationships through such techniques as joint ventures and cooperative marketing agreements;
- Recent efforts by the Departments of Labor, HHS and Education to use jointly funded technical assistance and periodic meetings of assistant secretaries and their staffs to promote meaningful coordination; and
- The wide range of recent publications to promote coordination, such as the Joining Forces materials from the National Association of State Boards of Education (e.g., Levy, 1989), the Linking Schools and Community Services booklet put out by Rutgers University (Robinson and Mastny, 1989) and the materials put out by the Education and Human Services Consortium (e.g., Melaville and Blank, 1991; Bruner, 1991).

Each of these efforts has clearly been well-meaning and each has had logic behind it. However, there remains a need to try to collect information on the results each approach has produced, in order to determine how to make each most effective and the circumstances under which effectiveness is most likely to be attained.

These research efforts should be as broadly based as possible, incorporating, for example, lessons from the range of foundation-funded employment and training efforts as well as from publicly funded coordination efforts.

2. The Department of Labor should fund research that explores the "systems-level" delivery of service to young people--the effects of all agencies on individual young people. Specific areas that might be explored include: (a) the extent to which individual young people are in fact being served by different agencies and (b) the extent to which needy young people (or adults) are receiving any services.

Most of the studies in the coordination literature have been funded by a single agency (or in rare instances two agencies) and typically picture the clients of these agencies as the hub of a wheel with whom everyone else has to coordinate. The fact that programs like JTPA serve only a small fraction of eligible youth and adults is frequently repeated. However, while studies often demonstrate service gaps from the point of view of the funding agency, they generally do not address the extent to which clients are getting needed services.

Further insights could be obtained by studies that address a neighborhood or community as the unit of analysis and document the total amount of services that flow in, the way they are distributed across the total eligible population, and community-level outcomes. This kind of approach is the only way to determine the extent to which duplication really exists, the extent to which young people are not getting needed services, and so forth. It represents the kind of basic research that should provide useful insights on its own as well as generate further research.

Studies to address this issue would require information on a sample of community residents, ideally a random sample. Creativity would be required in developing plans to draw the sample, but once it is drawn, data could be collected either from the young people themselves or from providers (if it were possible to use a common identifier, such as social security number).

3. The Department of Labor should fund research on the perceptions other community agencies have of JTPA.

There is widespread belief among SDA officials that their efforts to promote coordination are not being met halfway by representatives of school systems and other potential partners. This belief may reflect perceptions that are not necessarily accurate about JTPA, its clientele, its service offerings and the benefits it can offer. Accurate or not, collection and compilation of perceptions of JTPA should provide guidance to the Department in planning actions that will help to promote coordination by modifying either these perceptions or the reality that underlies them. This, in turn, should prove to be useful in convincing others that it is in their self-interest to engage in coordinated activities with JTPA SDAs.

Efforts to learn about the image of JTPA could be carried out through a variety of methodologies, ranging from relatively inexpensive informal discussions with small groups of government and community officials, to research utilizing structured questionnaires. Formal surveys of large numbers of government and community leaders would be more expensive.

4. There is no need for further Department of Labor-funded research on such general topics as (a) the barriers to coordination among publicly funded youth and adult programs and the strategies that have appeared to be successful in overcoming them, and (b) effective coordination models. Instead, studies that address barriers should address the contexts in which they are and are not problematic, and studies that address strategies to promote coordination should address the contexts in which each are and are not desirable.

The employment and training literature contains numerous examples of studies that list barriers to coordination among publicly funded programs and strategies to overcome them. The items on these lists are increasingly well-known to federal, state and local officials, and there would be little value to replicating them at this time. Instead, as was noted at several points in this paper, those who would promote improved coordination need to know when the barriers can be overcome and when they are likely to be insurmountable, the kinds of resources and strategies that are needed to overcome specific barriers in specific contexts, and so forth.

There is an increasing stream of studies that document particular efforts to develop broad linkages among two or more agencies, or communitywide collaborative endeavors. However, these studies generally do not detail the specific steps taken to "make it happen," the reasons these steps were taken or the tangible benefits that have followed. This literature will undoubtedly grow, regardless of what the Department does with its scarce research dollars, and there is therefore little reason to consider this kind of research a priority.

However, context-specific research would be helpful. It can take several forms:

- Review of the existing research literature to develop and refine frameworks that address the contextual factors;
- Reanalysis of the existing case study literature in a form that resembles meta-analysis, in order to explore the validity of these frameworks; and (or possibly followed by)
- Conduct of additional site visit-based research that devotes equal priority to (a) description of coordination activities and outcomes, and (b) the contexts in which coordination occurs, using typologies that are based in the literature.

REFERENCES

- Agranoff, Robert
1991 "Human Services Integration: Past and Present Challenges in Public Administration." Public Administration Review, 51:533-542.
- Appleby, Paul
1949 Policy and Administration. Tuscaloosa, AL: University of Alabama Press.
- Bailis, Lawrence Neil
1991(a) "Metamorphosis versus Modest Changes: A Balanced Approach to Promoting Coordination among Federal Agencies that Administer Public Assistance Programs." Paper prepared for the National Commission on Employment Policy's Seminar on Improving Coordination in Government-Sponsored Public Assistance Programs.
- Bailis, Lawrence Neil
1991(b) Evaluation of the Minnesota At-Risk Youth Demonstration Project. Saint Paul, MN: State Job Training Office.
- Bailis, Lawrence Neil
1989 An Assessment of the JTPA Role in State and Local Coordination Activities: Report on the Literature Review. Arlington, VA: James Bell Associates, Inc.
- Bailis, Lawrence Neil
1987 The More Things Change--A Study of the Status of PY 85 JTPA Coordination and PY 84 JTPA Program Activities. Washington, D.C.: National Commission for Employment Policy.
- Bendor, Jonathan
1985 Parallel Systems: Redundancy in Government. Berkeley, CA: University of California Press.
- Blum, Barbara and Blank, Susan
1991 Children in the U.S. City: Opportunities, Problems, and Possibilities for Change. New York: Foundation for Child Development.

Brady, Elaine and Balfe, Kevin

1987 JTPA Operations at the Local Level: Coordination or Discord? Survey on the Relationships between Service Delivery Areas and Selected Human Service Agencies. Washington, D.C.: National Alliance of Business.

Bruner, Charles

1991 Thinking Collaboratively: Ten Questions and Answers to Help Policy Makers Improve Children's Services. Washington, D.C.: Education and Human Services Consortium.

Brustein, Michael

The Legal and Fiscal Disjunction between the Carl Perkins Vocational Education Act and the Job Training Partnership Act. Washington, D.C.: National Commission for Employment Policy.

Caiden, Gerald

1969 Administrative Reform. Chicago, IL: Aldine.

Council of Chief State School Officers, Resource Center on Educational Equity

1991 Concerns.

Downs, George W. and Larkey, Patrick D.

1986 The Search for Government Efficiency: From Hubris to Helplessness. Philadelphia: Temple University Press.

Dryfoos, Joy G.

1991 States Responses to Youth At Risk Issues. New York: Carnegie Corporation.

Gormley, William, Jr.

1989 Taming the Bureaucracy: Muscles, Prayers, and Other Strategies. Princeton, NJ: Princeton University Press.

Grubb, W. Norton; Brown, Cynthia; Kaufman, Phillip; Lederer, John

1990 Order Amidst Complexity: The Status of Coordination Among Vocational Education, Job Training Partnership Act, and Welfare-to-Work Programs. Berkeley, CA: National Center for Research in Vocational Education.

- Grubb, W. Norton; Brown, Cynthia; Kaufman, Phillip; Lederer, John
1989 Innovation versus Turf: Coordination Between Vocational Education and Job Training Partnership Act Programs. Berkeley, CA: National Center for Research in Vocational Education.
- Gula, Annette and King, Christopher
1990 Welfare-to-Work Program Coordination in Texas. Austin: Center for the Study of Human Resources.
- Hickey, Delina R.
1986 Coordination Between JTPA and Vocational Education: A Case Study of the Eight Percent Set-Aside. Columbus, OH: National Center for Research in Vocational Education.
- Job Training Partnership Act Advisory Committee
1989(a) Working Capital: JTPA Investments for the 90s. Washington, D.C.: Job Training Partnership Act Advisory Committee.
- Job Training Partnership Act Advisory Committee
1989(b) Working Capital: Coordinated Human Investment Directions for the 90s. Washington, D.C.: Job Training Partnership Act Advisory Committee.
- Kane, Rosalie
1990 Case Management: What Is It Anyway? Minneapolis, MN: University of Minnesota, Medical School, Long-Term Care Decisions Resource Center.
- Kingsley, Christopher
1989 A Guide to Case Management for At-Risk Youth. Waltham, MA: Brandeis University, Center for Human Resources.
- Laventhol and Horwath
"Improving the Success of JTPA Coordination Efforts: An Idea Paper for the Florida Job Training System." Washington, D.C.: National Commission for Employment Policy.
- Leemans, Arne (ed.)
1976 The Management of Change in Government. The Hague: Martinus Nuhoff.

- Levitan, Sar and Gallo, Frank
 1988 A Second Chance: Training for Jobs. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Levy, Janet
 1989 Joining Forces: A Report from the First Year. Alexandria, VA: National Association of State Boards of Education.
- Lewis, Morgan
 1988 Vocational Education-Job Training Partnership Act Coordination--Second Annual Report. Columbus, OH: National Center for Research in Vocational Education.
- Lewis, Morgan; Ferguson, Marilyn; Card, Michael
 1987 Vocational Education-Job Training Partnership Act Coordination--First Annual Report. Columbus, OH: National Center for Research in Vocational Education.
- Liebert, Roland
 1976 Disintegration and Political Action: The Changing Functions of City Government. New York: Academic Press.
- Lindblom, Charles
 1968 The Policy-Making Process. Englewood Cliffs, NJ: Prentice-Hall.
- Melaville, Atelia and Blank, Martin
 1991 What It Takes: Structuring Interagency Partnerships to Connect Children and Families with Comprehensive Services. Washington, D.C.: Education and Human Services Consortium.
- Mudd, John
 1984 Neighborhood Services: Making Big Cities Work. New Haven: Yale University Press.
- Robinson, Estelle R. and Mastny, Aleta Y.
 1989 Linking Schools and Community Services: A Practical Guide. New Brunswick, NJ: Rutgers University, School of Social Work, Center for Community Education.

- Rogers, David and Whetten, David
1982 Interorganizational Coordination: Theory, Research and Implementation.
Ames, IA: Iowa State University Press.
- Schlechty, Phillip
1991 Schools for the 21st Century. San Francisco: Jossey-Bass.
- Schorr, Lisbeth B.
1988 Within Our Reach: Breaking the Cycle of Disadvantage. New York:
Doubleday.
- Smith, Thomas; Moorhouse, Mary; Trist, Carolyn
1988 A Practitioner's Guide: Strategies, Programs, and Resources for Youth
Employability Development. Philadelphia: Public/Private Ventures.
- Southern Institute for Human Resources
1978 Coordination: WIN and CETA. A Guide to Increasing the Enrollment of
AFDC Recipients in CETA Programs. Atlanta: Southern Institute for
Human Resources.
- Trutko, John; Bailis, Lawrence; Barnow, Burt; French, Stephen
1990 An Assessment of the JTPA Role in State and Local Coordination
Activities: Final Report. Arlington, VA: James Bell Associates, Inc.
- U.S. Conference of Mayors
1991 "A Human Resource Investment Policy--A Challenge to Mayors."
Washington, D.C.: U.S. Conference of Mayors.
- Urban Management Consultants of San Francisco
1976 CETA and HEW Programs. Washington, D.C.: U.S. Department of
Health, Education and Welfare.
- Watson, Bernardine and Jaffe, Natalie
1990 The Practitioner's View: New Challenges in Serving High-Risk Youth.
Philadelphia: Public/Private Ventures.

PERFORMANCE STANDARDS AND PERFORMANCE MANAGEMENT

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I. INTRODUCTION

The enactment of the Job Training Partnership Act (JTPA) in 1982 marked a significant shift in the structure of the federal employment and training system. Three major changes stood out. First, after nearly 50 years of federally controlled manpower programs, JTPA created a fundamentally decentralized employment and training system, moving primary responsibility for management and oversight of local activities from the federal government to the states. Second, JTPA emphasized job training and private sector employment, and established a substantial role for the private sector as a key policy and oversight partner at the local level through Private Industry Councils. Finally, in an effort to introduce a new degree of accountability to publicly funded programs, JTPA established a system of performance standards as one of the central tools for managing the employment and training system. Reflecting the explicit premise that training is "an investment in human capital, not an expense," JTPA's performance standards brought a "bottom-line" outcome orientation to the system and a widespread recognition of the need to "measure up" to a new set of performance expectations.

JTPA's enactment as a performance-driven, outcome-oriented system represented a new direction for federally funded human resource and human service programs. While many systems track program outcomes, few prior to JTPA had used them as the basis for performance standards or tied financial incentives to outcomes. In most systems (including the Comprehensive Employment and Training Act), sanctions and rewards had tended to be "process-oriented" and tied to such measures as service shares for target populations, "error rates," or adherence to well-established planning and policy guidelines (see King, 1988, for descriptions of several systems). In changing the focus to outcomes (defined ultimately as employment and earnings gains, and welfare reduction), JTPA released much of the decision-making authority about "process" to states and communities, and focused on results as the primary means of evaluating performance.

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Since 1983, JTPA's performance-driven approach has made its way into a number of other pieces of federal legislation (for example, the new Perkins Act), and the JTPA system has itself evolved in significant ways. However, nine years after its initial implementation, the JTPA performance standards system remains in many ways an ongoing experiment. On the one hand, the purpose and emphasis of the system itself has changed considerably, moving from an overseer with a relatively narrow focus on program accountability to a more proactive role as a national tool for policy and program management. At the same time, changing national goals have prompted the development of new policies and standards. Lurking behind most of the adjustments and revisions in the system is the ongoing effort to find the "best" measures of local performance and the most effective means of using those measures to encourage effective delivery of services.

The purpose of this paper is to provide a (relatively) brief review of the major issues in and research on JTPA's performance standards system, as well as some lessons to be learned from the experiences of other fields in setting performance standards. The original intent of the paper was to focus on issues of particular relevance to serving youth; however, it became clear that the issues for youth and adults are not easy to disaggregate. In part, this reflects the research, which focuses almost entirely on either the system as a whole or the measurement of outcomes for adults. But it also reflects the nature of the issues and questions most often raised in regard to a performance standards system. While specifics differ, questions about the validity of performance measures, the impact of standards on services, or the role of standards in local decision-making tend to cut across age and program lines. (One of the arguments of this paper, in fact, is that many of the issues of concern in youth standards will soon also apply to those for adults.) Consequently, while youth issues are highlighted where possible and appropriate, the paper takes a broader view of performance standards and performance management and their impact on local programs.

The discussion that follows is divided into four major sections. Section II provides history and background on the JTPA performance standards system, outlining its key elements and arguing that as national policy goals have changed, the role of the system has shifted from accountability *per se* to one of performance management. Section III then reviews the research on the performance standards system as an accountability tool, examining a number of issues concerning the system's accuracy, validity and impact. Section IV discusses the effectiveness of the system as a performance management tool aimed at shaping local behavior. Section V looks to performance management systems in several other fields for ideas on how to address some of the issues in JTPA's performance standards and performance management approach. The paper concludes with a summary of recommendations.

II. FROM ACCOUNTABILITY TO PERFORMANCE MANAGEMENT: JTPA's EVOLVING PERFORMANCE STANDARDS SYSTEM

The development of the JTPA performance standards system can best be described as an ongoing process of evolution that began during the last years of the Comprehensive Employment and Training Act (CETA) and has continued throughout the life of JTPA. One major element in that evolution has been a shift from a system whose primary purpose was program accountability--the "policy-neutral" measurement of implementation of the Act's basic mission of providing training to economically disadvantaged youth and adults for entry into the labor force--to a more proactive "program management" function aimed at actively influencing the types of programs and services offered at the local level in a decentralized system. As the focus of federal policy has moved from job placement to long-term employability development, the role of the performance standards system has moved from ensuring "that tax dollars are efficiently managed and productively spent" while allowing local communities "maximum flexibility to determine the types of services to meet the performance standards" (U.S. House of Representatives, 1982:2), to actively encouraging local entities to provide longer-term services to a higher-risk population. The two roles (both of which continue) provide a useful framework through which to view the performance of the system since the early 1980s.¹

CETA ORIGINS OF PERFORMANCE STANDARDS

The development of the current performance standards system began in the late 1970s as the U.S. Department of Labor (DOL) began to look for ways to better define and measure program performance.² The first major step was taken in 1977, with the definition of a series of performance indicators for use by DOL's regional offices in negotiating planned levels of performance for each prime sponsor (the local administrative entity under CETA). As part of its grant review guidelines, DOL defined ten indicators that were grouped into three broad clusters (termination, costs and fund

¹ It is important to be clear that, while the initial goal of the performance standards system was to be "policy-neutral," the system did in fact influence local targeting and program design decisions in significant ways. See Section III for a discussion of the "unintended effects" of the JTPA performance standards.

² The basic source for this section is Rubin and Zornitsky, 1988. Other studies that briefly discuss the CETA background include King, 1988; King and Pittman, 1987; National Association of Counties, et al., 1986; Geraci, 1984; Dickinson, et al., 1988.

utilization).³ The indicators were to be used in evaluating planned performance, with the proposed level of performance evaluated in terms of the previous year's local outcomes as well as regional and national performance figures. Proposed local performance levels below the prior year's performance, or below the region's lowest third, for example, would require explanation as part of the planning and negotiation process. In negotiating local standards, federal staff were also expected to take into account local "interpretive factors," which included measures of participant characteristics, program mix and environmental conditions--in essence, to adjust the standards based on local circumstances.

While criticized as too subjective and too focused on termination-based measures, the grant review guidelines represented an important step toward a structured approach to performance management. The 1978 CETA amendments moved the process forward another step. Partly in response to DOL's experience with the grant review guidelines, the amendments required the secretary of labor to establish formal performance standards (taking into account the characteristics of those served, economic and geographic differences, etc.) and an Office of Management Assistance. They also required prime sponsors to begin collecting follow-up information on postprogram employment and earnings. In 1980, a performance standards working group was formed to develop methods to quantify the factors believed to affect performance, and in 1982, "trial" standards were introduced based on regression modeling. Those standards continued to be refined over the next two years. As Rubin and Zornitsky (1988:19) note in their brief review of the JTPA standards history, "as CETA came to a close in September 1983, over six years of experience had been gained with an increasingly sophisticated approach to performance standards management."⁴

THE JTPA PERFORMANCE STANDARDS SYSTEM

The passage of the JTPA in 1982 moved the performance standards system to center stage. In contrast to CETA, which had been largely "process-oriented," with performance defined primarily in terms of "in-program" measures (for example, service to specified

³ The 10 indicators in the termination cluster were positive termination rate; two entered employment rates (entered employment over total terminations, and positive terminations); and two nondirect placement rates (nondirect placements over total terminations, and entered employments). The indicators in the cost cluster were cost per positive termination, cost per entered employment and cost per nondirect placement. The indicators in the fund utilization cluster were carryout rate (remaining funds over available funds) and administrative cost rate.

⁴ It is worth noting that experience, while substantial, was almost entirely focused on developing measures for adult programs. Little, if any, of the early technology focused on youth (Geraci, 1984).

target populations), JTPA was to be performance-driven and outcome-oriented. In the words of the Senate Committee on Labor and Human Resources:

The legislation must insist on performance. The current CETA system does not have any effective means of measuring program results or penalizing non-performance. The new legislation will provide standards for judging the programs for what they accomplish--by whether those trained are hired and earn more as a result of training. It will end federal involvement with the process of how people are trained. It will provide for measurement of the outcomes and remove the federal government from involvement in the details of program operations (Senate Report No. 97-469, quoted in Bailey, 1988:302).

The legislation provides for the definition of national performance standards aimed at establishing accountability based on program outcomes. The secretary of labor is responsible for defining the national standards, for setting their levels, and for establishing parameters within which the standards can be adjusted to local circumstances. States are responsible for implementation: adjusting standards to local conditions, establishing additional standards, awarding incentive funds to SDAs that exceed standards and sanctioning those whose performance falls short. Private Industry Councils (PICs) and service delivery areas (SDAs) decide who to serve and what services to offer within the context of these federally defined and state-managed standards. In the words of one researcher, "it is a hierarchical system, with roles and responsibilities for federal, state, and local actors differentiated in rough relation to their distance from service provision" (King, 1988:9).

Perhaps more to the point, however, JTPA's performance standards system is a decentralized system, with primary responsibility for performance management delegated to states and localities. While the standards are nationally defined, states adjust the standards and make decisions concerning the award of incentive grants or the imposition of sanctions. Six percent of the Title II-A funds (JTPA's core training allocation) are designated for incentive grants, to be awarded by states to SDAs that exceed their performance standards. States also have the power to mandate reorganization of SDAs that fail to meet their standards two years in a row. In the national system, these rewards and sanctions are seen as the engine that drives local performance, with much of the leverage in the system placed in the states' hands.⁵

⁵ A number of guides and policy papers discuss the state role and options in some detail. See National Association of Counties, et al., 1986; Figueroa and Ganzglass, 1988; Center for Human Resources, 1989; and SRI International and Berkeley Planning Associates, 1990. For discussions of local roles and options, see Center for Human Resources, 1989; Laventhol and Horwarth, 1988; and Strumpf, 1986.

As described in the legislation, the major purpose of the performance standards system was to establish accountability for the use of federal funds. Its basic premises, as outlined in Section 106, were that "job training is an investment in human capital and not an expense," and that "the basic return on investment is to be measured by the increased employment and earnings of participants and the reductions in welfare dependency." The legislation directed the secretary of labor to prescribe standards for both adult and youth programs. Adult standards might include the following:

- Placement in unsubsidized employment;
- Retention in unsubsidized employment;
- Increases in earnings, including hourly wages; and
- Reduction in the number of individuals and families receiving cash welfare payments and in the amounts of such payments.

Youth programs were to be evaluated in terms of these adult factors when appropriate, as well as for several youth-focused outcomes:

- Attainment of PIC-recognized employment competencies;
- Elementary, secondary and postsecondary school completion;
- Enrollment in other training programs or apprenticeships; and
- Enlistment in the armed forces.

The legislation also directed the secretary to prescribe cost standards relating gross program expenditures to various performance measures.

As a result, DOL defined seven initial performance measures, which are described in Table 1. The initial performance standards (i.e., the required levels of performance) were based on outcome data from CETA and were intended to reflect the average level of performance. In program year (PY) 1986, JTPA data were first used as the basis for the standards, and the standards were redefined as the minimum level of expected performance. As such, the numerical standards were relatively low--generally the 25th percentile of expected performance based on the prior year's experience (DOL, 1988a).

In addition to defining the standards, DOL also issued an optional adjustment model based on the regression modeling approach developed for CETA. Through use of the

Table 1
INITIAL JTPA PERFORMANCE MEASURES

Adult Measures

Entered Employment Rate: The number of adults who entered employment at termination as a percentage of the number of adults who terminated.

Cost Per Entered Employment: Total expenditures for adults divided by the number of adults who entered employment.

Average Wage at Placement: Average wage for all adults who entered employment at the time of termination.

Welfare Entered Employment Rate: The percentage of terminated adult welfare recipients who entered employment at termination.

Youth Measures

Entered Employment Rate: The percentage of terminated youth who entered employment at termination.

Positive Termination Rate: The percentage of terminated youth who had a positive termination (i.e., at termination, the youth had entered unsubsidized employment, met one of the youth employability enhancement termination definitions or attained youth employment competencies recognized by the Private Industry Council).

Cost Per Positive Termination: Total expenditures for youth divided by the number of youth who had a positive termination.

Source: U.S. Department of Labor, 1984.

model, governors could adjust the national standards for SDAs serving unusual numbers of hard-to-serve populations or operating in areas of particularly high unemployment. The goal was to ensure that SDAs were not penalized for conditions out of their control. It is important to note that, while "optional," use of the model was strongly encouraged by DOL.⁶ In 1986, 42 of the 50 states used the adjustment model (Dickinson, et al., 1988).

In briefly reviewing the initial standards, there are several observations to be made, some of which will be discussed in greater detail later. First, while a major goal of the standards was to assess changes in earnings and welfare status, the initial performance standards were entirely termination-based, largely because of the difficulties of collecting and evaluating net impact data. As a result, one of the ongoing issues for the performance standards system has been the adequacy of the termination measures as proxies for increased earnings and employment and reduced welfare dependency, and the degree to which they steer the system in the appropriate direction (Bailey, 1988; also see Barnow, 1990, and Zornitsky and Rubin, 1988, for discussion of some of the measurement issues in designing standards).⁷

Second, from the beginning, the youth standards incorporated a degree of ambiguity (and perhaps ambivalence) in regard to appropriate outcomes for youth programs. Little of the early work on national performance measures focused on youth outcomes, so there was relatively little experience to work from, and early versions of the Act appeared to leave the development of youth measures entirely to local communities (see U.S. House of Representatives, 1982). And although eventually mandated in the Act, "attainment of youth competencies" remains the only measure to be defined at the local level. As a result, the early youth standards sent a mixed message to the field, and accountability for performance in serving youth has been a problem from day one.⁸

⁶ In order to encourage use of the model, DOL noted that states would not have to produce any additional documentation for adjustments made through the model and that in cases of appeals where an SDA is sanctioned, "the Secretary will be predisposed to agree with those governors who used the Department's methodology appropriately" (DOL, 1984:4055; see also DOL, 1988a).

⁷ Postprogram follow-up measures were considered at the time of the initial standards, but DOL indicated that more research on postprogram measures was needed before they could be implemented. Follow-up measures were implemented on an optional basis in PY 1988 and mandated in PY 1990 (DOL, 1984, 1988c).

⁸ From the beginning of JTPA, substantial local variation in the definition of youth competencies was anticipated, making both data gathering and performance management difficult at best. In its PY 1984 performance standards issuance, DOL noted that it could not begin data collection on youth competencies until it had a better sense of how those competencies would be defined locally: "Until the PICs have defined

Third, one of the original major goals of the performance standards system was to be "policy-neutral" at the federal level. This is summarized in the 1988 evaluation of the system:

The intention of federal performance-standards policies is to foster accountability and cost-effectiveness without undue influence on SDA design decisions Careful effort went into choosing federal performance measures that would not constrain SDAs in their decisions about whom to serve and what services to offer The adjustment models developed for the federal standards are intended to ensure the "neutrality" of the standards with respect to decisions about client targeting and to "hold harmless" SDAs that choose to serve more difficult clients . . . (Dickinson, et al., 1988:2).

In short, the initial approach to the performance standards was intended to reflect JTPA's decentralized design. The goal of the standards was to hold states and service delivery areas accountable, and to encourage quality and efficiency, but, in the words of the House Committee on Education and Labor, "not preempt what are appropriately local decisions . . . about what persons are to be served, and how they are to be served" (U.S. House of Representatives, Committee on Education and Labor, 1982:11).

MOVING TOWARD PERFORMANCE MANAGEMENT

Beginning in the mid-1980s, DOL's "policy-neutral" approach to the performance standards system began to change. With the introduction of a series of new youth and adult standards, the system began to take on a new and additional role as a management tool for achieving both federal and state policy goals.

This change in approach grew out of a number of developments. In the mid-1980s, publication of A Nation at Risk (National Commission on Excellence in Education, 1983), Workforce 2000 (Johnston and Packer, 1987) and a series of other studies began to prompt increased concern over work force competitiveness and the problem of basic skills in both youth and adults. The 1986 JTPA amendments, which incorporated basic

such competencies and the Department has had an opportunity to study the manner in which competency systems are being designed and applied at the local level, it is not possible to establish an informed performance standard and its related reporting elements" (1984). Later efforts to report competency-related outcomes were stymied by local opposition and opposition from the Office of Management and Budget, which saw data collection on competency outcomes as an intrusion into local discretion. See the report by the U.S. General Accounting Office (1987) for a brief discussion of the difficulties in collecting data on youth competencies.

skills instruction into the Title II-B summer program, were one reflection of this growing concern. At the same time, there were continuing concerns over the impact of JTPA's performance standards on client selection and types of services offered, and over the limitations of the employment-focused and termination-based standards.

PY 1988-89 saw the first significant revision of the JTPA performance standards system since the system was established in 1983. After considerable discussion with the field through technical working groups and public comment on proposed revisions, DOL announced the establishment of five new measures as well as a series of changes in definitions, reporting requirements and numerical levels for several key standards (DOL, 1987, 1988b, 1988c). Four of the new measures established postprogram follow-up standards addressing employment rates, weeks worked and weekly earnings. The fifth was the youth employability enhancement rate, which measures the non-employment youth outcomes formerly included in the positive termination rate. (The new standards are summarized in Table 2.) Rather than introduce the new standards wholesale, states were required to select 8 of the now 12 national standards for use in managing local performance as part of the transition strategy for PY 1988-89.⁹

The new standards for PY 1988-89 marked several important changes in JTPA performance standards policy. In program terms, the establishment of a distinct youth employability enhancement standard clearly signalled the growing importance of skills development and provided an unambiguous message that "enhancement" represented as appropriate an outcome for JTPA youth as placement.¹⁰ The move toward follow-up measures similarly signalled a major effort to refocus JTPA adult services on longer-term employability development. The changes in performance measures were accompanied by redefinition of competency attainment, adjustments in the numerical standards and new data collection requirements, all of which were aimed at encouraging more intensive and comprehensive services for a more at-risk slice of the JTPA-eligible population (DOL, 1987; Strumpf, 1988; Figeroa and Ganzglass, 1988).

⁹ In selecting from among the national standards, governors were required to include an adult placement measure (e.g., placement wage, or weekly earnings at follow-up) and a non-cost youth measure (entered employment, positive termination or employability enhancement).

¹⁰ While the positive termination rate had always included placement as well as "enhancement" outcomes as part of its definition, it placed little pressure on SDAs to provide employability development programming. SDAs could still meet their goals through short-term job placements alone. By establishing a separate employability enhancement measure, DOL helped to legitimize outcomes other than placement, and directly encouraged more intensive, competency-based programs. (See Center for Human Resources, 1989, and Strumpf, 1988, for discussions of the enhancement standard.)

Table 2
ADDITIONAL DOL PERFORMANCE MEASURES
PY 1988-89

Follow-Up Measures

Follow-Up Employment Rate: Total number of adult respondents who were employed (full-time or part-time) during the 13th full calendar week after termination, divided by the total number of adult respondents (i.e., adult terminees who completed follow-up interviews).

Welfare Follow-Up Employment Rate: Total number of adult welfare respondents who were employed (full-time or part-time) during the 13th full calendar week after termination, divided by the total number of adult welfare respondents (i.e., adult terminees previously or currently on welfare who completed follow-up interviews).

Average Weekly Earnings at Follow-Up: Total weekly earnings for all adult respondents employed during the 13th full calendar week after termination, divided by the total number of adult respondents employed at the time of follow-up.

Average Number of Weeks Worked in Follow-Up Period: Total number of weeks worked (full-time or part-time) during the 13 full calendar weeks after termination for all adult respondents who worked, divided by the total number of all adult respondents (whether or not they worked any time during this 13-week follow-up period).

Youth Measures

Employability Enhancement Rate: Number of youth who attained one of the employability enhancements at termination, whether or not they also obtained a job, as a percentage of the total number of youth who terminated. Youth employability enhancements include: (a) attained two or more PIC-recognized youth employment competencies; (b) entered non-Title II training; (c) returned to full-time school; (d) completed major level of education; and (e) completed program objectives (14- and 15-year-olds).

Source: U.S. Department of Labor, 1988c.

But the new standards also marked a shift in approach to the management of the performance standards system. As part of the performance standards review, DOL set explicit policy goals to shape the performance standards management process and to establish criteria by which potential revisions could be evaluated. In doing so, DOL began to move away from use of the performance standards system as a "policy-neutral" accountability mechanism and toward more active use of the system as a tool implementing national policy.¹¹

In 1990, after two years of experience with the postprogram and employability enhancement measures, a further adjustment in the standards was made. Six "core" performance measures were adopted for PY 1990-91, eliminating the "menu" approach used for the previous two years and significantly streamlining the performance standards system. The six 1990-91 measures were:

- Adult Follow-Up Employment Rate;
- Adult Weekly Earnings at Follow-Up;
- Welfare Follow-Up Employment Rate;
- Welfare Weekly Earnings at Follow-Up;¹²
- Youth Entered Employment Rate; and
- Youth Employability Enhancement Rate.

As part of the 1990-91 revisions, the cost standards were eliminated, though cost data were to be collected for program oversight and fiscal management (DOL, 1990a).

As with the PY 1988-89 revisions, the changes for PY 1990-91 reflected DOL's growing use of the performance standards system as an active policy and performance manage-

¹¹ This shift was part of a broader move to establish a more active policy guidance role for DOL (DOL, 1988d). The performance standards system goals defined for PY 1989-90 were to encourage increased service to individuals at risk of chronic unemployment, particularly youth; provision of training that leads to long-term employability; increased basic skills and youth employment competency training; and implementation of postprogram performance measures (DOL, 1988a).

¹² The only new measure, defined as total weekly earnings for all welfare respondents employed during the 13th full calendar week after termination, divided by the total number of welfare respondents employed at follow-up.

ment tool. As stated in the notice of proposed revisions, the focus on follow-up measures was meant to "send an explicit policy signal that JTPA is a value-added program which generates long-term employment for its participants." The youth employability enhancement measure was also meant to emphasize the value of skills attainment and educational credentials, and to "focus program design on skill development, with particular emphasis on dropout prevention." The cost standards were excluded from the core measures "in support of the Department's policy goal of fostering improved service to more at-risk individuals" (DOL, 1990b:514-515). Finally, as the final notice stated, DOL focused on six measures because "the Department believes that streamlining the number of performance measures to a focused set of core standards sends an explicit policy message on what national JTPA priorities and program expectations should be promoted in state and local performance management policies" (DOL, 1990c:14012).¹³

PERFORMANCE STANDARDS IN THE 1990s

As it moved into the 1990s, the JTPA performance standards system had seen well over a decade of development. During that period, the "technology" used to establish performance levels and to adjust for local circumstances became well-established, and a number of refinements were made to the system to improve its accuracy and performance (most notably, the shift to follow-up standards).

At the same time, one might argue that the most significant change has been a shift in the function of the performance standards system from promoting and measuring performance to serving as a tool for national employment policy. While JTPA began with a relatively broad mission of providing training to those economically disadvantaged individuals "who can most benefit from, and who are most in need of, such opportunities" [Section 141a], the growing recognition of the need for more intensive services and increased services to those most at-risk shifted both national policy and the role the performance standards system could play.

In broad terms, one of the questions raised by the evolution of the system is what impact all this change has had on implementation. The standards, which remained constant for the first five years of JTPA, were changed twice in four years. Many of the changes (particularly those prompted by the youth employability enhancement standard) require substantial lead time and investment in program and system development, raising the question of whether the original provisions in the Act limiting changes in the standards to every two years provide enough stability. One area of investigation for DOL, then,

¹³ The need to streamline the number of performance measures was one of the recommendations of the JTPA Advisory Committee (1989).

might be to examine the implementation and impact of regular revisions and assess the trade-offs between the responsiveness of a two-year cycle and the stability and development time provided by a longer interval between revisions.

But the evolution of the performance standards system also provides a useful framework against which to assess the research conducted in the field. Given the primary role of the performance standards system as a means of promoting and measuring accountability and efficiency, how well have performance standards stood up? Are they appropriate and effective measures of quality training? At the same time, what have we learned about the effectiveness of the standards as performance management tools? What impact have they had on local practice, and how effective can we expect them to be as policy tools in the future? Finally, based on the experience of other systems, how can the JTPA approach to performance standards and performance management be improved? These questions are addressed in the balance of this paper.

III. THE EFFECTIVENESS OF THE JTPA PERFORMANCE STANDARDS SYSTEM AS AN ACCOUNTABILITY SYSTEM

Given the importance of the performance standards system in the structure of JTPA, and its evolving role as a tool to improve accountability and program management, what do we know about its use and effectiveness? How well does the system account for performance, and in what ways has it succeeded in shaping the delivery of services? How well has JTPA's outcome orientation translated into standards for youth? Are there special issues involved in the youth standards, and what perspective can we gain on the system as a whole by examining those issues?

The answers are mixed and somewhat tentative. While the performance standards system has been subject to substantial criticism (particularly that it encourages "cream-ing"), evaluations of the system by informed observers have been generally positive. Researchers have pointed to its coherent design and implementation (King, 1988); its broad acceptance within the field; its success in focusing states and SDAs on the importance of outcomes (Barnow, 1990); and its effectiveness in building a positive image and public support for JTPA (Johnston, 1987; Dickinson, et al., 1988). Even its harshest critics consider the commitment to performance standards in JTPA "an advance" (Levitan and Gallo, 1988).

But it is also important to recognize the system's limitations. Much of the performance standards methodology is weakened by problems of definition and inadequate data. As the management gurus often point out, only what gets measured gets attention, and there is much that the system fails to measure or measure adequately. In terms of the youth standards, the problems of measurement are substantial enough to cast doubt on the credibility of any national measures.

Our knowledge of the system is also thin. There has been only one major evaluation of the system (Dickinson, et al., 1988); much of the rest of the research is based on very limited data. Research on standards for youth programs is virtually nonexistent. Moreover, the research itself is very time-bound. As Section II of this paper indicates, JTPA's performance standards system is a moving target, and the bulk of the research focuses on the system prior to the revisions in PY 1988. Consequently, much of what we would like to know about the system awaits further research.

The conclusion that emerges most clearly from the literature is that the performance standards system may be "working," both as accountability system and performance management tool, but is still far from ideal. As it stands today, the system represents a compromise among often conflicting demands and goals (accuracy versus cost, federal versus state or local control, etc.). There are many ways in which it can be strengthened

and improved. However, to quote King (1988:63), "refinements are in order, not wholesale restructuring."

In considering the effectiveness of the performance standards system, it is important to recognize both its limitations and its role as part of a broader system of policy and governance. To be effective as a system of accountability, a performance standards system must be appropriate, fair and accurate. Its measures must be clearly related to performance goals; be based on accurate information; minimize "unintended effects;" and actually measure what they purport to measure. While DOL has made a significant effort to develop a system that meets these criteria, the system has its fair share of weaknesses and shortcomings. Taken together, they point to a need to improve the quality of the data used in the performance standards system and a need to better evaluate its effects.

MEASURING JTPA's GOALS

The first question to be asked in reviewing JTPA's performance standards system is how well it measures the goals set forth in the Act. JTPA is clearer than most legislation in defining its purpose and setting goals and measures. In Section 106, the Act sets the terms for all that follows: "job training is an investment in human capital and not an expense," and the return on that investment is to be measured in increased employment and earnings of participants, and reductions in welfare dependency.

The problem for JTPA has been how to translate that agenda into a workable system of performance standards. On the face of it, the Act appears to be setting net impact as the basis for measuring performance--simply put, are services making a difference? Is there a payback to the investment? However, as Barnow (1990), Levitan and Gallo (1988), and others point out, measuring program impact presents a number of methodological problems. To measure net impact effectively generally requires a formal evaluation and an experimental control group so that comparisons can be made with what happens in the absence of any intervention. But conducting experimental evaluations is costly, and the results are not likely to be available until long after the fact. While statistical methods are available for estimating impacts nonexperimentally, Barnow notes that they have not yet been shown to be reliable. Nonexperimental evaluations of CETA programs, for example, produced widely divergent estimates of earnings gains using essentially the same data (Barnow, 1990).

The measurement of gross change, a less ambitious measure, has also proven difficult. In terms of adults, Dickinson, et al., (1988) note that DOL investigated the possibility of establishing standards based on the difference between pre- and postprogram wages of participants, and on direct measures of welfare reduction. In these instances, the

difficulties in accurately determining preenrollment wages (since the majority of participants were unemployed or out of the labor market at time of enrollment) and the diversity of state Aid to Families with Dependent Children (AFDC) guidelines made it impossible to establish reliable measures.

In terms of youth, there is a similar problem in establishing a benchmark from which to measure change. How do you measure a consistent starting point or benchmark for "completed major level of education" or "entered non-Title II training"? The Job Corps has explored standards for competency attainment based on measured skill increases. However, that measure was based on the use of the same assessment instruments by all Job Corps centers, a degree of control not normally available in JTPA (DOL, 1986). For youth as well as for adults, the solution to the problem of measuring change seems elusive.¹⁴

On the one hand, the issue is a significant one. Even with the shift to follow-up rather than termination-based measures, JTPA's performance standards still focus on gross outcomes--numbers employed, weekly earnings, youth enhancements, etc. The absence of a clear and unambiguous connection between measures and the Act's goals of increased earnings and reduced welfare dependency leaves open the question of whether the standards are driving the system toward maximum impact.

In youth programs, the absence of effective measures of change leads to questions about both the reality of skills gains and the likelihood that enhancement outcomes would have taken place without JTPA intervention. As one study points out, the reliance on gross outcome measures rather than measures of change provides at least some incentive to serve the most job-ready youth and adults: "To the extent that these standards . . . differ from the true measure of program efficiency (net impact), efficiency-incentives for program operators will be confounded" (Sandell and Rupp, 1988:30).

However, it is also important to recognize the limitations inherent in performance management generally. As both Barnow (1990) and Dickinson, et al., (1988) point out,

¹⁴ In the PY 1988 revisions to the definition of youth competency attainment, some effort was made to address this issue by requiring participants to be initially deficient in at least 5 of the 11 preemployment/work maturity competencies in order to claim attainment. Similarly, some requirements were set to ensure at least a minimum level of service was associated with the school-based outcomes. However, these are very rough gestures at best, since most of the critical definitions (such as "competency attainment" and "satisfactory progress") are set locally. In terms of measures of change, they provide no real information. As discussed elsewhere in this paper, one of the problems with all the competency measures, of course, is consistency in definition and measurement of competencies across SDAs. An effective measure would require a much higher degree of federal control over local definitions than the Act currently allows. See U.S. General Accounting Office, 1987, and DOL, 1989, for discussions of competency attainment measures.

performance standards are generally not designed to measure net impact, but to provide answers to simpler process and outcome questions--in this case, are adults becoming employed, and are young people gaining skills and completing school? In contrast to evaluation, which tends to take place on an occasional or a one-shot basis, performance management is an ongoing function. As such, it has to be more timely, and less costly and intrusive. The price of that timeliness and efficiency is often a compromise between the ideal, in terms of "fit" to the program's goals, and the practical.¹⁵

ACCURACY AND PROBLEMS OF MEASUREMENT

While the discussion about the "fit" between the performance standards and JTPA's goals may favor theory over practice, concern over the quality of the data used in measuring performance is very real and immediate. The bottom line for performance management is the ability to measure and compare performance against a set of objectives. In order to be fair and meaningful, performance standards must be built on a foundation of accurate and consistently reported information. Here, in large part because of Office of Management and Budget (OMB) limitations on reporting requirements (Johnston, 1987), there are serious questions about the quality of the information used in the performance standards system.

The problem of data definition and accuracy is most serious for the youth competency-related standards. As established under JTPA, youth competencies are defined and recognized by the PICs. They are, in fact, the only standard-related outcome entirely defined at the local level. SDAs and PICs determine what competencies to teach, how to assess deficiency and attainment, and how to define critical measures of success, such as "competency attainment" and "positive termination."

The result of this local discretion, as a U.S. General Accounting Office (GAO) report (1987) detailed, was tremendous diversity among local systems during JTPA's early years in terms of the skills required, the training provided and the criteria for attainment. At that time, the GAO found that of 87 surveyed SDAs, 42.5 percent provided training in only one of the three broad competency areas defined by DOL (preemployment/work

¹⁵ Zornitsky and Rubin (1988) make a similar point in discussing the trade-offs between termination-based 3-month follow-up and 6-month follow-up measures. While the longest-term follow-up measures are the most accurate, they are the least practical and most expensive to implement. The "best" measure, as a result, may be the compromise 3-month follow-up.

maturity skills, basic educational skills and job-specific skills);¹⁶ 32 percent trained in two competency areas; and 25 percent provided training in all three areas. Training time for the different competency areas varied widely, with generally less than 50 hours of training for preemployment/work maturity skills, and several hundred hours for basic educational and job-specific skills training. Definitions of attainment also varied from attainment of 1 of 15 locally defined preemployment/work maturity skills in one SDA (about 3 to 4 hours of training time) to attainment of 22 of 24 skills (40 to 48 hours of training) in another. Some SDAs required attainment in only one area (again, usually preemployment/work maturity), while others required attainment in two or three before claiming credit for a positive outcome.

As the GAO report concluded, "differences in SDAs' minimum criteria for reporting positive terminations could render meaningless a comparison of SDA performance standards statistics that include competency attainment data" (1987:48). What was a positive termination in one SDA was, at best, an interim benchmark in another. The GAO also noted that, given the awarding of incentive funds for high performance, SDAs with more stringent requirements might be tempted to lower them to compete for incentive dollars: "As such, incentive awards would function to encourage smaller rather than larger enhancements of youths' employability" (1987:48).

By the time of the GAO report, DOL had begun to take steps to tighten the reporting requirements around youth competencies, and DOL has taken additional steps since. In 1986, DOL established criteria for a "sufficiently developed system" aimed at providing basic quality controls governing local reporting. In PY 1988-89, DOL further refined the system by defining a series of 11 "core" preemployment/work maturity competencies; by requiring that youth be deficient in at least 5 of these 11 competencies; and by requiring that youth attain competency in at least two of the three major areas (preemployment/work maturity skills, basic educational skills and job-specific skills) before a positive termination or employability enhancement outcome could be claimed (DOL, 1988c; GAO, 1987).

Despite these changes, the definition of competency attainment remains largely a matter of local discretion. According to the project leader for SRI's forthcoming national evaluation of the JTPA youth competency system, there is still tremendous variation among local systems. While the DOL regulations have brought greater consistency in the preemployment/work maturity competencies, the definition of individual skills, teaching strategies and assessment methods still vary widely from SDA to SDA. The

¹⁶ Preemployment/work maturity skills were taught in 34 of the 37 SDAs providing training in only one area.

definition of basic skills attainment is similarly diverse, with some SDAs defining attainment in terms of grade-level gains and others in terms of functionally defined skills. In some SDAs, gains of as little as one-half grade level in reading and math are required for "attainment;" in others, gains of a grade level or more are required; and in still others, an eighth-grade reading level or its equivalent is the criterion for attainment.¹⁷

In short, five years after the GAO report, the diversity in local definitions of youth competencies continues to lead to questions about the consistency and effectiveness of the youth employability enhancement standard that is based, in part, on competency attainments. While the forthcoming evaluation will report that the tighter definitions of competency attainment and the requirement for attainment in two of three areas have had an impact on the services offered in the field (particularly a substantial expansion in basic skills education), the youth competency system still lacks the consistency needed to be a meaningful national measure of performance. As the system now stands, one SDA is offering apples and another oranges, and all are being equally counted and credited as fruit.

Little of this is news to the system, and DOL staff have consistently pushed for improvements (against both OMB and local objections; see GAO, 1987). But as long-term skills development moves to the forefront of the national youth agenda, and as discussions continue concerning establishment of adult competency measures, the problem of measuring skill gains or "competency attainment" will grow more significant. One of the clear policy issues to emerge from the research (particularly the forthcoming national competency system evaluation) is whether the balance of local versus national definition of the youth competency system must be changed to improve the outcomes, in terms of both consistent services and meaningful performance measures.

While problems of consistency in reported data are most evident in the youth competency system, concerns have been raised elsewhere as well. Johnston (1987) and King (1988) both note that while improvements have been made, many of the definitions for key reporting elements, including "participant" and "entered unsubsidized employment," lack essential specificity and "raise serious questions about the quality of program data" used in evaluating performance and in developing performance standards adjustment models (King, 1988:5). Johnston, citing a 1986 GAO report, notes, for example, that "entered unsubsidized employment" includes full-time and part-time employment, entry into the armed forces, entry into an apprenticeship program, and self-employment.

¹⁷ Based on conversation with Katherine P. Dickinson, January 1992. Completion of the DOL-sponsored national evaluation is expected in 1992.

Under this definition, full-time, part-time and temporary employment are counted as essentially equivalent positive outcomes.¹⁸

The lack of specificity--essentially the grouping of reported outcomes--raises the same potential issues as the competencies, that "bad" outcomes will drive out good and that inaccuracies will dilute the credibility of the system. At the same time, it limits the capacity of the system's adjustment models to account for different types of outcomes (as noted later, the models can only adjust for factors reported on a national basis). The move to follow-up standards reduces somewhat the likelihood that credit will be claimed for short-term placements, but the grouping of part-time and full-time employment in the same measure means continued "looseness" in the definitions.

As always, this becomes a policy decision: whether the collection of information necessary for more accurate or more finely tuned reporting is worth the increased cost and potential infringement on local prerogatives. While JTPA (and OMB) have tended to opt for less information (while making better use of it), it is worth noting that JTPA's reporting requirements seem relatively mild compared with those of other federally funded programs.

In terms of the implementation of these reporting requirements, Levitan and Gallo (1988) raise the issue of inflated entered employment rates and the possibility of outright fraud. Follow-up surveys in two states, they note, indicate that claimed placement rates may be exaggerated by 5 to 10 percent. Recent critical reports by the GAO and DOL's Office of Inspector General also raise the question of the reliability of reported outcome data (GAO, 1991; DOL, Office of Inspector General, 1989, 1990). While few practitioners in the field credit the concerns of widespread fraud in reporting, the issue may provide added impetus for further definition of key reporting elements and for development of a more routinized process to monitor and evaluate the reporting system.

UNINTENDED EFFECTS

Perhaps the most visible area of concern about the performance standards system is the standards' impact on local practice--in particular, the degree to which they promote "unintended effects." Perhaps the central issue in discussions of the JTPA performance standards is the question of whether the standards promote "creaming"--that is, focusing services on the least disadvantaged and most job-ready among the eligible population. Other questions concern how well the performance standards adjustment models

¹⁸ The problem of consistency has also been particularly evident in program cost figures, and was a major element in elimination of the cost standard (Dickinson, et al., 1988; JTPA Advisory Committee, 1989; DOL, 1990c).

compensate for variations in local conditions, and the ways in which the standards are implemented at the state and local levels. Here as elsewhere, the answers are mixed, though a few clear lessons about the effects of the standards do emerge.

Creaming and Services

One of the central tensions inherent in JTPA's commitment to a performance-based system is between a focus on outcomes and attention to the population served. The drafters of JTPA attempted to finesse the issue by calling for measures of net gain in evaluating performance and by directing that services be targeted to "those who can benefit from, and who are most in need of such opportunities." However, the difficulties in measuring gains, and the almost total local discretion in determining needs and benefits have led to continuing concerns about what services are being offered and how they are being targeted (Johnston, 1987; Sandell and Rupp, 1988; GAO, 1990a).

In terms of the performance standards, a number of critics have argued that the emphasis of the initial performance standards on job placements and costs pushed the system to focus services on those most job-ready and to emphasize short-term training and placement, and limited the capacity of SDAs to serve the hard-to-serve. Levitan and Gallo (1988) and others (reported in Johnston, 1987) note the perception among practitioners that there was "widespread" creaming in the system. Bailey (1988) also argues that because of the standards, JTPA was serving proportionally fewer dropouts than CETA.

However, the 1985 Westat evaluation of JTPA (as reported in Johnston, 1987) found that JTPA was enrolling higher proportions of blacks, AFDC recipients and youth than the estimated proportions in the eligible population, and underserving females, Hispanics and high school dropouts. They also found that JTPA participants tended to be more severely disadvantaged than the eligible population as a whole. Reports by Sandell and Rupp (1988) and the GAO (1989, 1990b) have concluded that, on average, JTPA was serving disadvantaged youth and adults roughly in proportion to their presence in the eligible population. In the words of the GAO, while JTPA failed to target those most in need, "there is . . . little evidence that JTPA is 'creaming' by serving a disproportionately high number of those who have less need--the more job-ready" (1990b:20).¹⁹

¹⁹ In broad terms, Sandell and Rupp (1988) found that whites and Hispanics were slightly underrepresented, and blacks overrepresented. Those from the lowest income groups also tended to be overrepresented, as were AFDC recipients. Dropouts were underserved, but primarily among adults. Among youth, dropouts represented 19 percent of the eligible population and 29 percent of JTPA participants.

In terms of services, there is stronger evidence of a move toward shorter-term, placement-oriented services, at least in the first few years of JTPA. Bailey (1988) and Levitan and Gallo (1988) both cite figures indicating a substantially higher use of on-the-job training (OJT) and job search training under JTPA than under CETA. Levitan and Gallo also note a decline in classroom training and in the average duration of training. A DOL discussion paper (1988d:30484) reports similar findings: "Under JTPA there appears to have been a marked shift toward activities geared to more immediate and direct placement, such as job search assistance." The paper notes that job search assistance and "other" services accounted for about one-third of the JTPA enrollment, compared with the less than 10 percent of CETA participants who received direct referral and "other" services; approximately 22 percent of JTPA enrollees were in OJT programs--about twice the rate under CETA.

In sum, the enrollment and service research suggests that the performance standards have encouraged a shift toward shorter-term, placement-oriented services, though not rampant creaming. It is important, however, to recognize the limitations of both conclusions. On the one hand, it is not yet clear what impact the shift to the youth employability enhancement and adult follow-up standards has had on the service mix. In theory, both sets of standards should move the system toward longer-term, more intensive training.

On the other hand, the conclusions concerning creaming are based on data that were largely limited to demographic characteristics. As Zornitsky and Rubin (1988), Sandell and Rupp (1988), Barnow (1990), the Center for Human Resources (1989) and others have pointed out, there are clear variations in skill levels, motivation and labor market attachment within reported demographic groups, so creaming within those groups is still a distinct possibility. Data on reading levels and long-term welfare status were added to the reporting system in PY 1988 in an effort to better answer some of these questions (DOL, 1988b). An analysis of that data has not yet been published.

The DOL Adjustment Model

One of the central features of the performance standards system aimed at reducing such "unintended effects" as creaming is the opportunity for governors to adjust the national standards to local conditions. The purpose of the adjustment provision is to ensure that SDAs that operate in particularly tough economic environments or serve high proportions of "hard-to-serve" individuals are not penalized by unreasonably high performance standards (or alternatively, that SDAs operating in favorable environments do not unduly benefit). The goal is for SDAs to be "held harmless" for conditions out of their control, thereby creating a "level playing field" in the competition for incentive funds. The

parameters for these adjustments are set at the national level, but the actual adjustments are determined (at least in theory) by the states.²⁰

In practice, however, the adjustments in more than 40 of the 50 states are made using a statistical model developed by DOL. The model uses regression analysis of nationally reported data from the JTPA Annual Status Report (JASR) and the Census to develop "factor weights" adjusting for such factors as proportion of terminees who are black, female and read below the seventh-grade level, or local conditions, such as unemployment rate or average annual earnings in the retail and wholesale trades (DOL, 1990a). As a result, how well the model works in making "fair" adjustments has become an integral part of the ongoing performance standards debate.

In general, the DOL model has gained wide acceptance, as evidenced in part by use by more than 80 percent of the states. In surveying SDAs about the model, Dickinson, et al., (1988) found that more than 50 percent of the SDA directors surveyed rated the adjustments as either good or excellent, with somewhat higher satisfaction with adjustments for adult than for youth standards. At the same time, critics have argued that the model does not adequately compensate for service to hard-to-serve individuals and, as a result, contributes to the likelihood of creaming. Two major themes stand out.

Limited Data

One set of criticisms points to the limitations of the data used in constructing the model and argues that, as a result, the model does not adequately account for the factors that might influence local performance. Dickinson, et al., (1988) and Trott and Baj (1987), among others, note that the ability of the model to adjust for participant characteristics is limited to the data available through the national reporting system. An adjustment cannot be made for a factor that is not reported, such as long-term unemployment, or rural or urban residence.

Further, factors are dropped from the adjustment model if they are statistically insignificant on the national level. A factor may be insignificant because there is no actual relationship between the characteristic and performance, or because there is too little

²⁰ JTPA, in Section 106, charged the secretary of labor with the definition of adjustment parameters, which were then issued as part of the national performance standards regulations. According to the parameters, the adjustment procedure must be responsive to the intent of the Act, consistently applied among SDAs, objective and equitable, and in accordance with widely accepted statistical criteria. Source data must be of public use quality and available on request. Results must be documented and reproducible, and adjustments must be limited to economic factors, labor market conditions, characteristics of the population to be served, geographic factors and types of services to be provided (DOL, 1984).

variation of that factor among SDAs (the latter is one of the arguments for using individual-level data in constructing models, which is discussed below). When factors drop out because there is too little variation among SDAs, the result is a model that may provide no opportunity for SDAs to adjust for characteristics that, on their face, are likely to affect performance.²¹

The quality of the model also depends on the degree to which the data are an accurate proxy for the population they represent. The National Commission for Employment Policy (1990), for example, notes that while Hispanics are represented as a single data element, Hispanic populations vary widely in language skills and education. It argues that a model that averages all Hispanics together adequately adjusts for none, and that the failure to adjust for Hispanics is one reason they are underrepresented in JTPA. Research on welfare participants has found that program outcomes varied according to the skill levels of the participants, suggesting that the single characteristic "AFDC recipient" tends to mask important differences (Friedlander, 1988; Friedlander and Long, 1987).

In short, the performance standards model is subject to the same "garbage in, garbage out" limitations as are all statistical procedures. That is, the quality of the data determines the quality of the results. In this case, some argue that the characteristics that make individuals "hard to serve" are not sufficiently represented in the data available for the adjustment model, and as a result, SDAs providing increased services to hard-to-serve youth and adults are not recognized for their efforts.

Limitations of Aggregate Data

The second set of criticisms points at the construction of the DOL model itself, arguing that the use of national averages and aggregate SDA data tends to limit the predictive force of the model (Trott and Baj, 1987; Baj and Trott, 1988). In developing state-based adjustment models for use by states in Region V, Trott and Baj found that models using regional rather than national data produced more accurate adjustments and were often

²¹ For the PY 1990 youth standards, the entered employment rate model included adjustments for several factors, including the percent of participants in each of the following categories: 14 or 15 years old, black, dropout, student, and reading skills below seventh grade. The youth employability enhancement rate model, however, included adjustments for only three factors: percent student, percent not in labor force and unemployment rate (DOL, 1990a). It is important to note that the performance standards regulations include provisions for governors to make adjustments "beyond the model" through a documented negotiation. However, that process has been little used. The national evaluation found that only half the states had policies for adjustments beyond the model, and only 15 percent of the SDAs surveyed had applied for adjustments in PY 1986 (Dickinson, et al., 1988). See National Association of Counties, et al., 1986, for a description of the adjustment process.

based on different factors than those in the nationally developed model. (That is, factors that were statistically significant in the national model dropped out of the regionally based calculations, and vice versa.) Similarly, they argue that models using individual-level data (rather than aggregate SDA totals) are more likely to reflect the actual relationships between characteristics and outcomes and have proved substantially more accurate in predicting local performance. In essence, Trott and Baj argue two points: that models based on national data are relatively insensitive to local conditions; and that the use of more finely tuned and individual-level rather than aggregate data in models leads to better adjustments for hard-to-serve client populations and fewer incentives for creaming.²²

While there is no strong evidence that the adjustment model actively promotes creaming, it is clear from the research that the adjustment methodology could be improved to better recognize and adjust for hard-to-serve populations. One step in that direction would be improved data collection on a national level, including more information on participant characteristics and potential barriers. An intermediate step might include development of several regional adjustment models rather than a single national one. Trott and Baj (1987) found that even using SDA-level data, regional models were better predictors than the national one. Finally, DOL could encourage states to develop state-based models using individual-level data. Based on the Region V project, as Baj and Trott note, state-based models provide states the greatest capacity to build their policy priorities into the system and are best able to accurately adjust the national standards to local conditions.

Implementing the Standards

The most comprehensive and coherent evaluation of the national performance standards system (and the only full-scale evaluation effort) is reported by Dickinson, et al., (1988). That report examines the effects of national standards as implemented by the states in terms of their impact on who was served, services provided and costs. The evaluation also looks at the role of SDA policies, contracting and program decisions, and how they were shaped by state and national policies.

The core of the quantitative evaluation was a regression analysis of the impact of state performance standards policies on service to specific target groups and on the types of

²² Baj and Trott (1988) also point out that models based on individual-level data can be used to make adjustments in performance-based contracts at the provider level as well as the SDA level, again reducing incentives for providers to cream.

services offered. The analysis used data from PY 1986 (prior to the major revisions in the national standards). In particular, the analysis looked at the following:

- Whether states used the DOL adjustment model;
- Whether states provided for adjustments "beyond the model" in their state policies;
- Emphasis (through incentive policies) on exceeding standards;
- Whether states had provisions for use of incentive funds to serve hard-to-serve populations;
- Whether there were additional state policies targeting services to specific groups (dropouts, welfare recipients, etc.);
- Emphasis on entered employment standard;
- Emphasis on welfare standard; and
- Emphasis on cost standards.

In broad terms, the evaluation found that performance standards had an impact on service delivery at the local level, and, perhaps more important, that the nature and degree of that impact was shaped by the state policies for implementing the national standards. The analysis found:

- State incentive (6 percent funds) policies that emphasized exceeding standards (the incentive award increased according to how much an SDA exceeded its standards), and policies that placed greater weight on cost standards tended to discourage services to hard-to-serve groups.
- State policies that adjusted for serving hard-to-serve (use of the DOL model and adjustments "beyond the model") and those that encouraged targeting specified groups tended to increase services to hard-to-serve populations.
- State policies that adjusted standards tended to reduce the amount of job search assistance and slightly increase basic skills remediation, while state policies encouraging services to welfare recipients substantially increased basic skills services. State policies encouraging services to dropouts resulted in longer-term services, but also increased job search assistance.

- State policies that emphasized exceeding standards reduced basic skills training and tended to increase the employment focus of training, while state policies that emphasized cost standards tended to result in shorter programs (for adults) and increased job search assistance (for youth).
- In general, standards appeared to have a stronger impact on adult than on youth services.²³

While there is substantial detail to be digested here, the major conclusions from the evaluation are clear. First, the performance standards did affect clients and services on the local level (their impact on costs was apparently less clear-cut).²⁴ Second, several of the standards (and associated state policies) carried clear "unintended effects"--that is, they were not policy-neutral. Put simply, the cost standards, and state standards that awarded incentive funds based on the degree to which SDAs exceeded their standards tended to encourage reduced services to hard-to-serve groups and shorter, less-intensive services.

Third, the impact of the performance standards on local practice, while significant, was not large. The difference in the levels of welfare recipients served between states that encouraged and those that discouraged such service, for example, was less than 5 percent. "Even in states with policies that are found to discourage service to hard-to-serve groups," the report notes, "SDAs are enrolling a considerable number of hard-to-serve clients" (Dickinson, et al., 1988:73-74). One conclusion to draw from this is that the standards only had an effect "at the margins." JTPA performance standards may have inhibited services to at-risk populations, but they did not prohibit those services. A second conclusion, however, is that the standards had only a limited impact on local behavior. As discussed in Section IV of this paper, the standards are only one element in the local decision-making process. As such, they can help point the system in a particular direction, but there is question about how far they can move it on their own.

²³ See Tables A-1 and A-2 in the appendix to this paper for a summary of the statistically significant findings from the quantitative analysis. It is possible that the evaluation underestimates the impact of the standards on client mix; the unintended effects may have been larger than reported (Barnow, 1990). The regression models used in the analysis could look only at characteristics reported in the JASR, and since those characteristics are also the basis for the DOL model, adjustments may have already been made for those groups. It is possible, if not likely, that the standards had a larger, yet unmeasured impact on client groups not included in the JASR.

²⁴ The evaluation found that the relationship between performance standards policies and program costs was relatively inconsistent and often contrary to common sense, in part because of inconsistencies in how costs were reported (Dickinson, et al., 1988).

Unanswered Questions

The national evaluation of the performance standards system has had a major effect on the system at the national level, leading directly to the elimination of the cost standards from the group of "core" measures in PY 1990 and to a substantial national effort to inform states about the development of incentive policies that encourage rather than discourage services to those most at risk (see SRI International and Berkeley Planning Associates, 1990; Center for Human Resources, 1989; Figeroa and Ganzglass, 1988). It stands as the most substantial and influential research on the performance standards system to date.

But the national evaluation was designed to assess how the existing performance standards affected local services. It did not look at the effect of no standards or investigate alternatives. As a result, a number of basic questions remain open. Is there a more effective mix of standards available? Presumably, the new postprogram and employability enhancement standards will soon be evaluated and will begin to answer that question. However, Zornitsky and Rubin (1988), for example, advocate strongly for use of target-group standards; King (1988) also suggests differentiating standards by target groups. Research into the relative effectiveness of different approaches for reaching the DOL's current policy goals is still needed.

In the same vein, one has to ask whether the performance-based approach is, ultimately, more efficient and effective than the earlier process-oriented systems. The experience with the 6 percent incentive funds suggests that, with the proper guidelines, the absence of performance standards can promote service to hard-to-serve groups and innovative services (SRI International and Berkeley Planning Associates, 1990). The fact that the impact of the standards was "at the margin" also suggests that other tools may be more powerful (Zornitsky and Rubin, 1988, make a similar point). Are standards, then, worth the effort? In part, this is a policy decision; some of the benefits of JTPA's commitment to performance standards come in the shape of business commitment and public support. But at the level of local services, we still do not know if the standards system represents a more effective means of governance.

VALIDITY

The final question asked of performance standards as accountability systems is whether they are valid: Do they reliably measure what they purport to measure? Are the performance standards appropriate proxies for JTPA's broader goals and objectives? The answers to these questions are less than certain. As discussed earlier, rather than measure long-term gains in earnings and welfare reduction directly, JTPA has measured

performance in these areas through termination-based measures and, more recently, short-term follow-up measures.

To the extent that validity studies of these types of measures have been done, they have produced mixed results. The early studies of DOL's proposed performance measures under CETA (Borus, 1978; Gay and Borus, 1980) found termination measures to be extremely poor predictors of long-term earnings and employment. Both studies found that job placement was among the poorest indicators (Borus called it little better than random as a predictor of earnings gains), though other measures were somewhat more effective. More recent studies have been more positive, finding that placement has been an accurate predictor of longer-term net impact on earnings, and that follow-up measures of employment and earnings have provided even better indicators (King, 1988; Geraci, 1984; Zornitsky, et al., 1986; Zornitsky and Rubin, 1988).

