DOCUMENT RESUME

ED 311 253 CE 053 259

AUTHOR Auspos, Patricia; And Others
TITLE Implementing JOBSTART. A Demonstration for School Dropouts in the JTPA System.
INSTITUTION Manpower Demonstration Research Corp., New York, N.Y.
SPONS AGENCY EXXON Corp., New York, N.Y.
PUB DATE Jun 89
NOTE 275p.; For a related document, see ED 281 915.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC11 Plus Postage.
DESCRIPTORS Academic Achievement; *Demonstration Programs; *Disadvantaged Youth; *Dropout Programs; Dropout Research; Dropouts; Employment Potential; *Employment Programs; Federal Programs; High Risk Persons; High Schools; Job Placement; *Job Training; Outcomes of Education; Program Evaluation; Recruitment; *Youth Employment
IDENTIFIERS *Job Training Partnership Act 1982

ABSTRACT

The JOBSTART demonstration program addresses the employability problems of school dropouts by testing a program of basic education, occupational skills training, support services, and job placement assistance for young, economically disadvantaged dropouts who read below the eighth-grade level. The program is being offered at 13 diverse sites, primarily under the Job Training Partnership Act (JTPA). In the first year, the 2,312 applicants were randomly assigned either to an experimental group offered a chance to participate in JOBSTART or to a control group not offered JOBSTART but any other community services. A 12-month follow-up survey yielded 1,401 responses (82 percent). Highlights of the evaluation include the following: (1) JOBSTART participants were more disadvantaged than youths served by JTPA; (2) median participation was 6 months compared to 3.4 months for JTPA Title IIA participants; (3) participants receiving basic education followed by job training had better educational attainment than those in concurrent education/training programs; (4) JOBSTART participants were substantially more likely to receive high school diplomas or equivalency--however, they earned less than the control group in the short term; (5) job placement was the least successful component; and (6) some constraints were imposed by JTPA performance standards and contracting practices. Lessons were derived for each program component as well as for three program design issues: choice of institutional sponsor, concurrent versus sequential education and training, and brokered versus in-house sequential program. (Appendices describe evaluation data sources and methodological issues. Fifty-five references are included.) (KC)

IMPLEMENTING JOBSTART

A Demonstration for School Dropouts in the JTPA System

Patricia Auspos
George Cave