Two points stand out in the literature on the validity of the common employment and training performance indicators. The first is the degree of methodological uncertainty involved in all the studies. As Zornitsky and Rubin (1988) point out, most are based on quasi-experimental methods. In their words, "since it has been demonstrated that such estimation techniques yield biased results of an often unknown magnitude and direction, it would be difficult to defend the use of such results . . . in an effort to modify the existing JTPA performance standards" (1988:41).

The second, perhaps more important point is the general paucity of either quasi-experimental or formal impact evaluation data in support of the JTPA standards (in fact, most of the studies use CETA data). In particular, despite the central place of youth competencies in the JTPA system, there has been no formal effort to validate the assumption that competency attainment, at least under its current broad definitions, contributes to a young person's long-term employability. The absence of research on the validity of those measures contrasts sharply with the attention (however limited) paid to the adult measures and leaves the current competency system open to question.

The more intriguing, and ultimately more challenging issue related to validity is the relationship of the traditional measures of employability (such as employment or wages at termination or follow-up) to long-term employability in a rapidly changing economy. Ten or twenty years ago, one could readily assume that a youth or an adult with the skills to gain and hold a job over the short term would, with luck, be able to remain employed over the long haul with the same skills. However, based on the spate of recent studies and commission reports, the coming mark of long-term employability will be the ability to learn new skills and adapt to new work requirements in a changing workplace (Commission on the Skills of the American Workforce, 1990; American Society for Training and Development and U.S. Department of Labor, undated; Johnston and

Packer, 1987; Secretary's Commission on Achieving Necessary Skills, 1991). As we move toward a "high-performance" economy with an assumption of regular change as the central characteristic of employment, the ability to gain one job on program graduation is going to become less and less relevant as a predictor of improved opportunities.

Clearly, the development of appropriate performance standards for the new, high-performance economy is going to require increased forays into the world of workplace skills and competency attainment, with all the uncertainty evident in the JTPA youth competencies. As the initial Secretary's Commission on Achieving Necessary Skills report (1991) makes clear, that is necessarily going to involve efforts to measure and document an increasingly abstract, complex and elusive set of skills--teamwork skills, the ability to understand and work with systems, etc. The development of practical and operational definitions of these skills is and will be a major challenge, as will the initial assessment and final certification of these cognitive and affective behaviors. And, as the education community is discovering, there are inherent conflicts between the process of assessing and teaching these "higher-order" skills (through more individualized and "subjective" performance-based assessments) and the demands of statewide and national reporting.

It is in this context that the issues of youth and adult performance standards come together. In the short term, for both youth and adult performance standards, the most pressing issue is the consistency and accuracy of the data, both the characteristics and barriers affecting performance, and the measures of performance. In the assessments of the fairness, appropriateness and accuracy of the system discussed here, it is clear that the basic performance standards approach is sound, but that the system is seriously weakened by poor data.

But a broader set of issues has to do with the question of whether we are measuring the right things. For both youth and adults, what skills, attitudes and behaviors do we need to ensure as outcomes of our programs? How do we develop a performance standards system appropriate for the 21st century, one that can define and measure complex skills and maintain quality and consistency (in measurement and performance) on a national basis?

IV. THE EFFECTIVENESS OF THE JTPA PERFORMANCE STANDARDS AS A PERFORMANCE MANAGEMENT SYSTEM

While much of the discussion thus far has focused on the "technical" elements of performance standards, performance management involves a significant "political" (as in policy and persuasion) dimension as well. Above all else, JTPA is decentralized; the vast majority of decisions concerning implementation of performance standards and management of services are made at the state and local levels. How well the current performance standards system operates as a federal (or state) performance management tool depends in large part on how well it convinces relatively independent players to make decisions supporting national (or state) goals. The conclusion one must draw from the existing research on the system is that, in its current form, the performance standards system has an impact, but that the impact is "at the margin" for many SDAs. The fact is that, as visible and much discussed as the performance standards system is, it is but one element in the state and local decision-making process. If the system is to be used as one of DOL's central policy tools in the future, as recent developments might suggest, there are a number of areas in which the system's design and/or federal practice must be reviewed and possibly strengthened.

INCENTIVES FOR STATE AND LOCAL DECISION-MAKING

As the research and "how-to" literature on the performance standards system makes clear, the key decisions affecting local services are made at the state and local levels, not in Washington. Although the federal government defines the national performance measures and sets the national standards, it is the states that implement those standards through state policies, and it is localities that make service decisions based on the standards and other local priorities. At the state level, decisions range from use of the DOL adjustment model and adoption of state standards, to the decision to impose sanctions on nonperforming SDAs. A recent technical assistance guide for state policymakers (SRI International and Berkeley Planning Associates, 1990) lists nearly a dozen major performance standards decisions to be made by states, involving more than 20 different options (see Table 3). Local decisions, ranging from decisions about target groups to determining the structure and payment benchmarks of provider contracts, are also needed to translate state or local priorities into recruitment and program operations (see Center for Human Resources, 1989, and Laventhol and Horwath, 1988, for discussions of local performance management decisions).

Local Rewards and Sanctions

The engine that is expected to drive local decisions toward improved services is the set of incentives and sanctions that reward and punish SDAs based on their performance.

Table 3
STATE PERFORMANCE STANDARDS OPTIONS

State Decision/Options	State Experience	Predicted Impacts
Emphasizing Different Outcomes		
<p>Choosing Additional State Standards</p> <p>A Standards for Service to Hard-to-Serve Groups</p> <p>B Standards for Outcomes for Hard-to-Serve Groups</p> <p>C Standards for Additional Outcomes (e.g., more than 8 federal standards, or such standards as youth retention)</p> <p>D Standards for Other Program Goals (such as expenditure rate or coordination)</p>	<p>14 states set standards; 8 states set separate standards for specific groups (dropouts, welfare recipients, etc.); 8 states set standards using a broader definition of hard to serve.</p> <p>7 states, generally using placement standards.</p> <p>10 states: 5 designated additional federal standards, 5 set standards for additional outcomes.</p> <p>5 states; 15 states incorporated expenditure rate into calculation of incentive awards.</p>	<p>Option A tends to increase services for targeted groups. Unintended effects include decreased performance on wages at placement and weekly earnings (for welfare recipients); increased use of job search assistance and reduced performance on employment measures (for dropouts).</p> <p>Unclear effect from Option B; too closely tied to service-level standards.</p>
<p>Emphasizing Performance on Key Measures</p> <p>A Weighing Standards Differently in Calculating Incentive Awards</p> <p>B Establishing Core Standards</p>	<p>25 states</p> <p>9 states</p>	<p>21 states unintentionally gave greater weight to easily exceeded standards by use of composite measures.</p> <p>Option B tends to increase performance on those standards, but with unintended effects:</p> <ul style="list-style-type: none"> • possibly reduced performance on other standards (e.g., emphasis on youth employment rate reduced performance on enrichment standard); • emphasis on wage standard reduced service to dropouts; emphasis on youth entered employment reduced service to in-school youth; • emphasis on cost standard decreased performance on all measures, decreased services to hard-to-serve groups and reduced provision of longer-term services for adults.
Qualifying for Incentive Awards		
<p>Defining Exceeding and Failing to Meet Individual Standards</p> <p>A Use a Single Performance Level to Separate Exceeding from Failing to Meet</p> <p>B Use a Lower Level to Define Failing to Meet the Standard and a Higher Level to Define Exceeding the Standard</p>	<p>28 states</p> <p>15 states</p>	<p>No clear effect from either choice. However, states choosing option A tended to emphasize exceeding standards in their incentive award calculations, which does have the effect of reducing services to hard-to-serve groups or reducing provision of basic skills training.</p>

Table 3 (continued)
STATE PERFORMANCE STANDARDS OPTIONS

Defining Exceeding Performance Standards Overall		
A Setting a Minimum Number of Standards that Must be Met or Exceeded	13 states set no minimum (exceeding one standard would earn an award); 31 states required a minimum of 4 to 8 standards be met; 7 states required that all 8 standards be met.	The major difference among options is the extent to which they emphasize specific standards. Options A and C are neutral among standards, though Option C tends to unintentionally emphasize the cost standard.
B Requiring that Core Standards be Exceeded	9 states established 3 to 5 core standards that must be met or exceeded.	Requiring that a large number of standards be met emphasizes performance, which tends to discourage service to hard-to-serve groups (particularly welfare recipients) and provision of basic skills.
C Minimum Score on a Composite Index of Performance	24 states used a composite index of performance.	
Calculating Incentive Awards		
Policies for Calculating Incentives		
A Separate Pool for Each Award	18 states	Option A makes weights for each standard explicit and visible to SDAs, and hence conveys policy most clearly.
B Composite Measures of Performance	24 states	
Amount Received for Marginally Exceeding Standards	30 states awarded a portion of funds for marginally exceeding standards.	Reduces emphasis on exceeding standards, which tended to increase services to hard-to-serve groups and provision of basic skills training.
Rewarding Performance Beyond the Standard		
A Tiered Systems (or a "cap" on possible awards)	19 states	Option A is easy to understand, tends not to overemphasize exceeding standards (depending on how tiers are defined).
B Continuous System (e.g., awards based on a continuous measure of performance, such as percentage by which standard is exceeded)	23 states	Option B tends to place substantial emphasis on exceeding standards by providing increasingly higher awards for increasingly higher performance.
Caps on Rewarded Performance	21 states capped rewarded performance.	Reduces emphasis on exceeding standards
Competition Among SDAs		
A Noncompetitive (an SDA's award is not affected by performance of others)	18 states had noncompetitive incentive policies; 27 have either highly or moderately competitive policies.	
B Moderately competitive (unearned awards are redistributed, so base award is noncompetitive, but not secondary awards)		Competitive formulas increase emphasis on exceeding standards.
C Highly competitive (all awards dependent on relative performance of SDAs)		
Adjustments for Size of SDAs	29 states based 6 percent awards on SDA size; 9 states made no adjustments; 6 used a mixed approach.	Adjustments for size make performance equally important for all SDAs, though awards for small SDAs may be too small to use effectively.

Table 3 (continued)
STATE PERFORMANCE STANDARDS OPTIONS

Conditions Placed on Incentive Funds		
Exempting Incentive Funds from Performance Standards	20 states: 10 states excluded incentive funds for all SDAs; 10 gave SDAs the option of excluding the funds.	Variety of responses, ranging from use to establish high-risk programs to ongoing support for underperforming providers. Overall, impact was to increase the number of hard-to-serve individuals served, particularly welfare recipients.
Requiring Incentive Funds be Used for Specific Purposes	20 states, most requiring funds be used for hard-to-serve groups; 8 states required use for specific services, mostly basic skills remediation.	Tended to reduce unintended effects of exempting funds from performance standards; e.g., SDAs were more likely to fund innovative programs and less likely to fund underperforming providers.

Source: SRI International and Berkeley Planning Associates, 1990.

SDAs that exceed their performance standards (as defined by the governor) receive additional program funds--incentive awards. SDAs that fail to meet their standards are provided with technical assistance and, if they fail to meet their standards two years in a row, threatened with reorganization.

As a number of reviewers have commented, however, the relevance and impact of the system of rewards and sanctions is open to question. Several studies have argued that adjustment models and incentive policies have, in many cases, grown so complex that they have lost their power as policy tools (SRI International and Berkeley Planning Associates, 1990; Barnow, 1990; King, 1988). Simply put, between the factors in the adjustment model and the complexity of some state formulas for allocating incentive funds, local policymakers are no longer able to discern the consequences of their targeting or service decisions.²⁵

Dickinson, et al., (1988) and Rubin and Zornitsky (1988) also report that many SDAs see the JTPA incentive funds as relatively unimportant. According to those SDAs, the incentive grants are too small, the SDA has other resources to draw on, and the funding is unpredictable and usually has to be spent quickly--in short, it is not worth the effort. For those SDAs (approximately half of those studied by Dickinson, et al.), the motivation to respond to state performance standards policy has to come from some other source.²⁶

At the same time, the sanctions--technical assistance and reorganization--also appear relatively weak. Barnow (1990:12), tongue in cheek, questions whether "the possibility of sitting through lectures on how to perform better may serve as an incentive to perform well." Levitan and Gallo (1988) and Bailey (1988) both note that states were reluctant to impose sanctions and, five years after JTPA had begun, there had been no reported instances of sanctions by the states for poor performance. The relatively low level at which the standards were set (the 25th percentile) tends to further remove the threat of sanctions for most SDAs. The "bottom line" on incentives and sanctions may be that, for

²⁵ King (1988:62) notes that the adjustment models in particular "have remained beyond the grasp of most and are nearly unintelligible to the average person in contact with the system."

²⁶ Bailey (1988:303) also questions the effectiveness of the incentive awards, commenting that "maximizing allocations is not necessarily a strong motivation."

many SDAs, there is less "push" or "pull" from the performance standards system than one would have expected.²⁷

State Incentives

The question of what pushes or pulls the states to support national performance goals may be even more serious. As JTPA is constructed, states are expected to have substantial discretion in their decision-making and the setting of statewide policies. And given the relative openness to interpretation of JTPA's mission (particularly the phrases concerning service to "those who can benefit most, and are most in need"), states have tended to exercise that discretion broadly (Table 3 indicates variations found in the national evaluation).

However, as King (1988) notes, while states have many decisions to make, there are few incentives for states to either align with federal policy or make the hard decisions often needed to improve performance. King argues that, for all their decision-making authority, governors get few benefits from being strong performance managers. As political actors, governors are typically more concerned with distributional than results-oriented objectives. They can make many friends through incentive awards and have no incentive to make enemies by imposing sanctions. (A state's JTPA funding, King notes, "is unrelated to managerial vigor.") It is not surprising, King suggests, that "the JTPA system, with help from federal and state actors, has declared most SDAs winners, sanctioned very few, and generally undermined the credibility of the system's performance" (1988:59).

The findings at both the state and local levels suggest that the issue of incentives and sanctions must be examined. King proposes establishing a system of incentives for states, to reward good performance at the state level. Zornitsky and Rubin (1988) suggest increasing the size of the financial incentives available to SDAs. Additional technical assistance, particularly aimed at local policymakers, might improve understanding of the system and its implications for local policy. Whatever options are explored, it is clear that the mechanism by which states and SDAs are "persuaded" to support the system and its goals warrants further examination.

²⁷ A counterargument can be made that the standards are, in fact, important to many SDAs. Half of those surveyed in the national evaluation indicated that the system's incentives and sanctions were important--that the funds were needed, or that the political and public relations costs of failing to meet the standards were too high to risk (Dickinson, et al., 1988). The point here, however, is that the effect of the standards system is less than absolute. While it may work as expected in some SDAs, for a surprisingly high number, the incentives and sanctions are not major factors in local decision-making.

PROVIDER INVOLVEMENT

A second area of weakness in the performance management system is the limited involvement of service providers. One of the key lessons of "quality management" research in business is the need to involve all members of the system, from senior management to front-line staff (GAO, 1990b). Although JTPA service providers often bear primary responsibility for recruitment, instruction and job development at the local level (and are consequently in a position to directly affect client mix and local services), the research suggests that they are rarely included in the performance standards system. Zornitsky and Rubin (1988) note that incentives and adjustments are rarely passed along to providers, which means that most have incentives to cream. In their discussion of local practices, Dickinson, et al., (1983) note that SDAs tended to fall into one of several groups in terms of the degree to which they kept or passed along responsibility and risk to providers: "risk-sharers," "risk-keepers" and "risk-passers." Although the study did not try to count the number in each category, it notes that relatively few SDAs varied contract terms according to who was being served, and in more than half the SDAs studied, contract terms governing placement assigned a maximum share of the risk associated with performance standards to the service provider.

Perhaps more to the point, the research suggests that few providers were offered (or took) the opportunity to more actively participate in the performance standards process. Dickinson, et al., (1988:88) report:

Service providers were by and large unaware of the existence of performance standards in general, although a few know that the SDAs were somehow judged on outcomes and received bonus funds on those outcomes. Even when service provider staff know of the existence of a performance-standard system, they were usually unaware of the levels at which they were set.

In the JTPA "how-to" literature, a number of guides echo the emphasis on the importance of widespread participation and a "top-down/bottom-up" process. They also point to the importance of sharing risks and benefits with providers, primarily by structuring contracts to recognize and reward more intensive services or services to hard-to-serve populations (Center for Human Resources, 1989; Laventhol and Horwath, 1988). "Best practices" research being conducted by SRI International into JTPA assessment, contracting and case management practices should cast some light on improved methods for involving providers in performance management. Baj and Trott's (1988) work on state-based performance standards models also provides tools for applying adjustment models directly to providers. In both instances, DOL needs to explore ways of more directly involving and "vesting" providers in the performance management process.

THE INFLUENCE OF LOCAL FACTORS

As the national evaluation (Dickinson, et al., 1988) and studies of performance management for targeted welfare programs (Rubin and Zornitsky, 1988; Zornitsky and Rubin, 1988) point out, a performance standards system is only one of many influences on local decision-making; effective use of the standards as performance management tools requires that they be viewed in context. One of the strongest findings of the national evaluation, for example, was that the impact of the performance standards was significantly affected by the policy orientation (and, in fact, the presence or absence of clear policy) at the local level. As the evaluation notes: "Performance standards have their greatest unintended effects on program design and implementation practices in SDAs that are lacking in strong client or employer orientations to counterbalance their performance concerns" (Dickinson, et al., 1988:115). The evaluation also found that local risk-management strategies ("risk-managers" versus "risk-avoiders") similarly shaped the local response to national standards.

Both Zornitsky and Rubin, and Dickinson, et al., note the influence of outside institutional and environmental factors on local programs. In performance systems for welfare programs, Zornitsky and Rubin argue that such factors as the clarity of targeting, the ability to provide flexible and comprehensive services (through interagency coordination), the availability of adequate support services, and limitations on the use of funds are perceived by practitioners as having a greater impact on their ability to provide services than JTPA standards. Based on SDA case study interviews, the national evaluation produced a similar list of factors affecting the ability of SDAs to respond to performance standards, including the local unemployment rate, the structure of the local labor market, and service provider availability. Both studies also point to the influence of JTPA's 40 percent youth expenditure requirement, the equitable service requirements, and the limitations on stipends and services as key factors influencing local decisions. The conclusion reached by Zornitsky and Rubin (1988:74) concerns AFDC recipients but is applicable to others as well:

A growing presumption underlying much of the policy discussion over how to improve performance standards is that "the right changes" will induce program administrators and their contractors to devote more attention to serving AFDC recipients, and particularly those deemed hard to employ. However, several other key variables, such as child care and health benefits as well as interagency coordination, bear upon the ability of employment and training programs to target on such individuals and provide them with the mix of services needed to ensure gainful employment. Unless efforts

are made to address these issues, modifications to the performance standards system may have only a limited effect on future targeting and programming decisions.

The final element that must be considered in terms of local factors is local capacity--that is, the ability of SDAs and providers to design and operate services to meet targeted needs in response to performance standards. One of the anticipated findings of the national evaluation of the JTPA youth competency system is that local systems not only vary in quality, but that few SDAs or providers have the capacity to undertake the tasks involved in system development--labor market and job task analysis; development of functional, competency-based curricula; selection of appropriate assessment tools; and the like. While the evaluators note that the revisions of the competency requirements have had an impact on local services, particularly increased provision of basic skills education, few SDAs have the experience or resources to develop truly effective programs.²⁸ The likelihood of an SDA responding to national and state policy may ultimately depend on its ability to effectively implement the programs and services the policy requires.

The point to be made here is simple: in order to move the local service delivery system, it is necessary to view the national performance standards in context and recognize that other levers may also need to be applied. Several areas of emphasis are clear. First, the role of the PIC as a policymaking body, while often neglected in practice, represents a strong potential influence. As such, the evaluation findings suggest that a significant payoff could be had from an increased state and/or national investment in policy-oriented training for PIC members (i.e., more than neutral information on roles and responsibilities). To the extent that PIC members, as well as local administrators, understand the performance standards system and the implications of their local decisions, they will act in ways that increase program effectiveness.

Second, the importance of interagency linkages as a factor affecting services to hard-to-serve populations also stands out in the research. While much can be done at the local level, both the national evaluation and the Zornitsky and Rubin reports suggest that a high priority be placed on efforts by states and the federal government to lower interagency barriers.²⁹

²⁸ Based on conversation with Katherine P. Dickinson, January 1992.

²⁹ For an overview of the recent research on collaboration and state or federal strategies to increase interagency cooperation, see Bailis, this volume.

A third issue is supportive services. The proposed JTPA amendments would provide additional flexibility in the provision of supportive services; however, alternatives to the current limitations, such as adjusting spending limits according to the population being served, must be considered.

Finally, local capacity is key. As suggested earlier, the issue of long-term employability skills and competency-based education and training is likely to grow more central and more challenging over time. Current experience with the youth competency system suggests it is unrealistic to expect that each of the 600-plus SDAs around the country will have the capacity to effectively respond without significant research, development and assistance from the federal level. There are many possible options. One approach might involve federal support of state or national networks to develop and pilot competency-based systems and programs. As the JTPA Advisory Committee has noted (1989), a model for that approach can be seen, at least in part, in the Project of the States (see Center for Human Resources, 1991a, for a description). Another alternative might be the development of several "models" that, like the optional DOL adjustment model, could be adopted by interested states and SDAs. Whatever approach is taken, it is clear that as the requirements of preparing youth and adults for the labor market grow more demanding, a significant investment in local capacity-building must be part of national performance management policy.

PERFORMANCE STANDARDS AND PERFORMANCE MANAGEMENT

Because of the relative paucity of recent evaluation research on JTPA, many of the conclusions concerning the effectiveness of the standards as tools for performance management border on speculation. Evaluators in the field today, for example, informally report that the performance standards changes in PY 1988 and PY 1990 have had an impact in terms of more intensive programs (to address the follow-up standards) and increased basic skills education (to meet the youth employability enhancement standard). If so, the conclusion might be drawn that the impact depends on finding the "right" measures. Certainly a change to a new set of measures appears to have had a greater impact than efforts to influence behavior within the context of the original JTPA performance measures.

At the same time, the research and practical experience remind us that the performance standards represent only one of many influences on local decision-makers, and that to depend on standards alone to shape performance is to put too many eggs in one basket. At least in part, DOL's efforts to amend JTPA grow out of the recognition of that fact, but research clearly suggests that if and when JTPA amendments are passed, substantial research and policy work must still be done.

V. INVESTING IN QUALITY: LESSONS FROM ALLIED FIELDS

The case can easily be made that JTPA and the employment and training field stand at an important crossroads. With nearly a decade of experience behind it, JTPA is trying to shift its focus and refine (if not redefine) its mission to better prepare those youth and adults most in need of services for an increasingly challenging labor market. Regardless of questions about its direct and measurable impact on local services, JTPA's performance standards system quite clearly has a central role to play in this transition. At the most basic level, it is through the performance standards system that the fundamental mission of JTPA is translated into operable goals and that the quality and effectiveness of training is measured.

To meet the challenge of the 1990s--to provide increasingly complex and comprehensive services to an increasingly disadvantaged population--the JTPA performance standards system must move in new directions. Although the system "works" for measuring the employment outcomes of relatively traditional job training, its major weaknesses are in those areas most likely to grow in importance: the measurement of skills gains, the ability to generate quality data that can be used to analyze and manage performance, and procedures to evaluate program quality as well as overall performance. Without improvement in these areas, the ability to set realistic standards will likely decrease, and the gap between reported outcomes and actual impact will widen.

These are not simple issues to address, particularly in a system as strapped for funding as JTPA. However, a review of approaches to performance management in "allied" fields--business, health care and education--points to issues and approaches to consider. Two major themes stand out. The first is the shared investment in information as the basis for effective performance management and its associated effort to develop baselines and criteria for performance. The second is the ongoing involvement of practitioners (employees, physicians, educators) in the process of defining and reviewing performance.

TOTAL QUALITY MANAGEMENT (TQM)

One of the major influences on the design of JTPA and its performance standards system was the market-driven, "bottom-line" orientation of the private sector. Outcome-based performance standards tied to incentives and sanctions would drive local programs toward effective services much as bottom-line profits drive companies toward efficient operations. As Bailey (1988) points out, this analogy breaks down under close examination. But, since the beginning of the 1980s, the corporate approach to performance management and measurement has begun to change. One of the major movements has been away from short-term profit and financial figures as the foundation for performance measurement, and toward a broader approach to performance management (Eccles,

1991). At the heart of that movement is what is often referred to as "total quality management" (TQM).

Simply put, TQM is an effort to reorganize and restructure traditional management practices around the ideas of customer satisfaction, continuous improvements and employee involvement. Growing out of the theories of statistical process control, and popularized first in Japan by W. Edwards Deming and Joseph Juran, the TQM approach begins with the simple idea that quality and improved productivity come from improved control of the process of production rather than from efforts at the end of the line (inspection, reworking and repair). That improved control, in turn, comes from a focus on customer needs (both internal and external customers); continuous measurement, evaluation and improvement of quality; employee participation (on the assumption that those closest to the daily process can best see how to improve it); and leadership commitment to quality as a central strategic goal of the company (GAO, 1990b; Berwick, et al., 1991; Svenson and Brown, 1990). In one view, TQM can be seen as a set of broadly stated management principles, such as Deming's "14 points." (See Table 4.) In practice, however, TQM is a focused, ongoing effort to analyze and improve the process through which goods, services, and information are produced within an organization, through the use of data and a commitment to fix problems before they affect the final product or outcome.

In the corporate community, TQM has led to significant restructuring within a number of major corporations, and to measurable improvements in employee relations, operating procedures, customer satisfaction and financial performance (GAO, 1990b). In health care, pilot TQM initiatives have addressed issues ranging from delays in access to medical records, to inconsistencies in diagnostic and treatment procedures, and inaccuracies in billing records (Berwick, et al., 1991).

In at least one health maintenance organization (HMO), an examination of both internal (staff) and external (employer and patient) customer needs led to the definition of a multidimensional set of quality measures as the basis for a comprehensive approach to performance management. Information gathering was also expanded to include focus groups and regular patient surveys. The activities of the HMO were broken down into discrete "encounters," and performance measures were weighted and applied differently to each type of encounters. In contrast to traditional quality assurance measures that focus on structure (such as staff qualifications), technical process (such as procedures), and outcomes (such as death), new measures include access, coordination of care, patient satisfaction, support staff training and staff morale. The resulting system provides the capacity to manage performance along a number of dimensions, all contributing to quality outcomes and patient satisfaction (Berwick and Knapp, 1987; Jennison and Jordan, 1991; Jennison, 1992).

Table 4
PRINCIPLES OF TOTAL QUALITY MANAGEMENT

A Business View: Deming's 14 Points

1. Create constancy of purpose.
2. Adopt the new philosophy.
3. Cease dependence on mass inspection to achieve quality.
4. End the practice of awarding business on price tag alone. Instead, minimize total cost, often accomplished by working with a single supplier.
5. Improve constantly the system of production and service.
6. Institute training on the job.
7. Institute leadership.
8. Drive out fear.
9. Break down barriers between departments.
10. Eliminate slogans, exhortations and numerical targets.
11. Eliminate work standards (quotas) and management by objective.
12. Remove barriers that rob workers engineers, and managers of their right to pride of workmanship.
13. Institute a vigorous program of education and self-improvement.
14. Put everyone in the company to work to accomplish the transformation.

A Health Care Perspective

1. Productive work is accomplished through processes.
2. Sound customer-supplier relationships are absolutely necessary for sound quality management.
3. The main source of quality defects is problems in the process.
4. Poor quality is costly.
5. Understanding the variability of processes is key to improving quality.
6. Quality control should focus on the most vital process.
7. The modern approach to quality is thoroughly grounded in scientific and statistical thinking.
8. Total employee involvement is critical.
9. New organizational structures can help achieve quality improvement.
10. Quality management employs three basic, closely integrated activities: quality planning, quality control and quality improvement.

Sources: Dobyns and Crawford-Mason, 1991:289; Berwick, et al., 1991.

As the foregoing might suggest, the lessons of TQM are likely to have a greater performance management impact at the organization (the SDA or service provider) level than at the system or national level. For SDAs, TQM--emphasis on clear goals; leadership commitment to quality; constant measurement and analysis of the work process; and employee training and participation--provides a framework for the development of strong, well-managed programs at the local level (see Strumpf, 1991, for one such application).

But the major themes of TQM also provide support for reexamining the information and standards used to measure performance in employment and training on a national level. As the process of employability development has become more comprehensive and sequential in nature, the "production process" of training has become more complex and subject to breakdown. With a greater mix of services, there are more internal customers who must coordinate and share information (within an agency, and with cooperating agencies); a greater need for accuracy in assessment and diagnosis; and a greater chance that customers (participants and employers) will not be satisfied. In that context, an emphasis on quality management at the national level suggests better information on the components of the process (specific services and activities); on the process itself (for example, service delivery); and on the final outcomes (measured skills and customer satisfaction at follow-up, as well as wages and employment). The basic lesson from TQM is relatively simple: "You can't manage what you don't measure." A commitment to the measurement and management of performance along a variety of dimensions is increasingly seen as the best means of improving the bottom line.

PERFORMANCE MANAGEMENT IN HEALTH CARE

While the business community has moved away from simple "bottom-line" measures of performance, the publicly funded health care system has moved strongly toward attaching price tags to services as a means of performance management and cost control. The implementation of the Prospective Payment System (PPS) for Medicare has raised concerns similar to those in JTPA about the "unintended effects" of cost controls: unnecessary admissions and lower-quality care. But the publicly funded health care system also provides examples of how information can be used to more finely tune performance in a decentralized system, and how the effects of performance standards can be balanced through a process of review and local standard-setting.

The Prospective Payment System (PPS)

In 1983, in an effort to contain spiraling health care costs, the federal government radically changed the ways in which hospitals and other providers were paid for services. With passage of the Social Security amendments, payment for in-patient Medicare

services was changed from a retrospective, cost-based reimbursement process to the prospective payment of a flat rate per type of discharge, based on the classification of each case in a "diagnosis-related group," or DRG. Under the PPS, rates are fixed and determined in advance, and each hospital gains or loses the difference between the payment rate and the actual cost of care.

At the core of the PPS are the DRGs, designed to classify patients into groups that are "clinically coherent and homogenous with respect to resource use." Their purpose is to allow equitable payment across hospitals for comparable services. In a rough analogy to JTPA, the DRGs are part of the process by which hospital performance standards (payments) are adjusted to reflect both client characteristics and local conditions. In the PPS process, the base Medicare payment rate (based on an average cost of care) is first adjusted according to a local wage index (to account for variations in local costs), then adjusted by a DRG weighing factor that represents the relative costliness of a hospital discharge in that DRG. There are 467 DRGs currently in use, grouping several thousand individual diagnoses (Guterman and Dobson, 1986; Binner, 1986).

The DRGs provide clear, quantifiable measures of performance--in this case, in the form of cost targets. Proponents of the system argue that DRGs have slowed the growth of hospital care costs. However, critics have charged that hospitals can, with relatively minor changes in wording, manipulate the DRG classifications to substantially increase the level of payment (Binner, 1986). Others suggest that the PPS provides incentives for providers to select patients who are relatively easy and inexpensive to treat, and to avoid patients who are difficult or more expensive to serve; they raise questions about the equity and quality of in-patient care, and access to postdischarge services (Eggers, 1987). Finally, there is concern that the DRGs are distorting the delivery of services--that patients are being discharged to institutions or out-patient care not subject to the PPS (Guterman and Dobson, 1986). One conclusion that might be drawn is that any approach to the management of care or services will generate unintended consequences.³⁰

But for all the criticisms, the DRGs also represent an important effort to categorize and systematically describe key variables affecting performance--an area in which the JTPA

³⁰ Eccles (1991) notes a number of "unintended effects" of business's traditional focus on financial figures, pointing not only to the "short-term thinking" of many corporate managers, but also to the manipulation of reported quarterly earnings figures to satisfy the investment community. He comments: "The extent and severity of such gaming is hard to document. But few in management deny that it goes on or that managers' willingness to play the earnings game calls into question the very measures the market focuses on to determine stock prices" (1991:132). For a more general discussion of the "dysfunctional consequences" of performance management, see Ridgway, 1956.

system has been consistently criticized. As discussed earlier in this paper, one significant weakness of JTPA's performance standards system is the "looseness" of its data. Data categories are broad and inclusive ("dropout," "Hispanic," etc.), and provide little information about specific work or education needs. As a result, efforts at targeting or making appropriate adjustments in the standards often have mixed results. Similarly, program activities and program outcomes are described, at best, in general terms ("classroom training" and "entered employment"). The limited measures used in employment and training are one of the reasons the field's research base has remained so underdeveloped; without finer measures, it is difficult to establish meaningful comparisons among research projects.

In sharp contrast, the DRGs grow out of and are based on ongoing efforts in medicine and mental health to establish consistent classification schemes for diagnosis. The two major systems, the International Classification of Diseases (ICD) in medicine and the Diagnostic and Statistical Manual (DSM) in mental health, provide tools for making consistent diagnostic decisions, and for defining and analyzing research and performance data over time and across different settings.³¹ The DSM, ICD and DRGs represent major commitments of time and resources. For example, the 1980 revisions to the DSM took place over a period of years through a process of task forces, draft reviews, field trials and reliability studies (Millon, 1983; Binner, 1986). However, as the introduction to the DSM notes, the manual "reflects an increased commitment in our field to reliance on data as the basis for understanding mental disorders" (American Psychiatric Association, 1980:1).

Peer Review

The peer review system in Medicare began in the early 1970s. In the context of the cost-reimbursement form of funding in use at the time, Congress mandated Professional Standards Review Organizations (PSROs) to conduct utilization reviews to assure that the provided services were medically necessary and met quality standards. The PSROs also were directed to conduct profile analyses to identify patterns of service; and to conduct periodic health care research projects. The PSROs were open to any physician in the area, and by the end of the program in the early 1980s, it is estimated that nearly half the physicians in the country had joined.

³¹ In discussing the addition of diagnostic criteria to the DSM (DSM-III), Millon (1983:808) notes: "It is this very precision in articulating specific and uniform rules of definition . . . that makes the DSM-III so serviceable and potentially fruitful also as a research tool. Not only do the criteria delineate the components that will enable reasonably homogeneous group assignments, but its application as a standard national (and, it is hoped, international) gauge will ensure at least a modicum of reliability and comparability among studies undertaken at diverse research settings."

In 1982, the PSROs were replaced by Utilization and Quality Control Peer Review Organizations (PROs). With establishment of the PPS, the PROs took on major quality review responsibilities. In contrast to in the days of cost reimbursement, the primary role of the PROs was to guarantee that the quality of service did not decline under the weight of cost controls. Every hospital providing Medicare services was required to contract with a PRO, which was responsible for conducting admissions reviews; reviewing subsequent admissions, transfers and "outlier" cases; and validating the hospital-assigned DRGs. If a JTPA analogy was to be drawn, the role of the PROs might be described as reviewing enrollments to ensure that creaming did not take place; reviewing quick placements to ensure that appropriate services were provided; and reviewing pre- and posttest data to ensure that competency deficiencies were real and certifications valid. Where PROs found inappropriate DRGs or unnecessary admissions, they could deny payment. In addition, the PROs were responsible for selecting a quality-of-care issue and working to improve local practices in that area. As part of that process, the PROs might establish criteria for effective procedures, conduct physician education activities, conduct special medical record reviews and impose sanctions where appropriate (Lohr, 1985; Graham, 1982).³²

While the results from the PSRO and PRO process are mixed--poor on cost control, generally positive on improving quality of care (Lohr, 1985; Donabedian, 1982)--peer review represents an approach to performance management and quality assurance that actively involves practitioners in the development and enforcement of standards of quality for services. As Elwood, et al., (1973) note, one of the most important and unique characteristics of performance management in the health care field is the degree to which it is accomplished by individual providers and professional organizations (as opposed to government bureaucracies). To the degree that questions are regularly raised about the quality and consistency of employment and training services under JTPA, the peer review process offers one strategy for increasing quality control without entirely sacrificing local autonomy.³³

³² In conjunction with medical societies and insurers, peer-review systems were also being established in the mental health field during the same period. See, for example, Rodriguez, 1983.

³³ The Project of the States offers examples of one function of a peer review process--the development of common standards and criteria. In those states participating in the demonstration, SDA working groups define common competencies, develop criteria for assessment and select instruments for use, and jointly review curricula against criteria developed by the project (Center for Human Resources, 1991a).

MEASURING "HIGHER-ORDER" SKILLS IN EDUCATION

The concepts of quality information and peer review in many ways lie at the center of the education community's efforts to address the dual demands of increased school accountability and more appropriate assessment of the "higher-order" skills required by the high-performance workplace. As in JTPA, "accountability" has become a national issue in education--one of the central themes in the America 2000 education strategy is increased school accountability, in part through development of national achievement tests. At the same time, educational researchers are increasingly clear that traditional, standardized, multiple-choice tests not only fail to adequately measure the skills needed by today's students, but also send the wrong messages to educators about the needed focus of instruction (National Commission on Testing and Public Policy, 1990; Resnick and Resnick, 1989; Haney and Madaus, 1989). One of the key performance management challenges facing both JTPA and the education community is how to define and assess the new "higher-order" thinking and problem-solving skills in ways that are both educationally appropriate and amenable to large-scale reporting.

In education, the primary effort to address this issue is through the development of statewide performance-based assessment programs that use a mix of strategies to ensure consistency and provide a base for statewide reporting. In this context, examples of performance-based assessment are assessment of writing skills through writing samples, or assessment of problem-solving skills through demonstrations. The argument for performance assessment is that it provides a more direct and "authentic" assessment of an individual's skills than traditional tests because it tests the application of skills in realistic context (Center for Human Resources, 1991b, provides a brief introduction to performance assessment; also see Resnick and Resnick, 1989; Commission on the Skills of the American Workforce, 1990).

Among the efforts now taking place, two have received substantial attention, though neither has been formally evaluated (Center for Human Resources, 1991c). In Vermont, the state Department of Education has been piloting a statewide performance-based assessment system in writing and mathematics, and is now implementing it statewide in over 350 schools. The system uses a mix of assessment approaches, including a portfolio of each student's work, evaluated throughout the year; a single "best" piece at year's end; and a statewide assessment in which all fourth- and eleventh-grade students write in response to the same "prompt." As part of the assessment process, approximately 150 teachers will be trained in scoring techniques for math and writing samples, and evaluation teams of teachers will visit each school to review portfolios, "best" pieces and prompted writing samples.

In Kentucky, a somewhat different approach is being taken through the development of a competency-based and performance-assessed curriculum under the auspices of the state's 1990 Education Reform Act. The Kentucky Instructional Results Information System incorporates the definitions of a series of statewide learning goals and 68 "valued outcomes." The goals and valued outcomes will inform both curriculum revision and assessment. Once in place, assessment will take two forms: "continuous assessment," which focuses on the instructional progress of individual students, and "accountability assessment," aimed at providing a baseline for statewide reporting. For both forms, three types of assessments will be used: an annual test incorporating a mix of multiple choice and open-ended questions (similar to the National Assessment of Educational Progress); a series of performance tasks; and a portfolio of student work covering the year as a whole.

In both Kentucky and Vermont, several key elements are suggestive for the employment and training system. First, of course, is the movement toward performance assessment. To the degree that JTPA is concerned with what participants are able to do, it must ensure that its methods of assessing skills are appropriate. Second, in both Kentucky and Vermont, the foundation for performance assessment is the careful definition of the skills (competencies) to be assessed. That process took place through a series of statewide task forces and working groups, involving teachers, school administrators and other professionals. As with the peer-review process in health care, practitioners in the field took on a significant role in defining the standards and criteria by which institutional and individual performance would be measured. In the same vein, trained reviewers, particularly in Vermont, are a central element in the performance assessment approach; the evaluation teams ensure a degree of consistency and quality across school districts. As suggested earlier, the development of a peer-review process on a state, regional and/or national basis in order to improve the quality and consistency of JTPA's competency and assessment systems is a strategy worth exploring.

MOVING FROM PERFORMANCE TO QUALITY

What runs through the literature in each of these fields is the difficulty and ongoing challenge of improving performance management beyond the simplest (or crudest) approach to measuring performance. Despite the central importance of accurate data and record-keeping in the health care field, researchers estimate that 20 to 30 percent of hospital medical records are in error (Graham, 1982). Similarly, despite years of medical research, there are major gaps in the evidence linking specific treatments and outcomes; much of medicine, it would appear, is not substantiated by "scientific" evidence (Donabedian, 1982). As noted earlier, the corporate community still struggles to find a satisfactory mix of performance measures (Eccles, 1991), and acceptance of the validity and reliability of performance-based assessment is far from universal.

At the same time, several themes emerge that tend to reinforce many of the issues found in the literature on JTPA. The first is the importance of quality data as the foundation of any performance management initiative. Aphorisms, such as "you can't manage what you don't measure" and "what gets measured gets attention," reflect a basic truth: an investment in performance management without a concomitant investment in quality data is an exercise in futility.

A second theme is the involvement of professionals in the field as active developers of criteria and reviewers of performance. As the TQM gurus might suggest, participation of local providers and state and SDA staff in the evaluation of the training process and the development of criteria for quality represents a means of building their investment in quality systems and outcomes.

Both of these approaches cost money, which has often been a key limiting factor in JTPA's efforts to improve the quality of its systems. As such, the third and final point to be drawn from this review of "allied" systems is that the investment of any system in the measurement and management of performance appears to be proportional to the importance of high-quality outcomes. It may be that the first step toward improving JTPA's performance standards system should be an assessment of the costs of poor performance in employment and training. Once these costs are clear, so too may be the investments necessary to strengthen the system's approach to performance management.

VI. SUMMARY OF RECOMMENDATIONS

A number of recommendations have been made in the course of this paper, identifying issues for further research and development by DOL. The recommendations fall into four broad areas.

EVALUATION OF THE PERFORMANCE STANDARDS SYSTEM AND ALTERNATIVES

One theme of this paper is the relative absence of solid research on the performance standards system as it now stands, and of research into alternative standards and policies. Specific issues recommended for additional research and evaluation are:

1. Impact of revisions in performance. To what degree has the addition of the employability enhancement rate and the follow-up standards led to changes in the population served and the types of services offered? To what extent has the change in standards also led to improved or weakened outcomes? Finally, what impact has the relatively frequent change in standards since 1988 had on program management and the quality and effectiveness of services?
2. Alternative performance standards and policies. While the existing research provides some insight into the impact of the performance standards system as currently structured, little research has been conducted on alternative standards or policies. Several authors have recommended increased use of target-group standards to increase service to hard-to-serve groups, and standards for state-level management performance. Both options deserve investigation, particularly the target-group option should the proposed JTPA amendments fail to pass. Similarly, the research has left open the basic question of the relative effectiveness of standards versus other forms of performance management. Research into the uses of the incentive funds might point to relative advantages and disadvantages of performance standards as a means of governance.
3. Costs of quality. One of the primary recommendations of the TQM literature is to better evaluate the costs of quality. While JTPA's standards provide rough measures of success and failure, and in doing so average in some of the costs of failure, research into the costs of poor-quality training and/or inadequate or failed services would provide a cost baseline for decisions about quality improvements at both the national and state levels.

IMPROVING THE QUALITY OF DATA

A second major theme is the need to improve the quality of data used in managing and evaluating JTPA. As a number of the studies reviewed point out, the use of broad data categories and the lack of data on key characteristics and/or services severely limit the capacity of the performance standards system to adjust for local conditions or to guarantee consistency in reporting. Also, the limited and often inconsistent data available to the system hamper efforts to compare research across programs and settings and to cumulate research findings in support of specific conclusions. Finally, the TQM literature suggests that reliance on traditional outcome measures handicaps national and local efforts to assess and improve the quality of services, and that a broader array of process and quality measures should be developed.

One of the primary research recommendations, therefore, is to examine alternatives for improving the quality of JTPA performance standards data. Among the issues to be examined are: How can the quality and consistency of reported data be improved within the current JTPA reporting process? What are the feasibility, costs and benefits of developing (with substantial field involvement) a classification system for employment and training to ensure consistency in definition of participant characteristics, employment barriers, services and outcomes? What types of "process" and "quality" measures might be appropriate for use in the employment and training system at the federal, state and local levels?

STRENGTHENING SKILLS MEASURES AND COMPETENCY SYSTEMS

A third critical area for improvement is the strategies and tools for assessing and teaching basic employability skills. While JTPA has left much of the development of youth competency systems to local discretion, evaluators of local competency systems, as well as the growing importance of skills attainment as an outcome, suggest that a more active federal role is required. Two major recommendations are made to improve the quality of performance management in regard to employability competencies:

1. Explore federal support for competency system development. One of the clear conclusions from the forthcoming evaluation is that few SDAs have the capacity to research and develop employability competency systems that are appropriate for today's skills and that operate effectively and reliably. Consequently, DOL should explore funding the development and piloting of a series of such systems, including definitions of needed skills, appropriate performance-based assessment strategies, curricula and instructional approaches. These systems might be disseminated through a national replication effort and/or be offered as an option for local use much as the DCL adjustment model is made available.

2. Explore establishment of a peer-review system for local programs. In support of the development of "model" employability competency systems, DOL should also explore the feasibility of establishing a formal peer-review structure within JTPA aimed at developing standards and criteria for local programs, reviewing local services for quality of care, and evaluating or certifying consistent use of new or existing competency systems.

REFINING THE PERFORMANCE STANDARDS MODEL

The final set of recommendations is aimed at continued "fine tuning" of the existing performance standards model. Two recommendations stand out:

1. Examine the feasibility of developing regional adjustment models and/or providing support for development of state-based models. The research in Region V into state-based adjustment models demonstrates the improved accuracy and flexibility over the national model of both state models based on individual-level data and regional models using aggregate data. As a means of ensuring that model adjustments are appropriate and best reflect local circumstances, DOL should explore the feasibility of using regional adjustment models and/or supporting development of additional state-based models.

2. Examine the feasibility of provider adjustment models. One of the points made in several of the studies is the relative absence of adjustments in provider contracts to reflect service mix or increased service to hard-to-serve populations. DOL should examine the technical and policy options for providing adjustments to providers and involving them more directly in the performance management process.

APPENDIX

**Table A-1
SUMMARY OF ESTIMATED IMPACTS OF STATE PERFORMANCE STANDARDS POLICIES
ON PERCENTAGE OF JTPA TERMINEES WITH VARIOUS CHARACTERISTICS***

Adults						
	Welfare Recipients	Dropouts	Minorities	Females	Other Barriers to Employment	55 Years and Older
Use of DOL Adjustment Model	Increased Services	Increased Services				
Adjustment Procedures Specified in Policy			Increased Services		Decreased Services	
Emphasis on Exceed- ing Standards	Decreased Services		Decreased Services			Decreased Services
Use of 6 Percent Funds for Hard-to- Serve	Increased Services			Decreased Services	Increased Services	
State Policy for Serving Client Group	Increased Services	Increased Services				Increased Services
Incentive Weight on Cost Per Entered Em- ployment Standard	Decreased Services	Decreased Services				
Incentive Weight on Wage Standard		Decreased Services			Increased Services	Increased Services
Incentive Weight on Welfare Standard						

Table A-1 (continued)
SUMMARY OF ESTIMATED IMPACTS OF STATE PERFORMANCE STANDARDS POLICIES
ON PERCENTAGE OF JTPA TERMINEES WITH VARIOUS CHARACTERISTICS^a

Youth							
	Welfare Recipients	Dropouts	In School	Minorities	Females	Other Barriers to Employment	Ages 18 to 21
Use of DOL Adjustment Model						Increased Services	
Adjustment Procedures Specified in Policy	Increased Services			Increased Services			
Emphasis on Exceeding Standards	Decreased Services		Decreased Services	Decreased Services			Increased Services
Use of 6 Percent Funds for Hard-to-Serve	Increased Services	Decreased Services	Increased Services		Decreased Services		Decreased Services
State Policy for Serving Client Group							
Incentive Weight on Cost Per Positive Termination Standard	Decreased Services	Decreased Services				Decreased Services	
Incentive Weight on Employment Rate Standard	Decreased Services	Increased Services	Decreased Services			Decreased Services	

Source: Dickinson, et al., 1988:45-46.

^a Empty cells indicate no statistically significant impact.

**Table A-2
SUMMARY OF ESTIMATED IMPACTS OF STATE PERFORMANCE STANDARDS POLICIES
ON PERCENTAGE OF JTPA SERVICES IN VARIOUS PROGRAM ACTIVITIES^a**

Adults					
	Job Search Assistance	Basic Skills Training	Classroom Occupational Skills Training	On-the-Job Training	Average Length of Participation
Use of DOL Adjustment Model					Increased
Adjustment Procedures Specified in Policy	Decreased	Increased			Decreased
Emphasis on Exceeding Standards		Decreased	Increased		
Use of 6 Percent Funds for Hard-to-Serve		Decreased	Increased		
State Policy for Serving Welfare Recipients		Increased		Decreased	
State Policy for Serving Dropouts	Increased			Decreased	Increased
Incentive Weight on Cost Per Entered Employment Standard					Increased
Incentive Weight on Wage Standard			Increased	Decreased	

Table A-2 (continued)
SUMMARY OF ESTIMATED IMPACTS OF STATE PERFORMANCE STANDARDS POLICIES
ON PERCENTAGE OF JTPA SERVICES IN VARIOUS PROGRAM ACTIVITIES^a

Youth							
	Job Search Assistance	Basic Skills Training	Classroom Occupational Skills Training	On-the-Job Training	Work Experience	Try-Out Employment	Average Length of Participation
Use of DOL Adjustment Model	Decreased						
Adjustment Procedures Specified in Policy							Decreased
Emphasis on Exceeding Standards	Decreased	Decreased	Increased				Decreased
Use of 6 Percent Funds for Hard-to-Serve		Decreased					
State Policy for Serving Welfare Recipients		Increased					
State Policy for Serving Dropouts	Increased				Decreased		Increased
Incentive Weight on Cost Per Positive Termination Standard	Increased						
Incentive Weight on Employment Rate Standard							

Source: Dickinson, et al., 1988:78-81.

^a Empty cells indicate no statistically significant impact.

REFERENCES

- American Psychiatric Association
1980 Diagnostic and Statistical Manual of Mental Disorders. Washington, D.C.:
American Psychiatric Association.
- American Society for Training and Development and U.S. Department of Labor
WorkPlace Basics: The Skills Employers Want. Washington, D.C.:
American Society for Training and Development and U.S. Department of
Labor.
- Bailey, Thomas R.
1988 "Market Forces and Private Sector Processes in Government Policy: The
Job Training Partnership Act." Journal of Policy Analysis and
Management, 7(2):300-315.
- Baj, John and Trott, Charles E.
1988 "State-Based Performance Standards Models for JTPA." Washington, D.C.:
National Governors' Association.
- Barnow, Burt S.
1990 "The Effects of Performance Standards on State and Local Programs:
Lessons for the Job Opportunities and Basic Skills Program." Conference
paper. Madison, WI: University of Wisconsin-Madison, Institute for
Research on Poverty.
- Berwick, Donald and Knapp, Maria
1987 "Theory and Practice for Measuring Health Care Quality." Health Care
Financing Review, Annual Supplement: 49-55.
- Berwick, Donald; Godfrey, A. Blanton; Roessner, Jane
1991 Curing Health Care: New Strategies for Quality Improvement. San
Francisco: Jossey-Bass Publishers.
- Binner, Paul R.
1986 "DRGs and the Administration of Mental Health Services." American
Psychologist, 41(1):64-69.

Borus, Michael E.

1978 "Indicators of CETA Performance." Industrial and Labor Relations Review, 32:1-14.

Center for Human Resources

1991(a) "Focusing on Employability: The Michigan Employment Skills System." Youth Programs, Summer: 1-10.

Center for Human Resources

1991(b) "Assessing Skills Through Performance." Youth Programs, Summer: 11-14.

Center for Human Resources

1991(c) "Performance Assessment: Examples From the Field." Youth Programs, Summer: 15-17.

Center for Human Resources

1989 Working It Out: An Anthology of State and Local Performance Management Strategies Designed to Increase Services to Youth At Risk of Chronic Unemployment. Waltham, MA: Brandeis University, Center for Human Resources.

Commission on the Skills of the American Workforce

1990 America's Choice: High Skills or Low Wages. The Report of the Commission on the Skills of the American Workforce. Rochester, NY: National Center on Education and the Economy.

Dickinson, Katherine; West, Richard; Kogan, Deborah; Drury, David; Franks, Marlene; Schlichtmann, Laura; Vencill, Mary

1988 Evaluation of the Effects of JTPA Performance Standards on Clients, Services, and Costs. Washington, D.C.: National Commission for Employment Policy.

Dobyns, Lloyd and Crawford-Mason, Clare

1991 Quality or Else: The Revolution in World Business. Boston: Houghton-Mifflin.

Donabedian, Avedis

1982 "The Quality of Medical Care" in Graham, Nancy (ed.) Quality Assurance in Hospitals: Strategies for Assessment and Implementation. Rockville, MD: Aspen Systems Corporation.

Eccles, Robert G.

1991 "The Performance Measurement Manifesto." Harvard Business Review, January-February: 131-137.

Eggers, Paul W.

1987 "Prospective Payment System and Quality: Early Results and Research Strategy." Health Care Financing Review, Annual Supplement: 29-37.

Ellwood, Paul M., et al.

1973 Assuring the Quality of Healthcare. Minneapolis, MN: Interstudy.

Figeron, Jose and Ganzglass, Evelyn

1988 Using JPTA Performance Standards as a State Policy Tool. Washington, D.C.: National Governor's Association.

Friedlander, Daniel

1988 Subgroup Impacts and Performance Indicators for Selected Welfare Employment Programs. New York: Manpower Development Research Corporation.

Friedlander, Daniel and Long, David

1987 A Study of Performance Measures and Subgroup Impacts in Three Welfare Employment Programs. New York: Manpower Demonstration Research Corporation.

Gay, Robert and Borus, Michael E.

1980 "Validating Performance Indicators in Employment and Training Programs." Journal of Human Resources, 15:30-48.

Geraci, Vincent J.

1984 "Short-Term Indicators of Job Training Program Effects on Long-Term Participant Earnings." Austin, TX: University of Texas-Austin, Center for Economic Research.

Graham, Nancy

1982 "Historical Perspective and Regulations Regarding Quality Assessment" in Graham, Nancy (ed.) Quality Assurance in Hospitals: Strategies for Assessment and Implementation. Rockville, MD: Aspen Systems Corporation.

- Guterman, Stuart and Dobson, Allen
1986 "Impact of Medicare Prospective Payment System for Hospitals." Health Care Financing Review, 7(3):97-114.
- Haney, Walter and Madaus, George
1989 "Searching for Alternatives to Standardized Tests: Whys, Whats, and Withers." Phi Delta Kappan, May.
- Jennison, Kathleen
1992 "Total Quality Management--Fad or Paradigmatic Shift?" in Couch, J.B. (ed.) Health Care Quality Management for the 21st Century. Forthcoming.
- Jennison, Kathleen and Jordan, Harmon
1991 "A Quality Information System for Health Care TQM." Presented at the Juran Institute Conference, Atlanta. Brookline, MA: Harvard Community Health Plan.
- Job Training Partnership Act Advisory Committee
1989 Working Capital: JTPA Investments for the 90s. Washington, D.C.: U.S. Department of Labor.
- Johnston, Janet W.
1987 The Job Training Partnership Act: A Report by the National Commission for Employment Policy. Washington, D.C.: National Commission for Employment Policy.
- Johnston, William B. and Packer, Arnold
1987 Workforce 2000: Work and Workers for the 21st Century. Indianapolis, IN: Hudson Institute.
- King, Christopher T.
1988 Cross-Cutting Performance Management Issues in Human Resource Programs. Washington, D.C.: National Commission for Employment Policy.
- King, Christopher T. and Pittman, Laura L.
1987 Performance Standards in Job Training and Job Placement Programs. Washington, D.C.: National Association of Counties.

Laventhol and Horwath

1988 Using Performance Management to Achieve Quality Program Results. Washington, D.C.: National Commission for Employment Policy.

Levitan, Sar A. and Gallo, Frank

1988 A Second Chance: Training for Jobs. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Lohr, Kathleen

1985 Peer Review Organizations: Quality Assurance in Medicare. Prepared for the Office of Technology Assessment. Santa Monica, CA: Rand Corporation.

Millon, Theodore

1983 "The DSM-III: An Insider's Perspective." American Psychologist, July: 804-814.

National Association of Counties, National Governors' Association and National Association of Private Industry Councils

1986 Beyond the Model: An Approach to Negotiating JTPA Performance Standards. Washington, D.C.: National Association of Counties.

National Commission for Employment Policy

1990 Training Hispanics: Implications for the JTPA System. Washington, D.C.: National Commission for Employment Policy.

National Commission on Excellence in Education

1983 A Nation At Risk: The Imperative for Education Reform. Washington, D.C.: U.S. Government Printing Office.

National Commission on Testing and Public Policy

1990 From Gatekeeper to Gateway: Transforming Testing in America. Chestnut Hill, MA: Boston College, National Commission on Testing and Public Policy.

Resnick, Lauren B. and Resnick, Daniel

1989 Assessing the Thinking Curriculum: New Tools for Education Reform. Prepared for the National Commission on Testing and Public Policy. Pittsburgh, PA: University of Pittsburgh, Learning Research and Development Center.

- Ridgeway, V.F.
1956 "Dysfunctional Consequences of Performance Measures." Administrative Science Quarterly, Vol. 1.
- Rodriguez, Alex R.
1983 "Psychological and Psychiatric Review at CHAMPUS." American Psychologist, August: 941-947.
- Rubin, Mary and Zornitsky, Jeff
1988 Serving AFDC Recipients: Initial Findings on the Role of Performance Standards. Washington, D.C.: National Commission for Employment Policy.
- Sandell, Steven H. and Rupp, Kalman
1988 Who is Served in JTPA: Patterns of Participation and Intergroup Equity. Washington, D.C.: National Commission for Employment Policy.
- Secretary's Commission on Achieving Necessary Skills
1991 What Work Requires of Schools: A SCANS Commission Report for America 2000. Washington: D.C.: U.S. Department of Labor.
- SRI International and Berkeley Planning Associates
1990 Developing Effective JTPA Performance Standards Incentive Policies: A Technical Assistance Guide. Washington, D.C.: National Commission for Employment Policy.
- Strumpf, Lori
1991 "Speech [on TQM] to the North Central Indiana Annual Dinner," October 4, 1991. Washington, D.C.: Center for Remediation Design.
- Strumpf, Lori
1988 "Program Standards: A New Chance for Employability." Youth Programs, Spring: 8-15.
- Strumpf, Lori
1986 A PIC Member's Guide to Performance Standards: A Framework for Success. Washington, D.C.: National Association of Private Industry Councils.

Svenson, Ray and Brown, Mark G.

1990 "What Total Quality Management: Really Means." Prepared for the Journal for Quality and Participation. Naperville, IL: Svenson and Wallace.

Trott, Charles E. and Baj, John

1987 Development of JTPA Title II-A Performance Standards Models for the States of Region V. DeKalb, IL: Northern Illinois University, Center for Governmental Studies, Human Resource Policy Program.

U.S. Department of Labor

1990(a) Guide for Setting JTPA Title II-A and Title III Performance Standards for PY 1990. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.

U.S. Department of Labor

1990(b) "Job Training Partnership Act: Proposed Performance Standards for Program Years (PY) 1990 and 1991." Federal Register, 55(4):514-517.

U.S. Department of Labor

1990(c) "Job Training Partnership Act: Titles II-A and III Performance Standards for Program Years (PY) 1990-91." Federal Register, 55(72):7252-7256.

U.S. Department of Labor

1989 "Performance Standards for PY 1990 and Beyond: Summary of Technical Issues and Options." Washington, D.C.: U.S. Department of Labor, Employment and Training Administration, Adult and Youth Performance Standards Unit.

U.S. Department of Labor

1988(a) Guide for Setting JTPA Title II-A Performance Standards for PY 1988. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration, Office of Strategic Planning and Policy Development.

U.S. Department of Labor

1988(b) "JTPA Annual Status Report Instructions for PY 1988." Federal Register, 53(44):7256.

U.S. Department of Labor

1988(c) "Job Training Partnership Act: Performance Standards for Program Years (PY) 1988-89." Federal Register, 53(44):7252-7256.

U.S. Department of Labor
1988(d) - "Job Training Partnership Act: Review of Experience." Federal Register, 53(156):30483-30490.

U.S. Department of Labor
1987 "Job Training Partnership Act: Proposed Performance Standards for Program Year (PY) 1988." Federal Register, 52(241):47771-47774.

U.S. Department of Labor
1986 "Issues in Establishing Performance Standards for JTPA Title II-A Youth Programs for PY 1986." Washington, D.C.: U.S. Department of Labor, Office of Performance Management and Evaluation, Adult and Youth Standards Unit.

U.S. Department of Labor
1984 "Performance Standards for PY 1984." Federal Register, 49(22):4052-4056.

U.S. Department of Labor, Office of Inspector General
1990 Semiannual Report, October 1, 1989-March 31, 1990. Washington, D.C.: U.S. Department of Labor, Office of Inspector General.

U.S. Department of Labor, Office of Inspector General
1989 Semiannual Report, April 1-September 30, 1989. Washington, D.C.: U.S. Department of Labor, Office of Inspector General.

U.S. General Accounting Office
1991 Job Training Partnership Act: Inadequate Oversight Leaves Program Vulnerable to Waste, Abuse, and Mismanagement. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office
1990(a) Job Training Partnership Act: Youth Participants: Characteristics, Services, and Outcomes. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office
1990(b) Management Practices: U.S. Companies Improve Performance Through Quality Efforts. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989 Job Training Partnership Act: Services and Outcomes for Participants with Differing Needs. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1987 Youth Job Training: Problems Measuring Attainment of Employment Competencies. Washington, D.C.: U.S. General Accounting Office.

U.S. House of Representatives

1982 Job Training Partnership Act: Conference Report, Report No. 97-889. Washington, D.C.: U.S. Government Printing Office.

U.S. House of Representatives, Committee on Education and Labor

1982 Job Training Partnership Act: Report, Report No. 97-537. Washington, D.C.: U.S. Government Printing Office.

Zornitsky, Jeffrey and Rubin, Mary

1988 Establishing a Performance Management System for Targeted Welfare Programs. Washington, D.C.: National Commission for Employment Policy.

Zornitsky, Jeffrey, et al.

1986 Establishing a Post-Program Performance Management System for Employment and Training Programs. Cambridge, MA: Abt Associates.

THE MISSION AND STRUCTURE OF NATIONAL HUMAN RESOURCE POLICY FOR DISADVANTAGED YOUTH:

A Synthesis with Recommendations

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I. INTRODUCTION

This paper describes the evolution of our national system of job training and education for disadvantaged youth, culminating in the Job Training Partnership Act (JTPA). It looks at how the system is organized; its basic mission; and the series of relationships among federal, state and local entities that affect how schools, employers, community groups and job training agencies work together and separately to deliver services at the local level. By focusing on the organizational elements of the present youth-serving system and how those elements can affect the quality of local services, the paper identifies what is known and not known about the effectiveness of the present system; describes possible new policy directions; and illustrates how gaps in our knowledge might be filled by new research, demonstrations and evaluations sponsored by the U.S. Department of Labor (DOL).

As this paper is written, amendments have been submitted in Congress to improve JTPA and shore up fiscal and management problems that have been revealed not only by internal audits conducted by DOL, but by outside watchdog agencies and commentators as well. These amendments include various proposals that would alter the services provided to disadvantaged youth--possibly affecting the payments service providers receive, targeting, allocation formulae, contracting techniques, and even the termination of the enabling legislation itself through new "sunset" provisions (Gainer, 1986; DOL, 1989, 1991a; U.S. General Accounting Office, 1989a).

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In addition, other bills have recently passed (such as the National and Community Service Act of 1990), are pending or are likely to be submitted that will affect policy on apprenticeship, the school-to-college link and vocational education. Also, some in Congress are considering new legislation to link services covered in non-JTPA youth initiatives or to coordinate the activities that are now divided between DOL and the Department of Education. Finally, with the coming elections, advocacy and public interest groups will likely generate new proposals for youth legislation apart from the JTPA framework.

With all this legislative activity, we believe it is an especially useful time to consider the roots of the youth components of JTPA, review their historical origins, and identify relevant lessons from allied fields and the experience of other countries. This review will become especially relevant if Congress or the administration succeeds in introducing sunset provisions to the present JTPA system. Such a change would warrant a full-scale review of the basic JTPA system and an examination of such questions as whether a dedicated youth program should be created within existing legislation or should reside separately.

This paper is intended to provide a framework and a way of thinking about these knowledge development opportunities. The purpose is not to advocate a particular constellation of national human resource policies for "at-risk" youth but rather to help frame future discourse and stimulate new investments in knowledge development.

The paper develops two central points. The first is that the very structure of our national human resource system has profound impacts on the quality of local service delivery; thus the structure and mission of youth manpower policy must be examined periodically to ensure that national goals are being adequately met. This point may seem obvious until one realizes that most policy development in this field is aimed at shoring up parts of the present system rather than considering how all the pieces fit together or how alternatives to the system might work. The second point builds on the first--that new knowledge development investments should at least partially be informed by "comparative public policy" analysis. This type of analysis would draw insights from developments in other domestic social policy spheres as well as international experiences of interest.

The paper's framework is drawn from the political science field. The framework reflects the choices national governments make with respect to four factors: (1) the scope of particular social welfare policies, in this case youth human resource policy; (2) the distribution of services; (3) the policy instruments used by the national government; and (4) the degree to which the central government balances restraint with a willingness to innovate.

II. YOUTH EMPLOYMENT AND TRAINING IN THE MODERN ERA

A flood of youth-oriented human resource legislation and programs has risen in the United States since the New Deal, but many observers contend that neither legislators nor programmers have been clear or consistent about the purpose of employment and training policy for youth. At the national level, confusion has led to a proliferation of programs that often have contradictory aims; at the local level, there has been disagreement among and between practitioners and policymakers regarding fundamental policy questions, such as who should decide what segment of the youth population to serve and how best to serve them.

The U.S. General Accounting Office (GAO) quotes the enabling JTPA legislation as saying that the act was intended to provide training programs to "economically disadvantaged individuals and other individuals facing serious barriers to employment," but goes on to characterize the legislation as providing "only general guidance on how the program is to be targeted among this large eligible population" (1990a:12). The JTPA Advisory Committee (DOL, 1989) acknowledges the "looseness" in the basic mission statement of JTPA and the degree of discretion local entities have in deciding which services should be delivered to which populations. However, many state government representatives and local practitioners have resisted a stronger federal hand in setting targeting requirements or performance standards that ultimately affect the choice of services delivered to target groups.

Some scholars have suggested that there has always been a gap between the theoretical underpinnings of U.S. manpower policy and the institutions that have been developed in response to national and local human resource needs. Consider economist Osterman's (1988) review of the history of job training programs.

Osterman describes how one school of thought among economists in the 1950s and early 1960s led to the Manpower Development and Training Act (MDTA) of 1962. That school anticipated significant "structural unemployment," unemployment caused by technical changes in the economy that make the skills of some workers obsolete. MDTA was passed to help these workers acquire new skills in the face of rapidly changing workplace technology.

Other economists disagreed, stating that the so-called "skills mismatch" would largely take care of itself if the economy grew and labor markets performed well. This "human capital" school of economists had a simple and straightforward idea: poverty was caused by low levels of education and training; therefore, if people could have their skills upgraded, they would be rewarded by finding well-paying jobs in the labor market. With periods of low unemployment in the middle to late 1960s, this school gained prominence

and the countercyclical approach of MDTA was gradually transformed to fit their theory of human capital formation. Beginning with the War on Poverty programs, the human capital school was enshrined in federal approaches to low-income workers and youth. The programs were created to provide poor young people with remedial education, labor market preparation, skills training and other "supply-side" interventions.

Osterman concludes his brief history with the sobering observation that poor and marginal results from many of these programs and an ideological attack on the modern welfare state have combined to discredit the antipoverty and human capital approaches to skills upgrading. While he describes the present era as still dominated by human capital approaches to youth development, he also sees the country searching for a new theory that would help explain such phenomena as the existence of low-wage working poor and jobless youth locked in neighborhoods of concentrated poverty. Those who allege failure of human capital approaches are not drawn exclusively from one political wing or another. In fact, the limitations of the human capital approach have been cited by some as a call for less government (e.g., Murray, 1984) and by others as evidence of a need for a more comprehensive approach to youth problems, starting with a strong prevention component (e.g., W.T. Grant Foundation, 1988b).

In our assessment of the effects of changes in the manpower system on the organization of programs, the relationships among federal, state and local communities, and the quality of local service delivery, we attempt to address a primary question: Has new legislation radically altered previous delivery systems or has the "system" evolved logically through a progression of steps, each building on the other, leading to consistency in local operations? We argue that, despite the weak theoretical underpinnings of the system and notwithstanding rampant disagreement in the field about even the most basic structural questions (e.g., who should decide who should be served and how), the characterization of a logically developing system is largely accurate.

Despite the gaps between theory and institutional responses, there has been remarkable consistency in the ideology and organizational shape of American youth training policy. This consistency is reflected in five major ways:

- There has been an unwavering belief that employment and training are private matters, best left to individuals and the marketplace. It follows then that the organization of manpower policy has not actively intervened with the private side of the labor market. Supply-side policies focused on changing clients have dominated youth development policy.
- There is an associated belief that government should step in only when unusual circumstances dictate its presence. This involvement is then seen as transitory,

rather than as part of the permanent public policy landscape. Empowered by the notion that manpower policy should be dynamic and responsive, administrations have felt free to alter the system every four years. Serious consideration of a permanent youth training policy has not developed.

- Youth programs have been add-ons and adjustments to a delivery system originally created for adults, sometimes with inappropriate results.
- Fragmentation of responsibility at the federal level has been a cornerstone of federal youth policy.
- Since MDTA, youth programs have generally been locally managed and federally funded. Even in the New Deal era, the federal government deferred to the states and local governments for assistance aimed at the subset of the needy who were thought to be persistently poor. As for private sector involvement in job training, it has grown gradually rather than dramatically, starting with the Comprehensive Employment and Training Act (CETA).

All these themes are developed in the brief historical overview of youth programming that follows.

The modern era of youth employment and training policy has its roots in the New Deal. At that time, the most dramatic market failure of this century, if not in the history of our country, had set off the Great Depression, a period when unemployment rose to almost 25 percent. The federal government responded with massive public works and income-support programs that bolstered the economic security of a large number of American families.

It is important to consider that the New Deal programs that were put into place as a result of the Great Depression primarily helped the mainstream working population. Some writers (Bullock, 1985; Levitan and Taggart, 1976) have commented that the New Deal initiatives were only marginally helpful to African Americans. Equally important, the federal government relegated responsibility for the able-bodied, chronically dependent population (what we would call today the population served by work-welfare programs) to state and local governments. The National Conference on Social Welfare (1985:18) cites the committee responsible for drafting the Social Security legislation of the New Deal era (emphasis added):

"With the federal government carrying so much of the burden for pure unemployment, the state and local government we believe should assume responsibility for relief. The families that have always been partially or

wholly dependent on others for support can best be assisted through the tried procedures of social case work, with its individualized treatment."

"The families that have always been partially or wholly dependent on others for support" is a good description of the chronically unemployed--a group that became the major target population of federally funded employment and training programs developed during the Great Society era. This expansionary period (1961-1973) was the start of the modern era of federally funded employment and training programs--a period typified by a strong federal role and the development of diverse and broadly based employment and manpower development programs for the structurally unemployed (Haveman, 1977; Levitan and Taggart, 1976; Mangum, 1973).

This period was followed by the CETA period (1973-1981). The CETA decade was characterized by an attempt to consolidate and decentralize the diverse federal employment and training programs developed in the 1960s, and by the proliferation of counter-cyclical public service employment (PSE) to accommodate a large influx of new entrants into the labor market during a time of slow economic growth.

Following CETA, manpower policy entered the present JTPA period (1981 to the present). This period has been characterized by a significant cutback in federal funding, primarily due to the elimination of PSE, by the transfer of substantial administrative responsibility from the federal government to state and local governments, and by a renewed emphasis on private mechanisms to correct market failures.

Throughout this history, the target groups shifted along with changes in federal manpower policy. We noted earlier that in the early 1960s, policymakers at the national level began to address the problems of the chronically unemployed: those who experience long-term unemployment or underemployment even in times of economic prosperity. This expansionary period of the 1960s was highlighted in 1962 by the passage of MDTA, which was designed to retrain experienced workers displaced by technological change. By 1963, however, youth unemployment was becoming a special concern, as youth joblessness rose to three times the national average. Black youth unemployment was more than twice the national average for youth, and many older unemployed workers were lacking basic skills. Youth training and basic literacy training were therefore added to the MDTA mission. But it is important to consider that these enrichments were seen as an afterthought or as a temporary adjustment to a response originally crafted for adults.

By 1966, MDTA had become part of the War on Poverty, which was launched by President Lyndon Johnson in 1964. Sixty-five percent of MDTA training positions had to be filled by the disadvantaged, defined as a person with two or more of the following

characteristics: nonwhite, not a high school graduate, unemployed for at least 15 weeks, under age 22 or over age 44, and handicapped or a recipient of public assistance.

The centerpiece of the War on Poverty was the Economic Opportunity Act, which established three employment and job training programs for youth. The Job Corps provided disadvantaged 16- to 21-year-olds with occupational skills training, remedial education health care and counseling in a residential setting for up to two years. The Job Corps, of course, has endured to the present day. The Neighborhood Youth Corps (NYC) provided subsidized summer and year-round community jobs for low-income youth. This subsidized jobs strategy for youth later flourished under CETA but was greatly curtailed under JTPA, except for the summer jobs component, which today has become the largest American youth program, the Summer Youth Training and Employment Program. Interestingly, a Work/Study program was also set up during this era to help college youth from poor families. Today, the latter emphasis has remained with the federal education bureaucracy (the TRIO programs) rather than with DOL, whose current programs are largely concerned with the school-to-work transition rather than the school-to-school approach.

Where did responsibility and accountability lie during the expansionary period of youth programming? The 1960s generated many diverse new initiatives primarily aimed at helping the disadvantaged worker overcome labor market difficulties. Responsibility and administration of the various programs were, from the outset, scattered throughout different federal government agencies. For example, the Office of Equal Opportunity had been given responsibility for the Job Corps, Head Start and the Community Action Program. DOL had responsibility for NYC and MDTA. The Department of Health, Education and Welfare had responsibility for the various educational initiatives. Among the major challenges today is making coordinated strategies work at the federal, state and substate levels--a task necessitated by the piecemeal approach crafted by early human resource planners.

Not surprisingly, one goal of the Nixon administration, which assumed office in 1969, was to consolidate and decentralize the complex network of employment and training programs created in the 1960s. Pressed by the recession of 1970-71, the administration's attention was initially directed to the Emergency Employment Act of 1971, which established a Public Employment Program (PEP). PEP funded jobs with state and local governments and nonprofit organizations. With substantial federal funds for jobs available under PEP, mayors and governors placed a high priority on controlling employment and training resources. The term public service employment (PSE) first came into widespread use at this time, and PSE was carried over into the consolidation effort, CETA.

CETA became law in December 1973 as a locally managed, federally funded training and PSE program. In this respect, CETA was similar to JTPA, which replaced it. Title I of CETA authorized funds for training programs: classroom training, on-the-job training (OJT) and work experience. Titles II-D and VI of CETA provided for PSE.

The Carter administration and Congress authorized a major expansion of PSE slots in 1977-78. The additional funding, most of which was targeted to the countercyclical Title VI program, increased job slots from 310,000 to 725,000. In fiscal year 1980, approximately \$3.8 billion, or 41 percent of CETA's \$8.9 billion in outlays, went to PSE. In all, the PSE components of CETA served more than 3 million participants from 1973 to 1981, with outlays of \$26.5 billion. Although the majority of CETA funds went to training youth and adults, the PSE component of the program received the lion's share of publicity, much of it bad.

In 1977, the Youth Employment and Demonstrations Project Act (YEDPA) was enacted, greatly expanding funding for training and employment of youth (Hahn and Lerman, 1984; Betsey, et al., 1985). The Carter administration also implemented measures to encourage private expansion of jobs through the New Job Tax Credit in 1977 and the Targeted Jobs Tax Credit in 1978. The latter, greatly underutilized, was aimed at helping certain categories of young and adult workers (National Commission for Employment Policy, 1981).

In 1978, CETA was amended to encourage greater private sector involvement. The Private Sector Initiatives Program called for the development of Private Industry Councils (PICs) to advise prime sponsors (the operators of CETA programs) on existing programs, to develop and administer new training programs, and to improve the links between the CETA system and the private sector, aimed at stimulating private hiring of CETA eligibles. The legislation mandated that a majority of PIC members be from the private sector. Additional PIC members included labor unions, educational institutions, community-based organizations, employment services, and other federal and local agencies. The private sector initiatives begun in the employment and training area under the Carter administration were intensified under the Reagan administration.

Federal funding of employment and training programs was cut back drastically in the 1980s, primarily because of the elimination of all PSE in 1981. In October 1982, during a period of economic recession, CETA was replaced by JTPA, primarily a preemployment program, featuring job search instruction, job placement, and short-term vocational and skills training. Under JTPA, there are limited work experience components, in contrast to its predecessor, CETA, which had a strong public work experience dimension. JTPA's first-year appropriation was \$3.7 billion, far short of CETA's \$8.1 billion appropriation in 1980.

On the administrative front, JTPA transferred substantial federal administrative responsibilities to the states, but retained federal responsibility for financing, monitoring and technical assistance. JTPA requires states to establish a State Job Training Coordinating Council to recommend the coverage of service delivery areas (SDAs), plan the coordination of services, review local plans, adapt performance standards to state needs and make annual reports to the governor.

Other state functions involve administration of the performance management system, including oversight to ensure compliance with federal laws and mandates. The role of the private sector was enhanced by assigning PICs, which are dominated by private business, the responsibility of working with local government officials to distribute JTPA training funds and decide, within federal parameters, who should be served by local service providers.

The entire JTPA system, including the youth components, came under review in 1989. The JTPA Advisory Committee (DOL, 1989) examined and endorsed the JTPA human resource framework, but made 28 recommendations for improving the system so it could better address the training needs of the 1990s and the next century. Seven were considered key:

- Target the program more directly to disadvantaged persons with multiple barriers to employment, especially serious skills deficiencies.
- Individualize and substantially intensify the quality of services provided.
- Realign the services currently authorized for youth into a new, consolidated year-round program title with increased funding.
- Redesign outcome measures to reflect more accurately the program's goal of increasing the long-term economic self-sufficiency of participants.
- Substantially relax program constraints to increase the responsiveness of the system and to improve its capacity for effectively serving participants with serious barriers to employment.
- Increase the productivity of the system by undertaking a major training and research effort to improve program quality and build the capacity of staff who administer and deliver the program at the state and local levels.

- Create expanded public/private partnership arrangements to achieve linkages between JTPA and other human resource programs in order to serve a larger proportion of the eligible population more effectively with a broader range of services.

III. UNDERSTANDING AMERICAN YOUTH EMPLOYMENT AND TRAINING POLICY: A FRAMEWORK

Political scientists offer many analytic frameworks for studying national policies. The framework of Heidenheimer, et al., (1983) is particularly useful for the youth manpower system. They describe a four-factor framework beginning with choices of scope, i.e., the dividing line governments establish between public and private responsibilities. In the American human resource field, for example, we have chosen as our public responsibility to assist low-income youth, but only in ways that minimize interference with labor markets. Participation in the private economy is seen as a private choice made by young people; markets, in the American context, are best left alone and unfettered.

The next factor in the Heidenheimer, et al., framework involves choices of distribution, which refers to the many questions of fairness, equity and efficiency implicit in all policy formulations. Good examples in JTPA are the law's provisions for targeting economically disadvantaged youth, and the funding formula that distributes funds based partly on local unemployment levels. Do these criteria work, in terms of equity, when poor people are crowded in neighborhoods of persistent poverty? How does income testing work in school settings--the single largest provider of JTPA youth services--when there is reluctance to determine income eligibility? What happens when many youth are just over the income notch of eligibility? What about the reputation of JTPA as a system that "creams," i.e., chooses to serve only the most able of the eligibles? These are all issues of distribution.

Consider the third factor, choices of policy instruments, the tools governments choose for their policy interventions. In the United States, we rely on a complex set of relationships among federal authorities, governors, state coordinating councils, local PICs, SDAs and the vendors who actually deliver services (such as schools, community-based organizations, community colleges and private firms). We use financial set-asides, mandates, performance standards and other policy instruments to make the partnerships work.

McDonnell and Elmore (1987) describe four general categories of policy instruments:

- Mandates, or "rules governing the action of individuals and agencies, intended to produce compliance." There are many examples of JTPA mandates, ranging from income eligibility requirements to performance-based contracting.
- Inducements, or the "transfer of money to individuals or agencies in return for certain actions." The 8 percent set-aside and special funds for coordinated strategies at the state level are examples of inducements.

- Capacity-building, or the transfer of funds for upgrading intellectual capital, human resources and materials. The DOL investment in technical assistance, practitioner-oriented dissemination and research are all elements of capacity-building.
- System-changing activities, or the "transfer of authority among individuals and agencies to alter the system by which public goods and services are delivered." This factor lies at the heart of what JTPA policymakers try to do when they support comprehensive youth initiatives at the local level, such as the multisite Youth Opportunities Unlimited demonstration, or when they promote coordination between the Family Support Act and JTPA.

The final factor in the Heidenheimer, et al., framework is choices of restraint and innovation. What is the balance between regulation (restraint) and innovation, experimentation and loosening of requirements? How do such questions, for example, translate into the roles and responsibilities DOL chooses for itself? How much should the federal government prescribe versus recommend; what is the balance between the roles of cheerleader and tough cop? In the decentralized JTPA system, in which federal-state relationships are often touchy, the balance between innovation and restraint often turns on issues of authority and interpretation of the federal/state role.

CHOICES OF SCOPE

Where is the dividing line between public and private responsibility in contemporary youth manpower policy? Is the publicly financed American system of employment and training services for youth big or small? Before trying to answer these questions, it is important to consider whether there even is an American job training system to describe.

Federal employment and training policy for youth is just one component in a broader array of human resource programs that encompass public education, especially the career education, counseling and guidance components of secondary schools; the separate vocational education system, with its recent amendments requiring state coordination and targeting of services to the lowest-income populations; higher education, especially community colleges and proprietary schools (not to mention the entire system of financial aid in the form of grants and loan programs); private training, which goes on daily in the workplace; work-welfare policy and programs; and community-based programs (GAO, 1990b; American Vocational Association, 1990). The "system" of job training for economically disadvantaged young people in the United States might be better characterized as a galaxy of planetary systems, each having its own unique history, policy debates, linkages with other systems and performance records.

For the majority of Americans, employment is a private matter between the individual and a private employer. Americans have a deeply felt belief that, excepting initial preparation for working by public education, the responsibility for developing manpower resources lies with individuals, their families and employers. Employer-based training activities therefore account for the bulk of training the existing work force. Estimates on money devoted annually to private training range as high as \$250 billion, with perhaps \$25 billion spent on young workers (Lynch, 1989; Carnevale and Gainer, 1989).

Despite these broad estimates, not much is known about the actual scale of youth training in the regular economy or the motivations of firms providing the training. Distinguishing between private and public training is itself a difficult task (for example, many proprietary schools enjoy public subsidies primarily but not exclusively through federal sources). Lynch (1989) has tried to derive reliable estimates of the numbers of young people who receive private training in the United States. Using the National Longitudinal Survey of Youth cohort (all youth who were between 14 and 21 years of age at the end of 1978) and restricting the sample to people who completed their schooling by the 1980 interview, she found that between 1978 and 1983, only one in four young Americans were involved in private training. This included a significant number who were involved in training that was provided off-site (for example, business colleges, barber or beauty schools, nurses programs and training institutes); a smaller number who were engaged in training at the job site; and a much smaller number who were in formal apprenticeship programs. Lynch finds that race and sex influenced the probability of receiving different types of training; she notes that women and nonwhites were much less likely to receive training within a firm, either through an apprenticeship or other forms of OJT. For example, only 2 percent of all nonwhite youth were in on-site private training, half the 4 percent figure for white youth.

Bartel (1989) has looked at formal employee training programs from a sample of 493 businesses to answer the question, "why do companies invest in training?" She finds that the "profit maximization" model reliably predicts which companies will provide training for workers and which will not: "Large companies, those introducing new technology, and those with a high proportion of internal promotion were more likely to have formal training programs" (1989:27). These findings help explain why only 6 percent of youth receive on-site training in the private sector. As the Holzer paper in this series shows,¹ most firms in the youth labor market are small, "low-tech" and offer few opportunities for advancement. Bartel concludes about both youth and adults that "if the goal is to ensure that virtually all American workers have the opportunity to participate in formal training programs at the worksite . . . there is not enough training" (1989:27). She suggests that

¹ See Holzer, this volume.

special incentives will be required to increase the perceived marginal return or to lower the marginal cost of training, if more widespread training is the goal.

Vaughan and Berryman (1989) disagree with this policy conclusion but not with the diagnosis of the problem. They argue that "further subsidies would increase rather than reduce inequities since those trained by employers are already relatively well-educated and economically advantaged. Further, employers train firm-specific skills that have limited use outside of the firm" (1989:4). With fundamental policy questions in dispute, such as whether or not to subsidize private training, there is a compelling case for more research and demonstration activity on the subject of private training and public incentives. We need to know whether subsidies can be targeted effectively to certain categories of young workers who would not otherwise receive training and whether government incentives change employer practices and result in economic payoffs to employers.

If the amount of private training of young people is limited, the public side of the American youth training system is even more marginal, in terms of the size of federal funding and the ability of the system to reach those in need.

The GAO (1990a) reports that in fiscal year 1989, DOL operated nine youth programs with a total of \$3.8 billion, most of them under JTPA. This is a tiny figure in relation to the entire federal budget, representing not even one-quarter of 1 percent. It is altogether insignificant in terms of gross national product. The underinvestment results in a very significant unmet need in the youth populations designated as eligible for service.

To get a sense of the comparative magnitude of federal spending on JTPA employment and training policy, compare the federal outlays in 1990 for health care--about \$798 per person (\$201.3 billion)--to the \$15 spent per American on JTPA activities (GAO, 1989e, 1990a, 1990b, 1991). Of course, such statistics do not account for federal outlays in allied human resource spheres, such as college loans and grants. But as the William T. Grant Foundation (1988a) has pointed out, federal outlays for the non-college-bound lag greatly behind expenditures devoted to the college-going population. For example, recent data from unpublished material assembled by the GAO (1991) show that while federal spending on education and training is about \$16 billion dollars annually, 40 percent is devoted to graduate student loans and Pell grants for the college sector, with the remaining 60 percent spread among 45 separate programs for adults and youth.

How many youth are served by the JTPA second-chance system? The answer to that question reveals that JTPA is a very small youth system indeed. In fact, the youth manpower system is a good example of social policy trying to "wring" the most performance out of a relatively small enterprise. We have estimated the total number of youth

in JTPA as approximately 1,117,300. Most (54%) are enrolled in short summer job training programs (GAO, 1989e, 1990a).

Consider now how we estimated the youth enrollments. Title II-A of JTPA requires that at least 90 percent of all participants come from economically disadvantaged backgrounds and at least 40 percent of II-A funding must go to youth between the ages of 14 and 21. With the approximate \$1.9 billion appropriated for this component in 1989, the II-A program served 1.1 million youth and adults. Youth enrollments were roughly 40 percent of the total, or 440,000. The summer program (Title II-B) was funded at \$709,000 and in 1990 served approximately 604,000 additional youth (39 percent were 14 to 15 years of age); the Job Corps was funded at \$762,000 and served another 67,300 young people. Other youth were served in special pilots and demonstrations. These were funded at \$30,000,000 and served up to 12,100 people, but not all were youth. We estimate that half of the 12,100, or 6,000, were youth.

How do these enrollments match the national need? To calculate the need is a difficult and often subjective exercise; in fact, the concentration of youth problems and the degree to which problems correlate with one another and with available services is an area of research that would be useful for DOL to support.²

Dryfoos (1990) reviews much of the literature on the concentration of youth problems and finds a preponderance of evidence that about 15 percent of 15- to 21-year-olds, the general ages served by JTPA programs, are at very high risk, while 62 percent are at moderate risk, and only 25 percent are not at risk. As indicators, Dryfoos uses involvement in crime, drugs and unprotected early sex, rather than family income, employability skills, work experience or similar measures of direct interest to DOL. Still, with the population in this age range being approximately 20 million, the JTPA program is serving only 5 percent, far short of the 15 percent Dryfoos estimates to be at very high risk.

Other studies have looked at the share of income eligibles that JTPA serves nationally and have also concluded that JTPA reaches only 5 percent of eligible persons (e.g., DOL, 1989). By any of these standards, then, the JTPA program is small. That small a program, even if 100 percent effective, cannot be expected to shift aggregate social and economic indicators, such as the national jobless rate among teens, and illiteracy or school completion rates.

² See Lerman, this volume, for a similar conclusion.

CHOICES OF DISTRIBUTION

U.S. policymakers in the human resource field have generally made clear choices about the distribution of services. American youth programs are targeted rather than universal. In JTPA, there are explicit income guidelines governing who can participate. Such targeting can lead to peculiarities, such as when a public school serves JTPA-eligible youth through a special "pull out" program while other youth, many just over the income notch of eligibility, are not allowed in the program. New features in the reauthorization of the Perkins Vocational Education Act replicate this JTPA approach.

In addition to the income guidelines that set conditions for program eligibility, JTPA encourages informal targeting as well. For example, practitioners at the federal, state and local levels focus a considerable amount of attention and use ample JTPA discretionary funding to ameliorate the special problems faced by African-American teens and others who often fare poorly in the labor market or are thought to be at risk. This type of targeting in American youth programs stands in sharp contrast to the universal practices found in most European and Asian countries (Skocpol, 1989; Osterman, 1988).

The American choice of a targeted approach rather than a universal one derives in part from the decision to locate youth policy under the jurisdiction of DOL rather than in the mainstream of public education. Put differently, youth employment and training policy has developed as a subset of manpower policy rather than as a subset of education policy. That is, most American youth programs have been designed as second-chance programs outside the education system. Grubb (1989:70) points out:

[The] existence of parallel systems for job-related training extends back at least to the 1930s. The Roosevelt administration, believing that public schools were unsympathetic to the poorest children, established job training programs outside the educational system, both to reach the poorest individuals who might not accept school-based training and to establish a more flexible and shorter-term job training program than were conventional within high schools.

There has also been a formal yet somewhat rhetorical drive by American policymakers toward establishing a set of distinctive services for youth. This is evidenced by the Title II-A rule that 40 percent of all local JTPA funds be spent on youth between the ages of 14 and 21; youth competencies are linked to attainment; and eligible activities are available through the schools.

There is not, however, always clear differentiation made between adults and youth within specific programs. Youth and adults continue to be enrolled together in programs that

lack clear age distinctions and therefore fail to provide services based on such distinctions.³

To a lesser extent, gender separation is also a distinguishing feature of the American approach. Despite the rhetoric about eliminating sex stereotyping in occupational choice, many programs (but not all) prepare young men and women differently and place them in different kinds of jobs and settings on completing the training program (GAO, 1989b, 1990c). To the extent that sex stereotyping is a problem, it can be traced to local decisions by program operators in response to federal performance standards. For example, if performance standards favor short-term programs leading to rapid placements, these incentives make it difficult for local programs to serve multiproblem youth, such as teenage mothers who need long-term support through subsidized employment with provision for child care.

One might think that a policy of targeted services would avoid the inefficiencies usually associated with universal approaches. However, the American strategy has come under attack by critics who have raised the specter of "creaming," the phenomenon of programs choosing to serve only the most able of the eligibles (e.g., Grinker Associates, 1986; Orfield and Slessarev, 1986; Walker, et al., 1985). Not surprisingly, this is a contentious issue that has evoked contradictory responses. In response to the charge of creaming, a senior official of DOL has responded that the Reagan administration originally proposed far narrower eligibility criteria, but that Congress "loosened it up to 'economically disadvantaged.' We're doing just what the Congress intended" (Victor, 1990; see also Jones, 1985).

Even the usefulness of the term creaming is debated by federal officials. Some feel it incorrectly suggests that services are deliberately withheld from intended target groups of youth. In fact, according to one interpretation of the official position, JTPA consistently exceeds the legislative requirement that a minimum of 90 percent of participants come from economically disadvantaged groups.

In the only large-scale national study of creaming known to these writers (National Commission for Employment Policy, 1988b), the authors argue that before charges of creaming are leveled at JTPA, the interests and motivations of potential participants must be examined. They point out that approximately 39 million people are JTPA-eligible, including 31 million persons between the ages of 16 and 64. However, 90 percent of this group are either already employed or are not actively seeking jobs, and are thus unlikely to be interested in training.

³ Current proposed amendments to JTPA call for the establishment of a separate youth title.

The National Commission for Employment Policy study does not look at various administrative factors that surround the alleged creaming phenomenon. Kogan, et al., (1990) report that SDAs often do not target at all, except in the broadest terms--for example, by earmarking funds for at-risk youth.

All told, these factors may add up to an administrative system incapable of serious creaming in the youth area. Moreover, we have only sketchy information about the competencies young people possess when they enter youth training programs. How many, from a national perspective, are severely at risk, how many need "brush up" and short-run services, and how many do not need the programs but find themselves enrolled? Our larger point is that creaming has not been researched carefully enough. We also do not believe that this issue will go away, even if future JTPA amendments establish additional eligibility criteria.

In contrast to the American targeted approach, many European youth manpower schemes have assumed universal characteristics by locating job training in the school sector. In Sweden, for example, the education system is responsible for youth until they reach the age of 18, whether they are in or out of school-based programs (Nothdurft, 1990a; GAO, 1990b). Australia, whose levels of prosperity and education are somewhat comparable to those in the United States, provides a particularly instructive comparison for American policymakers.

Recent changes in the Australian approach to youth manpower policy include structural reforms and attempts to tighten up the school-to-work transition. The government virtually eliminated short-term labor market policies and placed greater emphasis on mainstream education and training. This was accomplished, in part, by moving youth policy from the Department of Employment to a new Department of Education and Youth Affairs (Vickers, 1991).

An explicit attempt was made to focus on comprehensiveness and coordination among education, income support and labor market policy. The rationale provided by Vickers, a key advisor in youth policy, was that "subsidizing the employment of early school leavers in low-skilled work was neither in the interests of the young person nor of the nation; in the long term, what would be needed were higher levels of youth participation in mainstream education and training" (1991:23).

Various national agencies worked together to eliminate the "piecemeal financial arrangements" associated with various financial aid and other programs and replaced them with a "rationalized system of benefits." Finally, the federal education and employment programs were joined in a new Department of Employment, Education and Training. Now, instead of nearly 20 programs, there are only four: the Skills Share program,

which consolidates a wide range of community-based programs for disadvantaged young people; Jobs Start, which offers employer subsidies under limited circumstances for young people having trouble finding a job; the Job Search Program, for young people receiving job search subsidies; and the Traineeship system, which combines on-the-job and off-the-job training.

All Australian youth 15 to 19 years old are eligible to receive a study or job search allowance to enable them to stay in school or look for a job. Eligibility for the job search allowance is delayed six weeks after leaving school to provide an incentive to stay in school. A job search training program is also available for youth receiving the allowance. This program is part of the education system (Vickers, 1991).

The changes in the Australian approach to youth manpower policy raise many questions--such as how decisions were made, and how effective the initiatives have been and under what conditions--that could serve as the basis for a program of comparative research studies.

Now consider the American approach. For example, have American youth policymakers resolved whether they want to serve in-school or out-of-school youth? The 1989 proposed JTPA amendments reflect ambivalence regarding the extent to which employment and training programs for youth should emphasize prevention of school failure or second-chance supports once young people have left mainstream settings. On the one hand, the proposed amendments would shift even more emphasis than is now the practice to out-of-school youth with the proposed requirement that at least 60 percent of youth served be out-of-school. (The proposal did not distinguish between dropouts and graduates.) At the same time, the amendments would promote year-round programming in conjunction with the summer youth employment program.

When the Commission on the Skills of the American Workforce examined the American school-to-work transition system, it characterized it as "the worst school-to-work transition system of any advanced industrial nation" (National Center on Education and the Economy, 1990:9). However, there may be common problems among Western countries. For example, Osterman (1991) notes that in France, as in the United States, many young people work in secondary labor market jobs and only secure stable employment after much turnover and experimentation. He points out that even in Germany, young people in apprenticeships are "overly represented in small firms . . . and have to move from these firms when their training ends . . . and thus while teenage German unemployment is low, some of it is simply deferred to later years" (1991:6).

Research and demonstration strategies comparing various school-to-work transition schemes, drawn from the United States and other countries, are clearly needed. These

schemes include job search assistance for all non-college-bound seniors in particular high schools or labor markets (Philadelphia has had such a program for years); job placement models, such as Jobs for America's Graduates; use of Employment Service staff (the British model) or PIC-supported employment counselors (the Boston Compact) in schools; or such new proposals as an Employment Information Exchange Service, which would make career and higher education information available to all students as well as job-seekers requiring assistance in job search or placement (Wills, 1991).

CHOICES OF POLICY INSTRUMENTS

The federal government's policy instruments include mandated financing schemes and performance standards.⁴ Here, we want to limit discussion to a brief review of what is distinctive about the American approach to financing job training for youth and a look at what might be done to expand our knowledge of alternatives.

The fiscal and performance standards of JTPA make it results-oriented. Contractors are paid only if they achieve certain performance goals, such as placing a target share of trainees in jobs, arranging alternative education or helping youth achieve approved competencies believed by PIC community leaders to be useful for entering the labor market (Center for Human Resources, 1989; National Commission for Employment Policy, 1988b).

This outcome-driven approach is rather unusual in terms of domestic policy. Most bureaucratic governments fund inputs or, as in national health care, try to control costs by setting ceilings on approved practices. Public education is a good example of the input approach. Once funds are collected on the basis of local property tax assessments, they are distributed by a formula that builds on "average daily attendance," an example of an input. At the federal level, elementary and secondary education funds are earmarked to meet certain broad purposes established by Congress. These funds are also distributed on the basis of inputs, such as the number of needy students in eligible school districts.

The use of results-oriented performance standards has been seen in many quarters as a positive social policy development worthy of replication. Thus, when the Perkins Vocational Education Act and the Family Support Act were considered by Congress, policymakers adopted parts of JTPA's performance standards approach.

⁴ The latter are the subject of another paper in this series, see Melchior, this volume.

But curiously, JTPA's system of performance standards has not been scrutinized for the role the standards play in shaping local human resource programs for youth. Rather, performance standards have been studied mostly as a compliance issue, for example, in terms of repairing such abuses as fixed unit price contracting procedures. Rarely has the results-oriented approach been examined in terms of how the costs and benefits of the standards affect the quality of services provided in the youth manpower system.

We would like to know, for example, whether the financing of job training through performance measures has become too cumbersome; whether it has stimulated or constrained quality in youth programs (see Berkeley Planning Associates, 1991, for a good start on this question); and whether it has led to achievement of genuine self-sufficiency in the postprogram period for young clients. What, for example, is the statistical association between "attaining youth employment competencies" (a youth performance standard) and long-term success in the labor market in terms of job quality, wages, hours, etc.?

We found very little literature on these themes and thus can only recommend further investigation. We also believe that a review of youth performance standards should be separate from a review of all performance standards in JTPA. Youth and adult standards are different, and a study of youth standards alone will be more manageable in the short run.

What is known about other aspects of the financing system is that JTPA did innovate over CETA through its authorization as a permanent program and its change in the fiscal cycle to begin in July rather than October. The intention of the latter was to give localities more advance notice about funding, which they have judged helpful (Levitan and Gallo, 1988). The purpose of the former was to protect the job training community from the domestic policy battles that often arise every four years with a new presidential election.

However, support for JTPA itself has not been measured and the recent congressional debates over amendments to JTPA, including the proposal for sunset provisions, show that the consensus today supporting the legislation may be weaker than many believe.

The funding formulae used in JTPA have been subject to legislative debate and considerable study. For example, DOL allocates two-thirds of state and local funds based on the distribution of unemployment. The rest is disseminated according to the distribution of low-income populations. Unemployment rates (several indices are used to assess unemployment in SDAs) therefore count heavily in the formulae, even though unemployment is not always a prerequisite for program assistance. Simply put, areas with high

unemployment may receive a disproportionate share of funds even if their share of the low-income population is low (Abt Associates, 1986).

Since instability in the unemployment rate is related to changing funding levels, programs often have a difficult time planning and managing their administrative functions. The American approach, in a sense, may be trading off fairness at the national level (an objective criterion is used) for local management difficulties and inefficiencies. There is much speculation about this in the JTPA literature, internal DOL studies and the testimony of youth program practitioners.

We have observed that the system of financing, including alternatives, has not been carefully scrutinized by outside researchers (for notable exceptions, see Barnow, et al., 1990). Rather, elements of the system (such as the allocation formulae) are examined only under the assumption that what we have today is the permanent operative system, which may need a few repairs. Compare this approach to the health care debate, in which entirely new systems of financing are offered for debate almost monthly in public policy circles. Much of the discussion in health care is financed by the federal government through a network of research centers, think tanks, commissions and so on. We would like to see more research on alternative financing schemes for youth employment and training.

The proposed research program would consider the following illustrative questions: How might youth employment and training funding be increased? What funding mechanisms would provide more stability to youth program providers? How would European tax schemes work in the American context? What are the simulated impacts of various employer training tax proposals? How would school districts handle job training opportunities if districts received the equivalent of average daily attendance funds for returning dropouts? A comparative policy research and demonstration initiative to consider these and related questions would spell out the financial implications of the alternatives, since the current budget deficit situation is unlikely to lead to expensive proposals.

Consumer choice is one of the recommendations of the president's education reform package. There is a long tradition of research investigating consumer-choice models. The policy arguments involve issues of equity, access, information for decision-making and the role of public services.

In the manpower field one proposal (Choate, 1982) involves using tax incentives to encourage businesses and/or workers to set aside money for individual employees for future education and training. Another version would allow businesses and workers to contribute to a pooled insurance fund. A third variation would allow parents to establish

accounts for their children in state trust funds that could be used for education or training.

Many of these proposed schemes have been criticized for lacking target efficiency. Will people who need to invest in training be the least likely to use individual training accounts or other approaches? Will they have the knowledge and information, not to mention the resources, to make these investments? Further, will businesses support such funds?

In response to these criticisms, Levin (1977, 1983), the National Commission on the Skills of the American Workforce (National Center on Education and the Economy, 1990), Vaughan, et al., (1984) and others have called for government grants or subsidized loans to all individuals who wish to obtain further education or training. The mix between grants and loans could be set by family income. Entitlement programs of this kind should be the focus of review and evaluation, with implications for the human resource community developed.

Great Britain is pilot-testing training credits within the scope of its Youth Training Program. Under the pilot program, young people leaving school (typically, 16- and 17-year-olds) are issued a credit by the government to pursue an individual training plan developed by the young person with advice and guidance provided through local offices of the national Careers Services, schools or other providers. In effect, the British youth training credit is an individual training account. If the youth is employed, the employer is expected to contribute resources to support the training; various time limits have been set on the use of the credit.

For the purposes of this review, we suggest that many of these questions and options are amenable to formal comparative research, descriptive studies and experimentation. For example, state initiatives could be assessed and lessons disseminated. What, for example, has been learned from Kentucky's use of vouchers? California, New York, Michigan and London are experimenting with the use of cards containing a "credit line" for off-the-job training and assessment; a "debit line" shows how much training time remains, and an "achievement line" shows the units earned toward a vocational qualification.

THE CHOICE BETWEEN RESTRAINT AND INNOVATION

Americans have chosen a youth manpower system that is restrained in several ways. First, as we have seen, the American approach to job training for youth focuses on human capital upgrading rather than on direct interaction with labor market institutions. Osterman (1988:132) says the "consequence of this philosophy is that American programs aim to provide the individuals with information and skills but are not integrated in any

substantial way into the human resource calculations or industrial relations strategies of firms." He concludes that useful employment policy "helps firms create and maintain flexible internal labor markets The notion of 'usefulness' helps explain the ineffectiveness of American employment policy and the comparative importance of European policy . . ." (1988:132).

The tilt toward supply-side interventions in American human resource policy has likely limited our ability to mesh the goals of youth manpower policy with other economic goals. This is not to suggest that the nation has failed to experiment with demand-side interventions; the controversial youth subminimum and training wages, the Targeted Jobs Tax Credit, and the wage subsidy experiments of YEDPA's Youth Incentive Entitlement Pilot Projects are good examples. But each time such initiatives were promulgated, they ran into serious political and ideological troubles. Policymakers have learned that political consensus is easier to obtain if the focus is on young people and their deficits rather than on employers and their hiring and training practices.

A second example of restraint relates to the federal role in manpower policy and its shared decision-making with state and substate entities. Simply put, the federal government is constrained by the partnership context. Although the balance between passivity and activism is determined by each Secretary of Labor, the basic functions of the federal government have not changed much over time, as our section on manpower history has shown. What does change is how federal authorities interpret their roles and responsibilities.

The balance between restraint and innovation is a consistent theme in any attempt to evaluate the mix of partnerships under JTPA. While our literature review indicates that the partnerships themselves have not been examined thoroughly or recently, some attempts have been made to draw conclusions about the mix.

Quality of Federal and State Leadership

The federal role under JTPA is largely prescribed by law to include financing, monitoring state and local compliance with the law, supplying technical assistance, assessing the program and ensuring fiscal accountability. Simply put, whether these functions have been done well is not known from the available literature. Levitan and Gallo (1988) and articles in the popular media (Victor, 1990) have accused the federal government of lackluster leadership at one time or another. But that is a rather skimpy basis on which to form firm conclusions on such an important matter.

Generally, criticisms of the federal role have dealt with specific issues, such as the government's ability to monitor the use of fixed unit price performance-based contracts

or mount a program of effective technical assistance. A number of monitoring and implementation reports on these issues are available (e.g., Westat, 1984, 1985), but do not provide a clear picture of federal leadership.

For the broad purposes of this paper, it is interesting to note that the role of the federal government in national youth policy has rarely been studied in and of itself. The authors uncovered few studies of federal leadership, and suggest that the results of such studies should be useful not so much for reversing the present devolution of authority from the federal government to state and substate entities, but rather for helping the federal government monitor its own role in a decentralized system of partnerships. Without such studies, the federal government's role in stimulating "continuous improvement" and quality control in the local system is likely to be hampered.

Similarly, research about the current state-federal relationship and the effectiveness of state agencies has not been prepared. Such a program of research would certainly be useful. For example, Levitan and Gallo (1988:30-31) believe such a study would conclude:

[T]here is little evidence that the states have rushed in to exercise their statutory responsibilities, or that state leadership has produced significant results The partnership which Congress envisioned between the governor, the newly created state advisory council, the legislature, business, labor and other state governmental agencies has emerged only in isolated cases With few exceptions, . . . most states have passively waited for federal instruction [I]ronically, a program (JTPA) which was designated to demonstrate the potential of state leadership instead suggests that a strong federal presence is necessary [W]hile a genuine federal-state partnership would be more desirable, the JTPA experience casts doubt on whether this arrangement can be achieved.

These are strong charges, and are based on a single study's observations, interviews and analysis of secondary reports. One study is an insufficient foundation for such conclusions. Clearly, the subject is important enough that additional, more systematic studies must be undertaken. We also recommend that future studies not be confined to questions of leadership under the current system, but also include the potential of leadership under alternative approaches to training for young people.

Local Service Delivery by SDAs and PICs

JTPA's framework is strong on expectations for outcomes but relatively quiet on the types of services, and the people and institutions to deliver them. Put differently, JTPA

relies on a form of accountability that may be labeled "bureaucratic accountability"--the enforcement of rules and regulations.

Other forms of accountability are equally important parts of the JTPA framework. These include "political accountability" (assurances that State Job Training Coordinating Council and PIC members, for example, meet their obligations); "legal accountability;" "professional accountability" (standards of professional practice); and "market accountability" (Darling-Hammond and Ascher, 1991). While all these forms of accountability affect local service delivery, bureaucratic accountability is the only one that receives attention at the national level.

Where, for example, are the policies, studies and demonstrations that focus on how youth select training programs (market accountability)? Will DOL's nascent interest in upgrading local youth program staff find the right balance between prescription and innovation in professional accountability? Similarly, to what extent should the federal government monitor the effectiveness of state JTPA entities--would aggressive monitoring be seen as a violation of the partnership concept (political and legal accountability)?

Consider the market accountability of the JTPA system as it operates at the local level. Our review of JTPA concludes that the performance-driven nature of the system results in a hybrid system of service delivery at the local level. But does this mean that the system operates competitively?

In theory, service providers must compete for funding in an outcome-driven environment controlled by performance indicators. Such competition should tend to keep costs down. Costs are also controlled by national formulae that arbitrarily limit administrative costs to a stipulated fraction of total costs. In practice, however, many program managers were able to operate their programs through the 1980s by using fixed unit price, performance-based contracts, which gave them a way to categorize administrative and support costs as training costs. Abuses of this option have received widespread attention by DOL and others (GAO, 1989a).

More important, some observers have written that the interaction among local providers has rarely translated into an innovative training environment, high quality programs, or even the ability to respond quickly to the changing demands of employers (e.g., Levitan and Gallo, 1988; Grubb, et al., 1989). The reasons for this assessment are many, but a primary explanation is that genuine competition among vendors offering the same services rarely exists.

One explanation for the lack of competition is that in JTPA, the real customers are not the youthful clients but rather the PICs and SDAs, who write the requests for proposals

to fund local service providers. In a system where clients do not pay tuition but instead often receive stipends, most communities find that real competition, stimulated by trainees, remains a goal rather than a reality. This helps explain why JTPA is a hybrid system: on the one hand, it is performance-driven; on the other hand, there is no independent payment system to increase the number of vendors and foster true competition among them at the local level. The relatively low funding level of the system also contributes to the lack of competitiveness.

Grubb, et al., (1990a, 1990b) have examined the service delivery system in detail in several communities and conclude that there is little overlap in the services provided. They find that different groups reached different kinds of individuals and provided specialized services.

Grubb, et al., describe five distinct "systems" operating at the local level: the "primary system"--high schools, four-year colleges, vocational education programs in community colleges and technical institutes, and graduate and professional schools; the "secondary system"--remedial programs in elementary schools, community colleges, adult schools and other institutions designed to integrate individuals into the primary system; the "tertiary system"--JTPA and other job training programs targeting the disadvantaged and hard-to-place; the "quinary system"--programs serving welfare recipients; and the "quintary system"--programs in correctional institutions.

Grubb, et al., conclude that there is no genuine competition among and within categories at the local level. In fact, they argue that in the present undercapitalized environment for human resource programs, we need more duplication and competition among vendors, not less. They equate this strategy to that of engineers who purposely design with redundancy in mind. It will be interesting in this regard to see how governors will use the set-aside funds (earmarked in recent proposals for JTPA amendments) to stimulate coordination of services, when in many locales there are not enough providers.

Compare this characterization to the movement underway in public education, which many hope will lead to more choice and competition. We recommend that DOL try to increase the competitive environment of JTPA at the local level by undertaking reviews of policies and by conducting studies and experiments to determine the degree to which competition is occurring and the best methods for promoting it. These tasks would initially be exploratory, since local conditions vary greatly and the goal of stimulating competition at the local level is not easily achieved. It is made even more difficult by JTPA's limited resources. However, if studies reveal that competition matters, perhaps a JTPA outreach campaign would stimulate the growth of youth service providers. PICs could also receive training in how to stimulate competition by combining JTPA funding with other resources.

IV. CAPACITY-BUILDING ACTIVITIES AND SYSTEM-CHANGING INITIATIVES

The federal government has a variety of tools for helping states and substates develop coherent, quality systems of youth program service delivery. Federal oversight of State Job Training Coordination Councils and the integration of these councils with other umbrella coordinating councils at the state level (e.g., in vocational education) is one way the federal government builds capacity and stimulates system-changing behaviors.

The federal government's special interest in coordination is generally conveyed through the technical assistance and research functions of the national and regional offices of DOL. For example, coordination has attracted recent interest as a research theme, and the "3 Cs"--coordination, collaboration and case management--have been the subject of many training workshops and forums. This attention results from concern that fragmented authority, turf battles, competition for funds, and rivalries among public programs inhibit cost-effective service delivery and hold back progress on treating "the whole child." As we have seen, competition is generally not addressed as a service improvement strategy.

Technical assistance guides with "dos and don'ts" and a growing academic research literature have emerged in response to the challenge of getting schools, community groups, welfare agencies, courts and others to cooperate with JTPA entities (see Bruner, 1991; Melaville, 1991; William T. Grant Foundation, 1991.) As noted, the JTPA law itself contains incentives for coordination. Governors can reject SDA plans that are weak on coordination, and governors and the councils can encourage coordination through creative uses of the 8 percent funds and the regular functions of planning and oversight. Students of these coordination criteria have found them to be generally helpful. For example, Grubb, et al., (1989) report that state and local administrators believe the coordination requirements have been helpful.

Coordination is a theme particularly suited to this paper's principal recommendation--to undertake studies of a comparative nature. The subject has long been of interest at the community level in addressing the issues of aging (the Area Agencies on Aging set up Home Care Corporations to coordinate services); mental health (the Robert Wood Johnson Foundation is deeply involved in coordinating community mental health services for children); health care (the Kellogg Foundation is about to embark on a major project coordinating health care delivery at the local level); social services (almost every state has grappled with coordination at the community level); drug abuse; and so on. Before expanding Youth Opportunities Unlimited programs and similar ventures--which call for unified, coordinated programs in very poor neighborhoods--we recommend that relevant experience from allied fields be synthesized, with the implications for DOL initiatives spelled out.

Tangible management tools that build on experiences in allied fields are also needed. For example, the challenge of tracking and managing the case of a JTPA participant who has been referred to a remediation program is very similar to the tracking and case management challenge faced by substance abuse programs, welfare administrators or aging agencies. The sending program needs to learn whether the client actually enrolled in the program to which he/she was referred; whether he/she completed the program; and whether he/she returned to the sending agency. Managers want to know whether the client is making sufficient progress, and funders would like to know which programs work best and under what conditions. These questions are generic, suggesting that lessons from one field may apply nicely to others. The value of cross-sector sharing seems so obvious, yet separate authorities and providers too often "go it alone," rather than help facilitate shared learning. DOL could take a leadership role in stimulating cross-sector learning about the "3 Cs" and associated topics.

Another component of the capacity-building and system-changing agenda involves the federal government's use of its research, data collection and technical assistance activities to promote high-quality local service delivery. On this front, we have found little evaluation of DOL efforts to support and provide technical assistance to the youth-serving field. Some information is available on the scope of these activities, but next to nothing has come to the attention of these writers about effectiveness (National Governors' Association and National Alliance of Business, 1985).

Levitan and Gallo (1988) contend that technical assistance was radically scaled back in the early days of JTPA in deference to giving states and localities maximum feasible discretion to implement the JTPA youth programs. The authors also point to potential problems in the organization and administration of technical assistance: reliance on subcontractors rather than federal staff in Washington and the regions; unevenness in the distribution of technical assistance; the question of who--states or the federal government--should take the leadership role in technical assistance; and the requirement that hard-pressed SDAs pay travel and other costs associated with technical assistance. Again, however, there is little available research evidence about any of these matters, much less on the alternatives.

How have other domestic agencies handled this question? For example, how has the Department of Education organized its technical assistance efforts and evaluated their effectiveness? What about other nations' initiatives--the British manpower reforms, for one? Through comparative studies, technical assistance can and should be examined.

Our recommendation is that the review of the technical assistance function be conducted by an internal working group, backed by small-scale review studies. The working group would include DOL officials, peers drawn from other domestic agencies, several techni-

cal assistance providers and practitioners, and knowledgeable representatives from the National Academy of Sciences, a group with considerable experience in tracing the impact of knowledge development and technical assistance in federal agencies. The initial focus of the project should be the distribution of present technical assistance efforts, their content and intended goals, and the self-reported effectiveness of the services from a practitioner's perspective.

A similar conclusion can be reached about federal involvement in data collection, research and evaluation. There is information available on spending patterns but little on the utilization, dissemination and effectiveness of the products that have been produced with federal support. To the best of our knowledge, DOL data collection, research and evaluation efforts have not been the subject of an outside review. But in other federal agencies, research utilization and knowledge diffusion have received considerable support and been the subject of formal evaluations. As in the technical assistance area, we recommend that peers from other federal agencies, scholars of research utilization, and consumers be assembled in a task force to consider the strategic uses of research.

JTPA's primary data collection tool, the Job Training Quarterly Survey (JTQS), exemplifies our earlier point that much in youth policy has been crafted as an add-on to adult-centered frameworks. This system is the closest the federal government comes to a management information system, and yet it uses categories of service that fit only imperfectly the youth components of JTPA. Moreover, the data system says little about the actual service deliverers (Community-Based Organizations, schools, colleges). Since many of these vendors receive funding from a variety of sources, studying them is complicated but nonetheless very important. This point is discussed in a Berkeley Planning Associates report (1991) and suggests a range of research topics and reforms in the reporting systems.

Another aspect of the system-changing agenda concerns the government's monitoring of the make-up, organization and effectiveness of PICs and SDAs. While not ignored, this subject has also received less attention than it deserves. A number of observers have pointed to the change in community attitudes from CETA to JTPA. Broad community involvement in SDAs and especially PICs has been cited as helping to stimulate respect for human resource and youth issues at the local level (National Alliance of Business, 1985, 1986).

But the federal government largely defers to the states when it comes to collecting information on a routine basis on SDA and PIC composition and effectiveness. It would fit DOL's mandate to improve the quality of local services if we knew, periodically, the backgrounds, experience with youth issues, interests, motivations and experiences of PIC

and SDA members. Moreover, a national study of PIC effectiveness has not been conducted since the early days of JTPA; one is needed to measure the strength of JTPA as a mature program.

If a full-scale study of PIC effectiveness is not possible, a series of small studies of the role of PICs in apprenticeships or education reform would be useful in the following ways: in helping policymakers think about the possibilities of alternative manpower schemes, such as worksite-based learning and apprenticeship arrangements; in determining whether an American version of German apprenticeship should use PICs as the business or labor market board entity; and in defining the potential and limits of such a development, based on PICs' present orientation and structure.

V. RESEARCH AND DEMONSTRATION IMPLICATIONS: THE NEED FOR A COMPARATIVE FRAMEWORK

Numerous studies have compared the achievement of American youth to that of young people in our trading partner nations. These studies find that American youth are less able than their counterparts to meet the rapidly changing requirements of the global economy. Findings from these studies have helped create the movement that has led the president and governors to announce implementation of national education goals and to seek national school reform. Comparative studies covering mainstream education policies (Department of Education, 1991; National Governors' Association, 1990; Nothdurft, 1990a, 1990b) have been valuable policy tools and are now routinely cited by President Bush and Education Secretary Alexander as they tour the country building support for their goals.

A similar but smaller-scale movement is underway in the manpower field, as evidenced by growing interest in manpower schemes in other countries, apprenticeship, and financial incentives to stimulate training opportunities in the private economy (see, for example, George, 1987; Glover, 1988; Osterman, 1989). A good example of a DOL-sponsored project on the latter theme is the review by Barnow, et al., (1990) of relevant experience in the United States and abroad. This and other emerging studies (Osterman, 1991) represent a fine start, but after reviewing recent literature from the manpower field, we suggest that the comparative knowledge development process needs further expansion. A recent example from Congress shows the urgency of this recommendation: in an early draft of proposed legislation from Senator Kennedy's staff, "The High Skills, Competitive Workforce Act of 1991," the staffers call for a "high-skills training trust fund" in which employers would be assessed 1 percent of total annual wages (with certain exceptions).

State experience with employer financing schemes for training provide evidence of the viability of this approach. More, however, must be done, particularly simulation modeling and research and demonstration efforts. This example also shows that alternatives to the present training system, both youth and adult components, are likely to surface from time to time in Congress and in the states. We believe that a readiness posture is required, and that it would be a mistake to wait for specific triggering events in Congress or the administration before undertaking a review of alternative youth development schemes. To summarize, we would like to see the federal government support not only descriptive studies but also a vigorous program of simulations and systematic demonstrations of alternatives to the present system.

We have noted that the vast majority of DOL spending on research, evaluation and demonstration is devoted to making JTPA work better. This is not unreasonable, since

most of such spending is authorized by JTPA. But there are additional uses for knowledge development investments, especially, as we have argued, in the field of comparative analysis. That this has not occurred sufficiently is only partly a reflection of JTPA's concern for its own integrity and quality. Another reason is that until recently, most academics have not shown an interest in comparative studies and research on alternative manpower schemes. The statement of Heidenheimer, et al., (1983:vii) could be generalized to most researchers: "the majority of the world's political scientists are Americans, and the majority of these have not regarded foreign experiences as relevant to their research."

There are exceptions to this general point. Consider the work of Reubens and her colleagues. Her books (1981, 1983) reflect a career of comparative policy analysis in the manpower field. But until recently, there was remarkably little follow-up of this work. Now, however, some policy experts and academic scholars have begun to shift attention to the international and comparative manpower field. Consider Lerman and Pouncy (1990a, 1990b), Hamilton (1990a, 1990b), Osterman (1989, 1991), the GAO's recent study (1990b), the aforementioned study by Barnow, et al., (1990) and the publications of the William T. Grant Foundation (1988a, 1988b). The recent commission report by the National Center on Education and the Economy (1990) and the Secretary's Commission on Achieving Necessary Skills report (DOL, 1991b) were also influenced by comparative policy analysis.

We must note, however, that even among the researchers and writers who have recently come to the comparative policy perspective, few have received federal support for their research and most of the intellectual work has thus far been strictly descriptive. The German Marshall Fund, for example, has been an ongoing source of support for policy experts and policymakers interested in international perspectives. More recently, the William T. Grant Foundation, The Pew Charitable Trusts, the Carnegie Corporation of New York, and The Commonwealth Fund have engaged in cross-national research reviews and supported activities in this area. Partnerships between the government and private foundations in a joint program of comparative research of manpower policy would be highly desirable.

One need only consider the daily references by American health care experts to the Canadian and German health care systems to appreciate that comparative research is fairly well-developed in the health policy arena--to name just one allied field. Yet in the manpower field, outside of the exciting new activities cited earlier (and a subset of activities sponsored by DOL's new Office of Work-Based Learning), most DOL youth research begins with the current constellation of programs and is aimed at improving or modifying them. Little current research in the youth manpower field is devoted to examining entirely new ways of doing business.

An area for potential comparative research and demonstration efforts is the use of transcripts and portfolios to determine eligibility for higher education and training. Bishop (1989) and Rosenbaum (1990) recommend that employers make greater use of school transcripts in hiring decisions in order to motivate students toward higher achievement. This recommendation, aimed at getting employers interested in the quality of the education or training behind transcripts, has also appeared in the reports of the Commission on Workforce Quality and Labor Market Efficiency and the Secretary's Commission on Achieving Necessary Skills (SCANS), and is part of the general interest in creating uniform hiring standards for non-college-bound youth.

In response to these interests, both the Educational Testing Service and the American College Test are developing national systems of such transcripts. The American Business Conference is funding Vital Link, which will ask businesses to require detailed student records when making employment decisions.

DOL could devise pilot or demonstration projects testing the use of transcripts and/or alternative credentials, such as work portfolios. These portfolios would document both student and worker skills, including test results (as proposed in the Bush administration America 2000 reform package and the SCANS report). The manpower field has used portfolios in the past, but we know of no sizeable, formal test of their implementation or effectiveness. The structure of the demonstrations should be informed by experiences in Asia and Europe, which have made extensive use of test-based credentials.

Another potential area for comparative research is approaches that connect community service and youth employment strategies. Youth service has grown and gained prominence during the past two years. The National and Community Service Act of 1990 demonstrates the appeal that community service, as a program and a voluntary strategy, has acquired across the country. For example, the president praises community service in his Points of Light initiative; special foundations have been set up to encourage community service; and national intermediary organizations, such as Youth Service America, promote the concept and work toward quality standards.

To professionals in the human resource field, community service runs parallel to youth employment programming, but is not identical. In Pennsylvania, however, a marriage of community service and JTPA has taken shape. Young teens enrolled in JTPA's Summer Youth Employment and Training Program (SYETP) work on service crews in all 28 SDAs across the state, carrying out a variety of community improvement and service projects. Generally, this type of approach would be applauded and perhaps even serve as a prototype for national replication. But a potential barrier to replication is the fact that JTPA restricts eligibility to low-income families, whereas community service programs generally enroll people from a wider range of backgrounds.

A program of DOL-sponsored research and evaluation might look at the potential of the Pennsylvania approach and the comparative advantage of enrolling young teens in community service rather than SYETP's regular jobs. Institutional analyses would examine whether an expanded summer program of JTPA community service opportunities would require modification of current eligibility requirements or alternatives to present practices. Research might also consider the role of stipends in community service and summer training.

VI. CONCLUSION AND RECOMMENDATIONS

At present, information available on the effectiveness of JTPA's youth-serving elements is limited and often out-of-date. Now that JTPA is a mature program, more information is needed on the role of federal leadership, federal-state relationships, state-substate relationships, PIC effectiveness, targeting and creaming, uses of research and technical assistance, and other topics that go to the "heart" of the system. Moreover, we have described the small scale of JTPA's youth components and noted that even if the system were 100 percent effective, the national impacts would be small. Expanding coverage will require extensive knowledge development.

Our primary recommendation is for a program of research on how JTPA works as a youth-serving system and how alternatives to the present system might work. Consideration of the latter would require detailed reviews of other countries' experiences. This recommendation does not result from a belief that the present system is a failure, nor that systems in other places are necessarily superior to the American approach. Our point is that although the effectiveness of alternative approaches may not be known, lessons for the American system could be extrapolated. Armed with this information, DOL would be better able to perform its role in the present system and to contribute to future discussions of potential youth service and self-sufficiency systems for America.

We recommend research on JTPA and reviews of its policies.

1. Conduct new studies and evaluations of the federal and state roles in the youth-serving components of JTPA. Federal, state and local leadership should be examined in and of themselves. These studies will help the various levels of government improve their effectiveness in the present system of partnerships.
2. Review the implementation (complexity of administration) of performance standards and their institutional impacts on youth programs.
3. Conduct careful studies and evaluations of the creaming phenomenon in the youth side of JTPA--studies that have not taken place despite a preoccupation with this theme in the field.
4. Conduct up-to-date institutional analyses and evaluations of PIC effectiveness. The focus should be on present performance, as well as the potential of using PICs in alternative manpower schemes, such as youth apprenticeship and school reform.
5. Conduct studies and experiments to better understand the extent to which competition exists among service providers at the local level, document current barriers and

propose policy, program or technical assistance solutions. What policies would stimulate more competition and more consumer choice?

6. Conduct comparative research on coordination, collaboration and case management. This research would draw on other domestic fields and would include investigation of such management tools as integrated case management systems.

7. Evaluate the Employment and Training Administration's technical assistance and research strategies, review current spending by topic area, and study utilization patterns. This evaluation should be conducted as an internal review, drawing on peers from other federal agencies.

We also recommend development of alternative youth development policies and financing schemes.

8. Undertake a program of policy review and research that supports investigations into alternative youth development policies and programs. Forge partnerships with private foundations for this purpose.

9. Conduct analyses of the decision-making process used in foreign countries, such as Australia, which have tried to move from a targeted youth employment and training strategy to one with more universal elements. Survey youth services in other countries that might be useful in U.S. programs.

10. Initiate a program of research on alternative financing schemes for the American youth employment and training system. This research program would cover, for example, tax levy schemes, school reform approaches (using average daily attendance money to fund training vouchers), individual training accounts, entitlements and card mechanisms. Fund studies on private training and the role of public subsidies. This series of studies should be sensitive to budget realities and demonstrate the financial implications of various proposals.

Finally, we recommend evaluation and demonstration of new programs.

11. Conduct evaluations, syntheses and demonstrations comparing school-to-work schemes. The focus should be on identifying the best strategies, in terms of both client outcomes and the ability of the government and others to institutionalize the approaches.

12. Conduct demonstrations of the use of transcripts and work portfolios.

REFERENCES

Abt Associates

- 1986 An Assessment of Funding Allocation Under the Job Training Partnership Act. Cambridge, MA: Abt Associates.

American Vocational Association

- 1990 AVA Guide to the Carl D. Perkins Vocational and Applied Technology Education Act. Alexandria, VA: American Vocational Association.

Barnow, Burt S.; Chasanov, Amy B.; Pande, Abhay

- 1990 Financial Incentives for Employer-Provided Worker Training: A Review of Relevant Experience in the U.S. and Abroad. A report prepared for the U.S. Department of Labor, Employment and Training Administration. Washington, D.C.: Urban Institute.

Bartel, Ann P.

- 1989 Formal Employee Training Programs and Their Impact on Labor Productivity: Evidence From a Human Resources Survey. Cambridge, MA: National Bureau of Economic Research.

Berkeley Planning Associates

- 1991 Improving the Quality of Training under JTPA. Washington, D.C.: U.S. Department of Labor.

Betsey, Charles L.; Hollister, Robinson G., Jr.; Papageorgiou, Mary R. (eds.)

- 1985 Youth Employment and Training Programs. Washington, D.C.: National Academy Press.

Bishop, John H.

- 1989 "Incentives for Learning: Why American High School Students Compare So Poorly to their Counterparts Overseas" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.

Bruner, Charles

- 1991 Thinking Collaboratively: Ten Questions and Answers to Help Policy Makers Improve Children's Services. Washington, D.C.: William T. Grant Foundation.

Bullock, Paul

1985 Youth Training and Employment: From New Deal to New Federalism.
Los Angeles, CA: University of California, Institute of Industrial
Relations.

Carnevale, Anthony P. and Gainer, Leila J.

1989 The Learning Enterprise. Washington, D.C.: U.S. Department of Labor
Employment and Training Administration.

Center for Human Resources

1989 "Working it Out: Performance Management Strategies for Increasing
Services to At-Risk Youth." in Youth Programs. Waltham, MA: Brandeis
University, Heller School, Center for Human Resources.

Choate, Patrick

1982 Retooling the American Workforce: Toward a National Training Strategy.
Washington, D.C.: Northeast-Midwest Institute.

Darling-Hammond, Linda and Ascher, Carol

1991 Creating Accountability in Big City Schools. New York: ERIC
Clearinghouse on Urban Education and National Center for Restructuring.

Dryfoos, Joy G.

1990 Adolescents At Risk: Prevalence and Prevention. New York: Oxford
University Press.

Gainer, William J.

1986 Job Training Partnership Act Amendments of 1986. Washington, D.C.:
U.S. Government Printing Office.

George, Rosemary

1987 Youth Policies and Programs in Selected Countries. Washington, D.C.:
William T. Grant Foundation.

German Marshall Fund of the United States

1990 "A Winning European Formula: Schools + Industry = Work-Readiness."
Transatlantic Perspectives, No. 21.

Glover, Robert W.

1988 Expanding the Use of Apprenticeship. Washington, D.C.: U.S. Department of Labor, Bureau of Apprenticeship and Training.

Grinker Associates

1986 An Independent Sector Assessment of the Job Training Partnership Act. Final Report. New York: Grinker Associates.

Grubb, W. Norton; McDonnel, Lorraine; Brown, Cynthia; Kaufman, Phillip; Lederer, John

1990(a) Local Systems of Work-Related Education and Training: Diversity, Interdependence, and Questions of Effectiveness. A report for the Office of Vocational and Adult Education. Berkeley, CA: National Center for Research in Vocational Education.

Grubb, W. Norton; McDonnel, Lorraine; Brown, Cynthia; Kaufman, Phillip; Lederer, John

1990(b) Order Amidst Complexity: The Status of Coordination Among Vocational Education, Job Training Partnership Act, and Welfare-To-Work Programs. A report to the U.S. Congress. Berkeley, CA: National Center for Research in Vocational Education.

Grubb, W. Norton; Brown, Cynthia; Kaufman, Phillip; Lederer, John

1989 Innovation Versus Turf: Coordination Between Vocational Education and Job Training Partnership Act Programs. Berkeley, CA: National Center for Research in Vocational Education.

Hahn, Andrew and Lerman, Robert

1984 What Works in Youth Employment Policy? Washington, D.C.: National Planning Association.

Hamilton, Stephen F.

1990(a) Essential Elements of the European Apprenticeship System and American Adaptation. Presentation at the Conference on Youth Apprenticeship, American Style. Washington, D.C.: William T. Grant Foundation.

Hamilton, Stephen F.

1990(b) "Is There Life After High School? Developing Apprenticeship in America." The Harvard Education Letter, IV(4).

Haveman, Robert H.

1977 A Decade of Federal Antipoverty Programs: Achievements, Failures, and Lessons. New York: Academic Press.

Heidenheimer, Arnold J.; Heclo, Hugh; Adams, Carolyn Teich

1983 Comparative Public Policy: The Politics of Social Choice in Europe and America. New York: St. Martin's Press.

Jones, Robert

1985 Oversight Hearing on the Implementation of the Job Training Partnership Act. Testimony in the U.S. Congress, House Committee on Education and Labor, Subcommittee on Employment Opportunities. Washington, D.C.: Government Printing Office.

Kogan, Deborah; Dickinson, Katherine; Means, Barbara; Strong, Marlene

1990 Improving the Quality of Training Under JTPA. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.

Lerman, Robert I. and Pouncy, Hillard

1990(a) "The Compelling Case for Youth Apprenticeships." The Public Interest, No. 101.

Lerman, Robert I. and Pouncy, Hillard

1990(b) Why America Should Develop A Youth Apprenticeship System. Washington, D.C.: Progressive Policy Institute.

Levin, Henry

1983 "Individual Entitlements" in Financing Recurrent Education. Newbury Park, CA: Sage Publications.

Levin, Henry M.

1977 "Post-Secondary Entitlements: An Exploration" in Entitlement Studies. Washington, D.C.: National Institute of Education.

Levitan, Sar A. and Gallo, Frank

1988 A Second Chance: Training for Jobs. Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research.

Levitan, Sar A. and Taggart, Robert

1976 The Promise of Greatness. Cambridge, MA: Harvard University Press.

Lynch, Lisa M.

1989 Private Sector Training and Its Impact on the Earnings of Young Workers. Cambridge, MA: National Bureau of Economic Research.

Mangum, Garth L.

1973 A Decade of Manpower Development and Training. Salt Lake City, UT: Olympus Publishing Company.

McDonnell, Lorraine M. and Elmore, Richard F.

1987 Alternative Policy Instruments. Santa Monica, CA: Rand Corporation.

Melaville, Atelia I.

1991 What It Takes: Structuring Interagency Partnerships to Connect Children and Families with Comprehensive Services. Washington, D.C.: William T. Grant Foundation.

Murray, Charles

1984 Losing Ground: American Social Policy, 1950-1980. New York: Basic Books.

National Alliance of Business

1986 Is the Job Training Partnership Working? Washington, D.C.: National Alliance of Business.

National Alliance of Business

1985 What's Happening with JTPA? Washington, D.C.: National Alliance of Business.

National Center on Education and the Economy

1990 America's Choice: High Skills or Low Wages. Rochester, NY: National Commission on the Skills of the American Workforce.

National Commission for Employment Policy

1988(a) Developing Effective JTPA Performance Standards Incentive Policies: A Technical Assistance Guide. Washington, D.C.: National Commission for Employment Policy.

National Commission for Employment Policy

1988(b) Who is Served by JTPA Programs? Washington, D.C.: National Commission for Employment Policy.

National Commission for Employment Policy

- 1981 Seventh Annual Report: The Federal Interest in Employment and Training. Washington, D.C.: National Commission for Employment Policy.

National Conference on Social Welfare

- 1985 Report to the President of the Committee on Economic Security. 50th Anniversary Edition. Washington, D.C.: National Conference on Social Welfare.

National Governors' Association

- 1990 Educating America: State Strategies for Achieving the National Education Goals. A report of the Task Force on Education. Washington, D.C.: National Governors' Association.

National Governors' Association and National Alliance of Business

- 1985 Report on Joint Survey of State Provision of JTPA Technical Assistance. Washington, D.C.: National Alliance of Business.

Nothdurft, William E.

- 1990(a) SchoolWorks: Reinventing Public Schools to Create the Workforce of the Future. Washington, D.C.: German Marshall Fund of the United States.

Nothdurft, William E.

- 1990(b) Youth Apprenticeship, American Style: A Strategy for Expanding School and Career Opportunities. A report of a conference. Somerville, MA: Jobs for the Future.

Orfield, Gary and Slessarev, Helene

- 1986 Job Training Under the New Federalism. Chicago: University of Chicago.

Osterman, Paul

- 1991 "Is There a Problem with the Youth Labor Market and If So How Should We Fix It?" A paper prepared for the Joint Center for Political and Economic Studies.

Osterman, Paul

- 1989 "Training People for Real Jobs: Europe's Investment in Worker Education." Transatlantic Perspectives, No. 19.

Osterman, Paul

1988 Employment Futures: Reorganization, Dislocation, and Public Policy.
New York: Oxford University Press.

Reubens, Beatrice G.

1983 Youth at Work: An International Survey. Totowa, NJ: Rowman and
Allanheld, Publishers.

Reubens, Beatrice G.; Harrison, John A.C.; Rupp, Kalman

1981 Youth Labor Force, 1945-1995: A Cross-National Analysis. Totowa, NJ:
Rowman and Allanheld, Publishers.

Rosenbaum, James E.

1990 "What If Good Jobs Depended on Good Grades?" American Educator,
13:4.

Sheets, Robert; Hahn, Andrew; Lerman, Robert; Butler, Erik

1988 Who Will Train and Educate Tomorrow's Workers? The Financing of
Non-College-Bound Young Workers' Recurrent Education. Washington,
D.C.: William T. Grant Foundation, Commission on Work, Family and
Citizenship.

Skocpol, Theda

1989 "Targeting Within Universalism: Politically Viable Policies to Combat
Poverty in the United States." A paper prepared for the Conference on the
Truly Disadvantaged, Evanston, IL, sponsored by the Social Science
Research Council, Committee for Research on the Urban Underclass.

U.S. Department of Education

1991 America 2000: An Education Strategy. Washington, D.C.: U.S.
Department of Education.

U.S. Department of Labor

1991(a) Proposals to Amend JTPA: H.R. 2496. Washington, D.C.: U.S.
Department of Labor.

U.S. Department of Labor

1991(b) What Work Requires of Schools: A SCANS Report for America 2000.
Washington, D.C.: U.S. Department of Labor, Secretary's Commission on
Achieving Necessary Skills.

U.S. Department of Labor

1989 Working Capital: JTPA Investments for the 90s. A report of the Job Training Partnership Act Advisory Committee. Washington, D.C.: U.S. Department of Labor.

U.S. General Accounting Office

1991 Overlapping Federal Employment and Training Programs. Briefing for the U.S. Senate Committee on Labor and Human Resources. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1990(a) Job Training Partnership Act: Youth Participant Characteristics, Services, and Outcomes. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1990(b) Training Strategies. Preparing Noncollege Youth for Employment in the U.S. and Foreign Countries. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989(a) Job Training Partnership Act: Comments on H.R. 2039, the JTPA Amendments of 1989. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989(b) Job Training Partnership Act: Information on Training, Placements, and Wages of Male and Female Participants. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989(c) Job Training Partnership Act: Services and Outcomes for Participants with Differing Needs. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989(d) Senate Bill 543: The Job Training Partnership Act Youth Employment Amendments of 1989. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989(e) Training Programs. Information on Fiscal Years 1989 and 1990 Appropriations. Washington, D.C.: U.S. General Accounting Office.

- U.S. General Accounting Office
1989(f) Vocational Education: Opportunity to Prepare for the Future.
Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1988 Job Training Partnership Act: Participants, Services, and Outcomes.
Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985(a) Concerns Within the Job Training Community Over Labor's Ability to Implement the Job Training Partnership Act. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985(b) Job Training Partnership Act: An Analysis of Support Cost Limits and Participant Characteristics. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985(c) Job Training Partnership Act: Initial Implementation of Program for Disadvantaged Youth and Adults. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985(d) Strong Leadership Needed to Improve Management at the Department of Labor. Washington, D.C.: U.S. General Accounting Office.
- Vaughan, Roger and Berryman, Sue E.
1989 "Employer-Sponsored Training: Current Status, Future Possibilities."
National Center on Education and Employment Brief, No. 4.
- Vaughan, Roger; Pollard, Robert; Dyer, Barbara
1984 "Investing in Human Capital" in The Wealth of States: Policies for a Dynamic Economy. Washington, D.C.: Council for State Planning Agencies.
- Vickers, Margaret
1991 Building a National System for School to Work Transition: Lessons from Britain and Australia. Somerville, MA: Jobs for the Future.

- Victor, Kirk
1990 "Helping the Haves." National Journal, April 14.
- Walker, Gary; Feldstein, Hilary; Solow, Katherine
1985 An Independent Sector Assessment of the Job Training Partnership Act.
Washington, D.C.: National Commission for Employment Policy.
- Westat, Inc.
1985 Implementation of the Job Training Partnership Act: Final Report.
Rockville, MD: Westat, Inc.
- Westat, Inc.
1984 State Level Implementation of the Job Training Partnership Act.
Rockville, MD: Westat, Inc.
- William T. Grant Foundation
1991 New Partnerships. Education's Stake in the Family Support Act of 1988.
Washington, D.C.: William T. Grant Foundation.
- William T. Grant Foundation, Commission on Work, Family and Citizenship
1988(a) The Forgotten Half: Non-College Youth in America. Washington, D.C.:
William T. Grant Foundation.
- William T. Grant Foundation, Commission on Work, Family and Citizenship
1988(b) The Forgotten Half: Pathways to Success for America's Youth and Young
Families. Washington, D.C.: William T. Grant Foundation.
- Wills, Joan L.
1991 "Cracks in the Foundation" in Voices from the Field: 30 Expert Opinions
on America 2000, the Bush Administration Strategy to "Reinvent"
America's Schools. Washington, D.C.: William T. Grant Foundation and
Institute for Educational Leadership.

YOUTH IN THE NINETIES: RECENT TRENDS AND EXPECTED PATTERNS

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I. INTRODUCTION

The youth population of the 1990s will make the transition to adulthood in a time characterized by increasing economic competitiveness and changing family and social patterns. The result is greater uncertainty about long-term career opportunities. Today's young people face serious challenges as they navigate their way through formal education, gain work experience, develop careers and form families. Although they are equipped with more years of schooling than earlier cohorts, young men and women will be challenged to obtain a well-paying job; to avoid the lures of drugs, crime and unprotected sex; and to rely less on the support of family and community.

Much has been written about the changing nature of youth and their futures. One common and disquieting view is that too many young people are learning too little in school; engaging in too much crime, sex and drug use; having children too early and outside marriage; working for cash instead of studying; and holding negative attitudes toward hard and sustained work. Young people are becoming sexually active at younger ages but entering adult jobs and careers when they are older. This widening gap between the time youth begin sexual activity and the time they land their first adult job may be an underlying cause of high teenage pregnancy and unwed parenting rates. An added concern is that a rising share of young people are growing up in poor and one-parent families.

Still, many emerging trends involving youth have positive aspects as well. The decline in the youth proportion of the population means a smaller potential work force but encourages employers to compete for and develop the skills of young workers. While many believe high school students learn too little, a larger proportion of youth are earning a high school diploma. The proportion of minorities in the youth population has

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been increasing, but so has the number of minority parents with middle-class incomes. Although fewer children now live with both parents, the fact that today's families have smaller numbers of children somewhat offsets the parental financial burden. American youth use more drugs, alcohol and cigarettes than other youth, but the extent of use is declining. An increasing proportion of children are born to unmarried young mothers, yet this is partly because of delays in marriage and the declining birth rate among married young women.

Trends in the world of work also require careful interpretation. The flexible labor market permits today's youth to find jobs and earn money while remaining in school. But there are two sides to this coin: the job experience gained by youth may provide valuable learning and credible references, or it may undermine their education and chances for long-term success.

Over recent years, the economy has been increasing its demand for high-skill workers faster than the schools and social system have been creating them. The wage and employment gap between college educated and high school educated workers is widening to the advantage of the college educated. The negative side of this development is increasing inequality; the positive side is that the economy is generating enough high-skill jobs to absorb many more workers. So, if schools and families can improve the skills of young workers, the jobs will be there. Alternatively, employers may choose to restructure work so as to produce more lower-skill jobs.¹

These changing social and economic realities make employment and training policy at least as challenging today as it was when the federal government started its manpower system for youth 30 years ago. This paper examines our current challenges in detail. Section II describes the youth cohort of the 1990s and looks at the demographic, economic and social changes affecting the cohort as a whole. We examine trends in the size and distribution of the youth population, in the educational attainment and capabilities of youth, in family and household backgrounds and in the marital and parenting status of youth. In addition, the section assesses what is known about various negative behaviors of young people, including drug and alcohol use and criminal activity.

In Section III, we examine selected evidence on the causes and consequences of these behaviors and their relationship to the development of young workers. Section IV takes up the literature by social psychologists and others on how work in the teenage years influences social development, motivation and involvement in schooling. The section considers evidence on the impacts that different aspects and types of work experience

¹ This argument is developed in Commission on the Skills of the American Workforce, 1990.

have on young people. It also looks at vocational education and other approaches to education and employment.

The final section deals with the implications of the literature review for employment and training policy and research. One set of questions deals with the scale of future problems: What component of the youth cohort of the 1990s will be unable to make a productive adjustment to the job market and adulthood? Are the numbers overwhelming, or can second-chance employment and training programs realistically make a dent in the key problems? A second set of questions concerns the types of program and policy approaches likely to prove most effective: To what extent are the emerging job market problems of young people related to educational deficiencies, social behaviors, lack of job networks or weak incentives? What might be a sensible place to intervene to upgrade the skills of less-educated workers? What changes in social life should we encourage to improve the transition to adulthood?

II. A PROFILE OF THE YOUTH COHORT

Conventional wisdom has it that the youth population is decreasing, is composed increasingly of minorities and disadvantaged youth, and is beset by a range of problem behaviors, such as drug use, crime and unprotected sex. Are these appropriate images of youth in the 1990s? We find that the facts are generally much more complex. This section brings together a variety of key facts about the demographic, social, educational and economic situation of the youth of the 1990s.

POPULATION PATTERNS

Population is one of the simplest characteristics of a group. The U.S. Census Bureau provides the most comprehensive estimates of current population as well as projections of future population. We rely on both.

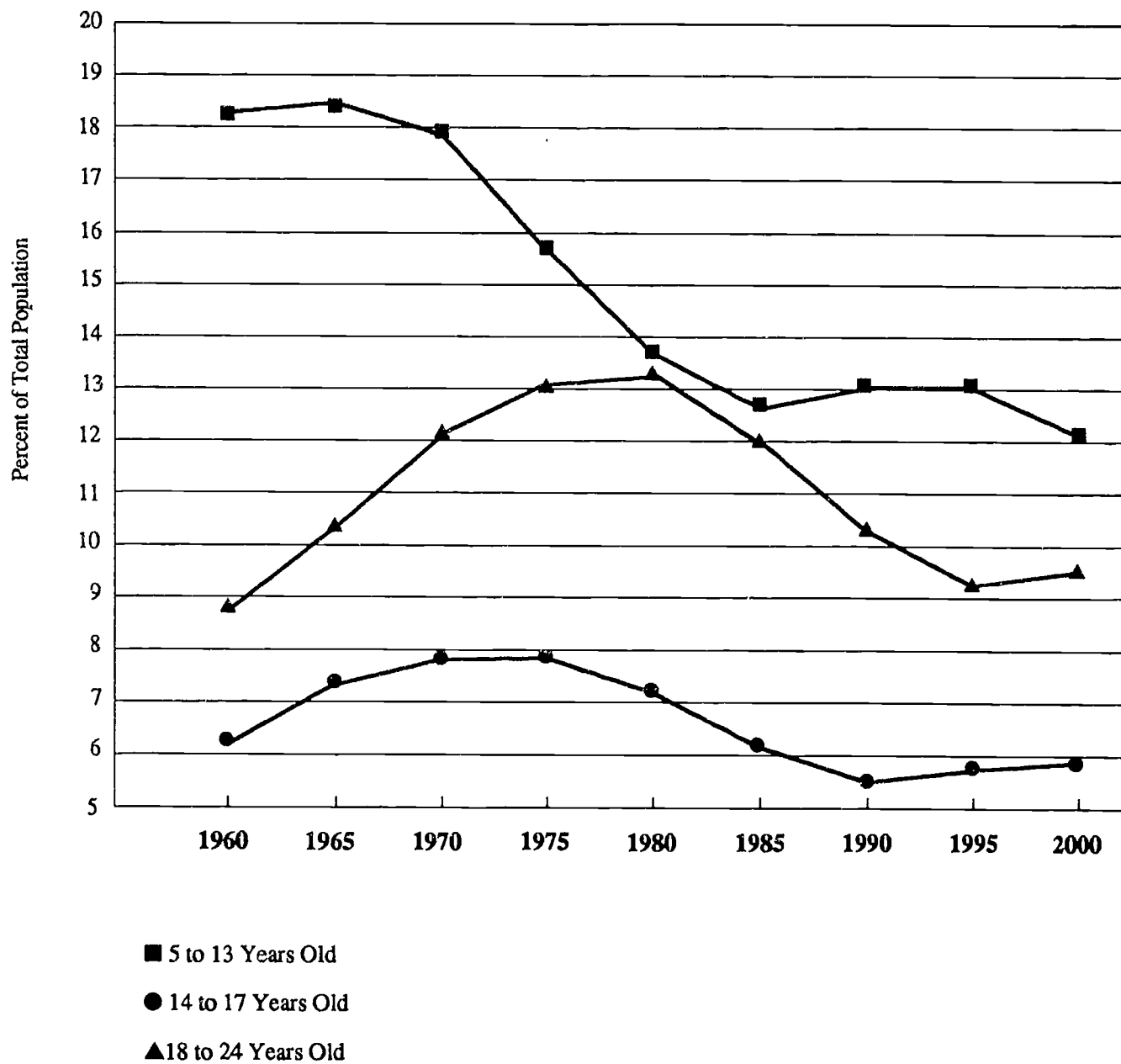
Figures 1 and 2 reveal the trends in the youth population in absolute terms and as a percentage of the total population. The patterns differ by specific age group and by the comparison years. The share of 5- to 13-year-olds declined sharply between 1960 and 1980, is rising slightly from 1985 to 1995 and is projected to fall further after 1995. For both 14- to 17-year-olds and 18- to 24-year-olds, recent declines in their proportion of the population follow large increases over the 1960-75 and 1960-80 periods, respectively. Despite these shifts, the two age groups will make up almost as large a share of the 1990s population as of the 1960 population.

These population shares result partly from changing birth cohorts but largely from recent increases in the elderly population. Thus, absolute numbers of youth will rise even though their share of the population is declining. Figure 2 reveals divergent patterns for 5- to 13-year-olds, 14- to 17-year-olds and 18- to 24-year-olds. Between 1985 and the end of the 1990s, the population of 5- to 13-year-olds will increase by over 3.5 million. The population of 14- to 17-year-olds began to rise later and more slowly but will increase by over 2 million from 1990 to 2000. Only the 18- to 24-year-olds will continue to decline in absolute numbers, finally levelling off between 1995 and 2000.

Table 1 reveals that these population trends are broadly similar for blacks and whites. Although whites have experienced a somewhat larger slowdown than blacks, projections indicate only a small rise in the black proportion of the youth population. Thus, the growth in the youth population will be more rapid among other minority groups.

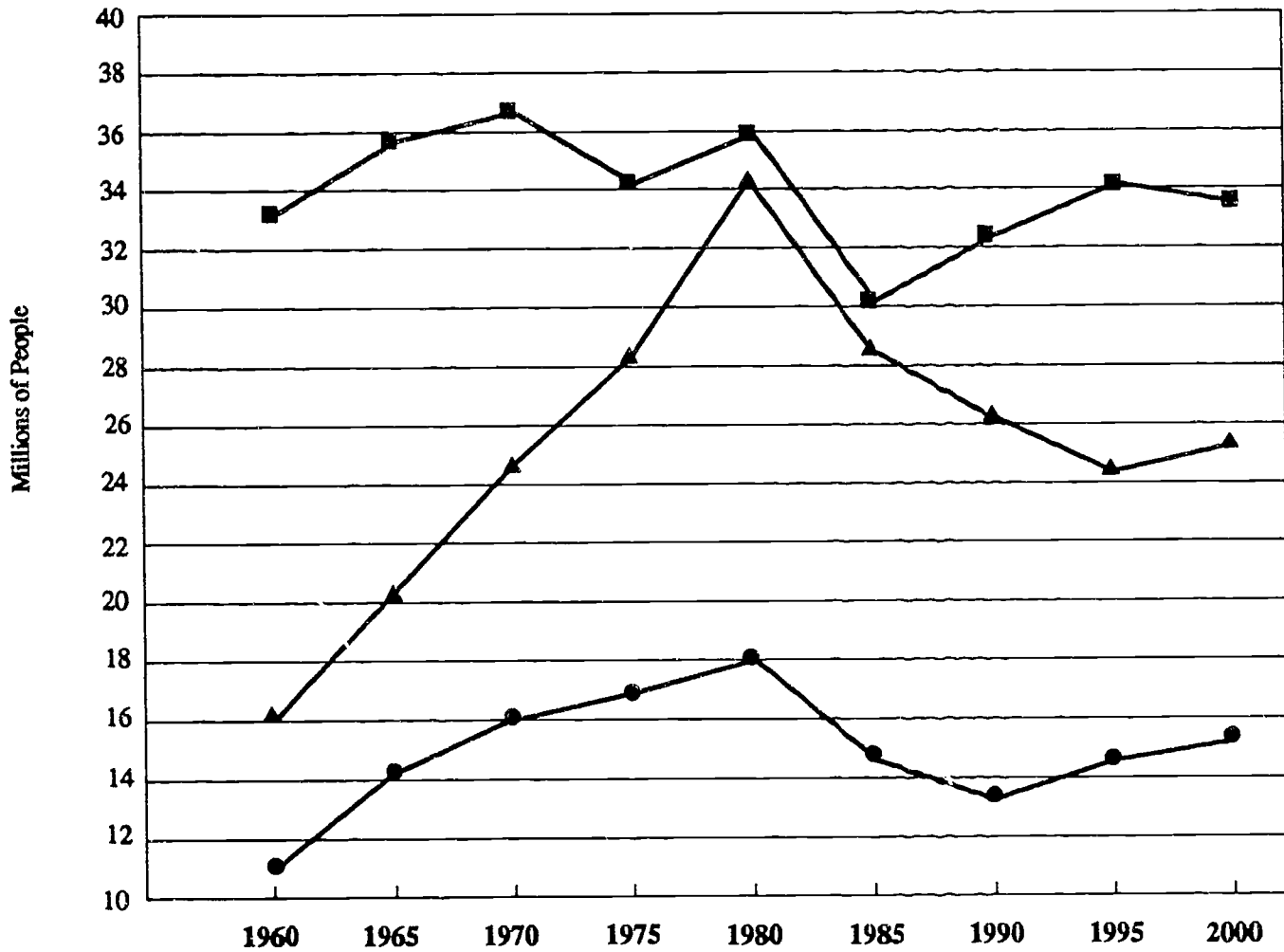
The changes in the youth population vary widely by region. Note in Table 2 that the New England, Mid-Atlantic and Central regions of the country will experience the largest declines, while the South Atlantic, Mountain and Pacific regions expect increases over

Figure 1
TRENDS IN THE PERCENTAGE OF YOUTH
IN U.S. POPULATION: 1960-2000



Source: U.S. Bureau of the Census, 1989:8.

Figure 2
U.S. YOUTH POPULATION: 1960-2000



- 5 to 13 Years Old
- 14 to 17 Years Old
- ▲ 18 to 24 Years Old

Source: U.S. Bureau of the Census, 1989:7-8.

Table 1
YOUTH POPULATION TRENDS BY
RACE AND AGE: 1988-1999

	1988	1992	1996	1999	1988-1996	1988-1999
White Youth	Population in Thousands				Percent Change	
12-14	9,774	10,628	11,264	11,512	15.2	17.8
15-17	10,726	10,089	11,058	11,398	3.1	6.3
18-20	11,216	10,313	10,355	11,194	-7.7	-0.2
21-23	11,274	11,296	9,980	10,201	-11.5	-9.5
Black Youth	Population in Thousands				Percent Change	
12-14	1,528	1,705	1,785	1,859	16.8	21.7
15-17	1,693	1,612	1,799	1,836	6.3	8.4
18-20	1,645	1,620	1,640	1,793	-0.3	9.0
21-23	1,635	1,605	1,504	1,551	-8.0	-5.1
Black Youth	Percent of Overall Population by Age				Percent Change	
12-14	13.5	13.8	13.7	13.9	1.2	2.8
15-17	13.6	13.8	14.0	13.9	2.6	1.8
18-20	12.8	13.6	13.7	13.8	6.9	7.9
21-23	12.7	12.4	13.1	13.2	3.4	4.2

Source: U.S. Bureau of the Census, 1989:38-60.

Table 2
POPULATION TRENDS OF 14- TO 17-YEAR-OLDS
BY REGION: 1980-2000

	1980	1986	1990	1995	2000	1990-1995	1990-2000	1980-2000
Region	14- to 17-Year-Olds in Thousands					Percent Change		
New England	901	796	637	677	751	6.3	17.9	-16.6
Mid-Atlantic	2,638	2,254	1,893	1,981	2,094	4.6	10.6	-20.6
E. North Central	3,069	2,669	2,309	2,424	2,405	5.0	4.2	-21.6
W. North Central	1,234	1,047	933	1,041	1,038	11.6	11.3	-15.9
South Atlantic	2,627	2,488	2,250	2,493	2,745	10.8	22.0	4.5
E. South Central	1,093	1,006	917	966	942	5.3	2.7	-13.8
W. South Central	1,729	1,724	1,610	1,771	1,874	10.0	16.4	8.4
Mountain	806	795	773	920	980	19.0	26.8	21.6
Pacific	2,150	2,046	1,914	2,236	2,504	16.8	30.8	16.5

Source: U.S. Bureau of the Census, 1988:34-42.

the 1980-2000 period. Only some of these regional differences have to do with migration and overall population growth; youth as a proportion of each region's population show the smallest dropoffs in the West and South. All regions have already reached their low and will see considerable growth over the 1990s in the number of 14- to 17-year-olds.

These population trends imply that the absolute number of young people who might require employment and training services will rise even if the typical young person in the 1990s is as well qualified as in earlier decades. All regions have already started to see increases in the 14 to 17 age group.

LIVING ARRANGEMENTS OF YOUTH

The youth entering adulthood in the 1990s will be the product of a dramatic shift in family structure and living arrangements. Today's youth live with a smaller number of immediate family members---both parents and siblings---than did earlier cohorts. The decline in the proportion living in two-parent families is of most importance. Table 3 shows trends among white, black and Hispanic families.

The trend toward one-parent families is present for all groups, with most one-parent families headed by women. Today's reality differs markedly from the situation in the 1960s. Then, two of three black children lived with two parents and only about one of five lived in a one-parent family, though over 10 percent did not live with either parent. By 1989, only a minority (38%) of black children lived in a two-parent household. The majority (62%) lived with one or neither parent. About one of five white youth lived with only one or neither parent in 1989, more than double the 1960 level.

The decline in two-parent families has potentially serious consequences for the academic and social development of young people. The work of McLanahan and others has demonstrated that spending part of childhood in a one-parent family increases the chances of young women giving birth before marriage, having their own marriages break up and failing to complete high school.² And many of these negative outcomes stem from factors other than the economic disadvantage of young people in one-parent families.

The economic disadvantage is considerable. For many children, living in a one-parent family means dependency on welfare programs. In 1989, benefits from Aid to Families with Dependent Children (AFDC) were received by nearly 60 percent of black children

² See, for example, McLanahan, 1985a, and Manski, et al., 1990, for solid evidence on the impact of one-parent families on high school completion.

Table 3
TRENDS IN LIVING ARRANGEMENTS
OF CHILDREN UNDER 18: 1960-1989

	1960	1970	1980	1989
White Children Under Age 18 (in thousands)	55,077	58,790	52,242	51,134
Percent of All Children Under 18	NA	81.4	77.9	75.3
Percent With Two Parents	90.1	89.5	82.7	79.6
Percent With Mother Only	6.1	7.8	13.5	16.1
Percent With Father Only	1.0	0.9	1.6	2.7
Percent With Neither Parent	1.9	1.8	2.2	1.5
Black Children Under Age 18 (in thousands)	8,650	9,422	9,375	9,835
Percent of All Children Under 18	NA	13.0	14.0	14.5
Percent With Two Parents	67.0	58.5	42.2	38.0
Percent With Mother Only	19.9	29.5	43.9	51.1
Percent With Father Only	2.0	2.3	1.9	3.4
Percent With Neither Parent	11.1	9.7	12.0	7.5
Hispanic Children Under Age 18 (in thousands)^a	NA	4,006	5,459	6,973
Percent of All Children Under 18	NA	5.5	8.1	10.3
Percent With Two Parents	NA	77.7	75.4	67.0
Percent With Mother Only	NA	NA	19.6	27.8
Percent With Father Only	NA	NA	1.5	2.7
Percent With Neither Parent	NA	NA	3.5	2.4

Source: U.S. Bureau of the Census, 1990c:3.

^a Hispanics may be of any race.

in one-parent families and about one-third of white children in one-parent families.³ Family type also affects residential status. (See Table 4.) The proportion of all one-parent families of 12- to 17-year-olds living in public housing is more than five times that of two-parent families of this age group.

Today's youth also grow up with fewer siblings. The decline in family size has affected all groups. Smaller families may reduce the financial burden on parents since there are fewer children to feed and clothe; but the reduced number of siblings may place a larger burden on parents to provide advice, help with homework and monitor behavior. Between 1974 and 1990, families with more than two children declined from 31 percent to 20 percent of all families with children (U.S. Bureau of the Census, 1990c, 1975).

As of March 1990, the number of 12- to 17-year-olds living with siblings varied by race/ethnicity but mostly by family type. Youth in one-parent families were much more likely to live without siblings than youth in two-parent families. Note in Table 4 that two-thirds of 12- to 17-year-olds in white one-parent families had only one or no sibling living with them. Within family types, a greater proportion of Hispanic youth lived with three or more siblings, followed by blacks and whites.

Youth may call on other relatives for support, supervision and even potential job contacts. In many one- and two-parent households, adult relatives--such as grandparents, uncles or older siblings---live with young people. Table 4 reveals that this phenomenon is widespread. Extended families are common among all three racial/ethnic groups. Overall, about 40 percent of youth in one-parent families also live with an unrelated or related adult other than the parent.

Youth live in areas that vary with family type and with the race/ethnicity of the parent. Residence in central city locations in large metropolitan areas is most common for youth in minority one-parent families; over 40 percent of these youth live in large central cities, compared with only 16 percent of youth in white one-parent families. Nearly two of three black youth but only one of three white youth live in central cities. The concentration is so extensive that minority single-parent families contain over 25 percent of 12- to 17-year-olds in central cities, even though they account for only about 10 percent of all 12- to 17-year-olds.

³ About 7.5 million children were on AFDC, nearly all in female-headed families. About 40 percent, or 3 million, of these children were black and a similar number were white. Dividing 3 million by the 5 million black children in one-parent families yields an estimate of 60 percent; for whites, 3 million is divided by 8.2 million children in one-parent families (U.S. Department of Health and Human Services, 1989:3).

Table 4
FAMILY ENVIRONMENT AND LOCATION OF 12- TO 17-YEAR-OLDS
BY FAMILY TYPE: MARCH 1989

	Two-Parent Families			One-Parent Families		
	White	Black	Hispanic ^a	White	Black	Hispanic ^a
Number of 12- to 17-Year-Olds	12,317,000	1,292,000	1,321,000	2,723,000	1,404,000	539,000
Siblings in Household (%)						
None	16.2	12.9	9.3	28.4	19.7	18.9
One	42.8	31.1	28.3	39.4	33.8	30.2
Two	25.7	31.1	26.5	21.0	23.9	23.0
Three	9.5	13.7	18.2	7.6	13.0	19.3
Four	3.0	4.2	8.8	2.3	5.8	5.8
Five or more	2.7	6.9	8.9	1.4	3.8	3.0
Other Adults Present (%)						
Relatives	28.0	32.4	35.8	29.9	32.4	39.5
Nonrelatives	0.5	0.2	0.5	8.8	6.1	5.4
Location (%)						
Large Metro Areas	37.5	48.0	61.2	41.7	54.0	63.2
In Central Cities	9.4	27.2	32.1	16.2	41.7	40.0
Outside Central Cities	28.0	20.8	29.2	25.4	12.3	23.0
Other Metro Areas	36.0	32.1	29.0	36.1	31.1	30.5
In Central Cities	10.9	20.4	15.0	17.5	23.1	19.7
Outside Central Cities	25.0	11.7	14.0	18.6	8.0	10.8
Outside Metro Areas	26.6	19.9	9.8	22.2	14.9	6.5
Residential Status (%)						
Homeowner	84.6	67.4	63.4	49.1	22.7	29.7
Renter, Public Housing	0.7	4.4	2.6	9.3	25.4	17.5
Renter, Private Housing	14.7	28.2	34.1	41.6	51.9	52.8

Source: Calculated from U.S. Bureau of the Census (1990c:37-52) data.

^a Hispanics may be of any race.

These trends have implications relevant to employment and training programs. Access of youth to informal job networks may be declining. Not only are today's youth less likely to live with a parent who can steer them to a job, but fewer youth can turn to brothers or sisters. Recent changes in family patterns may be exacerbating the special difficulties black youth experience in obtaining jobs through friends and relatives (Holzer, 1982). About 25 percent of black youth in one-parent families also live in public housing. Evidence indicates that growing up in a family receiving welfare and living in public housing worsens the employment experience of young workers (Lerman, 1986). Moreover, the general increase in the numbers of youth growing up without fathers has uncertain consequences for the socialization of young workers. All of these trends may increase the need for job search assistance and other formal job finding mechanisms.

EDUCATION AND EMPLOYMENT STATUS OF PARENTS

Young people depend greatly on their parents. They may receive help in doing homework, in finding a job or simply in learning from an adult's experience. Given these realities, one would expect youth to benefit from a parent who is well educated and steadily employed. Table 5 shows the differences in these dimensions among parents of 12- to 17-year-olds in 1990.

Teenage children from different racial/ethnic backgrounds have parents with very different educational backgrounds. As Table 5 shows, heads of white two-parent families have the most formal education: one in four of these families have a parent with a college degree. Hispanic parents of teens are the most likely to have low levels of education, with over half not having completed high school. Black parents of teens are in the middle of the range, with about one-third not having completed high school.

The vast majority of families with teens--over 80 percent of both white and black two-parent families--have at least one employed parent. As of March 1990, the proportion of families with no employed parent ranged from 8.5 percent for white two-parent to almost 50 percent for minority single-parent families with children 12 to 17 years old. But not being employed in one-parent families was largely a matter of not participating in the labor force (not actively looking for a job) rather than unemployment.

The employment differences have expected, if unfortunate, consequences for family incomes. Although incomes are above the poverty level for the vast majority of two-parent families with teenage children, one of three white and most minority single-parent families with teens are poor. Family type is especially consequential for minority youth in terms of family income. For example, among black families with teens, two-parent families have median incomes nearly 3.5 times the median for one-parent families

Table 5
EDUCATION, INCOME AND EMPLOYMENT
OF PARENTS OF 12- TO 17-YEAR-OLDS

	Two-Parent Families			One-Parent Families		
	White	Black	Hispanic ^a	White	Black	Hispanic ^a
Education of Head of Household (%)						
Less than High School	16.6	28.1	51.5	26.6	36.2	58.3
High School Graduate	37.6	40.6	26.9	41.3	41.5	24.1
Some College	19.5	17.1	13.5	19.6	15.3	13.7
College Graduate	13.5	7.7	4.9	7.4	5.7	2.8
Postgraduate Education	12.7	6.5	3.3	5.0	1.4	1.1
Family Income						
Median Income	43,143	35,755	27,575	20,124	10,358	10,443
Percent Poor	6.1	12.9	20.9	31.1	57.2	57.1
Employment of Parent(s) (%)						
One Parent Employed	28.0	19.4	38.1	70.6	55.8	51.5
Two Parents Employed	63.4	63.5	46.8	n.a.	n.a.	n.a.
Head Unemployed	2.9	5.0	4.6	5.2	9.7	5.9
Head Not in Labor Force	5.6	12.1	10.5	24.2	34.5	42.6
No Parent Employed	8.5	17.1	15.1	29.4	44.2	48.5

Source: Calculated from U.S. Bureau of the Census (1990c:37-52) data.

^a Hispanics may be of any race.

(nearly \$36,000 versus about \$10,000). White single-parent families with teens have median incomes of about \$20,000, or almost twice the median for black families of this type. Median incomes for black two-parent families with teenage children are 83 percent of the median for similar white families.

Although the rates of poverty, low parental education and unemployment are higher among one-parent and minority families with teenage children, the largest proportion of families with these difficulties are white two-parent families. Because the majority of youth (63%) are in white two-parent families, even a low incidence for this group represents a large absolute number of youth.

In sum, the disadvantaged youth in means-tested employment and training programs in the 1990s are more likely to be chronically poor than the low-income youth of earlier periods. This is because poverty is much more likely to be transitory for two-parent than for one-parent families (Ellwood, 1989). Although racial/ethnic differences persist, it is family type that will be most influential in determining eligibility for these programs.

EDUCATION LEVELS AND BASIC SKILLS OF TODAY'S YOUTH

The preceding sections have dealt with the demographics, geographic locations and family backgrounds of youth in the 1990s. It is now appropriate to examine the characteristics of the young people themselves.

We begin with education, one of the most important predictors of economic and social success.⁴ Poorly educated young people are more likely to engage in crime, to create unwanted pregnancies and to experience unemployment and low wages. Falling behind grade level is a good predictor of dropping out.

Over the past two decades, the gap between black and white high school completion rates was virtually eliminated. Between 1970 and 1989, the percentage of black 22- to 24-year-olds who were high school dropouts declined dramatically from 38 percent to only 15 percent (U.S. Department of Education, 1990:Table 98). During the same period, white dropout rates remained about the same, falling slightly from 16 to 13 percent.⁵

⁴ Dryfoos, 1990, is a good source for the statements in this paragraph.

⁵ While black and Hispanic youth have higher dropout rates than white youth, the largest proportion of dropouts in their early 20s are white. Black youth make up only about 13 percent of this group, Hispanic youth about 26 percent and white youth about 61 percent.

Table 6 reveals some remaining differences among black, Hispanic and white youth. Young minority males are most likely to fall behind by two or more years. At age 12, when the typical student is in seventh grade, one of six black males are in fifth grade or below. It is interesting that the proportion of students who are two or more years behind remains about the same until the age of 19.

One would expect that dropout rates would mirror rates of falling behind in school. Although the connection is present, several striking differences between the two measures show up in Table 6. For example, Hispanic males age 16 or older are about as likely as black males to fall behind by two years but are much more likely to have dropped out of high school. Black females do better than black males in not falling behind, yet the proportion who are high school dropouts is the same at age 22: 20 percent.

Despite the high rates at which youth graduate from high school, only 22 percent complete four or more years of college.⁶ The proportion of 25- to 29-year-olds completing at least four years of college has remained about the same for blacks and whites since 1976, though Hispanic youth have made some gains over the period. As of 1988, only about 12 percent of blacks and Hispanics and 25 percent of whites had finished four years of college.

Measuring years of schooling is much easier than assessing the quality of education or competencies achieved. Although a full analysis of educational performance is beyond the scope of this paper, several key trends and patterns contribute to the image of youth in the 1990s.

The main source of national trend data on representative samples of students is the National Assessment of Educational Progress (NAEP).⁷ These data reveal serious limitations, but no worsening of student capacities over time. Indeed, groups with the lowest scores have achieved gains. For black and Hispanic youth, nearly all the indicators show considerable absolute improvement as well as narrowing gaps between white and minority youth. The distribution of several test scores has become somewhat more equal, as groups at the bottom improve while those at the top stay the same or decline. Our analysis is based on the NAEP data for 17-year-olds who are in school.⁸

⁶ The data in this paragraph come from the Council of Economic Advisers (1990).

⁷ Reports of the NAEP test scores come from the U.S. Department of Education (1990).

⁸ Dropout rates have declined since the NAEP began testing. Since more students are remaining in school, greater numbers of 17-year-olds who would have dropped out in earlier years are still in school to be tested and may be lowering averages for this age group.

Table 6
YOUTH BEHIND MODAL GRADE AND
HIGH SCHOOL DROPOUTS: OCTOBER 1988

Percent Two or More Years Behind Modal Grade						
Age	Young Men			Young Women		
	White	Black	Hispanic ^a	White	Black	Hispanic ^a
12	4.4	16.7	8.8	2.8	6.9	7.8
13	4.2	9.7	2.1	3.1	5.6	4.8
14	5.5	18.2	17.6	3.1	8.1	5.3
15	7.3	17.6	9.2	2.5	5.3	0.8
16	5.4	15.9	15.3	4.0	9.9	16.2
17	6.6	14.2	12.4	3.7	9.6	14.1
18	6.9	17.6	14.3	2.8	17.6	5.4
19	10.9	35.9	NA	4.9	28.6	NA
Percent Not Enrolled and Not High School Graduates						
16	4.7	4.7	16.6	6.2	7.7	22.6
17	8.7	5.5	19.5	8.8	6.0	20.4
18	14.2	15.0	30.6	14.3	14.1	27.6
19	17.0	22.2	40.5	11.9	22.4	27.0
20	15.5	23.8	44.6	12.9	16.3	53.8
21	16.6	20.0	42.5	12.0	13.6	33.2
22	16.8	20.9	54.7	14.4	20.3	51.4

Source: U.S. Bureau of the Census, 1990b:14-18,157-162.

^a Hispanics may be of any race.

Reading comprehension tests provide considerable detail on performance. The defined thresholds for this test are: 200 (basic)--an ability to understand and to combine ideas and make inferences based on short, uncomplicated passages; 250 (intermediate)--an ability to search for specific information, interrelate ideas and make generalizations about literary, science and social studies material; 300 (adept)--an ability to find, understand, summarize and explain relatively complicated literary and informational material; and 350 (advanced)--an ability to understand links between ideas even when such links are not explicit, and to make appropriate generalizations even when texts lack clear introductions or explanations.

Nearly all 17-year-olds are able to read at a basic level, while only 5 percent can read at an advanced level. During the 1970-88 period, the average performance of the bottom 5 percent improved from 208 (just above basic) to 226 (between basic and intermediate) while that of the top 25 percent remained the same or declined. Black youth showed impressive progress, raising their average score from 239 to 274. Hispanic 17-year-olds also became better readers, as indicated by a rise in average score from 261 to 271 between 1980 and 1988. With the average score of white youth advancing only slightly from 291 to 295, the gap between white and minority youth narrowed.

Still, nontrivial racial/ethnic differences remained. Almost half (46%) of white youth but only about one-quarter of minority youth demonstrated the ability to read at the adept level in 1988. About one in four minority 17-year-olds scored below the intermediate level, but only one in ten white youth had similar scores.

Writing test scores indicate similar race/ethnicity differentials, but show modest evidence of narrowing gaps. Between 1979 and 1984, the proportion of black 17-year-olds able to do informative writing at the basic level or better increased from 73 to 80 percent; for whites, the increase was from 89 to 91 percent. During the 1984-88 period, 11th-grade blacks improved their average score slightly (from 204 to 207) as whites showed a slight worsening (from 229 to 225).

The patterns and trends in math proficiency are similar to those in reading, but show modest gains for minorities. Here, the classifications are: 200--considerable understanding of two-digit numbers and some basic multiplication and division; 250--understanding of the four basic operations as well as an ability to compare information from graphs and charts and to analyze simple logical relations; 300--identifying geometric figures, measuring lengths and angles, calculating areas of rectangles, and computing decimals, simple fractions and percents; and 350--applying a range of reasoning skills to solve multistep problems, including those with fractions and percents, exponents and square roots.

Only about half of all 17-year-olds were able to reach the 300 level or above in 1986, virtually the same proportion as in 1978. Overall gains occurred at the 250 level (the proportion rising from 92 to 96 percent), but a slight decline took place at the most advanced level (from 7.4 to 6.4 percent). The gains for black youth were mostly at the lower and middle levels. In 1977, 30 percent of black 17-year-olds did not reach the 250 level (which includes the four basic math operations); by 1986, only 14 percent fell short of this level.

While the proportion of black youth performing at the 300 level (moderately complex procedures) rose from only 18 to 21.7 percent, 58 percent of white youth passed this level. Racial/ethnic differences also are striking at the 350 level: 7.6 percent of whites, 0.3 percent of blacks, and 1.2 percent of Hispanics were proficient in doing multistep problems and algebra.

Science proficiency tests also indicate race/ethnicity differentials. The 1986 results for 17-year-olds show an average score of 298 for white students compared with 259 and 253 for Hispanic and black students, respectively. The disparities are greater at the 300 level (some detailed scientific knowledge and the ability to evaluate scientific procedures). About 50 percent of whites scored at this level while the rates for minorities were less than 20 percent.

However, the proportion of blacks scoring at the 300 and 350 levels increased by 48 and 67 percent, respectively, over the 1982 to 1986 period. Considering the overall decline in science proficiency scores from 1973 to 1982, these improvements are encouraging. Yet, overall performance on science tests remained below levels for the 1970 to 1973 period.

The lack of overall improvement in the capabilities of American students is one reason for their weak performance on tests conducted in several countries around the world. One particularly disappointing assessment of math competencies showed 13-year-old students in the United States scoring well below students in several Canadian provinces, Korea, the United Kingdom, Ireland and Spain. In general, American high school students earned test scores in the middle or lower range of scores earned by students in other countries.

Four conclusions stand out about the academic performance of young people: (1) American students generally score below students in other countries; (2) reading, writing, math and science capabilities for American youth as a whole have neither improved nor deteriorated over the last 15 to 20 years; (3) while test scores have improved among blacks and Hispanics, these youth still score much lower than whites on tests of reading comprehension and math and science proficiency; and (4) the dropout rate among blacks has declined dramatically.

While the lowest test scores in reading and math have improved, the expectations of employers also have increased. By implication, teaching the most basic skills is unlikely to be enough to promote the employability of disadvantaged youth. Instead, employment and training programs will have to undertake more complex approaches to promote the higher skills needed for employment.

MARRIAGE, SEXUAL ACTIVITY AND EARLY PARENTHOOD

Over the last two decades, men and women have begun sexual activity at younger ages. At the same time, a declining percentage of young people are married. Between 1970 and 1988, the married proportion of 18- to 19-year-old women declined from 24 to 11 percent (U.S. Bureau of the Census, 1990a:44). These two trends have contributed to a substantial rise in the prevalence of sexual activity before marriage. In the early 1960s, about 8 to 9 percent of white unmarried 17-year-olds had initiated sexual activity; by the early 1980s, the proportion had reached about 22 percent (Hofferth, et al., 1987).

The rate of sexual activity among unmarried young men and women continued upward during the 1980s. Between 1982 and 1988, the percentage of 15- to 19-year-old women who engaged in sexual activity rose from 42.1 to 49.5 (Forrest and Singh, 1990). Young men also became more sexually active over the 1980s; the percent of never-married 17- to 19-year-old men who had had sexual intercourse increased from 65.7 to 75.5 (Sonenstein, et al., 1989). Although use of contraception has increased and about two-thirds of sexually active teens frequently use one of several contraceptive methods, the number of young women unprotected from the risk of unintended pregnancy also has increased.

Not surprisingly, the results are more unmarried young women becoming pregnant, more obtaining abortions and more becoming unmarried mothers. In 1960, there were only about 1.5 births to every 100 unmarried women age 15 to 19; by 1987, the figure reached 3.4 (U.S. Bureau of the Census, 1981, 1990a). Since about 50 percent of pregnancies are aborted, compared with about 20 percent in 1960, the number of pregnancies is much greater than what is reflected in the birth rate. The marriage, sex and pregnancy trends have meant a sharp decline in the proportion of children born to married (as opposed to unmarried) teenage women. Between the early 1950s and the early 1980s, this proportion dropped from 86 to 48 percent.

By 1985, pregnancy and abortion rates of teenage women appeared to have levelled off at extremely high levels. For every 1,000 women age 18 or 19, there were 166 pregnan-

cies, 63 abortions and 81 births; among black young women, the rates per 1,000 were 261 pregnancies, 97 abortions and 129 births (Henshaw and Van Vort, 1989:85-86).⁹

We can examine the marital and parental status of young women by tabulating data from the National Longitudinal Survey of Youth (NLSY). Note in Table 7 that rates of motherhood and marriage vary substantially by race/ethnicity. As of 1985, fewer than 4 percent of white 20- to 21-year-old women were unmarried mothers compared with 10 percent of Hispanic and 33 percent of black young women. Overall rates of motherhood also were much higher among minority women. Nearly half of black and over one-third of Hispanic 20- to 21-year-old women had parental obligations compared with about one in five white young women. About 10 percent of black women, 21 percent of Hispanic women and about 14 percent of white women age 20 or 21 were married mothers. The proportion of 20- to 21-year-old women (mothers and not mothers) who were married was highest among Hispanics (31.8%), almost as high among whites (29.3%) and lowest among blacks (15.6%).

The majority of unmarried teen mothers reside with at least one adult relative. Trent and Harlan (1990) report that, in 1980, about 60 percent of never-married 18- to 19-year-old mothers lived with at least one parent and another 11 percent lived with other relatives.

Young men begin sexual activity at even earlier ages than young women. For white and Hispanic young men, 16 and 17 are the ages when the largest increases in initial sexual activity take place. Black young men begin much earlier. Still, the incidence of early fatherhood is lower than the incidence of early motherhood. For example, in 1985, only about 20 percent of black 20- to 21-year-old men had become fathers, well below the 45 percent of black 20- to 21-year-old women who had become mothers. Of those who reached age 20 in the late 1970s, the proportions who had become unwed teen parents were about 11 percent of black men, 26 percent of black women, 1 percent of white men and 3.4 percent of white women (author's unpublished tabulations from NLSY).

The decline in marriage has probably weakened the labor force involvement of young men. Marriage appears to be associated with higher employment and earnings of fathers as well as nonfathers. A careful study by Korenman and Neumark (1991) demonstrates that wage growth is higher among married young men than among unmarried young men. An analysis of 22- to 30-year-old men revealed that, in 1987, the earnings of

⁹ The reason abortions plus births do not virtually equal pregnancies in this calculation is that a woman may suffer a miscarriage or be older than 19 when a birth occurs.

Table 7
YOUNG WOMEN BY AGE AND MARITAL/PARENTAL STATUS:
1979, 1983 AND 1985

	Never-Married Mothers	Married Mothers	Separated/Divorced/ Widowed Mothers	Married Not Mothers	Other
Age (Year)	Percent in Each Marital/Parental Status				
Black					
18-19 (1979)	26.0	4.9	0.7	2.0	66.5
18-19 (1983)	25.4	2.0	0.0	4.5	68.1
20-21 (1979)	31.0	11.9	7.5	4.4	45.3
20-21 (1983)	31.5	8.0	2.1	7.9	50.5
20-21 (1985)	32.7	10.4	1.6	5.2	50.1
Hispanic					
18-19 (1979)	6.3	17.0	1.1	9.3	66.2
18-19 (1983)	8.2	12.6	2.1	6.1	71.0
20-21 (1979)	7.8	23.6	5.3	12.3	50.9
20-21 (1983)	10.6	24.2	2.4	8.9	53.8
20-21 (1985)	10.2	21.1	4.7	10.7	53.3
White					
18-19 (1979)	1.6	8.4	1.1	0.8	88.1
18-19 (1983)	2.7	8.1	1.0	8.6	79.7
20-21 (1979)	2.7	17.4	2.5	1.7	75.7
20-21 (1983)	3.5	13.9	2.3	14.7	65.7
20-21 (1985)	3.6	14.4	3.6	14.9	63.5

Source: author's unpublished tabulations from the National Longitudinal Survey of Youth.

married men were about \$4,000 higher than those of unmarried men who were not fathers (Lerman, 1990).

The higher rates of early parenthood, especially among young women and minorities, may require employment and training programs to take into account the needs of young parents. Among young men, lack of interest in marriage may be associated with a lack of commitment to employment. At the same time, young fathers may have to accept financial responsibility for child support. Thus, many of the youth in employment and training programs will have needs associated with early childbearing and parenting.

CRIMINAL ACTIVITY

Young people under age 24 commit over half of all crimes and over two-thirds of all violent crimes.¹⁰ The early teenage years are critical for current and future involvement in crime. In 1986, young people under age 18 accounted for about 30 percent of all arrests and 15.4 percent of all arrests for violent crime. Wolfgang, Thornberry and Figlio (1987), who followed a cohort of Philadelphia youth from age 11 through age 30, find that criminal offenses peak at age 16 and decline gradually as young people age. This peak is also the modal age for initial criminal activity. Thus, if young people can be prevented from entering criminal activity by age 16, there is a good chance their overall involvement with crime can be sharply reduced.

Only a minority of young people are arrested. Dryfoos (1990) estimates that 11 percent of 15- to 17-year-olds were arrested for nontraffic offenses in 1986. However, the proportion ever arrested is double this figure if self-reports of arrests are relatively accurate. The rates are much higher for males and for blacks. In 1986, nearly 80 percent of youth arrested were males; about 23 percent of all juvenile arrests and about 50 percent of juvenile arrests for violent crime were among blacks. Using data from the NLSY (from 1979 through 1987), Hill and O'Neill (1990) have estimated the criminal involvement of men age 19 to 21 in 1979. They report that one in ten black young men and one in forty white young men had spent time in jail by 1987. But overall, a relatively small proportion of youth commit a large proportion of crimes. According to Dryfoos (citing Elliot), about 15 percent of adolescents account for 66 percent of all offenses, including 87 percent of all crimes against persons.

The number of crimes against people increased from 1973 to 1979, levelled off through 1982, declined from 1982 to 1987, then increased again through 1990. Total crimes were

¹⁰ Unless otherwise noted, the crime data in this section come from FBI reports and National Crime Survey household data (U.S. Bureau of the Census, 1990b).

lower in 1990 than in the early 1980s. However, the number of violent crimes in 1990 returned to the level in 1983, though not quite to the levels of 1980-82. Murder is the one crime that has reached record levels, rising from a low (post-1973) of 18,751 in 1986 to a high of 23,000 in 1990. The decline over the 1980s in overall crimes approximately matched the 12 percent decline in the youth population. These figures imply that young people in the late 1980s were about as prone to commit crime as youth in the early 1980s and were actually more likely to commit murder.

Murders are concentrated in large cities and among young males. Just seven cities--New York, Los Angeles, Chicago, Philadelphia, Houston, Detroit and Washington--account for one-fourth of all murders. In 1988, over 1,000 black 15- to 19-year-olds and about 550 white 15- to 19-year-olds died in homicides. Homicide was the leading cause of death of black young men. The rate among black men age 15 to 24 jumped from 60.6 per 100,000 in 1984 to 85.6 in 1988.¹¹ Since 1988, the homicide rate has continued to skyrocket.

One result is the fear of crime many young people experience. Mental health workers, teachers and other professionals who work with young people report serious emotional problems related to fear of violence, which psychiatrist Dr. Carl Bell has compared to the posttraumatic stress experienced by Vietnam veterans (Harris, 1991). The fear is often well grounded. For example, a teacher's survey of 26 10th-graders in Laurel, Maryland, found that 16 knew of a person under 19 who had been killed, 13 knew of someone who had been stabbed, 4 knew of a suicide and 11 knew of someone who had attempted suicide (Harris, 1991).

The increasing violence has extended to schools. In Los Angeles schools, weapons seizures jumped nearly 30 percent over the 1988-90 school years and weapons-related incidents went from 469 to 1,076 between 1985 and 1987. In 1988, 18 percent of black and about 9 percent of white eighth-graders in a national sample reported they did not feel safe in their schools (U.S. Department of Education, 1990:Table 132).

The combination of high numbers of violent crimes and a reduced youth population indicates that young people were committing more of these crimes in 1988 than in 1980. However, the concentration of crime among a small group of offenders suggests that the number of violent criminals may not have significantly increased. It is uncertain whether employment and training programs are more likely to encounter youth with records of violent offenses.

¹¹ The death rate of black young men from homicide was even higher in 1970, at 102.5 per 100,000 (U.S. House of Representatives, Committee on Ways and Means, 1990:1008).

DRUG AND ALCOHOL USAGE

Surveys of households and high school seniors indicate that drug use has been declining at least since 1985 and that the prevalence of drug use is higher among white than among black youth (U.S. General Accounting Office, 1991). But drug problems remain serious. Many attribute increased violence to turf battles over the drug trade (Skorneck, 1991). Certainly, drug arrests jumped dramatically over the 1980s, with arrests for the sale or manufacture of drugs rising from 58,000 in 1980 to 217,000 in 1988.

The prevalence of drug use is hard to estimate. However, information from self-reported drug use is available. Data from self-reports in the NLSY indicate that about 12 to 13 percent of young men and about 5 to 6 percent of young women use drugs heavily (Hill and O'Neill, 1990). Some use, as opposed to heavy use, is much higher. The proportion of high school seniors that used marijuana or another illicit drug (cocaine, hallucinogens, heroin or unprescribed psychotherapeutics) was over 20 percent in 1988, a high figure but down from the 40 percent reported in 1979. Use of illicit drugs other than marijuana rose from 15 percent in 1975 to a high of 22 percent in 1981, then fell to 9 percent in 1989. Household survey data indicate the extent of drug use by 12- to 17-year-olds is lower among Hispanics and blacks than among whites (U.S. Department of Education, 1990).

EMPLOYMENT AND EARNINGS

As young people age from 16 to 24, they move from the part-time to the full-time job market. In 1990, the proportion of young men working full time was 15 percent of 16- to 17-year-olds, 50 percent of 18- to 19-year-olds and about 80 percent of 20- to 24-year-olds (U.S. Bureau of Labor Statistics, 1991:171).

Young people earn much less than older workers even when they work full time. The differentials vary by sex. In 1990, young men (age 16 to 24) had weekly earnings only about 55 percent of those received by adult men workers, while young women received about 68 percent of the earnings of adult women workers (U.S. Bureau of Labor Statistics, 1991:221-222). Young women in part-time or full-time jobs have about the same (97 percent and 90 percent, respectively) weekly earnings as young men in comparable jobs.

In describing their work experience, we should be cognizant of the limitations of official data. First, official labor force statistics typically do not include informal work, such as helping with a family business, babysitting or summer jobs. The Bureau of Labor Statistics describes youth labor force activity in the same simple categories as adult work. Second, it is typically the parent, not the youth, who provides Census interviewers with

information on the work behavior of young people. In general, parents are less likely to report their children working or looking for work than are the young people themselves (Freeman and Medoff, 1982).

Several broad trends characterize the changes in the youth labor market over the last four decades. First, an increase in schooling dramatically reduced the supply of young people interested in full-time jobs. Between 1955 and 1990, the proportion of 16- to 19-year-olds enrolled in school in the fall increased from 64 to 74 percent among males and from 49 to 73 percent among females. (See Table 8.) Second, young women, especially white young women, moved into the labor force at a rapid pace. Third, an increasing proportion of high school students, particularly females, were employed part time while enrolled in school. And finally, minority youth suffered extraordinary increases in unemployment rates, partly as a result of a shift from rural to urban labor markets (Freeman and Medoff, 1982; Kogan, 1982).

A look at the 1990 employment situation for out-of-school males age 16 to 24 reveals that many are either not in the labor force or unemployed. A strikingly high 40 percent of out-of-school black males were not employed; 25 percent were unemployed, even though the national rate was only 5.5 percent. The proportions of white and Hispanic males not working (about 20%) also were high, though half that of black males.

Youth unemployment rates are highly sensitive to aggregate economic conditions. For each one percentage increase in the total unemployment rate, the youth unemployment rate rises by 1.7 points and the black youth unemployment rate by 3.5 points.¹² In the recent recession, the unemployment rate of 16- to 19-year-olds rose from 15 percent (the lowest since 1973) in 1989 to 18 percent in the first quarter of 1991. For black youth, the increase was from about 32 percent to 36 percent.

A large body of literature has examined the determinants of unemployment among disadvantaged youth.¹³ In general, a combination of factors may influence employment outcomes for young people, including local employment conditions, the employment status of parents, high school completion, grades and performance on skills tests.

¹² These results come from ordinary least squares regression analyses conducted by the author. Both youth unemployment rates were treated separately as a dependent variable, with overall unemployment and time as the independent variables.

¹³ See, especially, Freeman and Wise, 1982, and Freeman and Holzer, 1986.

Table 8
TRENDS IN ENROLLMENT OF 16- TO 19-YEAR-OLDS:
1955-1990

	1955	1960	1965	1970	1975	1980	1990
Males							
Percent Enrolled	64.0	68.3	72.9	74.2	71.1	68.4	74.2
E/P of Enrolled	36.3	30.6	32.3	33.3	35.0	36.4	34.2
E/P of Not Enrolled	84.2	74.6	78.5	70.8	69.9	68.6	67.4
Enrolled Share of Employment	43.4	46.9	52.5	57.5	55.2	53.5	59.3
Not Employed, Not Enrolled	5.7	8.0	5.8	7.5	8.7	9.9	8.4
Females							
Percent Enrolled	48.7	57.9	63.9	65.8	65.7	66.9	72.8
E/P of Enrolled	21.6	22.0	24.5	29.5	32.5	36.1	36.5
E/P of Not Enrolled	53.6	52.7	54.3	49.1	49.6	56.2	52.7
Enrolled Share of Employment	27.7	36.5	44.4	53.6	55.7	56.5	64.9
Not Employed, Not Enrolled	23.8	19.9	16.5	17.4	17.3	14.5	12.9

Note: The E/P ratio is the number employed divided by the population.

Source: U.S. Bureau of Labor Statistics, 1971, 1981, 1991.

CONCENTRATION OF YOUTH PROBLEMS

One key question is the extent to which the problems experienced by youth overlap. This is difficult to answer, partly because of the many possible combinations among five behaviors: early sexual activity, heavy drug use, poor school performance, leaving school and criminal activity. Further, the data needed to examine these overlaps often are not available. Still, several analyses of this question are worth citing for their attempts to address the questions: Are negative behaviors correlated? What is the extent of correlation? What evidence exists of any causal connections?

Dryfoos (1990) finds a considerable degree of overlap of "high-risk" behaviors (delinquency, heavy drinking, use of marijuana and cigarettes, and weak school performance) in her review of literature on this subject.¹⁴ For example, Jessor, based on a sample of white 10th- to 12th-graders in the early 1970s, shows that problem drinkers were much more likely to use marijuana, engage in shoplifting, skip school and be sexually active. More recent research by Donovan and Jessor also demonstrates clear associations. Based on a sample of 7th- through 12th-graders in a Colorado school district, Table 9 illustrates the overlap of problem behaviors and their close relationship with school grades. Note, for example, that over one in four students with Ds engage in four or five problem behaviors, six times the rate among those with As and Bs.

Elliot has used NLSY data to document the links among delinquency, drug use and early sexual activity. In 1980, the 5 percent of 15- to 21-year-olds classified as serious delinquents committed about 80 percent of all serious offenses. The overwhelming majority of this group used alcohol, marijuana and other drugs. Among younger serious delinquents (11- to 17-year-olds), the rate of sexual activity was seven to nine times the rate among nonoffenders.

Some behaviors involve less overlap than others. For example, Mott and Haurin (1988) report on whether initial alcohol or marijuana use precedes initial sexual activity. While the rates of initial sexual activity are higher for those already using alcohol or marijuana, the differences are not always large.¹⁵

¹⁴ The material in this and the following paragraph is drawn from Chapter 7 of Dryfoos, 1990.

¹⁵ The proportion of male 15-year-olds becoming sexually active was 11.8 percent among nonusers and 12.5 percent among those using both marijuana and alcohol. For females, the rates were 8.6 percent for nonusers, 6.3 percent for those using only alcohol and 26.2 percent for those using both marijuana and alcohol.

Table 9
OVERLAP OF PROBLEM BEHAVIORS AND SCHOOL GRADES OF
7TH- TO 12TH-GRADERS IN A COLORADO SCHOOL DISTRICT

		Percent Distribution by School Grades		
Number of Problem Behaviors	Percent of Total	As and Bs	Cs	Ds
0	51	61	40	19
1	23	23	23	23
2-3	18	12	25	31
4-5	8	4	12	27

Source: Dryfoos, 1990:98.

Another plausible connection is between teenage childbearing and the completion of high school. Until recent years, schools themselves prevented teenage mothers from finishing high school. Today, while child care and other constraints still make school attendance difficult, there are programs for these mothers and laws against expelling pregnant students. As a result, the overlap between early pregnancy and dropping out of high school has become less pronounced. In 1955, according to a study by Upchurch and McCarthy (1989), only 51 percent of women having a child at age 18 or 19 graduated from high school, compared with 81 percent of mothers having their first child in their early 20s. By 1986, three-fourths of mothers having their first child at 18 or 19 graduated from high school, only 15 percentage points lower than the rate among women waiting until their early 20s.

The studies of multiple problem behaviors demonstrate that overlaps are much larger than would occur if each behavior were statistically independent. Extrapolating from a variety of studies, Dryfoos (1990) has estimated the distribution of youth by risk status: very high, high, moderate and low risk. Of the 28 million 10- to 17-year-olds, she estimates that 10 percent (2.8 million) are very high-risk youth. Over 50 percent of this group have been arrested, 70 percent have engaged in unprotected sex, 75 percent have dropped out or are two years behind in school, and most smoke cigarettes, drink and/or use marijuana. Dryfoos places another 15 percent (4.2 million) in the high-risk category. All of these youth have engaged in some delinquency, about three-quarters are one year behind in school and nearly half have had unprotected sex. Another 25 percent are what Dryfoos considers moderate-risk youth; these have engaged in only one of the risk behaviors. Finally, about half appear at low risk; they have not abused substances, engaged in unprotected sex or done poorly in school.

Although black and Hispanic youth are overrepresented in the higher-risk groups, the majority are white. Dryfoos estimates that within the very high-risk group, 44 percent are white males, 25 percent white females, 20 percent black males and 11 percent black females.

The substantial overlap among youth problems does not imply that one problem causes an array of other problems. Indeed, the U.S. General Accounting Office (1991) contends that studies to date have failed to prove any causal linkage between drug use and either teenage pregnancy or dropping out of high school. However, the high degree of overlap suggests some outside factor (e.g., growing up in a poor one-parent family) may cause several of these problems.

III. CAUSES AND CONSEQUENCES OF PROBLEM BEHAVIORS

A large body of current social science has considered the causes and consequences of problem behaviors among youth. A major review of this work goes well beyond the scope of this paper. However, it is possible to gain some interesting insights by examining selected recent analyses.

CONSEQUENCES

Hill and O'Neill (1990) have studied the influences of early problem behaviors (and other factors) on the incidence of young women averaging at least two months of AFDC per year and of young men and women working less than 26 weeks per year from 1979 to 1987. Hill and O'Neill find that neither heavy drug use nor alcohol use had much impact on the outcomes for young women, but that heavy drug use significantly reduced the employment of young men. A high association also was evident between early criminal involvement and highly negative employment outcomes for young men. Poor achievement scores on national tests and not completing high school were significant predictors of negative outcomes for both young men and women.

Recent studies have found significant impacts of drug use and delinquency on high school completion. Fagan and Pabon (1990) find strong evidence that drug use and delinquency significantly increase the chances of inner-city youth dropping out of high school. The impact of drug use and delinquency persists even after taking account of other significant influences, including the family and school environments.

Using the NLSY data, Mensch and Kandel (1988) have documented that early use of cigarettes, marijuana and other illicit drugs significantly increased the rate of dropping out of high school. They find that early sexual activity and early pregnancy also were important predictors of dropping out. Low test scores on the Armed Forces Qualifying Test (AFQT) had the most substantial association with dropping out of school; a one standard deviation decrease in AFQT score was associated with a 9 to 10 percent increase in the annual dropout rate. By comparison, the impacts from standard deviation changes in other behaviors were 2 to 3 percent for drug use and about 4 percent each for sexual activity and pregnancy.

On the basis of the research, we can draw simple, well-documented conclusions: (1) problem behaviors of young people are strong predictors of women's receipt of welfare and men's unemployment; (2) drug use and criminal behavior worsen a young person's schooling and men's employment outcomes; and (3) the relationship between various youth problems is not one for one. A particular negative behavior does not always imply another.

These conclusions leave open the questions: Why is problem behavior more concentrated among some groups? What accounts for the trends over time in various problem behaviors?

CAUSES

Wilson (1987) has explained some of these social trends and variations in terms of the interaction among employment trends, family patterns and neighborhood change. A short summary of Wilson's view includes the following: (1) good jobs for less-educated workers have been declining in many urban areas, thereby increasing the unemployment of young black men; (2) this, in turn, has reduced the marriage rate of young blacks and led to high rates of poverty and welfare dependency; (3) the ability of middle-class blacks to leave urban ghettos has increased the concentration of urban black poor; (4) the concentration of poverty and families headed by women has left neighborhood youth with weakened social institutions, few links to jobs, and a shortage of male and employed role models; and (5) the combined impact of these forces has created a chronic, potentially self-perpetuating set of problems affecting the development of young people.

Research clarifying the strengths and weaknesses of this view is in its early stages. However, some recent studies are specifically relevant to our understanding of youth behavior. Of particular interest are studies examining the effects of neighborhood and school characteristics. These studies ask to what extent living in a particular area or going to a particular school worsens a young person's life chances. As Crane (1991) points out, the role of neighborhoods would seem to have obvious and important impacts, but until recently, few researchers have been able to document highly significant neighborhood effects, net of individual or family characteristics.

Since this paper's focus is on youth, the most relevant studies of neighborhood effects are those concentrating on dropping out of high school and unwed teen pregnancy. Research by Crane (1991) and by Mayer (1991) demonstrates highly significant effects on both behaviors. Crane's analysis of urban neighborhoods in 1970 shows that the percentage of professional and managerial workers in a neighborhood was associated with the likelihood of dropping out of high school. To Crane, this does not mean that professionals or managers were directly affecting dropping out but that such workers choose better neighborhoods. The absence of such workers may simply be a proxy for a relatively undesirable neighborhood.

Mayer (1991) has examined how the behavior of high school sophomores in 1980 was affected by the racial and socioeconomic composition of their school. As that a school's mix of students had a major influence on the likelihood of youth dropping out of high school and of young women having a child within two years after their sophomore

year. The estimates indicate that, by moving from a school with a low socioeconomic mix to one with a high socioeconomic mix, a white student from a low-income family would reduce his or her dropout rate from 28.5 to 18.4 percent. The same type of move would lessen a young white woman's probability of having a child from 10.5 to 5 percent. The impact of the school's composition was largest for whites but also was important for dropout rates for blacks. The effect on childbearing by young black women was relatively small.

Ethnographic evidence on the role of neighborhoods in negative youth behaviors comes from the work of Anderson (1991). He describes the importance of peer groups in influencing young men to engage in unprotected sex and become unmarried fathers. Anderson argues that job opportunities might encourage some young men to marry and become heads of families, but that existing jobs do not.

Policymakers can begin to focus on the facts that neighborhood environments and the composition of schools exert significant influences on youth outcomes. One possibility is to emphasize more neighborhood targeting on the grounds that improving neighborhoods will have secondary effects. Another possibility is to promote experience outside the neighborhood or local school. However, while recent studies highlight significant and strong neighborhood and school influences, policymakers should not conclude that only these matter. The roles of other peer groups and the family should remain important considerations in developing youth policies.

IV. JOBS AND YOUTH DEVELOPMENT

At least since the early 1960s, policymakers have worried about high rates of youth unemployment and its social consequences. By the late 1970s, congressional alarm over the 40 percent unemployment rate experienced by black teens stimulated renewed federal initiatives to provide jobs and training for young workers. The largest experimental component of the Youth Employment and Demonstration Projects Act (YEDPA) of 1977 was the Youth Incentive Entitlement Pilot Projects (YIEPP), a demonstration to guarantee part-time and summer jobs to all poor youth remaining in or returning to high school.

Even at that time, the relationship between measured youth unemployment and economic hardship was unclear. The earnings of young workers were rarely critical to the family, and the tendency of youth to move in and out of jobs meant some youth unemployment was frictional and short-term. Still, the goal was that all young people wanting jobs would be able to find them. While some favored only market mechanisms and others were willing to use government subsidies, virtually no one took issue with the objective of reducing youth unemployment rates. For example, those on both sides of the debate over raising the minimum wage saw the reduced demand for young workers as a clearly negative by-product of the effort to help low-wage workers.

People also recognized that abundant job opportunities might draw young people out of high school and into the full-time job market. Some empirical evidence supports the view that young people stay in school longer in bad economic times or in areas experiencing high unemployment.¹⁶ In fact, it was partly this worry that caused Congress to authorize pilot projects that made school attendance a condition for receiving jobs.

Today, some sociologists, psychologists and social psychologists are questioning the desirability of having teens work, even when they stay in school. Their worry is that employment of young people, especially junior high and high school students, may hamper rather than foster their psychological and social development. Greenberger and Steinberg (1986) are the most articulate advocates of the view that work experience in high school is harmful to the development of young people. They argue that such work reduces learning in school, fosters cynicism, and weakens close social and family bonds.

The most damaging arguments put forward by Greenberger and Steinberg are that work can have harmful long-run impacts--on learning, socialization, use of alcohol and cigarettes, and work attitudes. This conclusion is precisely the opposite of what other

¹⁶ See Duncan, 1965; Lerman, 1972; Gustman and Steinmeier, 1981.

experts have long argued. In general, empirical evidence has demonstrated that early work experience raises earnings in the post-school period.¹⁷

The focus of the Greenberger and Steinberg critique is on summer and school-year jobs held by young people attending high school. Their sample primarily is limited to white middle-class youth, and they say little about the employment of out-of-school youth, or about the role of work in dropping out of school. Still, since the Greenberger and Steinberg research has been so influential, it is worth examining their case against youth employment in some detail.

They begin by placing the employment of young people in historical context. Until the 1940s and 1950s, most 16-year-olds left school for jobs in order to help support their families. However, by the 1960s, school attendance had expanded dramatically. Yet, while fewer 16- to 17-year-olds were leaving school to enter the full-time job market, more students were beginning to combine their schooling with part-time work. Unfortunately, the increase in students holding jobs coincided with and perhaps was eased by the changing character of the job market. In particular, jobs in agriculture, construction, skilled trades and manufacturing were replaced by jobs in the service and trade sectors. For young workers, this meant a concentration of jobs in fast food restaurants and as store clerks.

Greenberger and Steinberg contrast these jobs with the apprenticeship positions many young people entered in the 19th century. By comparison, they see today's jobs as providing little in the way of on-the-job learning or training, adult supervision, involvement with adults, scope for developing responsibility, or linkage between job and career. In their sample of 100 young workers (with each of whom they spent two hours), they found that only 10 percent of work time was spent on reading, writing and arithmetic; that the jobs largely involved repetitive and highly routinized tasks; and that adult contact and supervision was minimal.

According to Greenberger and Steinberg, students work primarily to support nonessential consumption. They cite figures from a report by Lewin-Epstein showing that employment among high school sophomores and seniors rises with family income (Greenberger and Steinberg, 1986:19). And most spend from half to all of their income on their own purchases. Increasing materialism of young people explains the apparent anomaly of a rising proportion of relatively affluent students working alongside the smaller proportion of students whose family circumstances require that they work for essentials.

¹⁷ See, for example, Meyer and Wise, 1982.

The evidence for the harmful effects of work are far from conclusive. One frequently cited study by D'Amico (1984) finds that working while in high school did not lower class ranking for any of four race-sex groupings (black males, black females, white males and white females). In fact, working was associated with improved class rankings for white males. It is striking that Greenberger and Steinberg ignore these findings but instead stress the D'Amico finding that work may reduce the amount of time spent studying. While working long hours had a statistically significant negative impact on white youth (and a nonsignificant negative effect on black youth), less than 20 hours of work per week did not have any significant negative effects. Moreover, for some groups, work reduced free time at school more than it reduced time spent studying. Finally, D'Amico's estimates indicate that moderate amounts (less than 20 hours per week) of work can reduce the chances of dropping out.

Greenberger and Steinberg attempt to use the D'Amico results to show that the long-run effects may be negative, since working tends to reduce time spent on homework. Yet, neither the D'Amico study nor the Lewin-Epstein study provides evidence that working harms long-term school performance. Only Mortimer and Finch (1986) report that longer work hours (among males) were associated with lower grades and fewer years of schooling after high school.

Mortimer and colleagues at the University of Minnesota have conducted detailed studies of the impact of working in high school on behavioral adjustment, on relations with peers and on orientations to the future. This group surveyed over 1,000 ninth-graders in St. Paul public schools and their parents to examine the effects of weeks worked, hours worked per week and job characteristics. Their studies (1990, 1991) have produced a vast array of findings that yield mixed evidence on the effects of working.

Greenberger and Steinberg have raised concerns that working tends to increase the time spent around other youth (and away from family and other adults) and to weaken relationships with close friends. Such concerns seem ill-founded, at least for the Minnesota sample. Mortimer and Shanahan (1990) report that employed young men spent less time with their peers (but did not feel less close to best friends) and that employed young women felt closer to best friends and perceived more peer support.

One group of adults who can observe whether the effects of work are positive or negative are parents. Of course, parents may not be the most reliable guides. On the one hand, they may be too uncritical of their children's behavior and wish to rationalize their acceptance of youth holding jobs. On the other hand, they may be quick to attribute any negative behavior to a child's job or employment, even if the work is unrelated to the behavior. Despite potential biases, parents are able to see specific

changes associated with working and have a stake in avoiding negative influences on their children.

Using data from the Minnesota sample, Phillips and Sandstrom (1990) find parental attitudes toward their children's work experience generally supportive. While about one in four parents believed too many teens were employed, only nine of nearly 1,000 parents disapproved of their own children's employment. Over 40 percent of parents strongly approved and another 50 percent approved, with about 8 percent reporting neutral feelings. Parents generally reported their children spending about the same time with their families, becoming more financially independent and, most of all, becoming more independent in other ways.

Most parents were entirely satisfied with their children's jobs. When asked, ". . . what, if anything, would you like to change about your child's job?" two-thirds did not want any change at all. And, of those wanting changes in hours, a much higher proportion of parents wanted their children to work more hours than fewer hours. They were especially interested in more steady work in the summer. Perhaps the added family income from a youth who works--even if spent entirely by the young person--reduces financial pressure on parents.

Overall, the weight of the evidence is that high school students gain something from work experience beyond the immediate cash rewards. There appears to be little risk of serious difficulty for students working less than 20 hours per week during the school year. More questionable is the impact of paid work of 20 or more hours per week. Although many studies find positive or neutral effects from longer amounts of work, one can make a theoretical and empirical case against such work experience.

The research on how work affects youth development has several important gaps, some of which analysts have begun to fill. One set of unanswered questions has to do with how various types of jobs influence youth outcomes. So far, only modest evidence is available on the long-term effects of job characteristics. Stern and his colleagues (1990) report that youth able to use and develop skills in their jobs had lower unemployment and higher wages than youth in other jobs. However, Stern, et al., also point to studies showing little, if any, special advantage for jobs in cooperative education programs, despite the efforts in such programs to integrate schooling and work and to provide supervised work experience. Further research on this subject is clearly needed.

A second set of questions concerns more direct efforts to link education and jobs in the vocational education system. Vocational education apparently raises the earnings of students who obtain jobs in the field for which they received training (Campbell, et al., 1986). However, less than half (44 percent) of students have jobs requiring skills

acquired in vocational education by three and one-half years after graduation (Meyer and Horn, 1990). Perhaps combining in-school vocational education with work experience (in or out of the field) might assure greater utilization of skills, improve placement and raise long-term earnings. Until now, researchers have looked only separately at impacts of vocational education and work experience.

A third set of questions involves distinguishing between summer and school-year work experience. Obviously, summer jobs are less likely than school-year jobs to reduce time spent on homework. However, summer jobs appear to have other features of school-year jobs that some analysts and public officials find objectionable. Despite the importance of the issue for public policy, few studies have examined the short- and long-term impacts of summer work on young people. Perhaps the lack of interest in this question is due to a belief that young people have few alternatives during the summer.

The question of alternatives is important to the broader debate, yet analysts rarely address what young people would be doing if they were not working. Studies comparing students with and without jobs provide some estimates based on what those not working (or working fewer hours) report concerning homework and free time at school. However, it is far from clear that young workers would reallocate their time in the same way. Only experimental evidence can ensure that we are comparing similar groups of young people, some who are working and some who are not.

The Youth Incentive Entitlement Pilot Projects (YIEPP) tested the impact of in-school work on school performance, behavior and earnings after high school. The principle behind YIEPP was that providing in-school (and summer) jobs would help poor youth if the jobs were linked to school attendance and minimum school performance. The idea was that jobs, even paying only the minimum wage, would be attractive enough to stimulate poor youth to remain in school or return to high school. Few worried about the impact of part-time work on school performance. In fact, the expectation of program designers was that the school attendance and school performance requirements might improve schooling outcomes. The primary objective was to increase high school graduation rates.

Researchers analyzing the impacts of YIEPP compared four YIEPP sites with four sites that did not operate a YIEPP program.¹⁸ Overall, the demonstration did not generate a statistically discernible impact on school attendance or high school graduation rates. Thus, while part-time jobs linked to school attendance did not promote the educational

¹⁸ The four pilot study sites were Denver, Cincinnati, Baltimore and eight rural counties in Mississippi. The four comparison sites were Phoenix, Louisville, Cleveland and six other rural counties in Mississippi (Farkas, et al., 1984).

gains that program sponsors sought, neither did they worsen the schooling outcomes of poor youth. In principle, the chance to gain work experience under YIEPP might have encouraged poor youth to avoid behaviors that could limit their future careers. Unfortunately, the results clearly show that the added jobs reduced neither self-reported crime among young men nor childbearing among unwed young women.

The one positive outcome was an increase in postprogram earnings associated with the work experience gained from the demonstration. On average, young people in demonstration sites earned about \$10 per week more than young people in comparison sites. While small in absolute terms, the gain was large relative to the approximately \$37 per week in earnings expected in the absence of the demonstration. This low figure represents total earnings divided by all eligible youth, including nonworkers and those who did not participate in a demonstration site.

The YIEPP results are broadly consistent with recent findings indicating (1) little impact on school outcomes from moderate amounts of part-time work and (2) modest gains in earnings in the immediate post-school period. Thus, overall, part-time work exerted modest positive impacts (Farkas, et al., 1984).

But questions remain about a broader range of possibilities: What if schools, workplaces and families limited the amount of work by young people? What if employers provided training for youth? Models observed in other industrial countries offer alternate approaches to youth employment.

Japan and Germany, two competitors who have achieved major success in developing their human resources, operate very different models from the United States and from each other. In Japan, the emphasis is on rigorous school-based learning in secondary schools, with labor market rewards linked to performance in school. The 70 to 75 percent of Japanese high school students in general education as opposed to vocational or technical education is similar to that of American high school students (Organization for Economic Cooperation and Development, 1985). However, as Rosenbaum and Kariya (1991) have recently documented, grades in high school play a much more significant role in finding a good job for Japanese students than for American students. It is thus not surprising that Japanese students concentrate on school and are less likely to engage in part-time work.

For American high school students, grades have much less consequence, except for the few trying to attend a selective college. In this context, work experience may be seen as competing with school performance to provide an advantage in the job market. By implication, efforts to make grades important in the allocation of post-high school jobs

may do much more to encourage students to concentrate on their studies than would efforts to limit the amount of their work.

One problem with such a strategy is the hardship imposed on young people who do not learn well in a classroom environment but are able to become skilled within a hands-on setting. The German approach takes direct account of differences in learning styles. About 80 percent of German high school students are in vocational or technical programs--mostly youth apprenticeships--while only 20 percent are in general education (Hamilton, 1990). The German system also links employment with worksite training and continuing school-based education.

Given the limited success of cooperative education in the United States, efforts to develop constructive bridges between young people and jobs will have to move beyond existing programs and establish training that can lead to successful careers. A youth apprenticeship system would build on the desire of young people to be part of the work force and provide them such training (Lerman and Pouncy, 1990).

V. CONCLUSIONS AND RECOMMENDATIONS

How should policymakers respond to the changes in the size, composition and behavior of the youth population? What new information about the emerging youth cohort is vital to the formulation of employment and training policies?

CONCLUSIONS

The emerging youth population will increase in absolute numbers over the 1990s but will make up a smaller share of the total population. Young people will come to their late teenage years with less family stability and fewer close family connections; more exposure to drugs, crime and early sexual activity; and more years of schooling. A small minority of the youth population will have grown up in inner-city areas, where neighborhood influences create enormous obstacles for young people.

Many young people will continue to experience poverty and income hardships, but these will increasingly depend more on family status than on race/ethnicity. Fewer young people will marry in their teens or early 20s. However, a large proportion of minority women--43 percent of blacks and 31 percent of Hispanics--will become mothers by age 21. Overall drug use and crime will have peaked, but both will be substantial. Because of the increased seriousness of violent crime and record murder rates, especially among minority young men, fear of crime may well influence many decisions of young people.

Not all the signs are bad. Fewer youth will have dropped out of high school. Many minority youth will come from middle-class families.¹⁹ Test scores of minorities will probably continue to improve. Employers will increasingly be interested in hiring people who have skills, who can learn on the job and who can apply what they have learned.

POLICY RECOMMENDATIONS

1. The Department of Labor should attempt to broaden the scope of formal linkages between schools and jobs.

A major challenge for employment and training programs in the 1990s is to reconcile economic and social realities: the economy needs educated and trained workers who require longer preparation before entering the job market, but young people are taking less time to begin quasi-adult activities, such as taking part-time jobs, using alcohol and engaging in sex. The importance of improving educational outcomes is clear, but doing

¹⁹ The median income for black two-parent families of 12- to 17-year-olds was \$35,755 in 1988.

so entirely through school will be difficult at a time when adolescents are more eager than ever to have independent social lives.

The education and the employment and training systems have mirrored the social environment of prolonged adolescence, of avoiding long-term commitments, and of frequent moves into and out of jobs and employment. Although these systems are hardly responsible for this state of affairs, they can foster change in sensible directions.

Some policymakers have already attempted to impose strict limits on the part-time work of students. For example, recommendations of a task force on youth employment formed by the Wisconsin superintendent of schools call for restricting the time students can work, for requiring close involvement of schools in supervising employers and for other actions to increase the time spent on homework. Although the recommendations rely on incomplete research, curtailing long work hours during the school year may be a wise preventive measure. On the other hand, it is unlikely that such restrictions will do much to promote increased learning at school.

Policymakers instead must find a way to provide mechanisms by which students can continue to learn outside of school settings. As argued at the end of Section IV, a youth apprenticeship system would be a vehicle for accomplishing these policy directions, but so are some other emerging initiatives.

2. The Department of Labor should focus program resources on lowering risk factors associated with poor labor market outcomes by attempting early intervention (by the age of 16) with at-risk youth.

The ages 16 and 17 are critical. It is at these ages that many young people succumb to the lures of drug and alcohol use, crime and unprotected sexual activity. Others leave school either mentally or physically. These are the ages when young people begin driving cars, dating extensively and wanting more spending money. In my view, objections to early intervention look weak when we recognize the extraordinary value of strengthening the opportunities of 16- to 17-year-olds who might otherwise end up in jail, as an alcohol-related auto casualty, as an unwed parent and/or as a poorly prepared student.

But what are the best means for achieving results for 16- to 17-year-olds? Work experience and job placement are tempting approaches, given the modest gains from early work experience and the decline of informal job contacts for youth. However, while part-time work might not have the disastrous consequences for youth projected by Greenberger and Steinberg, it might not produce major gains. A second possibility is teaching basic skills. This, too, is unlikely to have a significant impact on most young

people. Their real shortfall is in the medium- and higher-level skills and, in any case, remedial programs often fail to attract participants if they appear to be a continuation of school.

A promising approach, therefore, would be to coordinate summer training and education with entry into a formal job-related and career-related sequence. Such an approach would use career options as incentives to do well in education-related courses. It would also recognize the need to promote a more mature attitude on the part of young people and to expose them to adult responsibilities.

Specifically, I recommend linking training and modest work experience with preparation for an apprenticeship or career internship. The federal government could require that summer program monies, as well as some Title II-A dollars, be used in programs for youth that allow private employers to provide experience, education and training as part of the movement toward a real apprenticeship.

3. Focus early interventions within specific neighborhoods or communities in the service delivery area.

Summer programs might be channelled into particular communities so that local schools and employers could collaborate on apprenticeship or internship programs. Dealing with a target community would recognize the importance of neighborhood influences on youth behavior. Of course, this is a high-risk strategy, but the potential payoff is also high.

RESEARCH RECOMMENDATIONS

The primary research agenda should be to determine what combinations of work and education are most useful and most feasible for moving low-income youth into careers. The effort should focus on the potential implications of a more rigorous school-related approach involving close linkages with employers. A number of projects, listed below, need to be undertaken in order to address this issue.

1. Develop an overall cohort analysis of young people that traces all school, work and program participation during the late high school years and through the mid to late 20s.

Such an analysis can provide information on the uses of school-based training and postsecondary and second-chance education and training, and on the types of jobs and job durations among various groups of young people. One goal would be to identify the most successful types of school-workplace connections. A second goal is to determine the paths pursued by at-risk young people who attain well-paying jobs by their late 20s.

2. Assess efforts to integrate school and supervised work, such as cooperative education programs.

Existing research on the effects of early work experience on youth development points to the importance of job characteristics and adult contact and supervision. Cooperative education and other supervised work programs attempt to address these issues, but existing studies do not allow conclusions to be drawn about the link between favorable job characteristics and longer-term labor market outcomes.

3. Fashion demonstration projects combining in-school vocational education programs with related work experience programs.

Such projects would inform a potential strategy for strengthening school-workplace connections. Prior research has focused separately on the impacts of vocational education and work experience.

4. Develop demonstration projects to examine the employment effects of strengthened in-school job placement. Job counselors could help guide students toward appropriate part-time opportunities, summer jobs and permanent jobs after high school or postsecondary training.

The rise in single-parent families, the decline in the number of siblings and the concentration of minority single-parent families in central cities may well be worsening the informal connections between disadvantaged youth and employers. It is important to determine if making job connections in school can compensate for the lack of connections in the community, and, if so, how best to create them.

5. Examine the differences, across states, in the structure of school-based and work-based training and the likely impact of those differences on the absorption of low-income young people into the job market.

California has an elaborate system of state and community colleges; other states may emphasize work-based training. Some states may utilize proprietary schools more extensively than others. What lessons can be learned from the variety of school- and work-based training combinations across states?

The American job market delays entry into careers until young people are well into their 20s. Unfortunately, by this age, many young people have already made choices that will limit their ability to support themselves and form families. The challenge for the education and the employment and training systems is to reconcile the need to upgrade the skills of the work force with the need to provide attractive workplace options that help youth mature into constructive young adults.

REFERENCES

Anderson, Elijah

- 1991 "Neighborhood Effects on Teenage Pregnancy" in Jencks, Christopher and Peterson, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.

Campbell, Paul; Basinger, Karen; Dauner, Mary Beth; Parks, Marie

- 1986 Outcomes of Vocational Education for Women, Minorities, the Handicapped, and the Poor. Columbus, OH: Ohio State University, National Center for Research in Vocational Education.

Commission on the Skills of the American Workforce

- 1990 America's Choice: High Skills or Low Wages. Rochester, NY: National Center on Education and the Economy.

Council of Economic Advisers

- 1990 Economic Report of the President: 1990. Washington, D.C.: U.S. Government Printing Office.

Crane, Jonathan

- 1991 "Effects of Neighborhoods on Dropping Out of School and Teenage Childbearing" in Jencks, Christopher and Peterson, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.

D'Amico, Ronald

- 1984 "Does Employment During High School Impair Academic Progress?" Sociology of Education, 57:152-164.

Dryfoos, Joy

- 1990 Adolescents At Risk. New York: Oxford University Press.

Duncan, Beverly

- 1965 "Dropouts and the Unemployed." Journal of Political Economy, April: 121-134.

Ellwood, David

- 1989 "Poverty Through the Eyes of Children." Unpublished paper, Harvard University.

Paper No. 9

- Fagan, Jeffrey and Pabon, Edward
1990 "Contributions of Delinquency and Substance Use to School Dropout Among Inner-City Youth." Youth and Society, 21(3):306-354.
- Farkas, George; Olsen, Randall; Stromsdorfer, Ernst; Sharpe, Linda; Skidmore, Felicity; Smith, D. Alton; Merrill, Sally
1984 Post-Program Impacts of the Youth Incentive Entitlement Pilot Projects. New York: Manpower Demonstration Research Corporation.
- Forrest, Jacqueline and Singh, Susheela
1990 "The Sexual and Reproductive Behavior of American Women." Family Planning Perspectives, 22:206-214.
- Freeman, Richard and Holzer, Harry (eds.)
1986 The Black Youth Employment Crisis. Chicago: University of Chicago Press.
- Freeman, Richard and Medoff, James
1982 "The Youth Labor Market Problem in the U.S.: An Overview" in Freeman, Richard and Wise, David (eds.) The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago: University of Chicago Press.
- Freeman, Richard and Wise, David (eds.)
1982 The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago: University of Chicago Press.
- Greenberger, Ellen and Steinberg, Laurence
1986 When Teenagers Work: The Psychological and Social Costs of Adolescent Employment. New York: Basic Books.
- Gustman, Alan and Steinmeier, Thomas
1981 "The Impact of Wages and Unemployment on Youth Enrollment and Labor Supply." Review of Economics and Statistics, 63(4):553-560.
- Hamilton, Steve
1990 Apprenticeship for Adulthood. New York: Free Press.
- Harris, Ron
1991 "Childhood: Fearing for Your Life." The Los Angeles Times, May 13.

- Henshaw, Stanley K. and Van Vort, Jennifer
1989 "Teenage Abortion, Birth, and Pregnancy Statistics: An Update." Family Planning Perspectives, 21:85-88.
- Hill, M. Anne and O'Neill, June
1990 Underclass Behaviors in the United States: Measurement and Analysis of Determinants. Report to the U.S. Department of Health and Human Services. New York: Baruch College, Center for the Study of Business and Government.
- Hofferth, S.L.; Kahn, J.R.; Baldwin, W.
1987 "Premarital Sexual Activity Among U.S. Teenage Women Over the Past Three Decades." Family Planning Perspectives, 19:46-53.
- Holzer, Harry
1982 "Informal Job Search in Black Youth Unemployment." American Economic Review, June.
- Kogan, John F.
1982 "The Decline in Black Teenage Employment: 1950-1970." The American Economic Review, September: 621-638.
- Korenman, Sanders and Neumark, David
1991 "Does Marriage Really Make Men More Productive?" Journal of Human Resources, Spring: 282-307.
- Lerman, Robert
1990 "Fatherhood, Child Support, and Earnings: A Report on the Links Between Family Responsibilities and Job Market Outcomes." Paper prepared for the U.S. Department of Health and Human Services.
- Lerman, Robert
1986 "Do Welfare Programs Affect the Schooling and Work Patterns of Young Black Men?" in Freeman, Richard and Holzer, Harry (eds.) The Black Youth Employment Crisis. Chicago: University of Chicago Press.
- Lerman, Robert
1972 "Some Determinants of Youth School Activity." Journal of Human Resources, 7(3):366-383.

Paper No. 9

- Lerman, Robert and Pouncy, Hillard
1990 "The Compelling Case for Youth Apprenticeship." Public Interest, Fall.
- Manski, Charles; Sandefur, Gary; McLanahan, Sara; Powers, Daniel
1990 "Alternative Estimates of the Effect of Family Structure During Adolescence on High School Graduation." Madison, WI: Institute for Research on Poverty.
- Mayer, Susan
1991 "How Much Does a High School's Racial and Socioeconomic Mix Affect Graduation and Teenage Fertility Rates" in Jencks, Christopher and Peterson, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.
- McLanahan, Sara
1985 "Family Structure and the Reproduction of Poverty." American Journal of Sociology, 90:873-901.
- McLanahan, Sara and Bumpass, Larry
1988 "Intergenerational Consequences of Family Disruption." American Journal of Sociology, 94:130-152.
- Mensch, Barbara and Kandel, Denise
1988 "Dropping Out of High School and Drug Involvement." Sociology of Education, 61(2):95-113.
- Meyer, Robert and Horn, Robin
1990 "Reform of Secondary Vocational Education in the United States." Madison, WI: Institute for Research on Poverty.
- Meyer, Robert and Wise, David
1982 "High School Preparation and Early Labor Force Experience" in Freeman, Richard and Wise, David (eds.) The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago: University of Chicago Press.
- Mortimer, J.T. and Finch, M.D.
1986 "The Effects of Part-Time Work on Adolescent Self-Concept and Achievement" in Borman, K.M. and Reisman, J. (eds.) Becoming a Worker. Norwood, NJ: Ablex Publishing Corporation.

- Mortimer, Jeylan and Shanahan, Michael
1990 "Adolescent Work Experience and Relations With Peers." Unpublished paper, University of Minnesota.
- Mortimer, Jeylan; Finch, Michael; Shanahan, Michael; Ryu, Seongryeol
1991 "Adolescent Work History and Behavioral Adjustment." Unpublished paper, University of Minnesota.
- Mott, Frank L. and Haurin, R. Jean
1988 "Linkages Between Sexual Activity and Alcohol and Drug Use Among American Adolescents." Family Planning Perspectives, 20:128-136.
- National Assessment of Educational Progress
1990 America's Challenge: Accelerating Academic Achievement. Princeton, NJ: National Assessment of Educational Progress.
- Organization for Economic Cooperation and Development
1985 Education and Training After Basic Schooling. Paris: Organization for Economic Cooperation and Development.
- Phillips, Sarah and Sandstrom, Kent
1990 "Parental Attitudes Toward Youth Work." Youth and Society, 22(1):160-183.
- Rosenbaum, James and Kariya, Takehiko
1991 "Do School Achievements Affect the Early Jobs of High School Graduates in the United States and Japan?" Sociology of Education, 64(2):78-95.
- Skorneck, Carolyn
1991 "Crime Rise Not Tied Solely to Hard Economic Times." The Philadelphia Inquirer, January 13.
- Stern, David; McMillion, Martin; Hopkins, Charles; Stone, James
1990 "Work Experience for Students in High School and College." Youth and Society, 21(3):355-389.
- Trent, Katherine and Harlan, Sharon
1990 "Household Structure Among Teenage Mothers in the United States." Social Science Quarterly, 71(3):439-457.

U.S. Bureau of the Census

1990(a) Statistical Abstract of the United States: 1990 (110th edition).
Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census

1990(b) Current Population Reports (Series P-20, No. 443): School Enrollment--
Social and Economic Characteristics of Students: October 1988 and 1987.
Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census

1990(c) Current Population Reports (Series P-20, No. 445): Marital Status and
Living Arrangements: March 1989. Washington, D.C.: U.S. Government
Printing Office.

U.S. Bureau of the Census

1989 Current Population Reports (Series P-25, No. 1018): Projections of the
Population of the United States, by Age, Sex, and Race: 1988 to 2080.
Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census

1988 Current Population Reports (Series P-25, No. 1017): Projections of the
Population of States, by Age, Sex, and Race: 1988 to 2010. Washington,
D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census

1981 Statistical Abstract of the United States: 1981 (101st edition).
Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census

1975 Current Population Reports (Series P-20, No. 276): Household and Family
Characteristics: March 1974. Washington, D.C.: U.S. Government
Printing Office.

U.S. Bureau of Labor Statistics

1991 Employment and Earnings. Washington, D.C.: U.S. Department of Labor.

U.S. Bureau of Labor Statistics

1981 Employment and Earnings. Washington, D.C.: U.S. Department of Labor.

U.S. Bureau of Labor Statistics

1971 Employment and Earnings. Washington, D.C.: U.S. Department of Labor.

U.S. Department of Education

1990 Digest of Educational Statistics: 1990. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Health and Human Services, Family Support Administration

1989 Characteristics and Financial Circumstances of AFDC Recipients, FY 1989. Washington, D.C.: U.S. Department of Health and Human Services.

U.S. General Accounting Office

1991 Teenage Drug Use: Uncertain Linkages With Either Pregnancy or School Dropout. Report to the Chairman, Select Committee on Narcotics Abuse and Control (House of Representatives). Washington, D.C.: U.S. General Accounting Office.

U.S. House of Representatives, Committee on Ways and Means

1990 Overview of Entitlement Programs: Green Book. Washington, D.C.: U.S. Government Printing Office.

Upchurch, Dawn and McCarthy, James

1989 "Adolescent Childbearing and High School Completion in the 1980s: Have Things Changed?" Family Planning Perspectives, 21(5):199-202.

Wilson, William J.

1987 The Truly Disadvantaged. Chicago: University of Chicago Press.

Wolfgang, Marvin; Thornberry, Terence; Figlio, Robert

1987 From Boy to Man, from Delinquency to Crime. Chicago: University of Chicago Press.

YOUTH AND THE LABOR MARKET IN THE NINETIES

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I. INTRODUCTION

The labor market of the United States has undergone major structural change since 1970. Because of growing international trade, technological advances and demographic shifts, we have seen major changes in the occupational and industrial mix of the American work force. Changes in industrial relations, union representation and government policy (in such areas as the minimum wage) have accompanied these trends.

All of these forces appear to have resulted in major changes in the level and distribution of employment and earnings among young people, and projections of these forces for the 1990s suggest that the trends may well continue. In particular, overall wage levels (especially for males) have stagnated and the gaps between those of college graduates and other workers have widened dramatically. The employment and/or earnings of young dropouts and of blacks overall have deteriorated most sharply.

This paper evaluates the effects on the employment prospects of young people of labor market changes that have occurred in the past two decades, as well as those that are likely to occur in the coming decade. It focuses in particular on the concept of "skill mismatch"--i.e., the idea that job opportunities are ample for those with adequate skills but that many in the population lack these skills--as it concerns disadvantaged young workers, especially high school dropouts and inner-city blacks from low-income neighborhoods.

The sections are organized as follows: Section II evaluates recent outcomes in the labor market for young people and potential explanations of those outcomes. The section reports on occupational, industrial and demographic trends projected into the 1990s by the Bureau of Labor Statistics (and criticisms of these projections), as well as additional evidence from employer surveys on hiring and training strategies.

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Section III considers particular features of the labor market for disadvantaged youth, especially blacks. The section presents evidence both for and against a variety of other hypotheses regarding their employment disadvantages--e.g., "spatial mismatch," lack of work experience and references (or social networks more generally), deleterious neighborhood effects and the availability of alternative income sources, especially crime.

Section IV includes a summary, a discussion of the general directions youth labor market policy might take, and an agenda for future data collection and research.

II. LABOR MARKET OUTCOMES FOR YOUTH AND THEIR CAUSES

This section presents data on recent and projected outcomes, and employer hiring practices and skill requirements. It concludes with a discussion of the concept of "skill mismatch."

RECENT OUTCOMES

Table 1 presents recent data on labor force participation, employment-to-population ratios and unemployment rates for young people age 16 through 19 and 20 through 24.¹ Data are chosen from 1972, 1978 and 1989 to represent comparable points in the national business cycle (all are roughly peak years). Separate data are presented for whites and blacks by sex (no separate data are available for Hispanics in published summaries from the 1970s).

These data show several important outcomes in the labor market over the past two decades:

- Participation and employment among young women (especially whites) rose rapidly in the 1970s and 1980s.
- Participation fell and unemployment rose sharply for young black males in the 1970s, though there was partial recovery in these figures in the 1980s; still, their employment figures lag far behind those of young white males and are especially low among less-educated blacks and those living in poor, inner-city areas.²

In data not presented in this table, it is also clear that labor force activity of young males (either white or black) without high school diplomas has fallen sharply in recent years.³

¹ Employment-to-population ratios capture movements in participation rates as well as unemployment, while unemployment rates are defined only for those already in the labor force.

² Participation rates and employment-to-population ratios for black dropouts (males and females together) age 16 through 24 in 1989 were .523 and .395, respectively. Comparable numbers for whites were .680 and .565. Employment rates for blacks in poor, inner-city areas are even worse (Freeman and Holzer, 1986).

³ Participation rates for young male dropouts age 16 through 24 were 87.6 percent and 79.0 percent in 1977 and 1989, respectively (Bureau of Labor Statistics, 1989; U.S. Department of Labor, 1990).

Table 1
KEY LABOR FORCE MEASURES FOR YOUTH
1972-1989

Year	White Males			Black Males			White Females			Black Females		
	Labor Force Participation Rate	Employment to Population Ratio	Unemployment Rate	Labor Force Participation Rate	Employment to Population Ratio	Unemployment Rate	Labor Force Participation Rate	Employment to Population Ratio	Unemployment Rate	Labor Force Participation Rate	Employment to Population Ratio	Unemployment Rate
Ages 16 to 19												
1972	.601	.515	.142	.463	.316	.317	.481	.413	.142	.322	.192	.405
1978	.650	.563	.135	.449	.285	.367	.567	.485	.144	.373	.221	.408
1989	.610	.526	.137	.446	.304	.319	.571	.505	.115	.404	.271	.330
Ages 20 to 24												
1972	.843	.771	.085	.827	.704	.149	.594	.546	.082	.570	.469	.179
1978	.873	.806	.077	.788	.622	.210	.693	.636	.083	.627	.486	.227
1989	.868	.802	.075	.802	.658	.179	.740	.690	.068	.655	.537	.181

Sources: Bureau of Labor Statistics, 1989; U.S. Department of Labor, 1990.

Table 2 presents data on median annual income for various groups in 1972 and 1989.⁴ All numbers are expressed in 1989 dollars (and are thus unaffected by inflation). The following developments are apparent from this table:

- The incomes of females rose during this period, while those of males fell.
- The declines among males were especially dramatic among high school dropouts, whose incomes fell approximately 25 to 30 percent.⁵
- Even among young male high school graduates, annual incomes declined quite substantially (about 20 percent for those with no college and 12 percent for those with some college).
- The only group of males for whom there was very little income loss in this period was college graduates.

Overall, the data indicate that, for young males, average earnings fell and inequality among education-attainment groups rose in the past two decades. The deterioration in income and labor force activity for high school dropouts has been very sharp, as it has been for blacks overall. For blacks, the deterioration comes after strong progress in earnings (though not in employment) in the late 1960s and early 1970s (Freeman, 1981).

What factors can explain this set of trends? The most easily observable factors fall into the following categories: (1) demographic changes, which reflect shifts in labor supply; (2) occupational and industrial shifts, which reflect shifts in labor demand; (3) declining productivity growth; and (4) other factors (e.g., declines in union membership or in the inflation-adjusted value of the minimum wage).

These factors have been extensively studied in a group of recent papers on growing wage inequality among younger workers (Murphy and Welch, 1988; Blackburn, et al., 1989; Bound and Johnson, 1989; Bound and Holzer, 1991; Katz and Murphy, 1992; Acs and Danziger, 1990; the best review of the literature to date is Levy and Murnane, 1992). Each category is explained in greater detail below.

⁴ Trends in annual income primarily reflect trends in annual earnings, especially for males, among those below retirement age. Annual earnings, in turn, reflect both wage and employment changes.

⁵ Several studies (e.g., Bound and Freeman, 1990; Juhn, et al., 1989) show a greater deterioration in earnings for blacks (of all education levels) than for whites during the late 1970s and 1980s.

Ta. B. 2
**MEDIAN ANNUAL INCOME OF YOUNG PEOPLE
 BY SEX, AGE, EDUCATION AND RACE**

	Males		Females	
	1972	1989	1972	1989
Ages 15 and Above, by Race				
All	\$20,339	\$19,893	\$7,095	\$9,624
Whites	21,332	20,863	7,142	9,812
Blacks	12,921	12,609	6,672	7,875
Ages 25 and Above, by Education				
All	24,540	22,860	8,275	10,814
≤ 8 Years	13,358	10,033	4,960	5,627
9-11 Years	21,774	14,439	7,349	6,752
12 Years	27,041	21,650	10,257	10,439
13-15 Years	29,951	26,402	11,253	14,244
16+ Years	38,561	37,553	18,829	21,659
Ages 15-24	7,830	6,313	4,990	4,739
Ages 25-34	25,165	21,367	10,388	12,231

Source: U.S. Department of Commerce (1973, 1991).

Note: All numbers are in 1989 dollars and are calculated using the Fixed-Weight GNP Deflator for Personal Consumption Expenditures.

Demographics

The primary forces here are:

- The baby boom and baby bust;
- Changing school enrollment patterns; and
- A growing presence of females (and immigrants) in the labor force.

The baby boom cohort entered the labor market in the late 1960s and especially in the 1970s. This was widely believed to have depressed earnings of young people in the latter decade (Welch, 1979; Freeman, 1979) and raised their unemployment rates as well. As the much lower birth rates of the baby bust cohort of the 1960s and 1970s became reflected in the labor market entrants of the 1980s, the earnings and employment of young people generally recovered. This was especially true in such areas as the Northeast, where labor markets were especially tight for young people (Freeman, 1990).

College enrollment rates generally respond to the differential observed in wages between college and high school graduates at any point in time (Freeman, 1971). Thus, the depressed wage differentials observed in the 1960s and early 1970s led to declining enrollments in the latter decade. On top of the baby bust, this led to a relatively small cohort of young college graduates in the 1980s, which contributed to the higher wages that they earned. The high school dropout rate also levelled off at about 15 percent during the decade.

Only among blacks did college attainment continue to rise and dropout rates continue to fall, though substantial gaps in educational attainment between blacks and whites remain. Dropout rates for young whites and blacks, respectively, were about 15 percent and 29 percent in 1979, 16 percent and 21.5 percent in 1987; college graduation rates were 24 percent and 10.5 percent in 1979, 25 percent and 13 percent in 1987 (Bound and Freeman, 1990).

Female labor force participation grew dramatically in the 1960s and 1970s, though at slowing rates afterward. This rapid growth appeared to adversely affect their relative wage rates in the 1960s (since supply was shifting more rapidly than demand), though their relative wages began to improve thereafter. Female participation may also have contributed to the employment problems of males, especially black males (Borjas, 1986), as some women moved into jobs that had been male-dominated (as in manufacturing).

The effect of the growing immigrant presence in the labor force, mostly from Latin America and Asia, does not appear to have adversely affected the earnings and employment of the average worker (Altonji and Card, 1989; Lalonde and Topel, 1989). But Freeman, et al., (1991) show that the large number of workers without a high school degree among recent immigrant groups is another factor limiting employment opportunities for young dropouts.

Occupational and Industrial Shifts

Occupational shifts toward professional, technical and managerial jobs, which generally require greater educational preparation, have occurred at an increasing rate in recent decades. Growth of sales jobs has also been strong, and some of these require greater educational background as well.

The shift of employment away from manufacturing toward the trade and service sectors, and especially the decline of operative and laborer jobs within the manufacturing sector (as opposed to professional, managerial and clerical ones) was particularly strong in the 1980s. These trends have eliminated many jobs in which less-skilled workers could earn fairly high wages. These shifts result not only in lower wages but also in lower employment rates for less-educated workers in industrial areas, if they are not willing to accept the lower wages of newly emerging jobs. The effects on employment and/or earnings of young male dropouts, especially among blacks, have been particularly strong (Bound and Holzer, 1991).

A few studies have linked data on occupational and industrial employment distributions with skill variables from the Dictionary of Occupational Titles (DOT) in order to analyze how changes in these distributions have affected demand for skills. The most recent of these, by Howell and Wolff (1991), finds increases in demand between 1960 and 1985 for cognitive and interactive skills associated with occupational and industrial shifts, though it finds some slowdown in the rate of shift. Whether this slowdown reflects changes on the demand or the supply side of the labor market is unclear. Shifts from goods-producing to service-producing employment raised overall skill demands while they lowered overall earnings.

The most likely causes of these shifts in the occupational and industrial composition of employment are: (1) shifts in product markets, largely associated with rising import levels of manufactured products; (2) outsourcing of work from high-wage to lower-wage firms and/or plant relocations abroad; and (3) technological changes in the production of goods, which have increased reliance on computerized processes (such as CAD-CAM, robotics, computerized inventory control, etc.).

There have long been two conflicting claims: that new technology leads to "deskilling," and that it leads to "upgrading." Examples of both outcomes can clearly be found (e.g., Zuboff, 1988; Bailey, 1990). Employers can choose how to organize work and production around new technology in ways that can lead to either result. Still, statistical analysis across industries or over time strongly suggests that, on average, technological change tends to raise the demand for educated workers relative to those less educated (e.g., Bartel and Lichtenberg, 1987; Mincer, 1991).

Productivity Growth

The overall decline of real wages in the 1970s and their relatively weak average growth rates in the 1980s also reflect the decline in productivity growth (defined as increased output per hour of labor) experienced since the early 1970s. Productivity growth was virtually nonexistent between 1973 and 1979, and has remained fairly weak (averaging about 1 percent per year or less) (Levy, 1988; Baily and Blair, 1988). Among the many factors held responsible for the slowdown are the OPEC oil shocks, the baby boom, declining educational quality and test scores of youth in the late 1960s and 1970s (Bishop, 1989a), declining savings and investment rates, and the industrial shift from manufacturing to services (though this last factor may partially reflect the greater difficulty of measuring productivity in the service sector). However, a large part of this trend remains unexplained.

Other Factors

The decline in union membership (Freeman, 1989; Farber, 1987), which began in the mid-1950s but accelerated in the 1980s, appears to have contributed to the lower earnings of the less educated.

The inflation-adjusted value of the minimum wage also fell in the 1980s and contributes somewhat to the lower wages of less-skilled young workers (Blackburn, et al., 1989). It should be noted here that rising inequality and declining wages for less-skilled workers within occupations and industrial sectors are not well understood.

Some (e.g., Juhn, et al., 1989) have attributed the growing inequality to different skill levels that are often not measured. The rising wage gap in the 1980s between whites and blacks might reflect the rising value of unobserved skills. For instance, an increase in demand for reading and numerical literacy within traditionally low-skill sectors (due to technological change, import competition, etc.) would tend to increase the wage gap between white and black workers, whose average scores on reading and math tests lag well behind those of whites (Barton and Kirsch, 1990; O'Neill, 1990).

But an alternative explanation for the recent rise of the gap between blacks and whites might involve declining enforcement of affirmative action requirements for federal contractors during the 1980s (Leonard, 1990). An explanation for growing inequality within occupations and sectors might be the growing variance across firms in wage-setting policies, given the more competitive environment of the 1980s (Levy and Murnane, 1992).

PROJECTED OUTCOMES FOR THE 1990s

Given the importance of demographic changes and occupational/industrial shifts in helping to explain labor market developments of the 1970s and 1980s, we might learn something about expected developments in the 1990s from projections of these shifts and changes. These projections are made regularly by the Bureau of Labor Statistics (BLS) and have been described in various published formats (Fullerton, 1989; Personick, 1989; Silvestri and Lukasiewicz, 1989; Johnston and Packer, 1987).

Population/Labor Force Projections

The following changes are projected for the supply side of the labor market until the year 2000 (Fullerton, 1989):

- Population and labor force annual growth will slow to about 1 percent per year overall and will be about zero for ages 16 to 24.
- Population growth rates for blacks, Hispanics and Asians will exceed the rate for whites and will account for over half of net labor force growth, though these groups will still account for small fractions of the labor force overall (about 12 percent, 10 percent and 4 percent, respectively).

These projections suggest that the supply of youth in the labor market may grow more slowly than the demand for them, as their fraction of the overall labor force will continue to diminish, but that the large fractions of minorities among new entrants may limit the availability of educational and literacy skills among new workers.

Industry/Occupation Projections

The following changes are projected for the demand side of the labor market until the year 2000 (Personick, 1989; Silvestri and Lukasiewicz, 1989):

- Employment in services (especially retail trade, health and business) will continue to grow rapidly while manufacturing employment will remain relatively flat.
- Occupational growth will be strongest in professional, technical and managerial jobs that generally require higher educational attainment, as well as in sales and service jobs that require less.

While the most rapidly growing occupations in percentage terms will be those requiring technical education (e.g., paralegals and medical assistants), absolute job growth will be highest in a more mixed set of occupations--e.g., retail salespeople, janitors, waitresses, general managers, truck drivers and receptionists. The relative shift toward professional, managerial and technical employment is also projected to slow from what it was in the 1970s and 1980s.

The projections on the demand side thus suggest a continuing shift from traditionally high-wage to lower-wage sectors of the economy and the continuing growth of occupations with higher average educational demands, though the service occupations with lower educational qualifications will continue to grow as well. Links between the occupational projections and DOT-type skill measures (e.g., Johnston and Packer, 1987) again suggest growth in average cognitive and literacy skill requirements during the coming decade.

It should be noted that these projections are relevant only for shifts between occupations and industries and tell us nothing about projected changes within these broad groupings (even though much of the recent trends in earnings have occurred there). Furthermore, the projections themselves are highly uncertain. For instance, Bishop (1990) argues that past BLS projections have repeatedly underestimated the shifts toward professional and managerial occupations and that more accurate prediction techniques now predict even larger occupational shifts for the 1990s. While the net job growth in his projections is dominated by professional, managerial and technical jobs, the overall shares of the labor force do not change nearly so dramatically (Mishel and Tuxeira, 1991).

OTHER DATA ON EMPLOYERS AND SKILL REQUIREMENTS

Aside from these studies and projections that focus on traditional occupational, industrial and demographic variables, there have been attempts to analyze demand in terms of employer hiring behavior and skill requirements. While the availability of such data is limited, they provide us with at least a few glimpses of what employers are looking for in new workers and how they are proceeding to find them.

One of the most extensive analyses of job availability in the 1990s was performed by Bendick and Egan (1988) for the Washington, D.C., metropolitan area. They used very detailed occupational information from 1980, BLS-type projections for 1990, and a variety of assumptions about occupational skill and education requirements based on DOT and other sources. They estimated job vacancy rates based on assumptions about average employment durations and turnover. Bendick and Egan find that about 30 percent of projected jobs are in occupations that may not require a high school diploma, though employers might prefer applicants with diplomas.

About 30 to 40 percent of these jobs (about 9 to 12 percent of the total) also require minimal language and math skills. These jobs are heavily concentrated in restaurants, cleaning occupations and other services. Bendick and Egan estimate a job vacancy rate of about 2.5 percent among these jobs, which is higher than many previous estimates of overall job vacancies (e.g., Abraham, 1983; Holzer, 1988) but remains far lower than unemployment rates among the relevant groups. Furthermore, employer preferences for workers with such attributes as references and work experience are not gauged in the study, so the effective availability of these jobs for today's less-skilled youth remains questionable.

Bendick and Egan also note the low wages and benefits these jobs generally provide. For 1988, the average starting wage was \$4.57 per hour, and only about 40 percent of these jobs provided such benefits as health insurance. Potential wage growth was judged to be quite limited (two-thirds of the jobs offered wages that were not expected to rise by more than 60 percent) and employee turnover quite high. Thus, the long-term appeal of these jobs (especially relative to such alternative income sources as illegal activities) for unemployed youth appears to be limited.

Another study of employers was done in Chicago by Kirschenman and Neckerman (1990) as part of a larger study on poverty in Chicago under the direction of William J. Wilson. The Kirschenman and Neckerman project is based on a survey of a random (employment-weighted) sample of employers in Cook County that generated about 140 responses. The study finds that employers in Chicago, including black employers, have very negative perceptions of the skills, work preparation and work attitudes among young blacks. Fully 50 percent of these employers claimed that blacks lack basic skills, with the highest fraction (65%) found among employers of customer service workers. Lack of work ethic was cited by 47 percent and lack of dependability and "bad attitudes" by about 35 percent. In contrast, just 13 percent viewed specific occupational skills as lacking.

Kirschenman and Neckerman also find that 40 percent of employers had explicit educational requirements and 40 percent used skills tests (especially for clerical jobs). The total percentage of firms with no explicit educational requirement or skills test was

40 percent, a figure comparable to that of Bendick and Egan (though the numbers from the Chicago study represent firms rather than jobs).

Among those firms using skills tests, the tendency to hire blacks was actually somewhat greater than otherwise, controlling for occupation and proportion of blacks in the neighborhood. This suggests at least some racial bias in the attitudes expressed by employers about blacks' skills. Recruitment was skewed away from neighborhoods and schools in predominantly black areas, and reliance on referrals from current employees was the predominant recruitment method. If young blacks are less likely than whites to have friends and relatives among these current employees, they will be at a disadvantage in the recruiting process. However, three-quarters of the firms also used walk-ins off the street for filling certain jobs.

The possibility that employer perceptions and hiring behavior regarding young blacks show discrimination has also been evaluated in a recent experimental study conducted by the Urban Institute (Turner, et al., 1991). Matched pairs of young black and white men, equipped with identical resumes and trained to behave comparably in job interviews, were sent to a total of 576 employers in the Chicago and Washington, D.C., metropolitan areas, and employer reactions were then monitored. By "controlling" (as much as possible) for the personal skills and traits of applicants, the study could attribute any differences in employer behavior toward whites and blacks to racial discrimination.

The study finds that whites and blacks were treated comparably by employers in about 80 percent of the cases. But of the remaining 20 percent, whites received offers in 15 percent of the cases and blacks in just 5 percent. This 10-percent gap in job offers strongly supports the notion that employer perceptions of blacks are at least partly based on race discrimination. The discrimination may be of a "statistical" nature--i.e., it may be based on accurate employer perceptions of average white and black applicants or employees whose skills, job performance, etc., really differ. Nevertheless, the findings of this study suggest that even highly qualified black applicants may face discriminatory barriers as a result of these employer perceptions. (We also note a comparable study by Urban Institute researchers of whites and Hispanics in Chicago and San Diego in 1989 (Cross, et al., 1989). This study, too, shows more favorable treatment for white applicants, with offers going to whites alone in 22 percent of all cases and to Hispanics alone in just 8 percent.)

The Bendick and Egan (1988) and Kirschenman and Neckerman (1990) studies constitute the only recent and careful evaluations of random samples of firms or jobs in an area with regard to job availability and employer hiring practices that are relevant for the issue of skills demand. An earlier set of papers (e.g., Holzer, 1987a) analyzed data from the Employment Opportunity Pilot Project (EOPP) Survey of Firms. These data

constitute a fairly random national sample of over 3,000 employers in 28 local areas and show similar recruitment patterns to those presented by Kirschenman and Neckerman. They also show that over 80 percent of employees were interviewed at the time of hiring, which may disclose weak speaking or social skills, and that over half of the employers checked references, which are likely to be weak among those with limited employment experience. Unfortunately, the data are from the years 1980 and 1982 only, and little was asked about explicit hiring criteria or job content.

Another source of data on employer hiring is the Bureau of National Affairs Personnel Policies Forum, in which executives of major companies are surveyed about recruitment, hiring and training practices. While the surveys clearly overrepresent large companies, comparisons over time for these companies tell us about recent trends in hiring. For instance, a Bureau of National Affairs (1988) report on recruitment and selection indicates a growing tendency in these companies to test employees, especially for drugs; a growing use of reference and information checks, regarding both personal and employment history; and a tendency to use more structured interviews. All of these trends suggest growing difficulty for individuals with weak skills (both basic and social/verbal) or employment histories.

A number of more casual surveys of employers have been conducted in recent years regarding their perceptions of employee skills and their own skill requirements. These are summarized in Carnevale, et al., (1990) and in Barton and Kirsch (1990). Many of these surveys are not based on random samples of employers and/or do not explicitly measure hiring criteria or selection methods. Most are descriptive accounts of interviews with employers and managers and provide little statistical analysis of data on employment behaviors. Yet they do provide some insight into employer perceptions of their own skill needs and of the adequacy of skills in current or prospective employees.

Carnevale, et al., (1990) summarize the skills employers most frequently emphasize in the following way: (1) basic competency skills--reading, writing and computation; (2) communication skills; (3) adaptability skills--solving problems and thinking creatively; (4) group effectiveness skills; and (5) personal development skills--e.g., self-esteem and motivation. These suggest that employers require at least a minimal level of reading and math literacy and an ability to solve problems, often as part of a team. The same skills have been emphasized by others (e.g., Bailey, 1990) in case studies of firms that are responding to growing competition by providing more worker training and by reorganizing work environments to introduce more flexible production processes with greater worker autonomy.

The authors also cite the complaints of many employers who claim to have great difficulty finding skilled employees, though there is little evidence from which to judge

whether the frequency or severity of such complaints has grown (or whether these complaints have resulted in changed employer hiring, wage or training practices).

Barton and Kirsch (1990) use data from a survey of a large, random sample of young people (age 21 to 25) that was part of the National Assessment of Educational Progress (NAEP) in 1986 to compare their literacy levels (prose, document and quantitative literacy) with those needed on jobs. The literacy levels required on jobs were gauged by taking means on literacy test scores by occupational category for those in the survey who were employed.

Some interesting findings emerge. In particular, the average literacy scores of blacks overall are comparable to the average scores of white dropouts. Average levels for Hispanics are somewhat better but well below those of whites. Furthermore, the medians for both blacks and dropouts are lower than the average scores of young people employed in any major occupational category, including laborers and service workers. Even among whites and high school graduates, literacy above the fairly elementary levels that seem to be needed on many new jobs is not obtained by large fractions.

In sum, the very limited information available to us on the demand side of the labor market suggests that a large number of jobs still exist that require low levels of education and basic skills. But employer hiring practices and perceptions regarding the basic skills, social skills and work attitudes of minorities and the disadvantaged (which may be based on real employee deficiencies) will cause continuing problems for minorities and less-skilled workers in the labor market.

CONCLUSION: A SKILL MISMATCH FOR THE DISADVANTAGED?

Before deciding whether or not a skill mismatch characterizes the labor market for disadvantaged workers in the 1990s, it is important to clarify what most economists mean by this term. For most, "mismatch" implies an imbalance between the demand and supply sides of the labor market--i.e., an inability of available workers to be hired into available jobs. This can be caused by an imbalance in skills, geographic location, or even attitudes or expectations of workers relative to jobs they can obtain.

Some of the confusion over the term derives from the impression that the labor market must be out of equilibrium, or that workers must be unemployed, for mismatch to exist. This is not necessarily the case. The effects of mismatch might show up in low wages for the less skilled, rather than unemployment, until workers gain higher skill levels and wages adjust accordingly. Furthermore, the effects of low wages might be seen in low labor force participation rates for these groups, thereby affecting their employment as

opposed to unemployment rates. This has, in fact, been observed for young male high school dropouts in the 1980s (Holzer, 1990).

By this broader definition, then, it appears quite clear that a serious skill mismatch has developed, as demand has shifted away from the less educated and less skilled. But whether the degree of mismatch will improve or worsen in the 1990s is not obvious, given the limitations of available data and uncertainties about projected changes in skill requirements of jobs and skills obtained by workers.

On the one hand, shifts toward occupations requiring higher levels of education and literacy will clearly continue to occur. The evidence on current employer perceptions and hiring practices, including growing employer emphasis on certain types of skills, and the current weakness in literacy levels for dropouts and minorities all suggest that any current skill imbalances will continue or worsen in the 1990s.

On the other hand, graduation rates and test scores for minorities and the less skilled will likely continue to improve. Furthermore, the expected tightness in the labor market for youth (due to the baby bust and low population growth) should also work in their favor. These factors will interact with local labor market conditions, creating more favorable economic environments in the more rapidly growing metropolitan areas and especially in the suburbs of those areas (Holzer and Vroman, 1991). Finally, a large and growing number of jobs that do not require high levels of education or literacy will continue to be generated in the service sector.

Either way, it is clear that the severe deterioration in earnings for dropouts and minorities observed in the 1980s will not be quickly reversed. Even with a large number of jobs with low skill needs being generated in the service sector, employers may still refuse to hire applicants with weak references and work histories (perhaps preferring immigrants with greater perceived work ethic); or they will hire them at low wages for jobs with few benefits and little opportunity for advancement. Many workers will thus continue to forego such employment, while those who accept it will frequently experience turnover and little long-term improvement.

At this point, we need to take some care in defining exactly which skills are being "mismatched." Is it primarily education levels that need to be raised (or high school dropout rates lowered)? Is it the basic literary skills of both dropouts and high school graduates, and/or their social and communication skills? Is it attitudes, reliability and responsibility that can be inferred from general work experience? Or is it more specific occupational skills?

The evidence of harm for those who drop out of high school is very clear. This is also the one measure of skills--the "signal"--that is easiest for employers to spot when receiving applications and therefore most often used.

As for other skills measures, Meyer and Wise (1982) have found that high school grades are strong predictors of subsequent earnings and employment, though vocational education is not. Bishop (1989b) has found evidence that test scores in mathematics and other areas are fairly good predictors of earnings, productivity or performance in a variety of blue-collar occupational settings. O'Neill (1990) and Ferguson (1990) have found that math and reading scores (from the Armed Forces Qualification Test administered to the full sample of the National Longitudinal Survey of Youth) have significant effects on the wages of whites and blacks even after controlling for education; and they account for major portions of observed black/white wage differences.⁶ Furthermore, O'Neill finds that the effects of test scores on wages grew over the 1980s, consistent with the notion of rising demand for math and reading skills in the workplace. Ferguson also finds that these magnitudes rise consistently with age from the teens through the late twenties.

However, we note that most of these studies (except for Meyer and Wise) focus primarily on wages rather than employment; and they do not differentiate educational and occupational categories of workers in measuring these effects. Thus, the effects of reading and math skills on the basic employability of disadvantaged and/or less-educated young people cannot really be inferred here.

We noted above that a sizable minority of employers do their own testing. Heneman, et al., (1986) note that a wide variety of tests are currently administered--basic ability tests, personality and interest tests, and work sample tests (requiring demonstration of knowledge and/or job performance), with the latter more closely tied to needed occupational skills. Validity analyses of the ability and work sample tests generally have been favorable (not so for the personality and interest tests) in terms of their ability to predict subsequent employee performance or "trainability."

But since a majority of employers (at least to date) do not administer such tests, and since grades and test scores are generally not available to most employers when they are

⁶ If the "race norming" of black test scores that has recently received much attention is widely prevalent, then the ability of test scores to explain black/white earnings gaps would be even larger in the absence of this practice. But the large effects of test scores on blacks that we already observe raise questions about whether "race norming" really is very prevalent across firms.

making their hiring decisions, their ability to infer the basic skills of applicants at the time of hiring must be very limited. Some information can presumably be inferred from previous work experience, especially on related jobs, and from references.

But it is quite possible that basic skills do not greatly raise the general employability of disadvantaged individuals at the entry level. Instead, these skills may work primarily by improving individuals' performance on certain jobs (though probably not on all) once they have been hired. This, in turn, would lead to longer employment durations, wage growth and promotions, which also might give individuals the work experience and references to improve their mobility prospects. (This interpretation is clearly consistent with Ferguson's findings of growing effects of basic skills on wages as workers age.) But the fraction of jobs available to the less educated for whom this would be the case is not clear.

In short, the clearest signal currently sent to most employers about prospective job performance and trainability at the time of hiring is high school graduation. Employers of less-educated workers also seem to care a great deal about attitudes and work ethic, which they presumably try to infer from previous work experience and references as well as the personal impressions derived from interviews. Basic skills may improve performance on some jobs and may be a growing prerequisite for employment in many cases, but their effects on employment and earnings will likely be observed over the longer term rather than in entry-level positions. (This, of course, also suggests that impact evaluations of training programs that focus only on short-term effects may understate the long-term impacts of skills remediation for youth.)

Furthermore, we note that imbalances between educational requirements of occupations and the skills of workers should lead to a variety of adjustments in the labor market, of which wage adjustments are just one type. The hiring criteria of firms, the ways they recruit applicants and select employees, the amount of training they invest in their employees and even the general organization of work should all be affected.

For instance, firms may have a choice between a low-wage, high-turnover strategy for reducing costs and a high-wage, high-training, low-turnover strategy that reduces costs by hiring and retaining more productive and autonomous workers. One can imagine that basic skills and evidence of good attitudes and work ethic would receive more consideration in the latter strategy, since employers would be making greater investments in their workers and would want some return on these investments.

Furthermore, there is some evidence that on-the-job training generally increases with education level and is lower for women and minorities than for white males (Lillard and Tan, 1986; Mincer, 1989; Lynch, 1989a). Unless the cost to employers of providing such

training could be lowered (e.g., through government tax breaks or subsidies), their choosing to train more employees could result in even less willingness to hire disadvantaged workers, in whom such training might be a poor investment.

But it is well known that firms in the United States provide less on-the-job training than do those in many other industrial countries (Osterman, 1988), and there is little evidence that many firms have recently changed in the direction of providing more training and worker autonomy (Mishel and Tuxeira, 1991). Even when they do, we know little about the overall implications for how or whom they hire. Clearly, a great deal more needs to be known about employer choices and practices in this area.

In sum, the evidence suggests large and continuing problems for disadvantaged workers with limited skills in the labor market. While there remains a great deal we do not know about future trends, especially in terms of employer policies and procedures, it seems that raising high school graduation rates and enhancing basic literacy and problem-solving skills among minorities and other disadvantaged groups should be top priorities for employment and training policy.

III. MINORITY AND DISADVANTAGED YOUTH: OTHER SOURCES OF PROBLEMS

In the previous section, we noted that limited education and basic skills levels of disadvantaged workers, especially blacks, probably will contribute a good deal to their earnings and employment problems in the 1990s. Negative employer perceptions of black workers, which may be at least partly accurate on average but also create discriminatory barriers for qualified blacks, contribute to these problems.

In this section, we explore additional factors that limit labor market opportunities for the disadvantaged, especially inner-city blacks. These include:

- Suburbanization of jobs and resulting "spatial mismatch,"
- Difficulties obtaining early work experience and job contacts, and
- Negative neighborhood influences and participation in crime.

SUBURBANIZATION AND SPATIAL MISMATCH

The continuing tendency of population and industry in the United States to suburbanize within metropolitan areas leaves inner-city residents increasingly isolated from employment opportunities. Although middle-class blacks have also become more suburbanized in the last decade or two, they continue to live in relatively segregated neighborhoods that are closer to inner-city areas than are predominantly white neighborhoods (Frey, 1985; Massey and Denton, 1988). Furthermore, there is at least some evidence that traditional, goods-producing employment is suburbanizing relatively more rapidly while financial and service sector jobs are becoming more predominant in the central city (Kasarda, 1989), thus further distancing inner-city residents from the best-paying jobs for less-skilled workers.

It has long been suggested that a "spatial mismatch" has been created between inner-city residents and suburbanized jobs. This might be caused by the time and difficulties associated with commuting--especially for lower-income residents of inner cities who do not own cars--or by the difficulties in searching for work that is located far away. The perception of suburban areas as being unknown and hostile to young inner-city residents may also contribute to this problem.

The question has always been whether, and to what extent, the distance from jobs contributes to the employment problems of blacks. Over the past two decades or more, the evidence on this issue has been contradictory (Holzer, 1991). Still, evidence from the 1980 Census suggests that spatial mismatch does contribute to the employment problems

of young blacks, and can explain from 10 to 30 percent of the differences in employment rates between young whites and blacks in metropolitan areas (Ihlanfeldt and Sjoquist, 1990, 1991).

Thus, improving the access of young inner-city blacks to suburbanized jobs, especially those with lower skill requirements, should remain on the agenda for policymakers in the next decade.

EARLY WORK EXPERIENCE AND CONTACTS

There has been at least some evidence that the experience of young blacks in the labor market is often hampered by two related problems: (1) difficulties in the search process, especially in gaining "contacts" and referrals from other employees; and (2) difficulties in obtaining early work experience and employer references. As blacks leave school and search for jobs, their lack of contacts and work experience seems to compound their problems and make the attainment of jobs more difficult.

It has long been known that most employees obtain their jobs at least partly through the help of friends and relatives (e.g., Corcoran, et al., 1980). Furthermore, employers rely heavily on referrals from their current employees, who often provide information employers trust on an applicant's personal abilities (Montgomery, 1989). The lower turnover and absenteeism rates on jobs so obtained (Holzer, 1987a) suggest that these are, indeed, better matches of workers with jobs than are obtained through other methods of recruitment.

Young blacks might be at a disadvantage in obtaining references for several reasons: (1) the older blacks whom they know may themselves be unemployed or employed in less desirable and/or declining sectors of the economy; (2) they are more likely to reside in households where the head and other members are unemployed; and (3) the flight of middle-class blacks from inner-city neighborhoods may have further reduced their contacts with successfully employed members of the community.

While the evidence in favor of these hypotheses remains limited (mostly due to lack of data), there has been at least some support for them. For instance, Holzer (1987b) finds that young blacks are less successful in obtaining jobs through friends and relatives than are young whites, though an even bigger disadvantage occurs in the process of direct application without referral (which, again, suggests a role for discriminatory employer practices). Freeman (1986) also notes that churchgoing is a major determinant of who obtains jobs in poor, inner-city neighborhoods, which suggests a role for neighborhood contacts (as well as for personal characteristics); and Case and Katz (1990) find that

social networks appear to be at least partly based on geography and neighborhood, clearly a disadvantage for young blacks in poorer areas.

On the issue of the effects of early work experience on subsequent labor market outcomes, the evidence seems clear: early work experience contributes positively to the wages of young whites and blacks, and lack of work experience for blacks reduces their subsequent wages and perhaps their employment as well. Meyer and Wise (1982) find that weeks worked during high school increase subsequent wages and weeks worked. For out-of-school youth, Ellwood (1982) finds that weeks worked have small effects on subsequent weeks worked and larger effects on wages.

Becker and Hills (1983) find that short spells of unemployment or job changing do not reduce future wages, but lengthy durations do. Lynch (1989b) and D'Amico and Maxwell (1990) have confirmed the negative effects of low employment for out-of-school youth on their subsequent earnings; the latter study, in particular, finds that differences in early work experience account for a large part of the racial differences in wage growth during the first five years out of school.

Finally, Ballen and Freeman (1986) find that for inner-city black youth, nonemployment rates and durations do not decline with age or after spells of employment, as they do for other young people. Wages are also adversely affected by lengthy spells of nonemployment. Their interviews with a small number of employers in the Roxbury neighborhood of Boston confirm that spotty work histories discourage employers from hiring many of these youths.

Given the evidence from other employer surveys (i.e., the EOPP Survey of Firms and the Personnel Policies Forum of the Bureau of National Affairs) that most employers ask about previous work experience and/or check references when hiring, it is not surprising that the early difficulties of young blacks in the labor market should have negative effects on their earnings in subsequent years.

NEIGHBORHOOD EFFECTS AND CRIME

Many recent discussions of poverty (e.g., Wilson, 1987; Sawhill, 1989) have emphasized the idea of an urban underclass in very low-income neighborhoods where poverty is persistent for a small fraction of families and where individuals engage in behaviors that may limit their future upward mobility. These behaviors include single parenthood for women, criminal activities for men, and dropping out of school for both. Indeed, Wilson (1987) emphasizes that at least some of these activities result from deteriorating opportunities in the mainstream economy for the less skilled (due to skill or spatial

mismatch) and growing social isolation of the poor from middle-class blacks as well as whites.

These discussions raise questions about the extent to which growing up in very low-income neighborhoods per se limits future educational and labor market opportunities, and about the consequences of certain behaviors (e.g., participation in crime or drug use) for future employment.

On the question of neighborhood effects, the limited evidence has been reviewed by Jencks and Mayer (1990). In particular, they find very small effects of socioeconomic status on the chances of individuals attending college or on academic achievement, especially for whites. Mayer (1990) finds that little of the total variation in dropping out of school or teen childbearing is explained by socioeconomic status or racial mix of school populations, but that these characteristics contribute somewhat to average racial differences in these activities. Crane (1990) also finds that neighborhood effects on educational attainment and other outcomes are generally small except for the poorest neighborhoods, where they become much more substantial. Thus, the severe social isolation of the poor in the lowest-income neighborhoods of inner cities may contribute substantially to long-term impediments to success.

As for crime, research until recently has found only weak evidence of a negative association between crime and employment in analyzing data over time or across geographic areas (Freeman, 1983). But in recent U.S. survey data, the evidence of a negative association is stronger. For instance, Viscusi (1986) finds less self-reported crime among employed inner-city black youth than among the nonemployed. Furthermore, he finds that criminal participation is related to youth's perceptions of legal versus illegal returns as well as risks of apprehension.

Freeman (1991) finds that the criminal activities of young black males in low-income areas grew during the 1980s, perhaps because of the drug trade. The perceived returns to legitimate activity relative to crime declined, as crime became more lucrative and wages for less-skilled males declined. At this point, up to half of young black male dropouts are either imprisoned or on probation in the criminal justice system.

Although we have no direct evidence on the willingness of youth who have participated in crime to engage in legitimate work, the above evidence is at least somewhat consistent with that of high "reservation wages" (i.e., minimum acceptable wages) relative to what young blacks could obtain in the labor market (Holzer, 1986; Welch, 1990). They may avoid potentially available jobs, causing lengthier durations of unemployment or labor force nonparticipation. The availability of alternative income, especially from crime,

might therefore lessen the willingness of these youths to accept relatively low wages in the labor market.

Furthermore, participation in crime has negative long-term effects on employment prospects, especially for those who are imprisoned. Freeman (1991) finds that employment probabilities as much as eight years later are reduced by 20 percent for those who have ever been arrested. Grogger (1992) finds similarly large effects, especially for black youth. It is not clear whether this is due to employers refusing to hire those whom they know or suspect of having criminal records, or spotty work histories or reduced interest in regular employment among those with such records.

Thus, the growing attractiveness of crime relative to legitimate employment for young high school dropouts and especially black dropouts appears to have led to widespread criminal participation, with very negative consequences for the employment prospects of these young people.

IV. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The labor market for young people changed dramatically in the 1970s and 1980s:

- Labor force participation rates for young high school dropouts fell sharply;
- Real wages for less-educated people fell especially sharply for young high school dropouts--as much as 25 to 30 percent in real terms for male dropouts;
- Wages for high school graduates also declined during this period; and
- The inequality in earnings rose not only between young people of different education levels but also within these educational categories.
- For young blacks, employment and labor force participation dropped dramatically in the 1970s, and the gap in wages between black and white youth widened in the 1980s.

The factors that have caused changes in labor market outcomes for young people include the following:

1. Economic and demographic forces.

- Changes in international trade, technologies and firm production/location decisions have produced major changes in the occupational and industrial structure of employment. Jobs have shifted away from such high-wage sectors as manufacturing, which require less education and/or cognitive skills.
- Union representation has declined.
- The minimum wage in real and relative terms has declined as well.
- Overall productivity growth has fallen, thus lowering wage growth for all workers.
- Demographic changes (e.g., the baby boom and subsequent baby bust, changing school attainment patterns, and growth of females and immigrants in the labor force) have reinforced the changes in the structure of the economy.

Many of these structural changes are projected to continue through the 1990s. The relative decline of the manufacturing sector will proceed, as will the shift toward more-skilled occupations. The exact magnitudes of these projected shifts remain open to debate, but not their directions. Furthermore, the projected service jobs require less skill but pay much less.

2. Employer behavior and skill requirements.

The effects of the economic and demographic changes may be exacerbated by changes in the policies and practices of employers and the skill levels they require when hiring. Although we do not know exactly what skills and personal characteristics employers are seeking or what changes in their personnel policies they are making in response to structural and demographic changes, limited evidence to date suggests:

- A large number of jobs will remain open to high school dropouts with very limited skills, but employers may choose to reject them for other reasons (such as limited work experience or references). The wages, benefits and opportunities for income growth available to such employees are quite modest.
- Employers believe that many workers have inadequate basic skills, especially minorities; and some employers complain about poor work ethic and attitudes among minorities.
- The importance of interviews, references and tests in employer hiring decisions appears to be increasing.
- There is casual and case study support for the growing need for employees to have not only basic literacy skills but also problem-solving and social/communication skills. This may further raise employers' entry-level hiring standards.
- The literacy test scores of minorities and dropouts are rising, but remain below the averages of young workers in any major occupational category.

All of this suggests that a serious "mismatch" exists between the skill levels of disadvantaged employees and those sought by employers. This mismatch may contribute to the low wages and/or employment levels of high school dropouts and minorities, and it could worsen in the 1990s.

3. Discrimination.

Even if employer perceptions of skill or attitude problems of young blacks are accurate on average, they seem to create discriminatory barriers for black candidates who are as qualified as their white counterparts.

4. Lack of access.

There is some evidence of a "spatial mismatch" in which suburbanized jobs are less accessible to inner-city youth, especially for less-skilled positions. In addition, young inner-city blacks have less access to the social contacts that help in entering the labor market.

5. Lack of stable, early work experience among disadvantaged youth.

The evidence suggests that disadvantaged (and particularly black) youth suffer from a lack of solid connections to the labor market, and thus to positive work experience. In view of the link between moderate amounts of work experience during school and later earnings and employment, this lack is an important one.

6. The attractiveness of crime.

Up to half of young black high school dropouts now appear to be participating in illegal activities at some level, and, once incarcerated, their future employability is significantly reduced.

It is clear, then, that a very wide range of social as well as economic forces contribute to the problems of disadvantaged youth in the labor market. Young people growing up and attending school in poor, inner-city areas are lacking not only literacy and communication skills but also social contacts, access to suburban jobs, early work experience and rewarding alternatives to crime. The cumulative disadvantages of these environments are often too great by the time young people enter the labor market for any single program of short duration and specific focus to make a great deal of difference. Accordingly, we need to outline a more long-term, comprehensive strategy for dealing with the problems of disadvantaged youth in the labor market.

Reviews of existing federal employment and training programs illustrate their serious limitations in improving the employment and earnings prospects of these young people.⁷

⁷ See, for example, Smith and Gambone, first volume of this series.

Job Training Partnership Act (JTPA) programs are not required to focus on the most severely disadvantaged, are too limited in funding and duration, and provide very limited work experience and frequently no skills remediation. Therefore, most programs to date have shown little ability to improve the postprogram earnings or employment of young, disadvantaged participants. More successful programs, such as the Job Corps, are expensive and reach only a small number of the disadvantaged.

While new programs, such as the Summer Training and Education Program (STEP) and JOBSTART, offer some lessons about how to raise basic skills, lower dropout rates and train dropouts less expensively, it would take substantial increases in funding and a broader orientation for these programs to significantly affect the experiences of disadvantaged youth in larger ways.

RECOMMENDATIONS

This review leads to two groups of recommendations: four to consider in formulating policy and two for planning future research on youth employment issues.

Policy Recommendations

1. The findings underscore the priority need for efforts and programs to reduce high school dropout rates further and to raise basic literacy, problem-solving and communication skills.

Completing high school is clearly an influential factor in wage levels and employment. Youth lacking a high school diploma will be restricted in their short- and long-term employment prospects. Thus, a broad range of financial bonus and other incentive programs for keeping young people in school (and out of trouble with the law) have been suggested (e.g., Sawhill, 1989). The use of work experience (along with skills remediation) in this regard may prove to have real payoffs, especially in view of its long-term effects on employment and earnings.

JTPA funding should continue to be utilized for in-school programs that focus on remediation of basic skills. In view of the modest sum it represents (relative to most school budgets), care should be taken to invest these funds in programs of proven effectiveness. Likewise, JTPA funding for educational components--again, wherever possible, with evidence of effectiveness--should be supported. Here, special emphasis should be considered for programs that provide a high school diploma, a general equivalency diploma (GED) or some other credential.

2. Explore strategies for increasing private sector training of less-skilled young adults.

Both young graduates and school dropouts have experienced major earnings losses in the past two decades; programs that target their needs are thus particularly necessary. In addition to such public sector training as the Job Corps, the Department of Labor should explore avenues to increase the financing of apprenticeship programs and/or on-the-job-training in the private sector (perhaps through the tax system, as recently proposed by the Department's Commission on Workforce Quality).

3. Improve access to employers, particularly in suburban areas, while youth are in school and shortly after leaving.

Improving access to jobs, especially in the suburbs, must take into account the problems of job search/placement as well as transportation for inner-city youth. As noted above, most jobs are found through employee referral and direct walk-in; formal placement mechanisms play a much smaller role. Furthermore, the U.S. Employment Service, the placement service for the disadvantaged, is stigmatized in the eyes of most employers as a source only of very low-skill labor.

Efforts to improve access should therefore focus on the schools. Stronger employer participation in placement services and more widespread job search instruction in inner-city high schools should be encouraged; and transportation should also be provided, perhaps by employer groups.

Efforts to orient inner-city youth to the suburbs may also be necessary to break down informational or psychological barriers. Metropolitanwide coordination of placements through Private Industry Councils has also been suggested as a way to improve job placements in suburban areas (Hughes, 1991).

Since social contacts are such an important part of the job search and appear to be lacking for disadvantaged youth, efforts to enhance contact between community institutions and successful individuals in the community, and between these institutions/individuals and inner-city adolescents might also be encouraged. Recent discussions of the potential usefulness of mentoring programs in inner-city areas (e.g., Mincy and Wiener, 1990) are relevant in this regard.

4. Improve the rewards of regular employment relative to crime.

This should involve raising the appeal of employment and reducing that of crime. Since incarceration of youth appears to have such negative effects on future employability, and since such large numbers are being apprehended (at very large cost) without much

deterrent effect, approaches that emphasize greater enforcement of current laws do not offer much promise of success.

Instead, raising the appeal of legitimate work may be more appropriate. The decline in real and relative wages for the less skilled, especially dropouts, must be halted and at least partially reversed. Raising high school graduation rates and skill levels will help by reducing the relative supply of less-skilled labor. But more direct approaches can involve higher minimum wages, expanded use of Earned Income Tax Credits and/or direct wage subsidies to bolster the earnings of low-wage jobs.

5. Increase federal-level attention to the labor market-related problems of disadvantaged youth.

Although a comprehensive approach to the problems of disadvantaged youth is well beyond the scope of the Employment and Training Administration (ETA), an important role can be played by ETA as part of a broader process.

For one thing, some reorientation of JTPA programs toward longer-term interventions that are more focused on the disadvantaged is clearly in order. Increased funding is also imperative for these efforts to reach a larger number of eligible youth.

Beyond this, ETA could play some role in coordinating efforts and disseminating information among various federal agencies as well as state and local governments. For instance, a large number of states provide their own training programs for youth, and city governments have experimented with linkages between employers and schools (e.g., the Boston and Detroit Compacts) and transportation programs (e.g., the SEPTA program in Philadelphia). Greater federal government support of such efforts, through disseminating information and perhaps additional funding as well, might be useful to encourage similar initiatives.

Research Recommendations

ETA can also play an important role in generating more knowledge about the problems of disadvantaged youth in the labor market and successful approaches to dealing with them. This can take two forms:

1. Conduct comprehensive demonstration projects and evaluations.

Demonstration projects and evaluations would be useful in a variety of contexts, including: programs that rely on different kinds of skills remediation (e.g., basic literacy,

problem-solving, teamwork or specific job skills); employer-school linkages; transportation and orientation programs to suburbs; and bonus programs for schooling.

2. Sponsor basic data collection efforts.

Beyond these, we need more basic data on both employers and disadvantaged youth. On the employer side, we need much more direct evidence on the following:

- The location of vacant jobs (or overall employment growth) that are accessible to less-educated youth, by geographic location and industry;
- The hiring criteria employers use for these jobs;
- How the hiring criteria interact with employer decisions about training, wage rates and promotions;
- How all of these employer decisions interact with the tightness of the local labor market--i.e., how employers respond to perceived worker shortages and high vacancy rates; and
- The skills employers need and how they gauge these skills in prospective employees.

Regarding disadvantaged youth, any new survey data that might be gathered should focus on how they perceive the relative rewards to educational and skills attainment and to legal versus illegal work; on how these perceptions influence their investment decisions and job search behavior; and on their general perceptions of job availability and employer behavior (hiring, pay, etc.) and locations (cities versus suburbs).

REFERENCES

- Abraham, Katherine
1983 "Structural/Frictional versus Demand-Deficient Unemployment." American Economic Review, September.
- Acs, Gregory and Danziger, Sheldon
1990 "Educational Attainment, Industrial Structure, and Male Earnings, 1973-1987." Unpublished paper, University of Michigan.
- Altonji, Joseph and Card, David
1989 "The Effects of Immigration on the Labor Market Outcomes of Natives" in Abowd, J. and Freeman, R. (eds.) Immigration, Trade, and the Labor Market. Chicago, IL: University of Chicago Press.
- Baily, Martin N. and Blair, Margaret
1988 "Productivity and American Management" in Litan, Robert E. and Lawrence, Robert Z. (eds.) American Living Standards. Washington, D.C.: Brookings Institution.
- Bailey, Thomas
1990 "Changes in the Nature and Structure of Work: Implications for Skill Requirements and Skill Formation." Berkeley, CA: University of California, National Center for Research in Vocational Education.
- Ballen, John and Freeman, Richard
1986 "Transitions Between Employment and Nonemployment" in Freeman, Richard B. and Holzer, Harry J. (eds.) The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.
- Bartel, Ann and Lichtenberg, Frank
1987 "The Comparative Advantage of Educated Workers in Implementing New Technology." Review of Economics and Statistics, February.
- Barton, Paul and Kirsch, Irwin
1990 "Workplace Competencies: The Need to Improve Literacy and Employment Readiness." Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.

- Becker, Brian and Hills, Stephen
1983 "The Long-Run Effects of Job Changes and Unemployment Among Male Teenagers." Journal of Human Resources, Spring.
- Bendick, Marc and Egan, Mary Lou
1988 "JOBS: Employment Opportunities in the Washington Metropolitan Area for Persons with Limited Employment Qualifications." Washington, D.C.: Greater Washington Research Center.
- Bishop, John
1990 "The Deskilling versus Upskilling Debate: The Role of BLS Projections." Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies.
- Bishop, John
1989(a) "Is the Test Score Decline Responsible for the Productivity Growth Decline?" American Economic Review, March.
- Bishop, John
1989(b) "Incentives for Learning: Why American High School Students Compare So Poorly to Their Overseas Counterparts" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.
- Blackburn, McKinley; Bloom, David; Freeman, Richard
1989 "The Declining Economic Position of Less-Skilled American Males." NBER Working Paper No. 3186. Cambridge, MA: National Bureau of Economic Research.
- Borjas, George
1986 "The Demographic Determinants of the Demand for Black Labor" in Freeman, Richard B. and Holzer, Harry J. (eds.) The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.
- Bound, John and Freeman, Richard
1990 "What Went Wrong? The Erosion of the Relative Earnings of Young Black Men in the 1980s." Unpublished paper, Harvard University.

- Bound, John and Holzer, Harry
1991 "Industrial Shifts, Skill Levels, and the Labor Market for White and Black Males." Unpublished paper, Michigan State University.
- Bound, John and Johnson, George
1989 "Changes in the Structure of Wages During the 1980s: An Evaluation of Alternative Explanations." NBER Working Paper No. 2983. Cambridge, MA: National Bureau of Economic Research.
- Bureau of Labor Statistics
1989 Handbook of Labor Statistics, 1989. Washington, D.C.: U.S. Government Printing Office.
- Bureau of National Affairs
1988 "Recruiting and Selection Procedures." Personnel Policies Forum Survey No. 146, May.
- Carnevale, Anthony; Gainer, Leila; Meltzer, Ann
1990 Workplace Basics: The Essential Skills Employers Want. San Francisco: Jossey-Bass Publishers.
- Case, Ann and Katz, Lawrence
1990 "The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youths." Unpublished paper, Harvard University.
- Corcoran, Mary; Datcher, Linda; Duncan, George J.
1980 "Most Workers Find Jobs Through Word of Mouth." Monthly Labor Review, August.
- Crane, Jonathan
1990 "Effects of Neighborhoods on Dropping Out of School and Teenage Childbearing" in Jencks, Christopher and Petersen, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.
- Cross, Harry; Kenney, G.; Mell, Jane; Zimmerman, Wendy
1989 "Employer Hiring Practices: Differential Treatment Between Hispanic and Anglo Job Seekers." Washington, D.C.: Urban Institute.

D'Amico, Ronald and Maxwell, Nan

- 1990 "Black-White Employment Differences During the School-to-Work Transition: An Explanation for Between and Within Race Wage Differences." Unpublished paper, SRI International.

Ellwood, David

- 1982 "Teenage Unemployment: Permanent Scars or Temporary Blemishes?" in Freeman, Richard B. and Wise, David (eds.) The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago, IL: University of Chicago Press.

Farber, Henry

- 1987 "The Recent Decline of Unionization in the United States." Science, November.

Ferguson, Ronald

- 1990 "Racial Patterns in How School and Teacher Quality Affect Achievement and Earnings." Unpublished paper, Harvard University, J.F. Kennedy School.

Freeman, Richard

- 1991 "Crime and the Economic Status of Disadvantaged Young Men." Paper presented at the Conference on Urban Labor Markets and Labor Mobility, Airlie House, Virginia.

Freeman, Richard

- 1990 "Employment and Earnings of Disadvantaged Youth in a Labor Shortage Economy" in Jencks, Christopher and Petersen, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.

Freeman, Richard

- 1989 "On the Divergence in Unionism among Developed Countries." NBER Working Paper No. 2817. Cambridge, MA: National Bureau of Economic Research.

Freeman, Richard

- 1986 "Who Escapes? The Relationship of Church-Going and Other Factors to Outcomes for Inner-City Black Youth" in Freeman, Richard and Holzer, Harry (eds.) The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.

- Freeman, Richard
1983 "Crime and the Labor Market" in Wilson, J.Q. (ed.) Crime and Public Policy. San Francisco: ICS Press.
- Freeman, Richard
1981 "Black Economic Progress Since 1964: Who Has Gained and Why?" in Rosen, S. (ed.) Studies in Labor Markets. Chicago, IL: University of Chicago Press.
- Freeman, Richard
1979 "The Effect of Demographic Factors On Age-Earnings Profiles." Journal of Human Resources, Spring.
- Freeman, Richard
1971 The Market for College-Trained Manpower. Cambridge, MA: Harvard University Press.
- Freeman, Richard and Holzer, Harry J. (eds.)
1986 The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.
- Freeman, Richard; Borjas, George; Katz, Lawrence
1991 "On the Labor Market Effects of Immigration and Trade." New York: Russell Sage Foundation.
- Frey, William
1985 "Mover Destination Selectivity and the Changing Suburbanization of Whites and Blacks." Demography, 22(2):223-243.
- Fullerton, Howard
1989 "New Labor Force Projections, Spanning 1988 to 2000." Monthly Labor Review, November.
- Grogger, Jeffrey
1992 "Crime, Persistent Youth Joblessness, and Black/White Employment Differentials." Review of Economics and Statistics, Forthcoming.
- Heneman, Herbert; Schwab, Donald; Fossum, John; Dyer, Lee
1986 Personnel-Human Resource Management. Homewood, IL: Irwin.

- Holzer, Harry
1991 "The Spatial Mismatch Hypothesis: What Has the Evidence Shown?"
Urban Studies, Spring.
- Holzer, Harry
1990 "The Labor Market for Young Males: Trends, Causes, and Policy
Implications." Research in Labor Economics, Vol. XI.
- Holzer, Harry
1988 "Structural/Frictional and Demand-Deficient Unemployment in Local
Labor Markets." Cambridge, MA: National Bureau of Economic
Research.
- Holzer, Harry
1987(a) "Hiring Procedures in the Firm: Their Economic Determinants and
Outcomes" in Block, Richard; Kleiner, Morris; Roomkin, Myron; Salsburg,
Sydney (eds.) Human Resources and Firm Performance. Madison, WI:
Industrial Relations Research Association.
- Holzer, Harry
1987(b) "Informal Job Search and Black Youth Unemployment." American
Economic Review, June.
- Holzer, Harry
1986 "Reservation Wages and Their Labor Market Effects for Black and White
Male Youth." Journal of Human Resources, Spring.
- Holzer, Harry and Vroman, Wayne
1991 "Mismatches and the Urban Labor Market." Unpublished paper, Urban
Institute.
- Howell, David and Wolff, Edward
1991 "Trends in the Growth and Distribution of Skills in the U.S. Workplace."
Industrial and Labor Relations Review, April.
- Hughes, Mark
1991 "Emerging Settlement Patterns: Implications for Antipoverty Strategy."
Unpublished paper, Princeton University.

- Ihlanfeldt, Keith and Sjoquist, David
1991 "The Effect of Job Access on Black Youth Employment: A Cross-Sectional Analysis." Urban Studies, 28(2):255-265.
- Ihlanfeldt, Keith and Sjoquist, David
1990 "Job Accessibility and Racial Differences in Youth Employment Rates." American Economic Review, March.
- Jencks, Christopher and Mayer, Susan
1990 "The Social Consequences of Growing Up in a Poor Neighborhood: A Survey" in McGeary, Michael and Lynn, Lawrence (eds.) Concentrated Urban Poverty in America. Washington, D.C.: National Academy Press.
- Johnston, William and Packer, Arnold
1987 Workforce 2000: Workers and Work for the Twenty-First Century. New York: Hudson Institute.
- Juhn, Chinhui; Pierce, Brook; Murphy, Kevin
1989 "Accounting for the Slowdown in Black-White Wage Convergence." Unpublished paper, University of Chicago.
- Kasarda, John
1989 "Urban Industrial Transition and the Underclass." The Annals of the American Academy of Political and Social Science, January.
- Katz, Lawrence and Murphy, Kevin
1992 "Changes in Relative Wages, 1963-87: The Role of Supply and Demand Factors." Quarterly Journal of Economics, Forthcoming.
- Kirschenman, Joleen and Neckerman, Katherine
1990 "Hiring Strategies, Racial Bias, and Inner-City Workers." Unpublished paper, University of Chicago.
- LaLonde, Robert and Topel, Robert
1989 "Labor Market Adjustments to Increased Immigration" in Abowd, J. and Freeman, Richard B. (eds.) Immigration, Trade, and the Labor Market. Chicago, IL: University of Chicago Press.
- Leonard, Jonathan
1990 "What Was Affirmative Action?" Journal of Economic Perspectives, Fall.

- Levy, Frank
1988 "Incomes, Families, and Living Standards" in Litan, Robert E. and Lawrence, Robert Z. (eds.) American Living Standards. Washington, D.C.: Brookings Institution.
- Levy, Frank and Murnane, Richard
1992 "Earnings Levels and Earnings Inequality: A Review of Recent Trends and Proposed Explanations." Journal of Economic Literature, Forthcoming.
- Lillard, Lee and Tan, Hong
1986 "Private Sector Training: Who Gets It and What are Its Effects?" Los Angeles: Rand Corporation.
- Lynch, Lisa
1989(a) "The Youth Labor Market in the Eighties: Determinants of Reemployment Probabilities for Young Men and Women." Review of Economics and Statistics, 71(1):37-45.
- Lynch, Lisa
1989(b) "Private Sector Training and Its Impact on the Earnings of Young Workers." NBER Working Paper No. 2872. Cambridge, MA: National Bureau of Economic Research.
- Massey, Douglas and Denton, Nancy
1988 "Suburbanization and Segregation in U.S. Metropolitan Areas." American Journal of Sociology, 94(3):592-626.
- Mayer, Susan
1990 "How Much Does a High School's Racial and Economic Mix Affect Graduation and Teenage Fertility Rates?" in Jencks, Christopher and Petersen, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.
- Meyer, Robert and Wise, David
1982 "High School Preparation and Early Labor Force Experience" in Freeman, Richard B. and Wise, David (eds.) The Youth Labor Market: Its Nature, Causes and Consequences. Chicago, IL: University of Chicago Press.

Paper No. 10

Mincer, Jacob

1991 "Human Capital, Technology, and the Wage Structure: What Do Time Series Show?" NBER Working Paper No. 3581. Cambridge, MA: National Bureau of Economic Research.

Mincer, Jacob

1989 "Job Training: Costs, Returns, and Wage Profiles." NBER Working Paper No. 3208. Cambridge, MA: National Bureau of Economic Research.

Mincy, Ronald and Wiener, Susan

1990 A Mentor, Peer Group Incentive Model for Helping Underclass Youth. Washington, D.C.: Urban Institute.

Mishel, Lawrence and Tuxeira, Ruy

1991 "The Myth of the Coming Labor Shortage." Unpublished paper, Economic Policy Institute.

Montgomery, James

1989 "Social Networks and Labor Market Outcomes." Unpublished paper, Northwestern University.

Murphy, Kevin and Welch, Finis

1988 "The Structure of Wages." Unpublished paper, Unicon Research.

O'Neill, June

1990 "The Role of Human Capital in Earnings Differences Between White and Black Men." Journal of Economic Perspectives, Fall.

Osterman, Paul

1988 Employment Futures. New York: Oxford University Press.

Personick, Valerie

1989 "Industry Output and Employment: A Slower Trend for the Nineties." Monthly Labor Review, November.

Sawhill, Isabel

1989 "The Underclass." The Public Interest, Summer.

Silvestri, George and Lukasiewicz, John

1989 "Projections of Occupational Employment, 1988-2000." Monthly Labor Review, November.

Simms, Margaret

- 1989 "The Effectiveness of Government Training Programs" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.

Turner, Marjorie; Fix, Michael; Struyk, Raymond; Reed, Victor; Elmi, A.; Zimmerman, Wendy; Edwards, John

- 1991 "Opportunities Denied, Opportunities Diminished: Discrimination in Hiring." Washington, D.C.: Urban Institute.

U.S. Department of Commerce

- 1991 Money Income of Households, Families, and Persons in the United States: 1988 and 1989. Current Population Reports, Series P-60, No. 172. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

- 1973 Money Income in 1972 of Families and Persons. Current Population Reports, Series P-60, No. 90. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Labor

- 1990 Employment and Earnings. Washington, D.C.: U.S. Government Printing Office.

Viscusi, W. Kip

- 1986 "Market Incentives for Criminal Behavior" in Freeman, Richard B. and Holzer, Harry J. (eds.) The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.

Welch, Finis

- 1990 "Employment of Black Males." Journal of Labor Economics, January.

Welch, Finis

- 1979 "Effects of Cohort Size on Earnings: The Baby Boom Babies' Financial Bust." Journal of Political Economy, 87:565-597.

Wilson, William

- 1987 The Truly Disadvantaged. Chicago, IL: University of Chicago Press.

Zuboff, Shoshana

1988

In the Age of the Smart Machine. New York: Basic Books.

BIBLIOGRAPHY

PROGRAMS, SERVICES AND TECHNIQUES

Adler, Mortimer J.

1982 The Paideia Proposal. New York: Macmillan Publishing.

Alabama State Commission on Higher Education

1989 Academic Preparation for College: What Students Need to Know and Be Able To Do To Enter College in Alabama. Montgomery, AL: Alabama State Commission on Higher Education.

American Council on Education

1990 1990 Statistical Report. Washington, D.C.: American Council on Education.

Ames, Carole

1984 "Competitive, Cooperative, and Individualistic Goal Structures: A Cognitive-Motivational Analysis" in Ames, Carole and Ames, Russell (eds.) Research on Motivation in Education, Vol. 1. New York: Academic Press.

Ames, Carole

1981 "Competitive Versus Cooperative Reward Structures: The Influence of Individual and Group Performance Factors on Achievement Attributions and Affect." American Educational Research Journal, 18:273-287.

Ames, Carole

1978 "Children's Achievement Attributions and Self-Reinforcement: Effects of Self-Concept and Competitive Reward Structure." Journal of Educational Psychology, 70:345-355.

Ames, Carole

1976 "Achievement Attributions and Self-Instructions Under Competitive and Individual Goal Structure." Journal of Educational Psychology, 76:478-487.

Ames, Carole and Ames, Russell

1981 "Competitive Versus Cooperative Reward Structures: The Salience of Past Performance Information for Causal Attributions and Affect." Journal of Educational Psychology, 73:411-418.

Programs, Services and Techniques

Ames, Carole and Archer, Jennifer

1988 "Achievement Goals in the Classroom: Student's Learning Strategies and Motivation Processes." Journal of Educational Strategies, 80:260-267.

Anderson, Bernard E.

1980 "How Much Did the Program Help Minorities and Youth" in Ginzberg, Eli (ed.) Employing the Unemployed. New York: Basic Books.

Anderson, Elijah

1989 "Neighborhood Influences on Inner-City Teenage Pregnancy." Preliminary paper, University of Pennsylvania, Department of Sociology.

Applebee, Arthur N.; Langer, Judith A.; Mills, Ina V.S.

1989 Crossroads in American Education. Princeton, NJ: National Assessment of Educational Progress.

Ascher, Carol

1990 "Linking Schools with Human Service Agencies." New York: ERIC Clearinghouse on Urban Education.

Auspos, Patricia; Cave, George; Dolittle, Fred; Hoerz, Gregory

1989 Implementing JOBSTART: A Demonstration for School Dropouts in the JTPA System. New York: Manpower Demonstration Research Corporation.

Bailey, Thomas

1991 "School/Work: Economic Change and Education Reform" in Conservation of Human Resources. New York: Columbia University, Teachers College, Institute on Education and the Economy.

Bailey, Thomas

1989 Changes in the Nature and Structure of Work: Implications For Employer-Sponsored Training. New York: Columbia University, Teachers College, Institute on Education and the Economy.

Baker, Paula; Carpenter, Susan; Crowley, Joan; D'Amico, Ronald; Kim, Choongsoo; Morgan, William; Wielgosz, John (eds.)

1984 Pathways to the Future: A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982 (Vol IV). Columbus, OH: Ohio State University, Center for Human Resource Research.

- Bakewell, Charles A.
1987 Evaluation of Job Corps' Pilot Project to Include 22- to 24-Year-Olds. Arlington, VA: Executive Resource Associates, Inc.
- Ball, Joseph; Gerould, David M.; Burstein, P.
1980 The Quality of Work in the Youth Employment Demonstration. New York: Manpower Demonstration Research Corporation.
- Bandura, Albert
1977 "Self-Efficacy: Toward a Unifying Theory of Behavioral Change." Psychological Review, 84:191-215.
- Bandura, Albert and Schunk, Dale H.
1981 "Cultivating Competence, Self-Efficacy, and Intrinsic Interest through Proximal Self-Motivation." Journal of Personality and Social Psychology, 41:586-598.
- Barnow, Burt S.
1989 "Government Training as a Means of Reducing Unemployment" in Bawden, Lee D. and Skidmore, Felicity (eds.) Rethinking Employment Policy. Washington, D.C.: Urban Institute Press.
- Barron, Linda, et al.
1989 "Enhancing Learning in At-Risk Students: Applications of Video Technology." Syracuse, NY: ERIC Clearinghouse on Information Resources.
- Barton, Paul
1990 From School to Work. Princeton, NJ: Educational Testing Service, Policy Information Center.
- Barton, Paul E. and Kirsch, Irwin S.
1990 Workplace Competencies: The Need to Improve Literacy and Employment Readiness. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Bassi, Laurie J.; Simms, Margaret C.; Burbridge, Lynn C.; Betsey, Charles L.
1984 Measuring the Effect of CETA on Youth and the Economically Disadvantaged. Washington, D.C.: Urban Institute Press.

Programs, Services and Techniques

- Baumrind, Diana
1978 "Parental Disciplinary Patterns and Social Competence in Children." Youth and Society, 9:239-276.
- Becker, B.E. and Hills, S.M.
1983 "The Long-Run Effects of Job Changes and Unemployment Among Male Teenagers." The Journal of Human Resources, 17:197-211.
- Belle, D.
1984 "Inequality and Mental Health: Low-Income and Minority Women" in Walker, L. (ed.) Women and Mental Health Policy. Newbury Park, CA: Sage Publications.
- Bempechat, Janine and Wells, Amy
1989 "Trends and Issues in Urban and Minority Education: Promoting the Success of At-Risk Students." New York: ERIC Clearinghouse on Urban Education.
- Bennett, Teresa and Morgan, Robert L.
1988 "Teaching Interaction Skills to Adolescent Mothers." Social Work in Education, 10:143-151.
- Benson, Peter L. and Mangen, David J.
1986 "Help-Seeking for Alcohol and Drug Problems: To Whom Do Adolescents Turn?" in Benson, P.L.; Mangen, D.J.; Williams, D.L. (eds.) Adults Who Influence Youth: Perspectives from 5th-12th Grade Students. Minneapolis, MN: Search Institute.
- Benson, Peter L. and Mangen, David J.
1986 "Sources of Support for Young Adolescents" in Benson, P.L.; Mangen, D.J.; Williams, D.L. (eds.) Adults Who Influence Youth: Perspectives from 5th-12th Grade Students. Minneapolis, MN: Search Institute.
- Benson, Peter L. and Mangen, David J.
1986 "Young Adolescents' Concerns about Sexuality: Sources of Social Support" in Benson, P.L.; Mangen, D.J.; Williams, D.L. (eds.) Adults Who Influence Youth: Perspectives from 5th-12th Grade Students. Minneapolis, MN: Search Institute.

- Benson, Peter L.; Mangen, David J.; Williams, Dorothy L.
1986 Adults Who Influence Youth: Perspectives from 5th-12th Grade Students. Minneapolis, MN: Search Institute.
- Berkeley Planning Associates and Public/Private Ventures
1992 Youth in JTPA: The Final Report. Berkeley, CA: Berkeley Planning Associates. Forthcoming.
- Berlin, Gordon
1984 "Towards a System of Youth Development: Replacing Work, Service and Learning Deficits With Opportunities." Testimony before the U.S. Congress, Committee on Education and Labor, Subcommittee on Employment Opportunities, March 26.
- Berlin, Gordon and Sum, Andrew
1988 Toward A More Perfect Union: Basic Skills, Poor Families, and Our Economic Future. New York: Ford Foundation.
- Berrueta-Clement, J.R.; Schweinhart, L.J.; Barnett, W.S.; Epstein, A.S.; Weikart, D.P.
1984 Changed Lives: The Effect of the Perry Pre-School Program on Youths through Age 19. Ypsilanti, MI: High Scope Educational Research Foundation.
- Berryman, Sue E.
1991 "Cognitive Science: Indicting Today's Schools and Designing Effective Learning Environments." Preliminary paper, Columbia University, Teachers College, Institute on Education and the Economy.
- Berryman, Sue
1987 "Can Schools Change to Save Kids?" Presentation at the fall meeting of the Education Writers Association, Racine, WI.
- Betsey, Charles; Hollister, Robinson; Papageorgiou, Mary (eds.)
1985 Youth Employment and Training Programs: The YEDPA Years. Washington, D.C.: National Academy Press.
- Beyth-Marom, Ruth; Fischhoff, Baruch; Jacobs, Marilyn; Furby, Lita
1989 Teaching Decision-Making to Adolescents: A Critical Review. Washington, D.C.: Carnegie Council on Adolescent Development.

Programs, Services and Techniques

- Biester, Thomas W.
1976 Evaluation of Cumulative Effects of RBS Career Education, 1974-1976.
Philadelphia: Research for Better Schools, Inc.
- Billy, John O.G.; Landale, Nancy S.; Grady, William R.; Zimmerle, Denise M.
1988 "Effects of Sexual Activity on Adolescent Social and Psychological
Development." Social Psychology Quarterly, 51(3):190-212.
- Bishop, John
1989 Vocational Education For At-Risk Youth: How Can It Be Made More
Effective? New York: Cornell University, Vocational Education Analysis
and Support Center.
- Bishop, John
1988 "The Motivation Problem in American High Schools." Cornell Working
Paper No. 88-13. New York: Cornell University, Center for Advanced
Human Resources Studies.
- Blackburn, McKinley L.; Bloom, David E.; Freeman, Richard B.
1990 "An Era of Falling Earnings and Rising Inequality?" The Brookings
Review, Winter: 38-43.
- Blank, Helen
1986 "The Special Needs of Single-Parent and Low-Income Families" in
Gunzenhauser, N. and Caldwell, B.M. (eds.) Group Care for Young
Children. Key Biscayne, FL: Johnson and Johnson Baby Products.
- Blank, Rebecca
1987 "The Effect of Medical Need on AFDC and Medicaid Participation."
Discussion Paper No. 831-87. Madison, WI: University of Wisconsin,
Institute for Research on Poverty.
- Bloch, Deborah Perlmutter
1989 "Using Career Information With Dropouts and At-Risk Youth." The
Career Development Quarterly, 38:160-171.
- Blyth, Dale A.; Hill, John P.; Thiel, Karen Smith
1982 "Early Adolescents' Significant Others: Grade and Gender Differences in
Perceived Relationships with Familial and Nonfamilial Adults and Young
People." Journal of Youth and Adolescence, 11(6):425-450.

- Borus, Michael E.
1984 Youth and the Labor Market: Analysis of the National Longitudinal Study. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Borus, Michael E.
1983 Tomorrow's Workers. Lexington, MA: Lexington Books.
- Both, Deborah R. and Garduque, Laurie (eds.)
1989 Social Policy for Children and Families: Creating an Agenda. Washington, D.C.: National Academy Press.
- Bottoms, James E.
1989 Closing the Gap Between Vocational and Secondary Education. Washington, D.C.: Policy Studies Associated.
- Bowers, Bruce C.
1990 Meeting the Needs of At-Risk Students. Alexandria, VA: National Association of Elementary School Principals.
- Boyer, Ernest L.
1983 High School: A Report on Secondary Education in America. New York: Harper and Row.
- Bradley, Robert H.; Caldwell, Bettye M.; Rock, Stephen L.
1988 "Home Environment and School Performance: A Ten-Year Follow-Up and Examination of Three Models of Environmental Action." Child Development, 59:852-867.
- Branch, Alvia
1984 Building Self-Sufficiency in Pregnant and Parenting Teens. New York: Manpower Demonstration Research Corporation.
- Brickman, Arthur; Dey, Sheryl; Cuthbert, Pam
1991 "A Supervised Independent-Living Orientation Program for Adolescents." Child Welfare, LXX(1):69-80.
- Brooks-Gunn, J. and Furstenberg, Frank F., Jr.
1986 "The Children of Adolescent Mothers: Physical, Academic, and Psychological Outcomes." Developmental Review, 6:224-251.

Programs, Services and Techniques

- Brooks-Gunn, J.; Petersen, Anne C.; Eichorn, Dorothy
1985 "The Study of Maturation Timing Effects in Adolescence." Journal of Youth and Adolescence, 14(3):149-161.
- Brounstein, Paul J.; Hatry, Harry; Altschuler, David M.; Blair, Louis H.
1990 Substance Use and Delinquency Among Inner-City Adolescent Males. Washington, D.C.: Urban Institute.
- Brown, Bradford B.
1990 "Peer Groups and Peer Cultures" in Feldman, S.S. and Elliott, G.R. (eds.) At the Threshold: The Developing Adolescent. Cambridge, MA: Harvard University Press.
- Bryk, Anthony S. and Thum, Yeow M.
1989 "The Effects of High School Organization on Dropping Out: An Exploratory Investigation." American Educational Research Journal, 26:353-383.
- Bucknam, Ronald B. and Brand, Sheara G.
1983 "EBCE Really Works: A Meta-Analysis on Experience-Based Career Education." Educational Leadership, 40(6):66-71.
- Bullock, Paul
1985 Youth Training and Employment: From New Deal to New Federalism. Los Angeles, CA: Institute of Industrial Relations.
- Burbridge, Lynn C.
1983 Employment and Training Programs for Youth: An Interpretation and Synthesis of Measured Outcomes. Washington, D.C.: Urban Institute.
- Burt, Martha R. and Cohen, Barbara E.
1989 America's Homeless: Numbers, Characteristics and Programs That Serve Them. Washington, D.C.: Urban Institute Press.
- Burt, Martha; Kimmich, Madeleine; Goldmuntz, Jane; Sonenstein, Freya
1984 Helping Pregnant Adolescents: Outcomes and Costs of Service Delivery. Final report on the Evaluation of Adolescent Pregnancy Programs. Washington, D.C.: Urban Institute.

- Butler, Erik P. and Mangum, Garth L.
1983 Applying the Lessons of Youth Programs: Introduction to a Monograph Series. Salt Lake City, UT: Olympus Publishing Company.
- Caldwell, Robert M. and Heidl, John J., Jr.
1984 "Computer-Based Basic Skills Instruction in a CETA Funded Project: A Case Study." The Urban Review, 16:76-86.
- Campbell, Robert; Connell, Janie; Boyle, Karen Kimmel; Bhaerman, Robert D.
1983 Enhancing Career Development: Recommendations for Action. A Review of Empirical Studies of the Effects of Career Guidance. Columbus, OH: Ohio State University, National Center for Research in Vocational Education.
- Capuzzi, Dave and Gross, Douglas (eds.)
1989 Youth at Risk: A Resource for Counselors, Teachers and Parents. Alexandria, VA: American Association for Counseling and Development.
- Carnegie Corporation
1989 Early Adolescence: A Critical Time for Interventions in Education and Health. New York: Carnegie Corporation.
- Carnegie Council on Adolescent Development
1989 Turning Points: Preparing American Youth for the 21st Century. New York: Carnegie Corporation.
- Carnegie Forum on Education and the Economy
1986 A Nation Prepared: Teachers for the 21st Century. The Report of the Task Force on Teaching as a Profession. New York: Carnegie Forum on Education and the Economy.
- Carnevale, Anthony P.
1991 America and the New Economy. San Francisco: Jossey-Bass.
- Carnevale, Anthony P.; Gainer, Leila J.; Meltzer, Ann S.
1988 Workplace Basics: The Skills Employers Want. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration and American Society for Training and Development.

Programs, Services and Techniques

Case, Anne C. and Katz, Laurence F.

1990 "The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youth." Preliminary paper, Harvard University.

Cave, George and Quint, Janet

1990 Career Beginnings Impact Evaluation: Findings From a Program for Disadvantaged High School Students. New York: Manpower Demonstration Research Corporation.

Center for Remediation Design

1988 Survey of Basic Skills Remediation Practices in JTPA Youth Programs. Washington, D.C.: National Commission for Employment Policy.

Charner, Ivan and Fraser, Bryner

1984 Fast Food Jobs. Washington, D.C.: National Institute for Work and Learning.

Cherlin, Andrew J.

1988 The Changing American Family and Public Policy. Washington, D.C.: Urban Institute Press.

Children's Defense Fund

1991 The State of America's Children 1991. Washington, D.C.: Children's Defense Fund.

Children's Defense Fund

1989 The Lessons of Multi-Site Initiatives Serving High-Risk Youth. Washington, D.C.: Children's Defense Fund.

Children's Defense Fund

1986 Programs That Help Prevent Adolescent Pregnancy and Build Youth Self-Sufficiency. Washington, D.C.: Children's Defense Fund.

Chubb, John and Moe, Terry

1990 Politics, Markets and America's Schools. Washington, D.C.: Brookings Institution.

Clune, William; White, Paula; Patterson, Janice

1969 The Implementation and Effects of High School Graduation Requirements: First Steps Toward Curricular Reform. New Brunswick, NJ: Center for Policy Research in Education.

Cohen, Barbara

- 1991 Evaluation of the Teenage Parent Employability Demonstration Projects. Report to the U.S. Department of Labor. Washington, D.C.: Urban Institute.

Cohen, Barbara

- 1990 Implementation of Six DOL-Funded Teen Parent Employability Demonstration Programs. Washington, D.C.: Urban Institute.

Cohen, Barbara and van Houten, Therese

- 1991 Follow-Up of Youth Using Runaway and Homeless Youth Centers. Report to the U.S. Department of Health and Human Services. Washington, D.C.: Urban Institute.

Coie, John and Krehbiel, Gina

- 1984 "Effects of Academic Tutoring on the Social Status of Low-Achieving, Socially Rejected Children." Child Development, 55:1465-1478.

Coleman, James

- 1965 Adolescents and the Schools. New York: Basic Books.

Collins, Robert A. and Hann, Maymie K.

- 1991 Summative Evaluation Report, School-Based Management/Shared Decision-Making Project, 1987-1988 through 1989-1990. Miami: Dade County Public Schools, Office of Educational Accountability.

Colletta, Nancy Donohue and Lee, Diane

- 1983 "The Impact of Support for Black Adolescent Mothers." Journal of Family Issues, 4(1):127-143.

Comer, James P.

- 1988 "Educating Poor Minority Children." Scientific American, 259:42-48.

Commission on the Skills of the American Workforce

- 1990 America's Choice: High Skills or Low Wages. Rochester, NY: National Center on Education and the Economy.

Commission on Workforce Quality and Labor Market Efficiency

- 1989 Public Hearings: Analysis of Comments. Washington, D.C.: Technical Assistance and Training Corporation and U.S. Department of Labor, Office of the Secretary.

Programs, Services and Techniques

- Cooper, Ann M.
1990 "Fallacy of a Single Model for School Achievement: Consideration for Ethnicity." Sociological Perspectives, 33(1):159-184.
- Corno, Lyn and Mandinach, Ellen B.
1983 "The Role of Cognitive Engagement in Classroom Learning and Motivation." Educational Psychologist, 18:88-109.
- Council of Chief State School Officers
1988 School Success for Students At Risk: Analyses and Recommendations of the Council of Chief State School Officers. Orlando, FL: Harcourt Brace Jovanovich.
- Coyle-Williams, Maureen
1989 What Works in Vocational Education for Students Who Are at Risk. Champaign, IL: TASPP.
- Crouter, Ann C.; MacDermid, Shelly M.; McHale, Susan M.; Perry-Jenkins, Maureen
1988 "Parental Monitoring and Perceptions of Children's School Performance and Conduct in Dual- and Single-Earner Families." Developmental Psychology, 26(40):649-657.
- Csikszentmihalyi, Mihaly and Nakamura, Jeanne
1989 "The Dynamics of Intrinsic Motivation: A Study of Adolescents" in Ames, Carole and Ames, Russell (eds.) Research on Motivation in Education, Vol. 3. New York: Academic Press.
- Cutright, P. and Jaffe, F.S.
1977 Impact of Family Planning Programs on Fertility: The U.S. Experience. New York: Praeger Press.
- D'Amico, Joseph
1982 "Each Effective School May Be One of a Kind." Educational Leadership, December: 61-62.
- D'Amico, Ronald
1984 "Does Employment During High School Impair Academic Progress?" Sociology of Education, 57:152-164.

D'Amico, Ronald and Baker, Paula

- 1984 "The Nature and Consequences of High School Employment" in Baker, Paula; Carpenter, Susan; Crowley, Joan; D'Amico, Ronald; Kim, Choongsoo; Morgan, William; Wielgosz, John (eds.) Pathways to the Future: A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982 (Vol. IV). Columbus, OH: Ohio State University, Center for Human Resource Research.

Darling-Hammond, Linda and Green, Joslyn

- 1990 "Teacher Quality and Equality" in Goodlad, John I. and Keating, Pamela (eds.) Access to Knowledge: An Agenda for Our Nation's Schools. New York: College Entrance Examination Board.

David, Jane L.

- 1989 "Synthesis of Research on School-Based Management." Educational Leadership, May: 45-53.

de Lone, Richard H.

- 1990 Replication: A Strategy to Improve the Delivery of Education and Job Training Programs. Philadelphia: Public/Private Ventures.

de Lone, R.H. and Watson, B.

- 1988 "At-Risk Students and the Pittsburgh Public Schools." Case study prepared for the Education Commission of the States. Philadelphia: de Lone and Associates.

Dertouzos, Michael; Lester, Richard; Solow, Robert

- 1989 Made In America: Regaining the Productive Edge. Cambridge, MA: MIT Press.

Deschner, Jeanne P.

- 1980 "Critical Aspects of Institutional Programs for Youth." Children and Youth Services Review, 2(3):271-290.

Diaz, William A.; Ball, Joseph; Wolfhagen, Carl

- 1982 Linking School and Work for Disadvantaged Youths. The YIEPP Demonstration: Final Implementation Report. New York: Manpower Demonstration Research Corporation.

Programs, Services and Techniques

- Diener, Carol I. and Dweck, Carol S.
1980 "An Analysis of Learned Helplessness: The Processing of Success." Journal of Personality and Social Psychology, 39:940-952.
- Diener, Carol I. and Dweck, Carol S.
1978 "An Analysis of Learned Helplessness: Continuous Changes in Performance, Strategy and Achievement Cognitions Following Failure." Journal of Personality and Social Psychology, 36:451-462.
- Dornbusch, Sanford M.; Ritter, Philip L.; Leiderman, P. Herbert; Roberts, Donald F.; Fraleigh, Michael J.
1987 "The Relation of Parenting Style to Adolescent School Performance." Child Development, 58:1244-1257.
- Dornbusch, Sanford M.; Carlsmith, J. Merrill; Bushwall, Steven J.; Ritter, Philip L.; Leiderman, Herbert; Hastorf, Albert H.; Gross, Ruth T.
1985 "Single Parents, Extended Households, and the Control of Adolescents." Child Development, 56:326-341.
- Dougherty, Van; de Lone, Richard; Odden, Allan
1989 Current Practice: Is It Enough? Denver, CO: Education Commission of the States.
- Dressler, William M.
1985 "Extended Family Relationships, Social Support, and Mental Health in a Southern Black Community." Journal of Health and Social Behavior, 26:39-48.
- Dryfoos, Joy
1990 Adolescents at Risk. New York: Oxford University Press.
- Duncan, Greg J. and Rodgers, Willard L.
1988 "Longitudinal Aspects of Childhood Poverty." Journal of Marriage and the Family, 50:1007-1021.
- Dunham, Richard M.; Kidwell, Jeannie S.; Portes, Pedro R.
1988 "Effects of Parent-Adolescent Interaction on the Continuity of Cognitive Development from Early Childhood to Early Adolescence." Journal of Early Adolescence, 8(3):297-310.

- Dweck, Carol S.
1975 "The Role of Expectations and Attributions in the Alleviation of Learned Helplessness." Journal of Personality and Social Psychology, 31:674-685.
- Dweck, Carol S. and Leggett, Ellen L.
1988 "A Social-Cognitive Approach to Motivation and Personality." Psychological Review, 95:256-273.
- Ekstrom, R.B.; Goetz, M.G.; Pollock, J.M.; Rieck, D.A.
1986 "Who Drops Out of School and Why? Findings from a National Study." Teachers College Record, 87(3):356-373.
- Elliott, Elaine S. and Dweck, Carol S.
1988 "Goals: An Approach to Motivation and Achievement." Journal of Personality and Social Psychology, 54:5-12.
- Ellwood, David
1982 "Teenage Unemployment: Permanent Scars or Temporary Blemishes" in Freeman, R.B. and Wise, D.A. (eds.) The Youth Labor Market Problem. Chicago: University of Chicago Press.
- Entwisle, Doris R.
1990 "Schools and the Adolescent" in Feldman, S.S. and Elliott, G.R. (eds.) At the Threshold: The Developing Adolescent. Cambridge, MA: Harvard University Press.
- Farkas, F.; Olsen, R.; Stromsdorfer, E.W.; Sharpe, L.C.; Skidmore, F.; Smith, D.A.; Merrill, S.
1984 Post-Program Impacts of the Youth Incentive Entitlement Pilot Projects. New York: Manpower Demonstration Research Corporation.
- Farkas, G.; Smith, D.A.; Stromsdorfer, E.W.; Trask, G.; Jerrett, R.
1982 Impacts from the Youth Incentive Entitlement Pilot Projects: Participation, Work, and Schooling Over the Full Program Period. New York: Manpower Demonstration Research Corporation.
- Farrar, E.; De Sanctis, J.; Cohen, D.K.
1979 Views from Below: Implementation Research in Education. Cambridge, MA: Huron Institute.

Programs, Services and Techniques

- Feichtner, Sheila
1989 School-to-Work Transition for At-Risk Youth. Columbus, OH: ERIC Clearinghouse on Adult, Career and Vocational Education.
- Felson, Richard B. and Zielinski, Mary A.
1989 "Children's Self-Esteem and Parental Support." Journal of Marriage and the Family, 51:727-735.
- Ferguson, Ronald F.
1990 The Case for Community-Based Programs That Inform and Motivate Black Male Youth. Washington, D.C.: Urban Institute.
- Fine, Gary and Sandstrom, Kent
1988 Knowing Children: Participant Observations with Minors. Newbury Park, CA: Sage.
- Fiorentine, Robert and Grusky, Oscar
1990 "When Case Managers Manage the Seriously Mentally Ill: A Role-Contingency Approach." Social Service Review, March: 79-93.
- Fletcher, J.D.
1990 Effectiveness and Cost of Interactive Videodisc Instruction in Defense Training and Education. Alexandria, VA: Institute for Defense Analysis.
- Florida State Department of Education
1982 Reading, Writing, and Mathematics: Beginning Grades 3, 5, 8, and 11. Minimum Student Performance Standards for Florida Schools, 1985-1990. Tallahassee, FL: Florida State Department of Education.
- Ford Foundation Project on Social Welfare and the American Future
1989 The Common Good: Social Welfare and the American Future. New York: Ford Foundation.
- Fowler, Joseph W. and Peterson, Penelope L.
1981 "Increasing Reading Persistence and Altering Attributional Style of Learned Helpless Children." Journal of Educational Psychology, 73:251-260.

- Fraker, Thomas; Maynard, Rebecca; Nelson, Lyle
1984 An Assessment of Alternative Comparison Group Methodologies for Evaluating Employment and Training Programs. Princeton, NJ: Mathematica Policy Research.
- Freedman, Marc
1988 Partners in Growth: Elder Mentors and At-Risk Youth. Philadelphia: Public/Private Ventures.
- Frymier, J. and Gansneder, B.
1989 "The Phi Delta Kappan Study of Students At Risk." Phi Delta Kappan, October: 142-146.
- Gage, N.L.
1990 "Dealing with the Dropout Problem." Phi Delta Kappan, December: 280-285.
- Galbo, Joseph J.
1989 "Nonparental Significant Adults in Adolescents' Lives: Literature Overview, Theory and Issues." Paper presented at the biennial meeting of the Society for Research in Child Development, Kansas City.
- Galbo, Joseph J.
1986 "Adolescents' Perceptions of Significant Adults: Implications for the Family, the School and Youth-Serving Agencies." Children and Youth Services Review, 8:37-51.
- Galbo, Joseph J.
1983 "Adolescents' Perceptions of Significant Adults." Adolescence, XVIII(70):417-427.
- Galler, J.R.; Ramsey, F.; Solimano, G.; Lowell, W.; Mason, E.
1983 "The Influence of Early Malnutrition on Subsequent Behavioral Development: Degree of Impairment in Classroom Behavior." Journal of the American Academy of Child Psychiatry, 22(1):16-22.
- Galler, J.R.; Ramsey, F.; Solimano, G.; Lowell, W.; Mason E.
1983 "The Influence of Early Malnutrition on Subsequent Behavioral Development: Degree of Impairment in Intellectual Performance." Journal of the American Academy of Child Psychiatry, 22(1):8-15.

Programs, Services and Techniques

- Gamoran, Adam and Berends, Marek
1987 "The Effects of Stratification in Secondary Schools: Synthesis of Survey and Ethnographic Research." Review of Educational Research, 57:413-435.
- Garbarino, James and Sherman, Deborah
1980 "High-Risk Neighborhoods and High-Risk Families: The Human Ecology of Child Maltreatment." Child Development, 51:188-198.
- Garbarino, James; Burstop, Nancy; Crouter, Ann; Kops, Pamela
1978 Adults' Involvement in the Social Maps of Youth: The Transition from Elementary to Secondary School. Ithaca, NY: Cornell University.
- Gardner, Howard and Hatch, Thomas
1989 "Multiple Intelligences Go to School." Educational Researcher, 18:4-10.
- Gardner, Howard and Hatch, Thomas
1983 "The Impact of Computer-Assisted Instruction on Disadvantaged Young Adults in a Non-Traditional Educational Environment." Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Garnezy, Norman
1987 "Stress, Competence, and Development: Continuities in the Study of Schizophrenic Adults, Children Vulnerable to Psychopathology, and the Search for Stress-Resistant Children." American Journal Orthopsychiatry, 57(2):159-174.
- Garn, Stanley M.
1980 "Continuities and Change in Maturation Timing" in Brim, Orville G., Jr., and Kagan, Jerome (eds.) Constancy and Change in Human Development. Cambridge, MA: Harvard University Press.
- Gecas, Viktor
1981 "Contexts of Socialization" in Rosenberg, M. and Turner, R.H. (eds.) Social Psychology: Sociological Perspectives. New York: Basic Books.
- Gecas, Viktor
1979 "Contexts of Socialization" in Burr, Wesley R. (ed.) Contemporary Theories About the Family, Vol. 1. New York: Free Press.

- Gecas, Viktor
1979 "The Influence of Social Class on Socialization" in Burr, Wesley R. (ed.) Contemporary Theories About the Family, Vol. 1. New York: Free Press.
- Gecas, Viktor and Seff, Monica A.
1990 "Families and Adolescents: A Review of the 1980s." Journal of Marriage and the Family, 52:941-958.
- Gibboney, Richard A. and Langsdorf, Michael G.
1979 "The Career Intern Program: An Experiment in Career Education That Worked." Journal of Research and Development in Education, 12:103-105.
- Gilchrist, Lewayne D.; Schinke, Steven Paul; Maxwell, Josie Solseng
1987 "Life Skills Counseling for Preventing Problems in Adolescence." Progress in Behavioral Social Work, 73-84.
- Ginzberg, Eli
1980 "Overview: The \$64 Billion Innovation" in Ginzberg, Eli (ed.) Employing the Unemployed. New York: Basic Books.
- Glasscote, Raymond M.; Raybin, James B.; Reifler, Clifford B.; Kane, Andrew W.
1975 The Alternate Services: Their Role in Mental Health. A Field Study of Free Clinics, Runaway Houses, Counseling Centers and the Like. Washington, D.C.: American Psychiatric Association.
- Goldsmith, Robert G.
1987 Students Concerned About Tomorrow: A Dropout Intervention Program. Abingdon, VA: People, Incorporated.
- Goodlad, John I.
1984 A Place Called School: Prospects for the Future. New York: McGraw-Hill.
- Goodlad, John I. and Keating, Pamela (eds.)
1990 Access to Knowledge: An Agenda For Our Nation's Schools. New York: College Entrance Examination Board.
- Gordon, Anne and Burghardt, John
1990 The Minority Female Single Parent Demonstration: Short-Term Economic Impacts. New York: Rockefeller Foundation.

Programs, Services and Techniques

- Gottfredson, Denise C.
1985 "Youth Employment, Crime, and Schooling: A Longitudinal Study of a National Sample." Developmental Psychology, 21(3):419-432.
- Grasso, J.T. and Shea, J.R.
1979 Vocational Education and Training: Impact on Youth. Berkeley, CA: University of California, Carnegie Council on Policy Studies in Higher Education.
- Green, David L.
1990 "High School Student Employment in Social Context: Adolescents' Perceptions of the Role of Part-Time Work." Adolescence, XXV(98):425-434.
- Greenberger, E. and Steinberg, L.
1986 When Teenagers Work: The Psychological and Social Costs of Adolescent Employment. New York: Basic Books.
- Greenberger, Ellen and Steinberg, Laurence D.
1981 "The Workplace as a Context for the Socialization of Youth." Journal of Youth and Adolescence, 10(3):185-210.
- Greenwood, Peter W.
1986 Correctional Supervision of Juvenile Offenders: Where Do We Go From Here? Santa Monica, CA: Rand Corporation.
- Griffin, Edward; Hoffman, Lee; Hunter, Donald
1984 "Behavioral Outcomes of an Alternative Program for Junior High School Students at Risk of Dropping Out." Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Grubb, W. Norton
1989 "Dropouts, Spells of Time, and Credits in Postsecondary Education: Evidence from Longitudinal Surveys." Economics of Education Review, 8:49-67.
- Grubb, W. Norton
1989 "Preparing Youth for Work: The Dilemma of Education and Training Programs" in Stern, David and Eichorn, Dorothy (eds.) Social Structure, Labor Markets and Culture. Hillsdale, NJ: Lawrence Erlbaum Associates.

- Grubb, W. Norton; Brown, Cynthia; Kaufman, Phillip; Lederer, John
1990 Order Amidst Complexity: The Status of Coordination Among Vocational Education. Berkeley, CA: University of California, National Center for Research in Vocational Education.
- Gruber, David and Davidson, Frazierita
1986 State Employment Initiatives For Youth: An Assessment of the Demonstration. Philadelphia: Public/Private Ventures.
- Gurin, Gerald
1969 Inner-City Negro Youth in a Job Training Project: A Study of Factors Related to Attrition and Job Success. Washington, D.C.: U.S. Department of Labor.
- Guthrie, Larry F.
1989 What Schools Can Do for Students At Risk. San Francisco: Far West Laboratory for Educational Research and Development.
- Gutman, Marjorie A.
1987 Review of Innovative State Maternal Health Programs in the United States. Trenton, NJ: New Jersey Department of Health.
- Hahn, Andrew
1987 "Reaching Out to America's Dropouts: What to Do?" Phi Delta Kappan, 67:256-263.
- Hahn, Andrew and Lerman, Robert
1985 What Works in Youth Employment Policy. Washington, D.C.: National Planning Association.
- Halasz, Ida M.
1988 Trends and Issues in Career Education. Columbus, OH: ERIC Clearinghouse on Adult, Career and Vocational Education.
- Hall, V.C.; Howe, A.; Markel, S.; Lederman, N.
1986 "Behavior, Motivation, and Achievement in Desegregated Junior High School Science Classes." Journal of Educational Psychology, 78(2):108-115.
- Hamilton, Stephen F.
1990 Apprenticeship for Adulthood: Preparing Youth for the Future. New York: Free Press.

Programs, Services and Techniques

- Hamilton, Stephen F.
1986 "Excellence and the Transition from School to Work." Phi Delta Kappan, November: 239-242.
- Hamilton, Stephen F.
1986 "Raising Standards and Reducing Dropout Rates." Teachers College Record, 87:410-429.
- Hamilton, Stephen F. and Crouter, Ann C.
1980 "Work and Growth: A Review of Research on the Impact of Work Experience on Adolescent Development." Journal of Youth and Adolescence, 9(4):323-338.
- Hamilton, Stephen F. and Darling, Nancy
1989 "Mentors in Adolescents' Lives" in Horrelmann, Klauss and Engel, Uwe (eds.) The Social World of Adolescents: International Perspectives. Hawthorne, NY: Walter de Gruyter.
- Hamilton, Stephen F. and Hamilton, Mary Agnes
1990 Linking Up: Final Report on a Mentoring Program for Youth. Ithaca, NY: Cornell University, College of Human Ecology, Department of Human Development and Family Studies.
- Hamilton, S.F. and Hamilton, M.A.
1989 "Teaching and Learning on the Job: A Framework for Assessing Workplaces as Learning Environments." Paper prepared for the U.S. Department of Labor, Bureau of Apprenticeship and Training. Ithaca, NY: Cornell University, College of Human Ecology.
- Hamilton, Stephen F. and Powers, Jane Levine
1990 "Failed Expectations: Working-Class Girls' Transition From School to Work." Youth and Society, 22(2):241-262.
- Hammack, Floyd Morgan
1986 "Large School Systems' Dropout Reports: An Analysis of Definitions, Procedures and Findings." Teachers College Record, 87:324-341.
- Harris, Bruce and Harrison, Grant
1987 "An Evaluation of an Innovative Use of Computers and Volunteers in 7th Grade Math Instruction." Paper presented at the annual meeting of the California Educational Research Association, San Jose.

- Hart, Craig H.; Ladd, Gary W.; Burleson, Brant R.
1990 "Children's Expectations of the Outcomes of Social Strategies: Relations with Sociometric Status and Maternal Disciplinary Styles." Child Development, 61:127-137.
- Harter, Susan
1974 "Pleasure Derived by Children from Cognitive Challenge and Mastery." Child Development, 45:661-669.
- Hartford Public Schools
1984 Higher Horizons 100, 1983-84: An Evaluative Report. Hartford, CT: Hartford Public Schools.
- Heath, Shirley Brice and McLaughlin, Milbrey Wallin
1987 "A Child Resource Policy: Moving Beyond Dependence On School and Family." Phi Delta Kappan, April: 576-580.
- Heintz, Stephan
1986 Investing in Poor Families and Their Children: A Matter of Commitment. Washington, D.C.: American Public Welfare Association.
- Hernstein, Richard J.; Nickerson, Raymond; de Sanchez, Margarita; Swets, John A.
1986 "Teaching Thinking Skills." American Psychologist, 41(11):1279-1289.
- Hershey, Alan
1988 The Minority Female Single Parent Demonstration: Process/Analysis of Program Operations. Princeton, NJ: Mathematica Policy Research.
- Hetherington, E. Mavis; Stanley-Hagan, Margaret; Anderson, Edward R.
1989 "Marital Transitions: A Child's Perspective." American Psychologist, 44(2):303-312.
- Hier, Sally J. and Korboot, Paula J.
1990 "Social Adjustment and Symptomatology in Two Types of Homeless Adolescents: Runaways and Throwaways." Adolescence, XXV(100):761-771.
- Higgins, Catherine
1988 Youth Motivation: At-Risk Youth Talk to Program Planners. Philadelphia: Public/Private Ventures.

Programs, Services and Techniques

Hofferth, Sandra L.

- 1984 "Kin Networks, Race, and Family Structure." Journal of Marriage and the Family, November: 791-806.

Holzer, H.J.

- 1987 "Informal Job Search and Black Youth Unemployment." Paper presented at the Urban Poverty Seminar, University of Chicago, May.

Horn, John L. and Donaldson, Gary

- 1980 "Cognitive Development in Adulthood" in Brim, Orville G., Jr., and Kagan, Jerome (eds.) Constancy and Change in Human Development. Cambridge, MA: Harvard University Press.

Howe, Robert W. and Warren, Charles R.

- 1989 Teaching Critical Thinking Through Environmental Education. Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.

Hoyt, Kenneth B.

- 1990 "A Proposal for Making Transition from Schooling to Employment an Important Component of Educational Reform." Future Choices, 2:73-83.

Hoyt, Kenneth B. and High, Sidney C.

- 1982 "Career Education" in Mitzel, H. (ed.) Encyclopedia of Educational Research, Vol. 1. New York: Free Press.

Hunkins, Francis P.

- 1991 "Educating for Critical Awareness: A Curricular Challenge." Education and Urban Society, 23(3):302-312.

Isralowitz, Richard E. and Singer, Mark

- 1986 "Unemployment and Its Impact on Adolescent Work Values." Adolescence, XXI(81):145-158.

Iwanicki, Edward F. and Gable, Robert K.

- 1982 Hartford Project Concern Program. Final Evaluation Report, 1981-1982. Hartford, CT: Hartford Public Schools.

- Jargowsky, Paul A. and Bane, Mary Jo
1990 "Ghetto Poverty: Basic Questions" in Lynn, L.E. and McGeary, M.G. (eds.) Inner-City Poverty in the United States. Washington, D.C.: National Academy Press.
- Jencks, C. and Meyer, S.E.
1990 "The Social Consequences of Growing Up in a Poor Neighborhood" in Lynn, L.E. and McGeary, M.G. (eds.) Inner-City Poverty in the United States. Washington, D.C.: National Academy Press.
- Johnson, Carl I.
1986 New Jersey High School Proficiency Test: Identification of the Skills and Development of the Items. Trenton, NJ: New Jersey State Department of Education.
- Johnson, Lary
1973 Minneapolis Edison High School Employability Skills Program: An Evaluation, 1972-73. Minneapolis, MN: Minneapolis Public Schools, Department of Research and Evaluation.
- Johnston, William B. and Packer, Arnold H.
1987 Workforce 2000: Work and Workers for the Twenty-First Century. Indianapolis, IN: Hudson Institute.
- Kammerman, Sheila B. and Kahn, Alfred
1990 "Social Services for Children, Youth and Families in the United States." Children and Youth Services Review, 12(1-2).
- Kandel, D.B.
1986 "Processes of Peer Influences in Adolescence" in Silbereisen, R.K.; Eyferth, K.; Rudinger, G. (eds.) Development as Action in Context. Berlin: Springer-Verlag.
- Kang, Suk and Bishop, John
1986 "The Effect of Curriculum on Labor Market Success Immediately after High School." Journal of Industrial Teacher Education, Spring.
- Karniol, Rachel and Ross, Michael
1977 "The Effect of Performance-Relevant and Performance-Irrelevant Rewards on Children's Intrinsic Motivation." Child Development, 48:482-487.

Programs, Services and Techniques

- Keating, Daniel P. and Bobbitt, Bruce L.
1978 "Individual and Developmental Differences in Cognitive-Processing Components of Mental Ability." Child Development, 49:155-167.
- Keating, Daniel P. and Clark, Lawrence V.
1980 "Development of Physical and Social Reasoning in Adolescence." Developmental Psychology, 16(1):23-30.
- Kelly, Robert F.
1988 "The Urban Underclass and the Future of Work-Family Relations Research." Journal of Social Behavior and Personality, 3(4):45-54.
- Kim, Choongsoo
1984 "A Longitudinal Study of Reservation Wages, Duration of Job Search, and Subsequent Wages: An Empirical Econometric Analysis" in Baker, Paula; Carpenter, Susan; Crowley, Joan; D'Amico, Ronald; Kim, Choongsoo; Morgan, William; Wielgosz, John (eds.) Pathways to the Future: A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982 (Vol. IV). Columbus, OH: Ohio State University, Center for Human Resource Research.
- Kimmich, Madeleine H.
1985 America's Children: Who Cares? Washington, D.C.: Urban Institute.
- Kirsch, Irwin and Jungeblut, Ann
1986 Literacy: Profiles of America's Young Adults. Princeton, NJ: National Assessment of Educational Progress.
- Kirst, Michael W.
1991 "Toward a Focused Research Agenda" in Voices From the Field. Washington, D.C.: William T. Grant Foundation and Institute for Educational Leadership.
- Klerman, L.
1986 Health Care Component of the New Chance Demonstration. New York: Manpower Demonstration Research Corporation.
- Klerman, L. and Jeckel, J.F.
1983 School-Age Mothers: Problems, Programs, and Policy. Hamden, CT: Linnet Books.

- Knapp, Michael S. and Shields, Patrick M. (eds.)
1990 Better Schooling for the Children of Poverty: Alternatives to Conventional Wisdom. Washington, D.C.: U.S. Department of Education, Office of Planning, Budget and Evaluation.
- Knox, George
1980 "Educational Upgrading for Youthful Offenders." Children and Youth Services Review, 2(3):291-314.
- Kohn, M.
1977 Class and Conformity: A Study in Values. Chicago: University of Chicago Press.
- Kohn, M. and Schooler, C.
1978 "The Reciprocal Effects of the Substantive Complexity of Work and Intellectual Flexibility: A Longitudinal Assessment." American Journal of Sociology, 84(1):24-52.
- Kohn, M. and Schooler, C.
1973 "Occupational Experience and Psychological Functioning: An Assessment of Reciprocal Effects." American Sociological Review, 38:97-118.
- Koppel, Ross
1990 Pennsylvania Employers' Perceptions of Workers' Skills, Abilities, and Attitudes. Report to the Pennsylvania Occupational Information Coordinating Committee. Philadelphia: Social Research Corporation.
- Kruger, Louis J.
1990 "The Individualized Contingency Contract for Students: A Collaborative Approach" in Kruger, Louis J. (ed.) Promoting Success with At-Risk Students. Binghamton, NY: Haworth Press.
- Kutner, Mark A.; Furey, Sandra; Webb, Lenore; Gadsden, Vivian
1990 Adult Education: Programs and Services: A View From Nine States (draft). Washington, D.C.: Pelavin Associates.
- Kutscher, Ronald E.
1987 "Projections 2000: Overview and Implications of the Projections to 2000." Monthly Labor Review, September: 3-9.

Programs, Services and Techniques

- Kyle, John E. (ed.)
1987 Children, Families, and Cities: Programs That Work at the Local Level.
Washington, D.C.: National League of Cities.
- Lah, David and Wolf, Wendy
1985 The California Conservation Corps: A Report on Implementation.
Philadelphia: Public/Private Ventures.
- Lazerson, M. and Grubb, W.N.
1975 "Rally Round the Workplace: Continuities and Fallacies in Career
Education." Harvard Education Review, 45:451-474.
- Lazerson, M. and Grubb, W.N. (eds.)
1974 American Education and Vocationalism: A Documentary History, 1870-
1970. New York: Teachers College Press.
- Lempers, Jacques D.; Clark-Lempers, Dania; Simons, Ronald L.
1989 "Economic Hardship, Parenting, and Distress in Adolescence." Child
Development, 60:25-39.
- Lepper, Mark R. and Greene, David
1975 "Turning Play into Work: Effects of Adult Surveillance and Extrinsic
Rewards on Children's Intrinsic Motivation." Journal of Personality and
Social Psychology, 31:479-486.
- Lepper, Mark R. and Hodell, Melinda
1989 "Intrinsic Motivation in the Classroom" in Ames, Carole and Ames, Russell
(eds.) Research on Motivation in Education, Vol. 3. New York: Academic
Press.
- Lepper, Mark R.; Greene, David; Nisbett, Richard E.
1973 "Undermining Children's Intrinsic Interest with Extrinsic Reward: A Test
of the 'Overjustification' Hypothesis." Journal of Personality and Social
Psychology, 28:129-137.
- Lerman, Robert and Pouncy, Hillard
1990 Why America Should Develop A Youth Apprenticeship System.
Washington, D.C.: Progressive Policy Institute.

- Levin, Henry M.
1988 Accelerated Schools for At-Risk Students. New Brunswick, NJ: Center for Policy Research in Education.
- Levin, Henry M.
1985 "The State Youth Initiatives Project" in The Educationally Disadvantaged: A National Crisis. Philadelphia: Public/Private Ventures.
- Levin, Henry M. and Rumberger, Russell W.
1987 "Educational Requirements for New Technologies: Visions, Possibilities and Current Realities." Educational Policy, 1:333-354.
- Levitan, Sar A. and Gallo, Frank
1988 A Second Chance: Training for Jobs. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Licht, Barbara G. and Dweck, Carol S.
1984 "Determinants of Academic Achievement: The Interaction of Children's Achievement Orientations with Skill Area." Developmental Psychology, 20:628-636.
- Lieberman, Janet E.
1979 Career Education for 9th Graders in a Community College Setting. New York: City University of New York Research Foundation.
- Linder, Brian and Taggart, Robert (eds.)
1980 A Review of Youth Employment Problems, Programs and Policies, Vol. 1. Washington, D.C.: U.S. Department of Labor.
- Loomis, Amy
1987 A Formula for School Dropout Prevention. Manual for the Teenage Pregnancy and Parenting Program (TAPP). San Francisco: California State Department of Education.
- Lorence, Jon and Mortimer, Jeylan T.
1985 "Job Involvement Through the Life Course: A Panel Study of Three Age Groups." American Sociological Review, 50:618-638.

Programs, Services and Techniques

- Love, Kevin G. and O'Hara, Kirk
1987 "Predicting Job Performance of Youth Trainees Under a Job Training Partnership Act (JTPA) Program: Criterion Validation of a Behavior-Based Measure of Work Maturity." Personnel Psychology, 40:323-340.
- Lucas, Ann F.
1990 "Using Psychological Models to Understand Student Motivation." New Directions for Teaching and Learning, 42:103-114.
- Lucas, Tamara; Henze, Rosemary; Donato, Ruben
1990 "Promoting the Success of Latino Language-Minority Students: An Exploratory Study of Six High Schools." Harvard Educational Review, 60:315-340.
- Lund, L. and McGuire, E.P.
1984 The Role of Business in Precollege Education. New York: Conference Board.
- Luthar, Suniya S. and Zigler, Edward
1991 "Vulnerability and Competence: A Review of Research on Resilience in Childhood." American Journal of Orthopsychiatry, 61(1):6-22.
- Lynch, Lisa M.
1989 "The Youth Labor Market in the Eighties: Determinants of Reemployment Probabilities for Young Men and Women." The Review of Economics and Statistics, January: 37-45.
- Maccoby, Eleanor E. and Martin, John A.
1983 "Socialization in the Context of the Family: Parent-Child Interaction" in Mussen, Paul H. (ed.) Handbook of Child Psychology, Vol. 4. New York: Wiley and Sons.
- Mace, F. Charles and Shea, Michael C.
1990 "Behavioral Self-Management with At-Risk Children" in Kruger, Louis J. (ed.) Promoting Success with At-Risk Students. Binghamton, NY: Haworth Press.
- Madden, Nancy A. and Slavin, Robert E.
1987 Effective Pull-Out Programs for Students at Risk. Baltimore: Center for Research on Elementary and Middle Schools.

- Maehr, Martin L.
1976 "Continuing Motivation: An Analysis of a Seldom Considered Educational Outcome." Review of Educational Research, 46:443-462.
- Mainquist, Sheri and Eichorn, Dorothy
1989 "Competence in Work Settings" in Stern, David and Eichorn, Dorothy (eds.) Adolescence and Work: Influences of Social Structure, Labor Markets, and Culture. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Mallar, Charles; Kerachsky, Stuart; Thorton, Craig; Long, David
1982 Evaluation of the Economic Impact of the Job Corps Program: Third Follow-Up Report. Princeton, NJ: Mathematica Policy Research.
- Malmberg, Steven Robert
1983 A New Beginning: A Case Study of the Establishment of a Rural Community-Based Alternative High School, Emphasizing Basic Academic Skills, with a High Native American Minority Student Population. Sault Ste. Marie, MI: Department of Compensatory Education Services.
- Malouf, David
1983 "Do Rewards Reduce Student Motivation?" School Psychology Review, 12:1-11.
- Mangum, Garth
1988 Youth Transition from Adolescence to the World of Work. Washington, D.C.: William T. Grant Foundation.
- Mangum, Garth
1982 "CETA As a 'Second Chance' System for Disadvantaged Youth" in Taylor, Robert; Rosen, Howard; Pratzner, Frank (eds.) Job Training for Youth. Columbus, OH: National Center for Research in Vocational Education.
- Mangum, Garth L.
1968 Reorienting Vocational Education. Ann Arbor, MI: Institute of Labor and Industrial Relations.
- Mangum, Garth and Walsh, John
1980 Employment and Training Programs for Youth: What Works Best for Whom. Washington, D.C.: U.S. Department of Labor.

Programs, Services and Techniques

- Mangum, S.; Mangum, G.; Hansen, G.
1990 "Assessing the Returns to Training" in New Developments in Worker Training: A Legacy for the 1990s. Madison, WI: University of Wisconsin, Industrial Relations Research Association.
- Mann, Dale
1986 "Dropout Prevention--Getting Serious About Programs That Work." NASSP Bulletin, April: 66-73.
- Mann, Leon; Harmoni, Ros; Power, Colin; Beswick, Gery; Ormond, Cheryl
1988 "Effectiveness of the GOFER Course in Decision-Making for High School Students." Journal of Behavioral Decision Making, 1:159-168.
- Manpower Demonstration Research Corporation
1991 "Synthesis of Literature Related to the Evaluation of the JOBS Program." New York: Manpower Demonstration Research Corporation
- Manpower Demonstration Research Corporation
1990 Project Overview: New Chance Initiative for Adolescent Mothers and Their Children. New York: Manpower Demonstration Research Corporation.
- Manpower Demonstration Research Corporation
1980 Enhanced Work Projects--The Supported Work Approach for Youth. Youth Knowledge Development Report 7.3. Washington, D.C.: U.S. Government Printing Office.
- Manpower Demonstration Research Corporation
1980 Summary and Findings of the National Supported Work Demonstration. New York: Ballinger.
- Mardon, Steven
1991 "On Board, Not Behind Bars." Corrections Today, 53(1):32-38.
- Martinson, R. and Riccio, J.
1989 GAIN: Child Care in a Welfare Employment Initiative. New York: Manpower Demonstration Research Corporation.
- Masters, S. and Maynard, R.
1981 The Impact of Supported Work on Long-Term Recipients of AFDC Benefits. New York: Manpower Demonstration Research Corporation.

- Mathematica Policy Research
1980 Evaluation of the Economic Impact of the Job Corps Program: Second Follow-Up. Princeton, NJ: Mathematica Policy Research.
- Mathematica Policy Research
1978 Evaluation of the Economic Impact of the Job Corps Program: An Examination of Job Corps Participation. Princeton, NJ: Mathematica Policy Research.
- Mayer, Susan E. and Jencks, Christopher
1989 "Growing Up in Poor Neighborhoods: How Much Does It Matter?" Science, 243:1441-1445.
- Maynard, Rebecca
1980 The Impact of Supported Work on Young School Dropouts. New York: Manpower Demonstration Research Corporation.
- McClure, Larry and Buan, Carolyn (eds.)
1973 Essays on Career Education. Portland, OR: Northwest Regional Educational Laboratory.
- McDonnell, Lorraine M.
1989 "Restructuring American Schools: The Promises and the Pitfalls." NCEE Brief No. 6. New York: Columbia University, Teachers College, National Center on Education and Employment.
- McKey, R.H., et al.
1985 The Impact of Head Start on Children, Families and Communities. Washington, D.C.: U.S. Department of Education, Office of Education.
- McLoyd, Vonnie C.
1990 "The Impact of Economic Hardship on Black Families and Children: Psychological Distress, Parenting, and Socioemotional Development." Child Development, 61:311-346.
- McMullan, Bernard and Snyder, Phyllis
1987 "A Profile of Philadelphia High School Academies, Philadelphia, Pennsylvania" in Allies in Education: Schools and Business Working Together for At-Risk Youth (Vol. 2). Philadelphia: Public/Private Ventures.

Programs, Services and Techniques

McMullan, Bernard and Snyder, Phyllis

1987 Allies in Education: Schools and Business Working Together for At-Risk Youth (Vol. 1). Philadelphia: Public/Private Ventures.

McPartland, James M. and Slavin, Robert E.

1990 Increasing Achievement of At-Risk Students at Each Grade Level. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.

Means, Barbara and Knapp, Michael

1991 Teaching Advanced Skills to Educational Disadvantaged Students. Washington, D.C.: U.S. Department of Education, Office of Planning, Budget and Evaluation.

Mei, Dolores M.

1990 Institute for Career Exploration, the Basic Skills Academy/Comprehensive Competency Program, and the Career Employment Center Summer School Program. New York: New York City Board of Education.

Mei, Lori

1990 Chapter 1 Pupils with Compensatory Educational Needs: 1989-90 Peer Tutoring Program End-of-Year Report. New York: New York City Board of Education.

Mertens, D.; McElwain, D.; Garcia, G.; Whitmore, M.

1985 The Effects of Participating in Vocational Education: Summary of Studies Conducted Since 1968. Columbus, OH: Ohio State University, National Center for Research in Vocational Education.

Meyer, Katrina A.

1987 "The Work Commitment of Adolescents: Progressive Attachment to the Work Force." Career Development Quarterly, December: 141-147.

Meyer Robert

1981 "An Economic Analysis of High School Education" in The Federal Role in Vocational Education. Washington, D.C.: National Commission for Employment Policy.

- Meyer, R.H. and Wise, D.A.
1982 "High School Preparation and Early Labor Force Experience" in Freeman, R.B. and Wise, D.A. (eds.) The Youth Labor Market Problem: Its Nature, Causes and Consequences. Chicago: University of Chicago Press.
- Mihaly, Lisa Klee
1991 Homeless Families: Failed Policies and Young Victims. Washington, D.C.: Children's Defense Fund.
- Miller, Mark J.; Springer, Thomas P.; Wells, Don
1988 "Which Occupational Environments Do Black Youth Prefer? Extending Holland's Typology." The School Counselor, 36:103-107.
- Milliner, Julita and Higgins, Catherine
1989 The Bridge Demonstration: An In-School Program For At-Risk Youth. Philadelphia: Public/Private Ventures.
- Milton S. Eisenhower Foundation
1990 Youth Investment and Community Reconstruction: Street Lessons on Drugs and Crime for the Nineties. Washington, D.C.: Milton S. Eisenhower Foundation.
- Mincy, Ronald and Wiener, Susan
1990 A Mentor, Peer Group, Incentive Model for Helping Underclass Youth. Washington, D.C.: Urban Institute.
- Mirengoff, William and Rindler, Lester
1978 CETA: Manpower Programs Under Local Control. Washington, D.C.: National Academy of Sciences.
- Mirengoff, William; Rindler, Lester; Greenspan, Harry; Harris, Charles
1982 CETA: Accomplishments, Problems, Solutions. A report by the Bureau of Social Science Research. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Mirman, Jill; Swartz, Robert; Barrell, John
1988 "Strategies to Help Teachers Empower At-Risk Students" in Presseisen, Barbara Z. (ed.) At-Risk Students and Thinking: Perspectives from Research. Washington, D.C.: National Education Association.

Programs, Services and Techniques

- Mishel, Lawrence and Teixeira, Ruy
1991 The Myth of the Coming Labor Shortage: Jobs, Skills and Incomes of America's Workforce 2000. Washington, D.C.: Economic Policy Institute.
- Mitchell, John J.; Chadwin, Mark L.; Nightingale, Demetra Smith
1980 Implementing Welfare-Employment Programs: An Institutional Analysis of the Work Incentive (WIN) Program. Washington, D.C.: U.S. Department of Labor.
- Mitchell, Vernay; Russell, Ellen; Benson, Charles
1988 Exemplary Urban Career-Oriented High Schools. Berkeley, CA: University of California, National Center for Research in Vocational Education.
- Moffitt, R. and Wolfe, B.
1989 The Effects of Medicaid on Welfare Dependency and Work. Washington, D.C.: U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation.
- Moore, James
1991 "Kansas Youth Center Treats Sexually Abused Female Offenders." Corrections Today, 53(1):40-46.
- Moore, K. and Caldwell, S.
1977 "The Effect of Government Policies on Out-of-Wedlock Sex and Pregnancy." Family Planning Perspectives, 9:164-169.
- Moore, Kristin A.; Hofferth, Sandra; Caldwell, Steven B.; Waite, Linda J.
1979 Teenage Motherhood: Social and Economic Consequences. Washington, D.C.: Urban Institute.
- Morgan, William R.
1984 "The High School Dropout in an Overeducated Society" in Baker, Paula; Carpenter, Susan; Crowley, Joan; D'Amico, Ronald; Kim, Choongsoo; Morgan, William; Wielgosz, John (eds.) Pathways to the Future. A Report on the National Longitudinal Surveys of Youth Labor Market Experience in 1982 (Vol. IV). Columbus, OH: Center for Human Resources Research.

- Morrow, George
 1986 "Standardizing Practice in the Analysis of School Dropouts." Teachers College Record, 87:342-355.
- Mortimer, Jeylan T.
 1990 "Introduction." Youth and Society, 22(2):131-136.
- Mortimer, J.T. and Finch, M.D.
 1986 "The Effects of Part-Time Work on Adolescent Self-Concept and Achievement" in Borman, K.M. and Reisman, J. (eds.) Becoming a Worker. Norwood, NJ: Ablex Publishing Corporation.
- Mortimer, J.T. and Lorence, J.
 1981 "Work Experience and Work Involvement." Sociology of Work and Occupations, 8:297-326.
- Mortimer, J.T. and Lorence, J.
 1979 "Work Experience and Occupational Value Socialization: A Longitudinal Study." American Journal of Sociology, 84:1361-1385.
- Mortimer, Jeylan T.; Finch, Michael D.; Owens, Timothy J.; Shanahan, Michael
 1990 "Gender and Work in Adolescence." Youth and Society, 22(2):201-224.
- Mullis, Ina V.S.; Owen, Eugene H.; Phillips, Gary W.
 1990 America's Challenge: Accelerating Academic Achievement. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Nathan, Richard P.; Cook, Robert F.; Rawlins, V. Lane
 1981 Public Service Employment: A Field Evaluation. Washington, D.C.: Brookings Institution.
- National Alliance of Business
 1990 Lessons Learned: Job Skills Education Program Final Report. Washington, D.C.: National Alliance of Business.
- National Alliance of Business
 1989 The Compact Project: School Business Partnerships for Improving Education. Washington, D.C.: National Alliance of Business.

Programs, Services and Techniques

National Commission for Employment Policy

1988 Another Ounce of Prevention: Education and Employment Interventions for 9 to 15 Year Olds. Washington, D.C.: National Commission for Employment Policy.

National Commission for Employment Policy

1987 The Job Training Partnership Act. Washington, D.C.: National Commission for Employment Policy.

National Commission for Employment Policy

1979 Expanding Employment Opportunities for Disadvantaged Youth. Washington, D.C.: National Commission for Employment Policy.

National Commission for Manpower Policy

1976 From School to Work: Improving the Transition. Washington, D.C.: National Commission for Manpower Policy.

National Commission on Excellence in Education

1983 A Nation at Risk. Washington, D.C.: U.S. Department of Education.

National Governors' Association

1991 Quality Assessment in the JOBS Program. Washington, D.C.: National Governors' Association.

National Governors' Association

1990 Educating America: State Strategies for Achieving the National Education Goals. Washington, D.C.: National Governors' Association.

National Institute of Education

1981 The Vocational Education Study: The Final Report. Washington, D.C.: National Institute of Education.

National Science Board, Commission on Precollege Education in Mathematics, Science and Technology

1983 Today's Problems, Tomorrow's Crisis. Washington, D.C.: National Science Foundation.

Natriello, G.; Pallas, A.; Alexander, J.

1989 "On the Right Track? Curriculum and Academic Achievement." Sociology of Education, 62:109-118.

- New Jersey Department of Health
1987 Healthstart Program Description. Trenton, NJ: New Jersey Department of Health.
- New York City Board of Education
1989 The Cohort Report: Four-Year Results for the Class of 1988 and Follow-Ups of the Classes of 1986 and 1987. Brooklyn, NY: New York City Board of Education, Office of Research, Evaluation and Assessment.
- Nichoils, John G.
1984 "Achievement Motivation: Conceptions of Ability, Subjective Experience, Task Choice, and Performance." Psychological Review, 91:328-346.
- Nickerson, Raymond S.
1988 "On Improving Thinking Through Instruction" in Rothkopf, Ernst Z. (ed.) Review of Research in Education, Vol. 15. Washington, D.C.: American Educational Research Association.
- Nightingale, Demetra and Burbridge, Lynn
1987 The Status of State Work-Welfare Programs in 1986: Implications for Welfare Reform. Washington, D.C.: Urban Institute.
- Nightingale, Demetra S.; Cammisa, A.; Cohen, B.; Holcomb, P.; O'Brien, C.; Seefeldt, K.; Yudd, R.
1991 Services to Clients in the Washington State Family Independence Program (FIP): Second Process Analysis from the Evaluation of the Family Independence Program. Washington, D.C.: Urban Institute.
- Nightingale, Demetra S.; Burbridge, Lynn C.; Bawden, D. Lee; Jeffries, Neal O.
1990 Evaluation of the Massachusetts Employment and Training (ET) Choices Program. Washington, D.C.: Urban Institute.
- Nightingale, Demetra S.; Holcomb, Pamela A.; O'Brien, Carolyn Taylor
1990 The General Structure and Operation of the Washington State Family Independence Program (FIP). Washington, D.C.: Urban Institute.
- Nightingale, Demetra Smith; Yudd, Regina; Anderson, Stacey; Barnow, Burt
1990 The Learning Disabled in Employment and Training Programs. Washington, D.C.: Urban Institute.

Programs, Services and Techniques

- Nisbett, Richard E.; Fong, Geoffrey T.; Lehman, Darrin R.; Cheng, Patricia W.
1987 "Teaching Reasoning." Science, 238:625-631.
- Northrup, Herbert R.; Perry, Charles R.; Anderson, Bernard E.; Rowan, Richard L.
1976 The Impact of Government Manpower Programs: In General, and on Minorities and Women. Philadelphia: University of Pennsylvania, Wharton School.
- Nothdurft, William E.
1991 Youth Apprenticeship, American Style: A Strategy for Expanding School and Career Opportunities. A Report of a Conference. Somerville, MA: Consortium on Youth Apprenticeship.
- Nothdurft, William E.
1989 SchoolWorks: Reinventing Public Schools to Create the Workforce of the Future. Washington, D.C.: St. Mary's Press.
- Noyelle, Thierry
1989 Skills, Skill Formation, Productivity and Competitiveness: A Cross-National Comparison of Banks and Insurance Carriers in Five Advanced Economies. New York: Columbia University.
- Oakes, Jeannie
1985 Keeping Track: How Schools Structure Inequality. New Haven: Yale University Press.
- Ogbu, John
1986 "Stockton, California, Revisited: Joining The Labor Force" in Borman, Kathryn and Reisman, Jane (eds.) Becoming A Worker. Norwood, NJ: Ablex.
- Ogbu, John
1985 "A Cultural Ecology of Competence Among Inner-City Blacks" in Spencer, M.; Brookins, G.; Allen, W. (eds.) Beginnings: The Social and Affective Development of Black Children. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ogbu, John
1978 Minority Education and Caste: The American System in Cross-Cultural Perspective. New York: Academic Press.

- Organization for Economic Cooperation and Development
1980 Youth Unemployment: The Causes and Consequences. Paris:
Organization for Economic Cooperation and Development.
- Orland, Martin E.
1990 "Demographics of Disadvantage: Intensity of Childhood Poverty and Its
Relationship to Educational Achievement" in Goodlad, John and Keating,
Pamela (eds.) Access to Knowledge: An Agenda for Our Nation's Schools.
New York: College Entrance Examination Board.
- Orr, Terry; Cesvette, Carl; Alex, Wilkie
1990 Planning and Evaluation Study of the New York Working Program: The
First Two Years of Six Pilot Schools. New York: Academy for
Educational Development.
- Ortiz, Elizabeth Thompson and Bassoff, Betty Z.
1987 "Adolescent Welfare Mothers: Lost Optimism and Lowered Expectations."
The Journal of Contemporary Social Work, September: 400-405.
- Osterman, Paul
1989 "The Job Market for Adolescents" in Stern, David and Eichorn, Dorothy
(eds.) Social Structure, Labor Markets and Culture. Hillsdale, NJ:
Lawrence Erlbaum Associates.
- Osterman, Paul
1980 Getting Started: The Youth Labor Market. Cambridge, MA: MIT Press.
- Owens, T.R.
1982 "Experience-Based Career Education: Summary and Implications of
Research and Evaluation Findings." Child and Youth Services Journal,
Vol. 4.
- Oz, Sheri and Fine, Marshall
1988 "A Comparison of Childhood Backgrounds of Teenage Mothers and Their
Non-Mother Peers: A New Formulation." Journal of Adolescence, 11:251-
261.
- Parnell, Dale
1985 The Neglected Majority. Washington, D.C.: Community College Press.

Programs, Services and Techniques

- Parsons, Jacquelynne Eccles; Kaczala, Caroline M.; Meece, Judith L.
1982 "Socialization of Achievement Attitudes and Beliefs: Classroom Influences." Child Development, 53:322-339.
- Patterson, Charlotte J.; Kupersmith, Janis B.; Vaden, Nancy A.
1990 "Income Level, Gender, Ethnicity, and Household Composition as Predictors of Children's School-Based Competence." Child Development, 61:485-494.
- Pearse, Beverly and Chabassol, David J.
1976 "Relationship of Adolescent Problems to Sex, Socioeconomic Status, School Achievement, Intelligence Quotient, and Grade." Psychological Reports, 39:1137-1138.
- Pennsylvania State Board of Education
1991 Draft Regulations of the State Board of Education of Pennsylvania. Harrisburg, PA: Pennsylvania State Board of Education.
- Peterson, Gary W. and Rollins, Boyd C.
1987 "Parent-Child Socialization" in Sussman, M.B. and Steinmetz, S.K. (eds.) Handbook of Marriage and the Family. New York: Plenum Press.
- Peterson, Gary W.; Stivers, Mary Elizabeth; Peters, David F.
1986 "Family Versus Nonfamily Significant Others for the Career Decisions of Low-Income Youth." Family Relations, 35:417-424.
- Pharis, Mary and Levin, Victoria
1991 "A Person to Talk to Who Really Cared: High-Risk Mothers' Evaluations of Services in an Intensive Intervention Research Program." Child Welfare, LXX(3): 307-320.
- Piersel, Wayne C. and Lee, Steven W.
1990 "Individualized Education and Applied Behavior Analysis" in Kruger, Louis J. (ed.) Promoting Success with At-Risk Students. Binghamton, NY: Haworth Press.
- Polit, Denise F.
1989 "Effects of a Comprehensive Program for Teenage Parents: Five Years After Project Redirection." Family Planning Perspectives, 21(4):164-187.

- Polit, Denise
 1986 Building Self-Sufficiency: A Guide to Vocational and Employment Services for Teenage Parents. Saratoga Springs, NY: Humanalysis, Inc.
- Polit, Denise
 1986 Comprehensive Programs for Pregnant and Parenting Teens. New York: Manpower Demonstration Research Corporation.
- Polit, Denise and O'Hara, Joseph J.
 1989 "Support Services" in Cottingham, Phoebe H. and Ellwood, David T. (eds.) Welfare Policy for the 1990s. Cambridge, MA: Harvard University Press.
- Polit, D. and White, C.M.
 1987 Parenting Among Low-Income Teenage Mothers. Saratoga Springs, NY: Humanalysis, Inc.
- Polit, Denise; Kahn, Janet; Stevens, David
 1985 Final Impacts in Project Redirection. New York: Manpower Demonstration Research Corporation.
- Polit, D.F.; Kahn, J.R., Murray, C.A.; Smith, K.W.
 1982 Needs and Characteristics of Pregnant and Parenting Teens. New York: Manpower Demonstration Research Corporation.
- Porter, Kathryn
 1990 Making JOBS Work: What the Research Says About Effective Employment Programs for AFDC Recipients. Washington, D.C.: Center for Budget and Policy Priorities.
- Portes, Pedro R.; Dunham, Richard M.; Williams, Shavon
 1986 "Assessing Child-Rearing Style in Ecological Settings: Its Relation to Culture, Social Class, Early Age Intervention and Scholastic Achievement." Adolescence, XXI(83):723-735.
- Powell, Arthur; Farrar, Eleanor; Cohen, David K.
 1985 The Shopping Mall High School: Winners and Losers in the Educational Market Place. Boston: Houghton Mifflin.

Programs, Services and Techniques

Presser, H. and Baldwin, W.

- 1980 "Child Care as a Constraint on Employment: Prevalence, Correlates, and Bearing on the Work and Fertility Nexus." American Journal of Sociology, 85(5):1202-13.

Price, Richard H.; Cowen, Emory L.; Lorion, Raymond P.; Ramos-McKay, Julia

- 1989 "The Search for Effective Prevention Programs: What We Learned Along the Way." American Journal of Orthopsychiatry, 59(1):48-58.

Price, Virginia Ann

- 1990 Characteristics and Needs of Street Youth. Boston: Bridge, Inc., Bridge Over Troubled Waters.

Pritz, Sandra

- 1989 The Role of Vocational Education in the Development of Students' Academic Skills. Columbus, OH: ERIC Clearinghouse.

Public/Private Ventures

- 1991 "Curriculum Development: When, What and Why We Do It." Public/Private Ventures News, Fall.

Public/Private Ventures

- 1990 "The City Volunteer Corps: An Interim Report." New York: City Volunteer Corps.

Public/Private Ventures

- 1990 The Practitioner's View: New Challenges in Serving High-Risk Youth. Philadelphia: Public/Private Ventures.

Public/Private Ventures

- 1983 A Practitioner's Guide: Strategies, Programs, and Resources for Youth Employability Development. Philadelphia: Public/Private Ventures.

Quint, J. and Riccio, J.

- 1985 The Challenge of Serving Pregnant and Parenting Teens: Lessons from Project Redirection. New York: Manpower Demonstration Research Corporation.

Raizen, Senta A.

- 1989 Reforming Education For Work: A Cognitive Science Perspective. Berkeley, CA: University of California, National Center for Research in Vocational Education.

Reamer, Frederic G.

- 1990 "Review of Juvenile Justice in Double Jeopardy: The Distance Community and Vengeful Retribution--Justine Wise Polier." Social Service Review, December: 664-665.

Reamer, Frederic G.

- 1990 "Review of Juvenile Correctional Reform: Two Decades of Policy and Procedural Change--Edmund F. McGarrell." Social Service Review, March: 164-166.

Regional Institute of Social Welfare Research

- 1977 The Case Management Model: Concept and Process Definition. Athens, GA: Regional Institute of Social Welfare Research.

Reisner, E. and Balasubramanian, M.

- 1989 School-To-Work Transition Services For Disadvantaged Youth Enrolled in Vocational Education. Washington, D.C.: U.S. Department of Education, National Assessment of Vocational Education.

Research and Policy Committee of the Committee for Economic Development

- 1991 The Unfinished Agenda: A New Vision for Child Development and Education. New York: Committee for Economic Development.

Resnick, L.B.

- 1987 "Learning In School and Out." Educational Researcher, 16:13-20.

Richardson, Philip; Burghardt, John; Rosenthal, Arlen; Irion, Albert; Elliott, John

- 1985 Job Corps Process Analysis Final Report. Silver Spring, MD: Macrosystems.

Risko, Victoria; Kinzer, Charles; Vie, Nancy; Rowe, Deborah

- 1990 "Effects of Videodisc Macrocontexts on Comprehension and Composition of Causally Coherent Stories." Paper presented at the annual meeting of the American Educational Research Association, Boston.

Programs, Services and Techniques

- Robbins, Cynthia; Kaplan, Howard B.; Martin, Steven S.
1985 "Antecedents of Pregnancy Among Unmarried Adolescents." Journal of Marriage and the Family, 47:567-583.
- Rosenbaum, James E.
1976 Making Inequality: The Hidden Curriculum of High School Tracking. New York: Wiley.
- Ruggiero, M.
1984 "Work as an Impetus to Delinquency: An Examination of Theoretical and Empirical Connections." Ph.D. dissertation, University of California.
- Ruggiero, M.; Greenberger, E.; Steinberg, L.
1982 "Occupational Deviance Among First-Time Workers." Youth and Society, 13:423-448.
- Rumberger, Russell W.
1987 "High School Dropouts: A Review of Issues and Evidence." Review of Educational Research, 57:101-121.
- Rumberger, Russell W.
1981 Overeducation in the U.S. Labor Market. New York: Praeger.
- Rumberger, R.W. and Daymont, T.N.
1984 "The Economic Value of Academic and Vocational Training Acquired in High School" in Borus, M.E. (ed.) Youth and the Labor Market: Analyses of the National Longitudinal Survey. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Rutter, Michael
1984 "Family and School Influences on Behavioral Development." Journal of Child Psychology and Psychiatry, 26(3):349-368.
- Saltiel, John
1986 "Segmental Influence: The Case of Educational and Occupational Significant Others." Adolescence, XXI(83):615-622.
- Samson, Gordon; Niemiec, Richard; Weinstein, Thomas; Walberg, Herbert
1986 "Effects of Computer-Based Instruction on Secondary School Achievement: A Quantitative Synthesis." AEDS Journal, 19(4):312-324.

- Samuelson, Robert J.
1991 "Gibberish on Job Skills." Washington Post, July 11.
- Sawhill, Isabel V.
1989 "Rethinking Employment Policy" in Bowden, Lee D. and Skidmore, Felicity (eds.) Rethinking Employment Policy. Washington, D.C.: Urban Institute Press.
- Sawhill, Isabel and Ricketts, Erol
1986 Defining and Measuring the Underclass. Washington, D.C.: Urban Institute.
- Schill, William; McCartin, Rosemarie; Meyer, Katrina
1985 "Youth Employment: Its Relationship to Academic and Family Variables." Journal of Vocational Behavior, 26:155-163.
- Schunk, Dale H.
1989 "Self-Efficacy and Cognitive Skill Learning" in Ames, Carole and Ames, Russell (eds.) Research on Motivation in Education, Vol. 3. New York: Academic Press.
- Schunk, Dale H.
1981 "Modeling and Attributional Effects on Children's Achievement: A Self-Efficacy Analysis." Journal of Educational Psychology, 73:93-105.
- Scott-Jones, Diane and Turner, Sherry L.
1990 "The Impact of Adolescent Childbearing on Educational Attainment and Income of Black Females." Youth and Society, 22(1):35-53.
- Scribner, Silvia and Stephens, Joy
1989 "Experimental Studies on the Relationship of School Math and Work Math." New York: Columbia University, Teachers College, National Center on Education and Employment.
- 7001 Training and Employment Institute
1988 Believing Once Again: Solutions Addressing the Plight of Challenged Youth. Washington, D.C.: 70001 Training and Employment Institute.
- Shapiro, Edna and Biber, Barbara
1972 "The Education of Young Children: A Developmental-Interaction Approach." Teachers College Record, 74(1):55-79.

Programs, Services and Techniques

- Shapiro, Jonathan; Gaston, Susan; Hebert, Janet; Guillot, Dewey
1986 LSYOU (Louisiana State Youth Opportunities Unlimited): Project Evaluation. Baton Rouge, LA: Louisiana State University, College of Education.
- Shrum, Wesley and Cheek, Neil H.
1987 "Social Structure During the School Years: Onset of the Degrouping Process." American Sociological Review, 52:218-223.
- Sims, Edith R.
1988 "Successful Programs, Policies, and Practices Employed at Corliss High School." Journal of Negro Education, 57:394-407.
- Simutis, Zita M.
1988 ARI Research in Basic Skills Education: An Overview. Alexandria, VA: Army Research Institute for the Behavioral and Social Sciences.
- Sipe, Cynthia L.; Grossman, Jean Baldwin; Milliner, Julita A.
1988 Summer Training and Education Program (STEP): Report on the 1987 Experience. Philadelphia: Public/Private Ventures.
- Sizer, T.R.
1984 Horace's Compromise: The Dilemma of the American High School. Boston: Houghton Mifflin.
- Slavin, Robert
1989 School and Classroom Organization. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Slavin, Robert E.
1984 "Students Motivating Students to Excel: Cooperative Incentives, Cooperative Tasks, and Student Achievement." The Elementary School Journal, 85:53-63.
- Slavin, Robert E.
1983 "When Does Cooperative Learning Increase Student Achievement?" Psychological Bulletin, 94:429-445.
- Slavin, Robert E. and Madden, Nancy A.
1989 "What Works for Students at Risk: A Research Synthesis." Educational Leadership, 47:4-13.

- Slavin, Robert E. and Madder, Nancy A.
1987 Effective Classroom Programs for Students at Risk. Baltimore, MD: Center for Research on Elementary and Middle Schools.
- Smith, Steven
1991 "Detention Is an Invaluable Part of the System, But It's Not the Solution to All Youths' Problems." Corrections Today, 53(1):56-60.
- Smith, Thomas; Walker, Gary; Baker, Rachel
1987 Youth and the Workplace: Second-Chance Programs and the Hard-to-Employ. Philadelphia: Public/Private Ventures.
- Sonenstein, Freya and Wolf, Douglas
1988 "Caring for the Children of Welfare Mothers." Paper presented at the annual meeting of the Population Association of America.
- Sonenstein, Freya, et al.
1991 Prevention Programs for Children. Report to the United Way of America. Washington, D.C.: Urban Institute.
- Sonenstein, Freya; Ku, Leighton; Adam, E. Kathleen; Orloff, Tracey
1990 Potential Research Strategies for Evaluating the Effects of Transitional Medicaid and Child Care Benefits. Lexington, MA: Systemetrics/McGraw-Hill.
- South Carolina State Department of Education
1989 South Carolina Exit Examination: Questions and Answers. A Basic Skills Assessment Publication. Columbia, SC: South Carolina State Department of Education, Office of Research.
- Spring, William J.
1988 "Building a Network of Opportunity for the Majority of Our Young People" in School Success for Students At Risk: Analyses and Recommendations of the Council of Chief State School Officers. Orlando, FL: Harcourt Brace Jovanovich.
- Steinberg, Laurence and Dornbusch, Sanford M.
1991 "Negative Correlates of Part-Time Employment During Adolescence: Replication and Elaboration." Developmental Psychology, 27(2):304-313.

Programs, Services and Techniques

- Steinberg, Laurence; Elmen, Julie D.; Mounts, Nina S.
1989 "Authoritative Parenting, Psychosocial Maturity, and Academic Success Among Adolescents." Child Development, 60:1424-1436.
- Steinberg, Laurence D.; Greenberger, Ellen; Garduque, Laurie; Ruggiero, Mary; Vaux, Alan
1982 "Effects of Working on Adolescent Development." Developmental Psychology, 18(3):385-395.
- Stepanik, Ron
1991 "The Eckerd Youth Program: Challenging Juveniles to Change." Corrections Today, 53(1):48-50.
- Stern, David
1991 Combining School and Work: Options in High Schools and Two-Year Colleges. Washington, D.C.: U.S. Department of Education, Office of Vocational and Adult Education.
- Stern, David and Nakata, Yoshi-fumi
1989 "Characteristics of High School Students' Paid Jobs and Employment Experience after Graduation" in Stern, David and Eichorn, Dorothy (eds.) Adolescence and Work: Influences of Social Structure, Labor Markets, and Culture. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Stern, David; Stone, James R.; Hopkins, Charles; McMillion, Martin
1990 "Quality of Students' Work Experience and Orientation Toward Work." Youth and Society, 22(2):263-282.
- Stern, David; McMillion, Martin; Hopkins, Charles; Stone, James
1990 "Work Experience for Students in High School and College." Youth and Society, 21(3):355-389.
- Stern, David; Dayton, Charles; Paik, Il-Woo; Weisberg, Alan
1989 "Benefits and Costs of Dropout Prevention in a High School Program Combining Academic and Vocational Education: Third Year Results from Replications of the California Peninsula Academies." Education Evaluation and Policy Analysis, 11(4):405-416.

- Stevenson, Wayne
1980 "The Relationship Between Youth Employment and Future Employability and Earnings" in Youth Unemployment--Its Measurement and Meaning. Youth Knowledge Development Report 2.1. Washington, D.C.: U.S. Department of Labor.
- Sticht, Thomas G.
1982 Basic Skills in Defense. Alexandria, VA: Human Resources Research Organization.
- Sticht, Thomas G. and Mikulecky, Larry
1984 Job-Related Basic Skills: Cases and Conclusions. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.
- Sticht, Thomas; Armstrong, William; Hickey, Daniel; Caylor, John
1987 Cast-Off Youth: Policy and Training Methods from the Military Experience. New York: Praeger.
- Stickney, Benjamin D. and Plunkett, Virginia R.L.
1982 "Has Title I Done Its Job?" Educational Leadership, 39(5):378-383.
- Stone, Calvin R.
1989 Considerations in the Design of the Work and Learning Center. Washington, D.C.: Policy Studies Associates.
- Stone, James R.; Stern, David; Hopkins, Charles; McMillan, Martin
1989 Learning from School-Based Work Experience Programs. Berkeley, CA: National Center for Research in Vocational Education.
- Stromsdorfer, Ernst W.
1980 "The Effectiveness of Youth Programs: An Analysis of the Historical Antecedents of Current Youth Initiatives" in Anderson, Bernard E. and Sawhill, Isabel V. (eds.) Youth Employment and Public Policy. Englewood Cliffs, NJ: Prentice-Hall.
- Strumpf, Lori; Friedman, Pamela; Rickard, Patricia; Eguez, Jane
1989 Improving Workplace Skills: Lessons From JTPA. Washington, D.C.: Center for Remediation Design.

Programs, Services and Techniques

- Sum, A.
1987 The Longer-Term Impacts of Participation in Jobs for America's Graduates Programs: Findings of the 20-Month Follow-Up of the Class of 1984. Washington, D.C.: Jobs for America's Graduates.
- Summers, Anita A. and Johnson, Amy W.
1991 "A Review of the Evidence on the Effects of School-Based Management Plans." Paper prepared for the panel on the Economics of Educational Reform and Teaching.
- Sussman, Marvin E. and Steinmetz, Suzanne K. (eds.)
1987 Handbook of Marriage and the Family. New York: Plenum Press.
- Systemetrics/McGraw-Hill
1989 Significant Problems Facing American Children, Youth and Families. Lexington, MA: Systemetrics/McGraw-Hill.
- Taggart, Robert
1981 A Fisherman's Guide: An Assessment of Training and Remedial Strategies. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Taggart, R.; Sum, A.; Berlin G.
1987 "Basic Academic Skills: Key to Youth's Future." Paper presented to the U.S. Senate Committee on Labor and Human Resources, January 14.
- Tan, Hong W.
1989 Private Sector Training in the United States: Who Get It and Why. New York: Rand Corporation and Columbia University, Teachers College, Institute on Education and the Economy.
- Taylor, Lottie L. and Pinard, Joan R.
1988 "Success Against the Odds: Effective Education of Inner-City Youth in a New York City Public High School." Journal of Negro Education, 57:347-361.
- Timpane, P.M. and McNeill, L.M.
1991 Business's Impact on Education and Child Development Reform. New York: Committee for Economic Development.

- Timpane, M.; Abramowitz, S.; Bobrow, S.B.; Pascal, A.
1976 Youth Policy in Transition. Santa Monica, CA: Rand Corporation.
- Turiel, Elliot
1989 "Domain-Specific Social Judgments and Domain Ambiguities." Merrill-Palmer Quarterly, 35(1):89-114.
- Turner, Susan and Conradus, Carolyn
1978 Supportive Services: CETA Program Models. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.
- U.S. Congress
1988 Family Support Act. P.L. 100-485. October 13, 1988.
- U.S. Congress, Committee on Ways and Means
1991 Overview of Entitlement Programs (1991 Green Book). Washington, D.C.: U.S. Government Printing Office.
- U.S. Congress, Joint Economic Committee
1984 Economic Change, Physical Illness, Mental Illness and Social Deviance. Washington, D.C.: U.S. Government Printing Office.
- U.S. Congress, Office of Technology Assessment
1986 Children's Mental Health: Problems and Services. Washington, D.C.: U.S. Government Printing Office.
- U.S. Congress, Select Committee on Children, Youth and Families
1986 Teen Pregnancy: What Is Being Done? A State-By-State Look. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Commerce
1989 Spells of Job Search and Layoff and Their Outcomes. Current Population Reports, Series P-70, No. 16-RD-2. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Commerce
1985 Marital Status and Living Arrangements. Current Population Reports, Series P-20. Washington, D.C.: U.S. Government Printing Office.

Programs, Services and Techniques

U.S. Department of Education

1989 Digest of Education Statistics: 1989. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education

1989 1989 Education Indicators. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education

1988 Dropout Rates in the United States: 1988. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education and U.S. Department of Labor

1988 The Bottom Line: Basic Skills in the Workplace. Washington, D.C.: U.S. Department of Education and U.S. Department of Labor.

U.S. Department of Labor, Employment and Training Administration

1990 Training and Employment Report of the Secretary of Labor. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Labor, Employment and Training Administration

1989 Work-Based Learning: Training America's Workers. Washington, D.C.: U.S. Department of Labor.

U.S. Department of Labor, Employment and Training Administration

1980 Assessments of the Job Corps Performance and Impacts: Volume I. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills

1991 What Work Requires of Schools. A SCANS Report for America 2000. Washington, D.C.: U.S. Department of Labor.

U.S. General Accounting Office

1991 Job Training Partnership Act: Racial and Gender Disparities in Services. Testimony of Lawrence H. Thompson before the U.S. House Committee on Government Operations, Subcommittee on Employment and Housing. Washington, D.C.: U.S. General Accounting Office.

- U.S. General Accounting Office
1991 Within School Demonstration: Inadequate Title VI Enforcement by Education Office for Civil Rights. Testimony of Lawrence H. Thompson before the U.S. Senate Committee on Labor and Human Resources. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1990 Job Training Partnership Act: Youth Participant Characteristics, Services and Outcomes. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1990 Training Strategies: Preparing Non-College Youth for Employment in the U.S. and Foreign Countries. Washington D.C: U.S. General Accounting Office.
- U.S. General Accounting Office
1988 Summer Youth Jobs Program: Congressional Action Has Increased Emphasis on Remedial Education. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1986 Job Corps: Its Costs, Employment Outcomes, and Service to the Public. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985 The Job Training Partnership Act: An Analysis of Support Cost Limits and Participant Characteristics. Washington, D.C.: U.S. General Accounting Office.
- United Way of America
1990 Wrap-Around Services for High-Risk Children and Their Families. Alexandria, VA: United Way of America.
- Vecchiolla, Francine J. and Maza, Penelope L.
1989 Pregnant and Parenting Adolescents: A Study of Services. Washington, D.C.: Child Welfare League of America.
- Voith, Richard and Leiderman, Sally
1986 The California Conservation Corps: A Report on Attrition. Philadelphia: Public/Private Ventures.

Programs, Services and Techniques

Voydanoff, Patricia

1990 "Economic Distress and Family Relations: A Review of the 1980s." Journal of Marriage and the Family, 52:1099-1115.

Walberg, Herbert J.

1988 "Productive Educational Practices For At-Risk Youth" in School Success for Students At Risk: Analyses and Recommendations of the Council of Chief State School Officers. Orlando, FL: Harcourt Brace Jovanovich.

Walther, R.H.

1976 Analysis and Synthesis of Department of Labor Experience in Youth Transition to Work Programs. Springfield, VA: National Technical Information Service.

Washington, D.C., Public Schools

1981 The Fresh Start Minischool E.S.E.A. Title IV-C. Final Evaluation Report. Washington, D.C.: Washington, D.C., Public Schools.

Watson, Bernardine and Jaffe, Natalie

1990 The Practitioner's View: New Challenges in Serving High-Risk Youth. Philadelphia: Public/Private Ventures.

Weatherley, Richard A.

1990 "Review Essays: What to Do About Teen Pregnancy." Journal of Health, Politics, Policy and Law, 15(1):211-220.

Wehlage, G.G.; Stone, C.R.; Lesko, N.

1982 Effective Programs for the Marginal High School Student: A Report to the Wisconsin Governor's Employment and Training Office. Madison, WI: Wisconsin Center for Education Research.

Weidman, John C. and Friedmann, Robert R.

1984 "The School-To-Work Transition for High School Dropouts." The Urban Review, 16(1):25-42.

Weiner, Bernard

1985 "An Attributional Theory of Achievement Motivation and Emotion." Psychological Review, 92:548-573.

- Weiner, Bernard
1979 "A Theory of Motivation for Some Classroom Experiences." Journal of Educational Psychology, 71:3-25.
- Wells, Shirley E.
1990 At-Risk Youth. Identification, Programs, and Recommendations. Englewood, CO: Teacher Ideas Press.
- Werner, Emmy E.
1989 "High-Risk Children In Young Adulthood: A Longitudinal Study from Birth to 32 Years." American Journal of Orthopsychiatry, 59(1):72-81.
- Werner, Emmy E. and Smith, Ruth S.
1989 Vulnerable But Invincible. A Longitudinal Study of Resilient Children and Youth. New York: McGraw-Hill.
- Westat, Inc.
1987 Review of Participant Characteristics and Program Outcomes for the First Eleven Quarters of JTPA Operation. Rockville, MD: Westat, Inc.
- Wetzel, James
1987 American Youth: A Statistical Snapshot. Washington, D.C.: William T. Grant Foundation.
- White, Robert
1959 "Motivation Reconsidered: The Concept of Competence." Psychological Review, 66:297-333.
- William T. Grant Foundation, Commission on Work, Family and Citizenship
1988 The Forgotten Half: Non-College Youth in America. Washington, D.C.: William T. Grant Foundation.
- William T. Grant Foundation, Commission on Work, Family and Citizenship
1988 The Forgotten Half: Pathways to Success for America's Youth and Young Families. Washington, D.C.: William T. Grant Foundation.
- Wilms, Wellford W.
1984 "Vocational Education and Job Success: The Employer's View." Phi Delta Kappan, 65:347-350.

Programs, Services and Techniques

- Wilson, William J.
1988 The Truly Disadvantaged: The Inner City and Public Policy. Chicago, IL: University of Chicago Press.
- Winters, Karen; Rubenstein, Mark; Winters, Raymond
1988 An Investigation of Education Options for Youth At Risk, Ages 9 to 15: Demographics, Legislation, and Model Programs. Washington, D.C.: National Commission for Employment Policy.
- Wirt, John G.
1991 A New Federal Law on Vocational Education: Will Reform Follow? Washington, D.C.: U.S. Department of Labor.
- Wirt, John; Muraskin, Lana; Goodwin, David; Meyer, Robert
1989 Summary of Findings and Recommendations: Final Report (Vol. 1). Washington, D.C.: U.S. Department of Education, Office of Education, National Assessment of Vocational Education.
- Wirth, Arthur, G.
1986 "Job and Work-Two Models For Society and Education" in Benson, Norman and Lyons, Richard (eds.) Controversies Over the Purposes of Schooling and the Meaning of Work. Lanham, MD: University Press of America.
- Wolf, Wendy C.; Leiderman, Sally; Voith, Richard
1987 The California Conservation Corps: An Analysis of Short-Term Impacts on Participants. Philadelphia: Public/Private Ventures.
- Woodson, Robert L.
1981 Youth Crime and Urban Policy: A View from the Inner City. Washington, D.C.: American Enterprise Institute for Public Policy Research.
- Yagi, Kan
1987 State Disadvantaged Child Project in the Portland Public Schools. Portland, OR: Portland Public Schools, Department of Research, Evaluation, and Testing.
- Yamoor, Catherine M. and Mortimer, Jeylan T.
1990 "Age and Gender Differences in the Effects of Employment on Adolescent Achievement and Well-Being." Youth and Society, 22(2):225-240.

Young, M.B.; Hipps, J.; Hanberry, G.; Hopstock, P.; Goldsamt, M.R.
1980 An Assessment of State-Administered Programs of the Adult Education Act. Report submitted to the U.S. Department of Education, Office of Program Evaluation. Washington, D.C.: Development Associates.

Youthwork, Inc.
1980 Youth Knowledge Development Report. Washington, D.C.: U.S. Department of Labor.

Yudd, Regina and Nightingale, Demetra Smith
1990 The Availability of Information for Defining and Assessing Basic Skills Required for Specific Occupations. Washington, D.C.: Urban Institute.

Zambrana, Ruth E. and Aguirre-Molina, Marilyn
1987 "Alcohol Abuse Prevention Among Latino Adolescents: A Strategy for Intervention." Journal of Youth and Adolescence, 16(2):97-113.

PROGRAM GOVERNANCE AND MANAGEMENT

Abt Associates
1986 An Assessment of Funding Allocation Under the Job Training Partnership Act. Cambridge, MA: Abt Associates.

Abt Associates
1984 Measuring the Costs of JTPA Program Participation. Cambridge, MA: Abt Associates.

Agranoff, Robert
1991 "Human Services Integration: Past and Present Challenges in Public Administration." Public Administration Review, 51:533-542.

Aiken, Michael, et al.
1975 Coordinating Human Services. San Francisco: Jossey-Bass.

Alampresse, Judith and Hughes, Donna
1990 Study of Federal Funding Sources and Services for Adult Education: Phase I Preliminary Report. Washington, D.C.: U.S. Department of Education.

Program Governance and Management.

Alegria, Fernando and Figueroa, Jose

- 1986 Study of the JTPA Eight Percent Education Coordination and Grants Set-Aside and the Three Percent Set-Aside Training Program for Older Individuals. Washington, D.C.: National Governors' Association, Center for Policy Research and Analysis.

American Psychiatric Association

- 1980 Diagnostic and Statistical Manual of Mental Disorders. Washington, D.C.: American Psychiatric Association.

American Vocational Association

- 1990 AVA Guide to the Carl D. Perkins Vocational and Applied Technology Education Act. Alexandria, VA: American Vocational Association.

Appleby, Paul

- 1949 Policy and Administration. Tuscaloosa, AL: University of Alabama Press.

Bailey, Thomas R.

- 1988 "Market Forces and Private Sector Processes in Government Policy: The Job Training Partnership Act." Journal of Policy Analysis and Management, 7(2):300-315.

Bailis, Lawrence Neil

- 1991 "Case Management: The Key to Coordination of Employment and Training Programs for Homeless People." Paper prepared for Streamlining the Business of Government: Toward a State Human Investment System, a National Governors' Association conference.

Bailis, Lawrence Neil

- 1991 "Coordinate Unto Others as You Would Have Them Coordinate Unto You: The Importance of Self-Interest as a Key to Effective Collaboration." Paper prepared for Making the Connection: Coordinating Education and Training for a Skilled Workforce, a U.S. Department of Education conference.

Bailis, Lawrence Neil

- 1991 Evaluation of the Minnesota At-Risk Youth Demonstration Project. Saint Paul, MN: State Job Training Office.

- Bailis, Lawrence Neil
1991 "Metamorphosis versus Modest Changes: A Balanced Approach to Promoting Coordination among Federal Agencies that Administer Public Assistance Programs." Paper prepared for the National Commission on Employment Policy's Seminar on Improving Coordination in Government-Sponsored Public Assistance Programs.
- Bailis, Lawrence Neil
1989 An Assessment of the JTPA Role in State and Local Coordination Activities: Report on the Literature Review. Arlington, VA: James Bell Associates, Inc.
- Bailis, Lawrence Neil
1987 The More Things Change--A Study of the Status of PY 85 JTPA Coordination and PY 84 JTPA Program Activities. Washington, D.C.: National Commission for Employment Policy.
- Baj, John and Trott, Charles E.
1988 "State-Based Performance Standards Models for JTPA." Washington, D.C.: National Governors' Association.
- Barnow, Burt S.
1990 "The Effects of Performance Standards on State and Local Programs: Lessons for the Job Opportunities and Basic Skills Program." Conference paper. Madison, WI: University of Wisconsin-Madison, Institute for Research on Poverty.
- Barnow, Burt S. and Constantine, Jill
1988 Using Performance Management to Encourage Services to Hard-to-Serve Individuals in JTPA. Washington, D.C.: National Commission for Employment Policy.
- Barnow, Burt S.; Chasanov, Amy B.; Pande, Abhay
1990 Financial Incentives for Employer-Provided Worker Training: A Review of Relevant Experience in the U.S. and Abroad. A report prepared for the U.S. Department of Labor, Employment and Training Administration. Washington, D.C.: Urban Institute.

Program Governance and Management

Bartel, Ann P.

1989 Formal Employee Training Programs and Their Impact on Labor Productivity: Evidence From a Human Resources Survey. Cambridge, MA: National Bureau of Economic Research.

Barton, Paul E.

1990 From School to Work. Princeton, NJ: Educational Testing Service.

Bencor, Jonathan

1985 Parallel Systems: Redundancy in Government. Berkeley, CA: University of California Press.

Berkeley Planning Associates

1990 JTPA Staffing and Staff Training at the State and SDA Levels: Final Report. Washington, D.C.: U.S. Department of Labor.

Berwick, Donald and Knapp, Maria

1987 "Theory and Practice for Measuring Health Care Quality." Health Care Financing Review, Annual Supplement: 49-55.

Berwick, Donald; Godfrey, A. Blanton; Roessner, Jane

1991 Curing Health Care: New Strategies for Quality Improvement. San Francisco: Jossey-Bass Publishers.

Betsey, Charles L.; Hollister, Robinson G., Jr.; Papageorgiou, Mary R. (eds.)

1985 Youth Employment and Training Programs. Washington, D.C.: National Academy Press.

Binner, Paul R.

1986 "DRGs and the Administration of Mental Health Services." American Psychologist, 41(1):64-69.

Bishop, John H.

1989 "Incentives for Learning: Why American High School Students Compare So Poorly to their Counterparts Overseas" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.

- Blum, Barbara and Blank, Susan
1991 Children in the U.S. City: Opportunities, Problems, and Possibilities for Change. New York: Foundation for Child Development.
- Borus, Michael E.
1978 "Indicators of CETA Performance." Industrial and Labor Relations Review, 32:1-14.
- Brady, Elaine
1985 Is the Job Training Partnership Act Working? The 1985 NAB Survey of PIC Chairs and SDA Administrators. Washington, D.C.: National Alliance of Business.
- Brady, Elaine and Balfe, Kevin
1987 JTPA Operations at the Local Level: Coordination or Discord? Survey on the Relationships between Service Delivery Areas and Selected Human Service Agencies. Washington, D.C.: National Alliance of Business.
- Brewer, G.D.
1973 Politicians, Bureaucrats, and the Consultant. New York: Basic Books.
- Bruner, Charles
1991 Thinking Collaboratively: Ten Questions and Answers to Help Policy Makers Improve Children's Services. Washington, D.C.: William T. Grant Foundation.
- Brustein, Michael
The Legal and Fiscal Disjunction between the Carl Perkins Vocational Education Act and the Job Training Partnership Act. Washington, D.C.: National Commission for Employment Policy.
- Bullock, Paul
1985 Youth Training and Employment: From New Deal to New Federalism. Los Angeles, CA: University of California, Institute of Industrial Relations.
- Caiden, Gerald
1969 Administrative Reform. Chicago, IL: Aldine.

Program Governance and Management

Cain, H.P.

1971 "Confidential Presidential Task Forces." Ph.D. dissertation, Brandeis University, Heller Graduate School.

Carnevale, Anthony P.

1991 America and the New Economy. Alexandria, VA: American Society for Training and Development and U.S. Department of Labor, Employment and Training Administration.

Carnevale, Anthony P. and Gainer, Leila J.

1989 The Learning Enterprise. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.

Carnevale, Anthony P.; Gainer, Leila J.; Meltzer, Ann S.

1988 Workplace Basics: The Skills Employers Want. Alexandria, VA: American Society for Training and Development and U.S. Department of Labor, Employment and Training Administration.

Center for Human Resources

1991 "Assessing Skills Through Performance." Youth Programs, Summer: 11-14.

Center for Human Resources

1991 "Focusing on Employability: The Michigan Employment Skills System." Youth Programs, Summer: 1-10.

Center for Human Resources

1991 "Performance Assessment: Examples From the Field." Youth Programs, Summer: 15-17.

Center for Human Resources

1989 Working It Out: An Anthology of State and Local Performance Management Strategies Designed to Increase Services to Youth At Risk of Chronic Unemployment. Waltham, MA: Brandeis University, Center for Human Resources.

Choate, Patrick

1982 Retooling the American Workforce: Toward a National Training Strategy. Washington, D.C.: Northeast-Midwest Institute.

- Commission on the Skills of the American Workforce
1990 America's Choice: High Skills or Low Wages. The Report of the Commission on the Skills of the American Workforce. Rochester, NY: National Center on Education and the Economy.
- Committee for Economic Development
1985 Investing in Our Children: Business and the Public Schools. New York: Committee for Economic Development.
- Cook, Robert, et al.
1985 Implementation of the Job Training Partnership Act: Final Report. Rockville, MD: Westat.
- Council of Chief State School Officers
1991 "Students At Risk of School Failure." Washington, D.C.: Council of Chief State School Officers.
- Council of Chief State School Officers, Resource Center on Educational Equity
1991 Concerns.
- Creticos, Peter A. and Sheets, Robert G.
1990 Evaluating State-Financed, Workplace-Based Retraining Programs: A Report on the Feasibility of a Business Screening and Performance Outcome Evaluation System. Washington, D.C.: National Commission for Employment Policy.
- Darling-Hammond, Linda and Ascher, Carol
1991 Creating Accountability in Big City Schools. New York: ERIC Clearinghouse on Urban Education and National Center for Restructuring.
- Dement, Edward F.
1985 Final Report: State Job Training Coordinating Councils. Washington, D.C.: National Commission for Employment Policy.
- Deming, W. Edwards
1986 Out of the Crisis. Cambridge, MA: Massachusetts Institute of Technology.

Program Governance and Management

Dickinson, Katherine; West, Richard; Kogan, Deborah; Drury, David; Franks, Marlene; Schlichtmann, Laura; Vencill, Mary

1988 Evaluation of the Effects of JTPA Performance Standards on Clients, Services, and Costs. Washington, D.C.: National Commission for Employment Policy.

Dobyns, Lloyd and Crawford-Mason, Clare

1991 Quality or Else: The Revolution in World Business. Boston: Houghton-Mifflin.

Donabedian, Avedis

1982 "The Quality of Medical Care" in Graham, Nancy (ed.) Quality Assurance in Hospitals: Strategies for Assessment and Implementation. Rockville, MD: Aspen Systems Corporation.

Downs, George W. and Larkey, Patrick D.

1986 The Search for Government Efficiency: From Hubris to Helplessness. Philadelphia: Temple University Press.

Dryfoos, Joy G.

1991 States Responses to Youth At Risk Issues. New York: Carnegie Corporation.

Dryfoos, Joy G.

1990 Adolescents At Risk: Prevalence and Prevention. New York: Oxford University Press.

Eccles, Robert G.

1991 "The Performance Measurement Manifesto." Harvard Business Review, January-February: 131-137.

Education and Human Services Consortium

1991 What It Takes: Structuring Interagency Partnerships to Connect Children and Families with Comprehensive Services. Washington, D.C.: William T. Grant Foundation.

Education Writers Association

1990 Training for Work. What the U.S. Can Learn from Europe. Washington, D.C.: Education Writers Association.

- Eggers, Paul W.
1987 "Prospective Payment System and Quality: Early Results and Research Strategy." Health Care Financing Review, Annual Supplement: 29-37.
- Ellwood, Paul M., et al.
1973 Assuring the Quality of Healthcare. Minneapolis, MN: Interstudy.
- Figueroa, Jose
1986 "Bridges to Self-Sufficiency: A Study of Work and Welfare Programs and Their Linkages with the Employment and Training System." Washington, D.C.: National Governors' Association, Center for Policy Research and Analysis.
- Figueroa, Jose and Ganzglass, Evelyn
1988 Using JPTA Performance Standards as a State Policy Tool. Washington, D.C.: National Governors' Association.
- Frawley, Sandra J.
1977 "Bureaucratic Competition and Policy Implementation." Ph.D. dissertation, Brandeis University, Heller Graduate School.
- Friedlander, Daniel
1988 Subgroup Impacts and Performance Indicators for Selected Welfare Employment Programs. New York: Manpower Demonstration Research Corporation.
- Friedlander, Daniel and Long, David
1987 A Study of Performance Measures and Subgroup Impacts in Three Welfare Employment Programs. New York: Manpower Demonstration Research Corporation.
- Gainer, William J.
1986 Job Training Partnership Act Amendments of 1986. Washington, D.C.: U.S. Government Printing Office.
- Gay, Robert and Borus, Michael E.
1980 "Validating Performance Indicators in Employment and Training Programs." Journal of Human Resources, 15:30-48.
- Geigle, Ron and Jones, Stanley B.
1990 "Outcome Measurement: A Report from the Front." Inquiry, 27:7-13.

Program Governance and Management

- George, Rosemary
1987 Youth Policies and Programs in Selected Countries. Washington, D.C.: William T. Grant Foundation.
- Geraci, Vincent J.
1984 "Short-Term Indicators of Job Training Program Effects on Long-Term Participant Earnings." Austin, TX: University of Texas-Austin, Center for Economic Research.
- German Marshall Fund of the United States
1990 "A Winning European Formula: Schools + Industry = Work-Readiness." Transatlantic Perspectives, No. 21.
- Glover, Robert W.
1988 Expanding the Use of Apprenticeship. Washington, D.C.: U.S. Department of Labor, Bureau of Apprenticeship and Training.
- Gormley, William, Jr.
1989 Taming the Bureaucracy: Muscles, Prayers, and Other Strategies. Princeton, NJ: Princeton University Press.
- Graham, Nancy (ed.)
1982 Quality Assurance in Hospitals: Strategies for Assessment and Implementation. Rockville, MD: Aspen Systems Corporation.
- Grinker Associates, Inc.
1986 An Independent Sector Assessment of the Job Training Partnership Act. Final Report: Program Year 1985. Prepared for the National Commission for Employment Policy, The Ford Foundation, Charles Stewart Mott Foundation and The Rockefeller Foundation. New York: Grinker Associates.
- Grubb, W. Norton
1985 Preparing Youth for Work: The Dilemmas of Education and Training Programs. Paper presented at the Symposium of Adolescents' Orientation Toward Work. Berkeley, CA: University of California, Institute for Human Development.

- Grubb, W. Norton; Kallman, Judith; Castellano, Marisa; Brown, Cynthia; Bradby, Denise
1991 Readin', Writin', and 'Rithmetic One More Time: The Role of Remediation in Vocational Education and Job Training Programs. A report to Congress, the Secretary of Education and the Secretary of Labor. Berkeley, CA: National Center for Research in Vocational Education.
- Grubb, W. Norton; McDonnel, Lorraine; Brown, Cynthia; Kaufman, Phillip; Lederer, John
1990 Local Systems of Work-Related Education and Training: Diversity, Interdependence, and Questions of Effectiveness. A report for the Office of Vocational and Adult Education. Berkeley, CA: National Center for Research in Vocational Education.
- Grubb, W. Norton; McDonnel, Lorraine; Brown, Cynthia; Kaufman, Phillip; Lederer, John
1990 Order Amidst Complexity: The Status of Coordination Among Vocational Education, Job Training Partnership Act, and Welfare-to-Work Programs. Berkeley, CA: National Center for Research in Vocational Education.
- Grubb, W. Norton; Brown, Cynthia; Kaufman, Phillip; Lederer, John
1989 Innovation Versus Turf: Coordination Between Vocational Education and Job Training Partnership Act Programs. Berkeley, CA: National Center for Research in Vocational Education.
- Gula, Annette and King, Christopher
1990 Welfare-to-Work Program Coordination in Texas. Austin, TX: Center for the Study of Human Resources.
- Guterman, Stuart and Dobson, Allen
1986 "Impact of Medicare Prospective Payment System for Hospitals." Health Care Financing Review, 7(3):97-114.
- Hahn, Andrew and Lerman, Robert
1984 What Works in Youth Employment Policy? Washington, D.C.: National Planning Association.
- Hamilton, Stephen F.
1990 Essential Elements of the European Apprenticeship System and American Adaptation. Presentation at the Conference on Youth Apprenticeship, American Style. Washington, D.C.: William T. Grant Foundation.

Program Governance and Management

- Hamilton, Stephen F.
1990 "Is There Life After High School? Developing Apprenticeship in America." The Harvard Education Letter, 6(4):1-5.
- Haney, Walter and Madaus, George
1989 "Searching for Alternatives to Standardized Tests: Whys, Whats, and Withers." Phi Delta Kappan, May.
- Haveman, Robert H.
1977 A Decade of Federal Antipoverty Programs: Achievements, Failures, and Lessons. New York: Academic Press.
- Heidenheimer, Arnold J.; Hecl, Hugh; Adams, Carolyn Teich
1983 Comparative Public Policy: The Politics of Social Choice in Europe and America. New York: St. Martin's Press.
- Hickey, Delina R.
1986 Coordination Between JTPA and Vocational Education: A Case Study of the Eight Percent Set-Aside. Columbus, OH: National Center for Research in Vocational Education.
- Hirsch, Werner and Sonenblum, Sidney (eds.)
1973 Governing Urban America in the 1970s. New York: Praeger.
- Honadle, Beth and Howitt, Arnold
1986 Perspectives on Management Capacity Building. Albany, NY: State University of New York Press.
- Hoyt, Kenneth B.
1990 "A Proposal for Making Transition From Schooling to Employment an Important Component of Educational Reform." Future Choices: Toward a National Youth Policy, 2(2):73-86.
- Jennison, Kathleen
1992 "Total Quality Management--Fad or Paradigmatic Shift?" in Couch, J.B. (ed.) Health Care Quality Management for the 21st Century. Forthcoming.
- Jennison, Kathleen and Jordan, Harmon
1991 "A Quality Information System for Health Care TQM." Presented at the Juran Institute Conference, Atlanta. Brookline, MA: Harvard Community Health Plan.

Johnston, Janet W.

- 1987 "The Job Training Partnership Act--A Report by the National Commission for Employment Policy." Washington, D.C.: National Commission for Employment Policy.

Johnston, William B. and Packer, Arnold

- 1987 Workforce 2000: Work and Workers for the 21st Century. Indianapolis, IN: Hudson Institute.

Jones, Robert

- 1985 Oversight Hearing on the Implementation of the Job Training Partnership Act. Testimony in the U.S. Congress, House Committee on Education and Labor, Subcommittee on Employment Opportunities. Washington, D.C.: U.S. Government Printing Office.

Joyce, Peter J.

- 1991 "Are We Prepared for a Skills Mismatch? An Analysis of the Job Training Partnership Act's Performance Standards System in Washington and Connecticut." Ph.D. dissertation, Harvard University, Graduate School of Education.

Kammerman, Sheila and Kahn, Alfred

- 1976 Social Services in the United States. Philadelphia: Temple University Press.

Kane, Rosalie

- 1990 Case Management: What Is It Anyway? Minneapolis, MN: University of Minnesota, Medical School, Long-Term Care Decisions Resource Center.

King, Christopher T.

- 1988 Cross-Cutting Performance Management Issues in Human Resource Programs. Washington, D.C.: National Commission for Employment Policy.

King, Christopher T. and Pittman, Laura L.

- 1987 Performance Standards in Job Training and Job Placement Programs. Washington, D.C.: National Association of Counties.

Kingsley, Christopher

- 1989 A Guide to Case Management for At-Risk Youth. Waltham, MA: Brandeis University, Center for Human Resources.

Program Governance and Management

Kirst, Michael W.

1990 Accountability: Implications for State and Local Policymakers.
Washington, D.C.: U.S. Government Printing Office.

Kogan, Deborah; Dickinson, Katherine; Means, Barbara; Strong, Marlene

1990 Improving the Quality of Training Under JTPA. Washington, D.C.: U.S.
Department of Labor, Employment and Training Administration.

Kusserow, Richard P.

1991 Services Integration: A Twenty Year Retrospective. Washington, D.C.:
U.S. Department of Health and Human Services, Office of Inspector
General.

Laventhol and Horwath

1988 Using Performance Management to Achieve Quality Program Results.
Washington, D.C.: National Commission for Employment Policy.

Laventhol and Horwath

"Improving the Success of JTPA Coordination Efforts: An Idea Paper for
the Florida Job Training System." Washington, D.C.: National
Commission for Employment Policy.

Leemans, Arne (ed.)

1976 The Management of Change in Government. The Hague: Martinus
Nuhoff.

Leichter, Howard M.

1979 A Comparative Approach to Policy Analysis: Health Care Policy in Four
Nations. New York: Cambridge University Press.

Lerman, Robert I. and Pouncy, Hillard

1990 "The Compelling Case for Youth Apprenticeships." The Public Interest,
No. 101.

Lerman, Robert I. and Pouncy, Hillard

1990 Why America Should Develop A Youth Apprenticeship System.
Washington, D.C.: Progressive Policy Institute.

Levin, Henry

1983 "Individual Entitlements" in Financing Recurrent Education. Newbury
Park, CA: Sage Publications.

- Levin, Henry M.
1977 "Post-Secondary Entitlements: An Exploration" in Entitlement Studies. Washington, D.C.: National Institute of Education.
- Levitan, Sar and Gallo, Frank
1988 A Second Chance: Training for Jobs. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Levitan, Sar A. and Mangum, Garth L. (eds.)
1981 The T in CETA. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Levitan, Sar A. and Taggart, Robert
1976 The Promise of Greatness. Cambridge, MA: Harvard University Press.
- Levitan, Sar A.; Mangum, G.; Pines, M.
1989 A Proper Inheritance: Investing in the Self-Sufficiency of Poor Families. Washington, D.C.: George Washington University.
- Levy, Janet
1989 Joining Forces: A Report from the First Year. Alexandria, VA: National Association of State Boards of Education.
- Lewis, Morgan
1988 Vocational Education-Job Training Partnership Act Coordination--Second Annual Report. Columbus, OH: National Center for Research in Vocational Education.
- Lewis, Morgan; Ferguson, Marilyn; Card, Michael
1987 Vocational Education-Job Training Partnership Act Coordination--First Annual Report. Columbus, OH: National Center for Research in Vocational Education.
- Liebert, Roland
1976 Disintegration and Political Action: The Changing Functions of City Government. New York: Academic Press.
- Lindblom, Charles
1968 The Policy-Making Process. Englewood Cliffs, NJ: Prentice-Hall.

Program Governance and Management

Lohr, Kathleen

1985 Peer Review Organizations: Quality Assurance in Medicare. Santa Monica, CA: Rand Corporation.

Lynch, Lisa M.

1989 Private Sector Training and Its Impact on the Earnings of Young Workers. Cambridge, MA: National Bureau of Economic Research.

MacDonald, Don

1987 "Norway" in Rowat, Donald (ed.) Public Administration in Developed Democracies: A Comparative Study. New York: Dekker.

Mangum, Garth L.

1973 A Decade of Manpower Development and Training. Salt Lake City, UT: Olympus Publishing Company.

McDonnell, Lorraine M. and Elmore, Richard F.

1987 Alternative Policy Instruments. Santa Monica, CA: Rand Corporation.

MDC, Inc.

1982 "Tracking the Transition--Summary and Analysis: Early State-Level Preparations for JTPA Implementation." Washington, D.C.: National Governors' Association.

Melaville, Atelia and Blank, Martin

1991 What It Takes: Structuring Interagency Partnerships to Connect Children and Families with Comprehensive Services. Washington, D.C.: William T. Grant Foundation.

Millon, Theodore

1983 "The DSM-III: An Insider's Perspective." American Psychologist, July: 804-814.

Mirengoff, William; Rindler, Lester; Greenspan, Harry; Harris, Charles

1982 CETA: Accomplishments, Problems, Solutions. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Mudd, John

1984 Neighborhood Services: Making Big Cities Work. New Haven: Yale University Press.

Murray, Charles

1984 Losing Ground: American Social Policy, 1950-1980. New York: Basic Books.

National Alliance of Business

1986 Is the Job Training Partnership Working? Washington, D.C.: National Alliance of Business.

National Alliance of Business

1986 Making the Link: Coordinating Economic Development and Employment and Training. Washington, D.C.: National Alliance of Business.

National Alliance of Business

1985 What's Happening with JTPA? Washington, D.C.: National Alliance of Business.

National Association of Counties, National Governors' Association and National Association of Private Industry Councils

1986 Beyond the Model: An Approach to Negotiating JTPA Performance Standards. Washington, D.C.: National Association of Counties.

National Commission for Employment Policy

1990 Training Hispanics: Implications for the JTPA System. Washington, D.C.: National Commission for Employment Policy.

National Commission for Employment Policy

1988 Developing Effective JTPA Performance Standards Incentive Policies: A Technical Assistance Guide. Washington, D.C.: National Commission for Employment Policy.

National Commission for Employment Policy

1988 Who is Served by JTPA Programs? Washington, D.C.: National Commission for Employment Policy.

National Commission for Employment Policy

1981 Seventh Annual Report: The Federal Interest in Employment and Training. Washington, D.C.: National Commission for Employment Policy.

Program Governance and Management

- National Commission on Excellence in Education
1983 A Nation At Risk: The Imperative for Education Reform. Washington, D.C.: U.S. Government Printing Office.
- National Commission on Testing and Public Policy
1990 From Gatekeeper to Gateway: Transforming Testing in America. Chestnut Hill, MA: Boston College, National Commission on Testing and Public Policy.
- National Conference on Social Welfare
1985 Report to the President of the Committee on Economic Security. 50th Anniversary Edition. Washington, D.C.: National Conference on Social Welfare.
- National Governors' Association
1990 Educating America: State Strategies for Achieving the National Education Goals. A report of the Task Force on Education. Washington, D.C.: National Governors' Association.
- National Governors' Association
1987 Making America Work: Bringing Down the Barriers. Washington, D.C.: National Governors' Association.
- National Governors' Association
1983 The Role of Training in A Changing Economy. Washington, D.C.: National Governors' Association.
- National Governors' Association and National Alliance of Business
1985 Report on Joint Survey of State Provision of JTPA Technical Assistance. Washington, D.C.: National Alliance of Business.
- Nightingale, Demetra Smith
1985 Federal Employment and Training Policy Changes During the Reagan Administration: State and Local Responses. Washington, D.C.: Urban Institute.
- Nothdurft, William E.
1990 SchoolWorks: Reinventing Public Schools to Create the Workforce of the Future. Washington, D.C.: German Marshall Fund of the United States.

- Nothdurft, William E.
1990 Youth Apprenticeship, American Style: A Strategy for Expanding School and Career Opportunities. A report of a conference. Somerville, MA: Jobs for the Future.
- Orfield, Gary and Slessarev, Helene
1986 Job Training Under the New Federalism. Chicago: University of Chicago.
- Osterman, Paul
1991 "Is There a Problem with the Youth Labor Market and If So How Should We Fix It?" A paper prepared for the Joint Center for Political and Economic Studies.
- Osterman, Paul
1989 "Training People for Real Jobs: Europe's Investment in Worker Education." Transatlantic Perspectives, No. 19.
- Osterman, Paul
1988 Employment Futures: Reorganization, Dislocation, and Public Policy. New York: Oxford University Press.
- Panel on Quality Control of Family Assistance Programs
1988 From Quality Control to Quality Improvement in AFDC and Medicaid. Washington, D.C.: National Academy Press.
- Panel on Quality Control of Family Assistance Programs
1987 Rethinking Quality Control: A New System for the Food Stamp Program. Washington, D.C.: National Academy Press.
- Peters, Thomas J. and Waterman, Robert H., Jr.
1982 In Search of Excellence: Lessons from America's Best-Run Companies. New York: Harper and Row.
- Public/Private Ventures
1990 A Practitioner's View. Philadelphia: Public/Private Ventures.
- Resnick, Lauren B. and Resnick, Daniel
1989 Assessing the Thinking Curriculum: New Tools for Education Reform. Prepared for the National Commission on Testing and Public Policy. Pittsburgh, PA: University of Pittsburgh, Learning Research and Development Center.

Program Governance and Management

- Reubens, Beatrice G.
1983 Youth at Work: An International Survey. Totowa, NJ: Rowman and Allanheld, Publishers.
- Reubens, Beatrice G.; Harrison, John A.C.; Rupp, Kalman
1981 Youth Labor Force, 1945-1995: A Cross-National Analysis. Totowa, NJ: Rowman and Allanheld, Publishers.
- Richardson, Philip, et al.
1985 "Assessment of the Implementation and Effects of the JTPA Title V Wagner-Peyser Amendments: Phase II Final Report." Silver Spring, MD: Macro Systems, Inc.
- Richardson, Philip, et al.
1985 "Assessment of the Implementation and Effects of the JTPA Title V Wagner-Peyser Amendments: Phase I Final Report." Silver Spring, MD: Macro Systems, Inc.
- Ridgeway, V.F.
1956 "Dysfunctional Consequences of Performance Measures." Administrative Science Quarterly, Vol. 1.
- Robinson, Estelle R. and Mastny, Aleta Y.
1989 Linking Schools and Community Services: A Practical Guide. New Brunswick, NJ: Rutgers University, School of Social Work, Center for Community Education.
- Rodriguez, Alex R.
1983 "Psychological and Psychiatric Review at CHAMPUS." American Psychologist, August: 941-947.
- Rogers, David and Whetten, David
1982 Interorganizational Coordination: Theory, Research and Implementation. Ames, IA: Iowa State University Press.
- Rosenbaum, James E.
1990 "What If Good Jobs Depended on Good Grades?" American Educator, 13:4.

- Rosenbaum, James E.
 1989 "Empowering Schools and Teachers: A New Link to Jobs for the Non-College Bound" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, National Commission on Workforce Quality and Labor Market Efficiency.
- Rubin, Mary and Zornitsky, Jeff
 1988 Serving AFDC Recipients: Initial Findings on the Role of Performance Standards. Washington, D.C.: National Commission for Employment Policy.
- Sandell, Steven H. and Rupp, Kalman
 1988 Who is Served in JTPA: Patterns of Participation and Intergroup Equity. Washington, D.C.: National Commission for Employment Policy.
- Schlechty, Phillip
 1991 Schools for the 21st Century. San Francisco: Jossey-Bass.
- Schorr, Lisbeth B.
 1988 Within Our Reach: Breaking the Cycle of Disadvantage. New York: Doubleday.
- Schorr, Lisbeth B., et al. (eds.)
 1991 Effective Services for Young Children: Report of a Workshop. Washington, D.C.: National Academy Press.
- Sheets, Robert; Hahn, Andrew; Lerman, Robert; Butler, Erik
 1988 Who Will Train and Educate Tomorrow's Workers? The Financing of Non-College-Bound Young Workers' Recurrent Education. Washington, D.C.: William T. Grant Foundation, Commission on Work, Family and Citizenship.
- Skocpol, Theda
 1989 "Targeting Within Universalism: Politically Viable Policies to Combat Poverty in the United States." A paper prepared for the Conference on the Truly Disadvantaged, Evanston, IL, sponsored by the Social Science Research Council, Committee for Research on the Urban Underclass.

Program Governance and Management

- Smith, Thomas; Moorhouse, Mary; Trist, Carolyn
1988 A Practitioner's Guide: Strategies, Programs, and Resources for Youth Employability Development. Philadelphia: Public/Private Ventures.
- Snedeker, Bonnie and Snedeker, David
1978 CETA: Decentralization on Trial. Salt Lake City, UT: Olympus.
- Solow, Katherine
1986 The Job Training Partnership Act Service to Women. New York: Grinker, Walker and Associates.
- Southern Institute for Human Resources
1978 Coordination: WIN and CETA. A Guide to Increasing the Enrollment of AFDC Recipients in CETA Programs. Atlanta: Southern Institute for Human Resources.
- SRI International and Berkeley Planning Associates
1990 Developing Effective JTPA Performance Standards Incentive Policies: A Technical Assistance Guide. Washington, D.C.: National Commission for Employment Policy.
- Strumpf, Lori
1991 "Speech [on TQM] to the North Central Indiana Annual Dinner," October 4, 1991. Washington, D.C.: Center for Remediation Design.
- Strumpf, Lori
1988 "Program Standards: A New Chance for Employability." Youth Programs, Spring: 8-15.
- Strumpf, Lori
1986 A PIC Member's Guide to Performance Standards: A Framework for Success. Washington, D.C.: National Association of Private Industry Councils.
- Svenson, Ray and Brown, Mark G.
1990 "What Total Quality Management Really Means." Prepared for the Journal for Quality and Participation. Naperville, IL: Svenson and Wallace.

- Taggart, Robert
1981 A Fisherman's Guide. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Teitel, L.
1989 Coordinating Education and Employment Training. Boston: State Council on Vocational Education.
- Treanor, William
1988 Barriers to Developing Comprehensive and Effective Youth Services. Washington, D.C.: William T. Grant Foundation, Commission on Work, Family and Citizenship.
- Trott, Charles E. and Baj, John
1987 Development of JTPA Title II-A Performance Standards Models for the States of Region V. DeKalb, IL: Northern Illinois University, Center for Governmental Studies, Human Resource Policy Program.
- Trutko, John; Bailis, Lawrence; Barnow, Burt; French, Stephen
1990 An Assessment of the JTPA Role in State and Local Coordination Activities: Final Report. Arlington, VA: James Bell Associates, Inc.
- U.S. Conference of Mayors
1991 "A Human Resource Investment Policy--A Challenge to Mayors." Washington, D.C.: U.S. Conference of Mayors.
- U.S. Congress, Committee on Labor and Public Welfare
1964 Toward Full Employment: Proposals for a Comprehensive Employment and Manpower Policy in the United States. A report prepared for the U.S. Congress. Washington, D.C.: U.S. Government Printing Office.
- U.S. Congress, Office of Technology Assessment
1990 "Human Resources for Competitiveness" in Worker Training: Competing in the New International Economy. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Education
1991 America 2000: An Education Strategy. Washington, D.C.: U.S. Department of Education.

Program Governance and Management

U.S. Department of Education

1981 The Vocational Education Study: The Final Report. Washington, D.C.: U.S. Department of Education.

U.S. Department of Health and Human Services

1987 Report on the Progress and Status of Services Integration Pilot Projects: First Year Planning Phase. Washington, D.C.: U.S. Department of Health and Human Services, Office of Policy Planning and Legislation, Office of Human Development Services.

U.S. Department of Labor

1991 Proposals to Amend JTPA: H.R. 2496. Washington, D.C.: U.S. Department of Labor.

U.S. Department of Labor

1990 Guide for Setting JTPA Title II-A and Title III Performance Standards for PY 1990. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.

U.S. Department of Labor

1990 "Job Training Partnership Act: Titles II-A and III Performance Standards for Program Years (PY) 1990-91." Federal Register, 55(72):7252-7256.

U.S. Department of Labor

1990 "Job Training Partnership Act: Proposed Performance Standards for Program Years (PY) 1990 and 1991." Federal Register, 55(4):514-517.

U.S. Department of Labor

1989 "Performance Standards for PY 1990 and Beyond: Summary of Technical Issues and Options." Washington, D.C.: U.S. Department of Labor, Employment and Training Administration, Adult and Youth Performance Standards Unit.

U.S. Department of Labor

1989 Working Capital: JTPA Investments for the 90s. A report of the Job Training Partnership Act Advisory Committee. Washington, D.C.: U.S. Department of Labor.

U.S. Department of Labor

1988 Guide for Setting JTPA Title II-A Performance Standards for PY 1988. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration, Office of Strategic Planning and Policy Development.

U.S. Department of Labor

1988 "Job Training Partnership Act: Review of Experience." Federal Register, 53(156):30483-30490.

U.S. Department of Labor

1988 "JTPA Annual Status Report Instructions for PY 1988." Federal Register, 53(44):7256.

U.S. Department of Labor

1988 "Job Training Partnership Act: Performance Standards for Program Years (PY) 1988-89." Federal Register, 53(44):7252-7256.

U.S. Department of Labor

1987 "Job Training Partnership Act: Proposed Performance Standards for Program Year (PY) 1988." Federal Register, 52(241):47771-47774.

U.S. Department of Labor

1986 "Issues in Establishing Performance Standards for JTPA Title II-A Youth Programs for PY 1986." Washington, D.C.: U.S. Department of Labor, Office of Performance Management and Evaluation, Adult and Youth Standards Unit.

U.S. Department of Labor

1984 "Performance Standards for PY 1984." Federal Register, 49(22):4052-4056.

U.S. Department of Labor, Office of Inspector General

1990 Semiannual Report, October 1, 1989-March 31, 1990. Washington, D.C.: U.S. Department of Labor, Office of Inspector General.

U.S. Department of Labor, Office of Inspector General

1989 Semiannual Report, April 1-September 30, 1989. Washington, D.C.: U.S. Department of Labor, Office of Inspector General.

U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills

1991 What Work Requires of Schools: A SCANS Commission Report for America 2000. Washington: D.C.: U.S. Department of Labor.

Program Governance and Management

U.S. General Accounting Office

1991 Job Training Partnership Act: Inadequate Oversight Leaves Program Vulnerable to Waste, Abuse, and Mismanagement. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1991 Overlapping Federal Employment and Training Programs. Briefing for the U.S. Senate Committee on Labor and Human Resources. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1990 Job Training Partnership Act: Youth Participant Characteristics, Services, and Outcomes. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1990 Management Practices: U.S. Companies Improve Performance Through Quality Efforts. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1990 Training Strategies. Preparing Noncollege Youth for Employment in the U.S. and Foreign Countries. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989 Job Training Partnership Act: Comments on H.R. 2039, the JTPA Amendments of 1989. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989 Job Training Partnership Act: Information on Training, Placements, and Wages of Male and Female Participants. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989 Job Training Partnership Act: Services and Outcomes for Participants with Differing Needs. Washington, D.C.: U.S. General Accounting Office.

U.S. General Accounting Office

1989 Senate Bill 543: The Job Training Partnership Act Youth Employment Amendments of 1989. Washington, D.C.: U.S. General Accounting Office.

- U.S. General Accounting Office
1989 Training Programs. Information on Fiscal Years 1989 and 1990 Appropriations. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1989 Vocational Education: Opportunity to Prepare for the Future. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1988 Job Training Partnership Act: Participants, Services, and Outcomes. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1987 Youth Job Training: Problems Measuring Attainment of Employment Competencies. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985 Concerns Within the Job Training Community Over Labor's Ability to Implement the Job Training Partnership Act. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985 Job Training Partnership Act: An Analysis of Support Cost Limits and Participant Characteristics. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985 Job Training Partnership Act: Initial Implementation of Program for Disadvantaged Youth and Adults. Washington, D.C.: U.S. General Accounting Office.
- U.S. General Accounting Office
1985 Strong Leadership Needed to Improve Management at the Department of Labor. Washington, D.C.: U.S. General Accounting Office.
- U.S. House of Representatives, Committee on Education and Labor
1982 Job Training Partnership Act: Conference Report, Report No. 97-889. Washington, D.C.: U.S. Government Printing Office.

Program Governance and Management

- U.S. House of Representatives, Committee on Education and Labor
1982 Job Training Partnership Act: Report, Report No. 97-537. Washington, D.C.: U.S. Government Printing Office.
- Urban Management Consultants of San Francisco
1976 CETA and HEW Programs. Washington, D.C.: U.S. Department of Health, Education and Welfare.
- Vaughan, Roger
1983 Education and Training for Industrial Policy. Testimony before the U.S. House Banking Committee, Subcommittee on Economic Stabilization. Washington, D.C.: U.S. Government Printing Office.
- Vaughan, Roger and Berryman, Sue E.
1989 "Employer-Sponsored Training: Current Status, Future Possibilities." National Center on Education and Employment Brief, No. 4.
- Vaughan, Roger; Pollard, Robert; Dyer, Barbara
1984 "Investing in Human Capital" in The Wealth of States: Policies for a Dynamic Economy. Washington, D.C.: Council for State Planning Agencies.
- Vickers, Margaret
1991 Building a National System for School to Work Transition: Lessons from Britain and Australia. Somerville, MA: Jobs for the Future.
- Victor, Kirk
1990 "Helping the Haves." National Journal, April 14.
- Walker, Gary; Feldstein, Hilary; Solow, Katherine
1985 An Independent Sector Assessment of the Job Training Partnership Act. Washington, D.C.: National Commission for Employment Policy.
- Walker, Gary C.; Grinker, William; Seessel, Thomas; Smith, R.C.; Cama, Vincent
1985 An Independent Sector Assessment of the Job Training Partnership Act. Phase II: The Initial Implementation. Prepared for the National Commission for Employment Policy, The Ford Foundation, Charles Stewart Mott Foundation and The Rockefeller Foundation. Washington, D.C.: National Commission for Employment Policy.

- Walker, Gary C.; Grinker, William; Seessel, Thomas; Smith, R.C.; Cama, Vincent
1984 An Independent Sector Assessment of the Job Training Partnership Act. Phase I: The Initial Transition. Prepared for the National Commission for Employment Policy, The Ford Foundation, Charles Stewart Mott Foundation and The Rockefeller Foundation. Washington, D.C.: National Commission for Employment Policy.
- Watson, Bernardine and Jaffe, Natalie
1990 The Practitioner's View: New Challenges in Serving High-Risk Youth. Philadelphia: Public/Private Ventures.
- Weiss, Janet
1981 "Substance Versus Symbol in Administrative Reform: The Case of Human Service Integration." Policy Analysis, 7(1):21-46.
- Westat, Inc.
1984 State-Level Implementation of the Job Training Partnership Act. Rockville, MD: Westat, Inc.
- William T. Grant Foundation
1991 New Partnerships. Education's Stake in the Family Support Act of 1988. Washington, D.C.: William T. Grant Foundation.
- William T. Grant Foundation, Commission on Work, Family and Citizenship
1988 The Forgotten Half: Non-College Youth in America. Washington, D.C.: William T. Grant Foundation.
- William T. Grant Foundation, Commission on Work, Family and Citizenship
1988 The Forgotten Half: Pathways to Success for America's Youth and Young Families. Washington, D.C.: William T. Grant Foundation.
- Wills, Joan L.
1991 "Cracks in the Foundation" in Voices from the Field: 30 Expert Opinions on America 2000, the Bush Administration Strategy to "Reinvent" America's Schools. Washington, D.C.: William T. Grant Foundation and Institute for Educational Leadership.
- Wilson, William Julius
1987 The Truly Disadvantaged. Chicago: University of Chicago Press.

Youth and the Labor Market

Zornitsky, Jeffrey and Rubin, Mary

1988 Establishing a Performance Management System for Targeted Welfare Programs. Washington, D.C.: National Commission for Employment Policy.

Zornitsky, Jeffrey, et al.

1986 Establishing a Post-Program Performance Management System for Employment and Training Programs. Cambridge, MA: Abt Associates.

YOUTH AND THE LABOR MARKET

Abraham, Katherine

1983 "Structural/Frictional versus Demand-Deficient Unemployment." American Economic Review, September.

Acs, Gregory and Danziger, Sheldon

1990 "Educational Attainment, Industrial Structure, and Male Earnings, 1973-1987." Unpublished paper, University of Michigan.

Altonji, Joseph and Card, David

1989 "The Effects of Immigration on the Labor Market Outcomes of Natives" in Abood, J. and Freeman, R. (eds.) Immigration, Trade, and the Labor Market. Chicago, IL: University of Chicago Press.

Anderson, Elijah

1991 "Neighborhood Effects on Teenage Pregnancy" in Jencks, Christopher and Peterson, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.

Bailey, Thomas

1990 "Changes in the Nature and Structure of Work: Implications for Skill Requirements and Skill Formation." Berkeley, CA: University of California, National Center for Research in Vocational Education.

Baily, Martin N. and Blair, Margaret

1988 "Productivity and American Management" in Litan, Robert E. and Lawrence, Robert Z. (eds.) American Living Standards. Washington, D.C.: Brookings Institution.

- Ballen, John and Freeman, Richard
1986 "Transitions Between Employment and Nonemployment" in Freeman, Richard B. and Holzer, Harry J. (eds.) The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.
- Barnow, Burt and Aron, Laudan
1989 "Survey of Government-Provided Training Programs" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.
- Bartel, Ann and Lichtenberg, Frank
1987 "The Comparative Advantage of Educated Workers in Implementing New Technology." Review of Economics and Statistics, February.
- Barton, Paul and Kirsch, Irwin
1990 "Workplace Competencies: The Need to Improve Literacy and Employment Readiness." Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Bassi, Lauri and Ashenfelter, Orley
1986 "The Effect of Direct Job Creation and Training Programs on Low-Skill Workers" in Danziger, Sheldon and Weinberg, Daniel (eds.) Fighting Poverty: What Works and What Doesn't. Cambridge, MA: Harvard University Press.
- Becker, Brian and Hills, Stephen
1983 "The Long-Run Effects of Job Changes and Unemployment Among Male Teenagers." Journal of Human Resources, Spring.
- Bendick, Marc and Egan, Mary Lou
1988 "JOBS: Employment Opportunities in the Washington Metropolitan Area for Persons with Limited Employment Qualifications." Washington, D.C.: Greater Washington Research Center.
- Bishop, John
1990 "The Deskilling versus Upskilling Debate: The Role of BLS Projections." Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies.

Youth and the Labor Market

- Bishop, John
1990 "The Productivity Consequences of What Is Learned in High School." Journal of Curriculum Studies, 22(2):101.
- Bishop, John
1989 "Incentives for Learning: Why American High School Students Compare So Poorly to Their Overseas Counterparts" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.
- Bishop, John
1989 "Is the Test Score Decline Responsible for the Productivity Growth Decline?" American Economic Review, March.
- Bishop, J. and Carter, S.
1991 "The Worsening Shortage of College Graduate Workers." Education Evaluation and Policy Analysis, 13(3):221.
- Blackburn, McKinley; Bloom, David; Freeman, Richard
1989 "The Declining Economic Position of Less-Skilled American Males." NBER Working Paper No. 3186. Cambridge, MA: National Bureau of Economic Research.
- Borjas, George
1986 "The Demographic Determinants of the Demand for Black Labor" in Freeman, Richard B. and Holzer, Harry J. (eds.) The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.
- Bound, John and Freeman, Richard
1990 "What Went Wrong? The Erosion of the Relative Earnings of Young Black Men in the 1980s." Unpublished paper, Harvard University.
- Bound, John and Holzer, Harry
1991 "Industrial Shifts, Skill Levels, and the Labor Market for White and Black Males." Unpublished paper, Michigan State University.
- Bound, John and Johnson, George
1989 "Changes in the Structure of Wages During the 1980s: An Evaluation of Alternative Explanations." NBER Working Paper No. 2983. Cambridge, MA: National Bureau of Economic Research.

- Bureau of National Affairs
1988 "Recruiting and Selection Procedures." Personnel Policies Forum Survey No. 146, May.
- Burtless, Gary
1985 "Are Targeted Wage Subsidies Harmful? Evidence from a Wage Voucher Experiment." Industrial and Labor Relations Review, 39(1):105-114.
- Campbell, Paul; Basinger, Karen; Dauner, Mary Beth; Parks, Marie
1986 Outcomes of Vocational Education for Women, Minorities, the Handicapped, and the Poor. Columbus, OH: Ohio State University, National Center for Research in Vocational Education.
- Carnevale, Anthony; Gainer, Leila; Meltzer, Ann
1990 Workplace Basics: The Essential Skills Employers Want. San Francisco: Jossey-Bass Publishers.
- Case, Ann and Katz, Lawrence
1990 "The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youths." Unpublished paper, Harvard University.
- Commission on the Skills of the American Workforce
1990 America's Choice: High Skills or Low Wages. Rochester, NY: National Center on Education and the Economy.
- Corcoran, Mary; Datcher, Linda; Duncan, George J.
1980 "Most Workers Find Jobs Through Word of Mouth." Monthly Labor Review, August.
- Council of Economic Advisers
1990 Economic Report of the President: 1990. Washington, D.C.: U.S. Government Printing Office.
- Crane, Jonathan
1991 "Effects of Neighborhoods on Dropping Out of School and Teenage Childbearing" in Jencks, Christopher and Peterson, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.
- Cross, Harry; Kenney, G.; Mell, Jane; Zimmerman, Wendy
1989 "Employer Hiring Practices: Differential Treatment Between Hispanic and Anglo Job Seekers." Washington, D.C.: Urban Institute.

Youth and the Labor Market

- D'Amico, Ronald
1984 "Does Employment During High School Impair Academic Progress?"
Sociology of Education, 57:152-164.
- D'Amico, Ronald and Maxwell, Nan
1990 "Black-White Employment Differences During the School-to-Work
Transition: An Explanation for Between and Within Race Wage
Differences." Unpublished paper, SRI International.
- Dryfoos, Joy
1990 Adolescents At Risk. New York: Oxford University Press.
- Duncan, Beverly
1965 "Dropouts and the Unemployed." Journal of Political Economy, April: 121-
134.
- Duncan, Greg J. and Hoffman, Saul D.
1991 "Teenage Underclass Behavior and Subsequent Poverty: Have the Rules
Changed?" in Jencks, Christopher and Peterson, Paul (eds.) The Urban
Underclass. Washington, D.C.: Brookings Institution.
- Eggebeen, David; Crockett, Lisa J.; Hawkins, Alan J.
1990 "Patterns of Adult Male Coresidence Among Young Children of
Adolescent Mothers." Family Planning Perspectives, 22:219-223.
- Ellwood, David
1989 "Poverty Through the Eyes of Children." Unpublished paper, Harvard
University.
- Ellwood, David
1982 "Teenage Unemployment: Permanent Scars or Temporary Blemishes?" in
Freeman, Richard B. and Wise, David (eds.) The Youth Labor Market
Problem: Its Nature, Causes, and Consequences. Chicago, IL: University
of Chicago Press.
- Fagan, Jeffrey and Pabon, Edward
1990 "Contributions of Delinquency and Substance Use to School Dropout
Among Inner-City Youth." Youth and Society, 21(3):306-354.

- Farber, Henry
1987 "The Recent Decline of Unionization in the United States." Science,
November.
- Farkas, George; Olsen, Randall; Stromsdorfer, Ernst; Sharpe, Linda; Skidmore, Felicity;
Smith, D. Alton; Merrill, Sally
1984 Post-Program Impacts of the Youth Incentive Entitlement Pilot Projects.
New York: Manpower Demonstration Research Corporation.
- Ferguson, Ronald
1990 "Racial Patterns in How School and Teacher Quality Affect Achievement
and Earnings." Unpublished paper, Harvard University, J.F. Kennedy
School.
- Forrest, Jacqueline and Singh, Susheela
1990 "The Sexual and Reproductive Behavior of American Women." Family
Planning Perspectives, 22:206-214.
- Freeman, Richard
1991 "Crime and the Economic Status of Disadvantaged Young Men." Paper
presented at the Conference on Urban Labor Markets and Labor Mobility,
Airlie House, Virginia.
- Freeman, Richard
1991 "Employment and Earnings of Disadvantaged Young Men in a Labor
Shortage Economy" in Jencks, Christopher and Peterson, Paul (eds.) The
Urban Underclass. Washington, D.C.: Brookings Institution.
- Freeman, Richard
1989 "On the Divergence in Unionism among Developed Countries." NBER
Working Paper No. 2817. Cambridge, MA: National Bureau of Economic
Research.
- Freeman, Richard
1986 "Who Escapes? The Relationship of Church-Going and Other Factors to
Outcomes for Inner-City Black Youth" in Freeman, Richard and Holzer,
Harry (eds.) The Black Youth Employment Crisis. Chicago, IL: University
of Chicago Press.

Youth and the Labor Market

- Freeman, Richard
1983 "Crime and the Labor Market" in Wilson, J.Q. (ed.) Crime and Public Policy. San Francisco: ICS Press.
- Freeman, Richard
1981 "Black Economic Progress Since 1964: Who Has Gained and Why?" in Rosen, S. (ed.) Studies in Labor Markets. Chicago, IL: University of Chicago Press.
- Freeman, Richard
1979 "The Effect of Demographic Factors On Age-Earnings Profiles." Journal of Human Resources, Spring.
- Freeman, Richard
1971 The Market for College-Trained Manpower. Cambridge, MA: Harvard University Press.
- Freeman, Richard and Holzer, Harry J. (eds.)
1986 The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.
- Freeman, Richard and Medoff, James
1982 "The Youth Labor Market Problem in the U.S.: An Overview" in Freeman, Richard and Wise, David (eds.) The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago: University of Chicago Press.
- Freeman, Richard and Wise, David (eds.)
1982 The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago: University of Chicago Press.
- Freeman, Richard; Borjas, George; Katz, Lawrence
1991 "On the Labor Market Effects of Immigration and Trade." New York: Russell Sage Foundation.
- Frey, William
1985 "Mover Destination Selectivity and the Changing Suburbanization of Whites and Blacks." Demography, 22(2):223-243.

- Fullerton, Howard
1989 "New Labor Force Projections, Spanning 1988 to 2000." Monthly Labor Review, November.
- Greenberger, Ellen and Steinberg, Laurence
1986 When Teenagers Work: The Psychological and Social Costs of Adolescent Employment. New York: Basic Books.
- Grogger, Jeffrey
1992 "Crime, Persistent Youth Joblessness, and Black/White Employment Differentials." Review of Economics and Statistics, Forthcoming.
- Gueron, Judith
1984 "Findings on Youth Employment: Lessons from MDRC Research." New York: Manpower Demonstration Research Corporation.
- Gustman, Alan and Steinmeier, Thomas
1981 "The Impact of Wages and Unemployment on Youth Enrollment and Labor Supply." Review of Economics and Statistics, 63(4):553-560.
- Hamilton, Steve
1990 Apprenticeship for Adulthood. New York: Free Press.
- Harris, Ron
1991 "Childhood: Fearing for Your Life." The Los Angeles Times, May 13.
- Hauser, R.M.
1991 "Trends in College Entry Among Whites, Blacks and Hispanics, 1972-1988." Discussion Paper No. 958-91. Madison, WI: University of Wisconsin, Institute for Research on Poverty.
- Hauser, R.M.
1991 "Measuring Adolescent Educational Transition Among Black Americans, Hispanics, and Whites." Discussion Paper No. 951-91. Madison, WI: University of Wisconsin, Institute for Research on Poverty.
- Heneman, Herbert; Schwab, Donald; Fossum, John; Dyer, Lee
1986 Personnel-Human Resource Management. Homewood, IL: Irwin.

Youth and the Labor Market

- Henshaw, Stanley K. and Van Vort, Jennifer
1989 "Teenage Abortion, Birth, and Pregnancy Statistics: An Update." Family Planning Perspectives, 21:85-88.
- Hill, M. Anne and O'Neill, June
1990 Underclass Behaviors in the United States: Measurement and Analysis of Determinants. Report to the U.S. Department of Health and Human Services. New York: Baruch College, Center for the Study of Business and Government.
- Hofferth, S.L.; Kahn, J.R.; Baldwin, W.
1987 "Premarital Sexual Activity Among U.S. Teenage Women Over the Past Three Decades." Family Planning Perspectives, 19:46-53.
- Hollister, Robinson
1989 "Black Male Youth: Their Employment Problems and Training Programs" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.
- Holzer, Harry
1991 "The Spatial Mismatch Hypothesis: What Has the Evidence Shown?" Urban Studies, Spring.
- Holzer, Harry
1990 "The Labor Market for Young Males: Trends, Causes, and Policy Implications." Research in Labor Economics, Vol. XI.
- Holzer, Harry
1988 "Structural/Frictional and Demand-Deficient Unemployment in Local Labor Markets." Cambridge, MA: National Bureau of Economic Research.
- Holzer, Harry
1987 "Hiring Procedures in the Firm: Their Economic Determinants and Outcomes" in Block, Richard; Kleiner, Morris; Roomkin, Myron; Salsburg, Sydney (eds.) Human Resources and Firm Performance. Madison, WI: Industrial Relations Research Association.

- Holzer, Harry
1987 "Informal Job Search and Black Youth Unemployment." American Economic Review, June.
- Holzer, Harry
1986 "Reservation Wages and Their Labor Market Effects for Black and White Male Youth." Journal of Human Resources, Spring.
- Holzer, Harry
1982 "Informal Job Search in Black Youth Unemployment." American Economic Review, June.
- Holzer, Harry and Vroman, Wayne
1991 "Mismatches and the Urban Labor Market." Unpublished paper, Urban Institute.
- Howell, David and Wolff, Edward
1991 "Trends in the Growth and Distribution of Skills in the U.S. Workplace." Industrial and Labor Relations Review, April.
- Hughes, Mark
1991 "Emerging Settlement Patterns: Implications for Antipoverty Strategy." Unpublished paper, Princeton University.
- Ihlanfeldt, Keith and Sjoquist, David
1991 "The Effect of Job Access on Black Youth Employment: A Cross-Sectional Analysis." Urban Studies, 28(2):255-265.
- Ihlanfeldt, Keith and Sjoquist, David
1990 "Job Accessibility and Racial Differences in Youth Employment Rates." American Economic Review, March.
- Jencks, Christopher and Mayer, Susan
1990 "The Social Consequences of Growing Up in a Poor Neighborhood: A Survey" in McGahey, Michael and Lynn, Lawrence (eds.) Concentrated Urban Poverty in America. Washington, D.C.: National Academy Press.
- Johnston, William and Packer, Arnold
1987 Workforce 2000: Workers and Work for the Twenty-First Century. New York: Hudson Institute.

Youth and the Labor Market

- Juhn, Chinhui; Pierce, Brook; Murphy, Kevin
1989 "Accounting for the Slowdown in Black-White Wage Convergence."
Unpublished paper, University of Chicago.
- Kandel, Denise B. and Davies, Mark
1990 "Labor Force Experiences of a National Sample of Young Adult Men: The Role of Drug Involvement." Youth and Society, 21(4):411-445.
- Kasard, John
1989 "Urban Industrial Transition and the Underclass." The Annals of the American Academy of Political and Social Science, January.
- Katz, Lawrence and Murphy, Kevin
1992 "Changes in Relative Wages, 1963-87: The Role of Supply and Demand Factors." Quarterly Journal of Economics, Forthcoming.
- Kirschenman, Joleen and Neckerman, Katherine
1990 "Hiring Strategies, Racial Bias, and Inner-City Workers." Unpublished paper, University of Chicago.
- Kogan, John F.
1982 "The Decline in Black Teenage Employment: 1950-1970." The American Economic Review, September: 621-638.
- Korenman, Sanders and Neumark, David
1991 "Does Marriage Really Make Men More Productive?" Journal of Human Resources, Spring: 282-307.
- LaLonde, Robert and Topel, Robert
1989 "Labor Market Adjustments to Increased Immigration" in Abowd, J. and Freeman, Richard B. (eds.) Immigration, Trade, and the Labor Market. Chicago, IL: University of Chicago Press.
- Leonard, Jonathan
1990 "What Was Affirmative Action?" Journal of Economic Perspectives, Fall.
- Lerman, Robert
1990 "Fatherhood, Child Support, and Earnings: A Report on the Links Between Family Responsibilities and Job Market Outcomes." Paper prepared for the U.S. Department of Health and Human Service

- Lerman, Robert
1986 "Do Welfare Programs Affect the Schooling and Work Patterns of Young Black Men?" in Freeman, Richard and Holzer, Harry (eds.) The Black Youth Employment Crisis. Chicago: University of Chicago Press.
- Lerman, Robert
1972 "Some Determinants of Youth School Activity." Journal of Human Resources, 7(3):366-383.
- Lerman, Robert and Pouncy, Hillard
1990 "The Compelling Case for Youth Apprenticeship." Public Interest, Fall.
- Levitan, Sar and Gallo, Frank
1988 A Second Chance: Training for Jobs. Kalamazoo, MI: W.E. Upjohn Institute.
- Levy, Frank
1988 "Incomes, Families, and Living Standards" in Litan, Robert E. and Lawrence, Robert Z. (eds.) American Living Standards. Washington, D.C.: Brookings Institution.
- Levy, Frank and Murnane, Richard
1992 "Earnings Levels and Earnings Inequality: A Review of Recent Trends and Proposed Explanations." Journal of Economic Literature, Forthcoming.
- Lillard, Lee and Tan, Hong
1986 "Private Sector Training: Who Gets It and What are Its Effects?" Los Angeles: Rand Corporation.
- Lynch, Lisa
1989 "Private Sector Training and Its Impact on the Earnings of Young Workers." NBER Working Paper No. 2872. Cambridge, MA: National Bureau of Economic Research.
- Lynch, Lisa
1989 "The Youth Labor Market in the Eighties: Determinants of Reemployment Probabilities for Young Men and Women." Review of Economics and Statistics, 71(1):37-45.

Youth and the Labor Market

- Manski, Charles; Sandefur, Gary; McLanahan, Sara; Powers, Daniel
1990 "Alternative Estimates of the Effect of Family Structure During Adolescence on High School Graduation." Madison, WI: Institute for Research on Poverty.
- Massey, Douglas and Denton, Nancy
1988 "Suburbanization and Segregation in U.S. Metropolitan Areas." American Journal of Sociology, 94(3):592-626.
- Mayer, Susan
1991 "How Much Does a High School's Racial and Socioeconomic Mix Affect Graduation and Teenage Fertility Rates" in Jencks, Christopher and Peterson, Paul (eds.) The Urban Underclass. Washington, D.C.: Brookings Institution.
- McLanahan, Sara
1985 "Family Structure and the Reproduction of Poverty." American Journal of Sociology, 90:873-901.
- McLanahan, Sara
1985 "Single Mothers and Psychological Well-Being: A Test of the Stress and Vulnerability Hypotheses." Research in Community and Mental Health, 5:253-266.
- McLanahan, Sara and Bumpass, Larry
1988 "Intergenerational Consequences of Family Disruption." American Journal of Sociology, 94:130-152.
- Mensch, Barbara and Kandel, Denise
1988 "Dropping Out of High School and Drug Involvement." Sociology of Education, 61(2):95-113.
- Meyer, Robert and Horn, Robin
1990 "Reform of Secondary Vocational Education in the United States." Madison, WI: Institute for Research on Poverty.
- Meyer, Robert and Wise, David
1982 "High School Preparation and Early Labor Force Experience" in Freeman, Richard and Wise, David (eds.) The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago: University of Chicago Press.

- Miller, Louisa and Moorman, Jeanne
1989 "Married Couple Families with Children" in Studies in Marriage and the Family. Current Population Reports, Series P-23, No. 162. Washington, D.C.: U.S. Government Printing Office.
- Mincer, Jacob
1991 "Human Capital, Technology, and the Wage Structure: What Do Time Series Show?" NBER Working Paper No. 3581. Cambridge, MA: National Bureau of Economic Research.
- Mincer, Jacob
1989 "Job Training: Costs, Returns, and Wage Profiles." NBER Working Paper No. 3208. Cambridge, MA: National Bureau of Economic Research.
- Mincy, Ronald and Wiener, Susan
1990 A Mentor, Peer Group, Incentive Model for Helping Underclass Youth. Washington, D.C.: Urban Institute.
- Mishel, Lawrence and Tuxeira, Ruy
1991 "The Myth of the Coming Labor Shortage." Unpublished paper, Economic Policy Institute.
- Montgomery, James
1989 "Social Networks and Labor Market Outcomes." Unpublished paper, Northwestern University.
- Mortimer, J.T. and Finch, M.D.
1986 "The Effects of Part-Time Work on Adolescent Self-Concept and Achievement" in Borman, K.M. and Reisman, J. (eds.) Becoming a Worker. Norwood, NJ: Ablex Publishing Corporation.
- Mortimer, Jeylan and Shanahan, Michael
1990 "Adolescent Work Experience and Relations With Peers." Unpublished paper, University of Minnesota.
- Mortimer, Jeylan; Finch, Michael; Shanahan, Michael; Ryu, Seongryeol
1991 "Adolescent Work History and Behavioral Adjustment." Unpublished paper, University of Minnesota.

Youth and the Labor Market

- Mott, Frank L. and Haurin, R. Jean
1988 "Linkages Between Sexual Activity and Alcohol and Drug Use Among American Adolescents." Family Planning Perspectives, 20:128-136.
- Murphy, Kevin and Welch, Finis
1988 "The Structure of Wages." Unpublished paper, Unicon Research.
- National Assessment of Educational Progress
1990 America's Challenge: Accelerating Academic Achievement. Princeton, NJ: National Assessment of Educational Progress.
- O'Neill, June
1990 "The Role of Human Capital in Earnings Differences Between White and Black Men." Journal of Economic Perspectives, Fall.
- Organization for Economic Cooperation and Development
1985 Education and Training After Basic Schooling. Paris: Organization for Economic Cooperation and Development.
- Osterman, Paul
1988 Employment Futures. New York: Oxford University Press.
- Personick, Valerie
1989 "Industry Output and Employment: A Slower Trend for the Nineties." Monthly Labor Review, November.
- Phillips, Sarah and Sandstrom, Kent
1990 "Parental Attitudes Toward Youth Work." Youth and Society, 22(1):160-183.
- Rosenbaum, James and Kariya, Takehiko
1991 "Do School Achievements Affect the Early Jobs of High School Graduates in the United States and Japan?" Sociology of Education, 64(2):78-95.
- Sawhill, Isabel
1989 "The Underclass." The Public Interest, Summer.
- Silvestri, George and Lukasiewicz, John
1989 "Projections of Occupational Employment, 1988-2000." Monthly Labor Review, November.

- Simms, Margaret
1989 "The Effectiveness of Government Training Programs" in Investing in People: A Strategy to Address America's Workforce Crisis. Background Papers, Vol. I. Washington, D.C.: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.
- Skorneck, Carolyn
1991 "Crime Rise Not Tied Solely to Hard Economic Times." The Philadelphia Inquirer, January 13.
- Sonenstein, Freya L.; Pleck, Joseph H.; Ku, Leighton C.
1989 "Sexual Activity, Condom Use, and AIDS Awareness Among Adolescent Males." Family Planning Perspectives, 21:152-158.
- Steel, Lauri
1991 "Early Work Experience Among White and Non-White Youths." Youth and Society, 22(4):419-447.
- Stern, David; McMillion, Martin; Hopkins, Charles; Stone, James
1990 "Work Experience for Students in High School and College." Youth and Society, 21(3):355-389.
- Stern, David; Dayton, Charles; Paik, Il-Woo; Weisberg, Alan
1989 "Benefits and Costs of Dropout Prevention in a High School Program Combining Academic and Vocational Education: Third-Year Results from Replications of the California Peninsula Academies." Educational Evaluation and Policy Analysis, 11:405-416.
- Trent, Katherine and Harlan, Sharon
1990 "Household Structure Among Teenage Mothers in the United States." Social Science Quarterly, 71(3):439-457.
- Turner, Marjorie; Fix, Michael; Struyk, Raymond; Reed, Victor; Elmi, A.; Zimmerman, Wendy; Edwards, John
1991 "Opportunities Denied, Opportunities Diminished: Discrimination in Hiring." Washington, D.C.: Urban Institute.
- U.S. Department of Commerce
1991 Money Income of Households, Families, and Persons in the United States: 1988 and 1989. Current Population Reports, Series P-60, No. 172. Washington, D.C.: U.S. Government Printing Office.

Youth and the Labor Market

U.S. Department of Commerce

1990 Household and Family Characteristics: March 1990 and 1989. Current Population Reports, Series P-20, No. 447. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1990 Marital Status and Living Arrangements: March 1989. Current Population Reports, Series P-20, No. 445. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1990 School Enrollment--Social and Economic Characteristics of Students: October 1988 and 1987. Current Population Reports, Series P-20, No. 443. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1990 Statistical Abstract of the United States: 1990 (110th edition). Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1989 Projections of the Population of the United States, by Age, Sex, and Race: 1988 to 2080. Current Population Reports, Series P-25, No. 1018. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1988 Projections of the Population of States, by Age, Sex, and Race: 1988 to 2010. Current Population Reports, Series P-25, No. 1017. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1981 Statistical Abstract of the United States: 1981 (101st edition). Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce

1975 Household and Family Characteristics: March 1974. Current Population Reports, Series P-20, No. 276. Washington, D.C.: U.S. Government Printing Office.

- U.S. Department of Commerce
1973 Money Income in 1972 of Families and Persons. Current Population Reports, Series P-60, No. 90. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Education
1990 Digest of Educational Statistics: 1990. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Family Support Administration
1989 Characteristics and Financial Circumstances of AFDC Recipients, FY 1989. Washington, D.C.: U.S. Department of Health and Human Services.
- U.S. Department of Labor
1991 Employment and Earnings. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Labor
1990 Employment and Earnings. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Labor
1989 Handbook of Labor Statistics, 1989. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Labor
1982 Employment and Training Report of the President. Washington, D.C.: U.S. Department of Labor.
- U.S. Department of Labor
1981 Employment and Earnings. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Labor
1978 Employment and Training Report of the President. Washington, D.C.: U.S. Department of Labor.
- U.S. Department of Labor
1971 Employment and Earnings. Washington, D.C.: U.S. Government Printing Office.

Youth and the Labor Market

U.S. General Accounting Office

- 1991 Teenage Drug Use: Uncertain Linkages With Either Pregnancy or School Dropout. Report to the Chairman, Select Committee on Narcotics Abuse and Control (House of Representatives). Washington, D.C.: U.S. General Accounting Office.

U.S. House of Representatives, Committee on Ways and Means

- 1990 Overview of Entitlement Programs: Green Book. Washington, D.C.: U.S. Government Printing Office.

Upchurch, Dawn and McCarthy, James

- 1989 "Adolescent Childbearing and High School Completion in the 1980s: Have Things Changed?" Family Planning Perspectives, 21(5):199-202.

Viscusi, W. Kip

- 1986 "Market Incentives for Criminal Behavior" in Freeman, Richard B. and Holzer, Harry J. (eds.) The Black Youth Employment Crisis. Chicago, IL: University of Chicago Press.

Welch, Finis

- 1990 "Employment of Black Males." Journal of Labor Economics, January.

Welch, Finis

- 1979 "Effects of Cohort Size on Earnings: The Baby Boom Babies' Financial Bust." Journal of Political Economy, 87:565-597.

Wilson, William J.

- 1987 The Truly Disadvantaged. Chicago: University of Chicago Press.

Wolfgang, Marvin; Thornberry, Terence; Figlio, Robert

- 1987 From Boy to Man, from Delinquency to Crime. Chicago: University of Chicago Press.

Zuboff, Shoshana

- 1988 In the Age of the Smart Machine. New York: Basic Books.

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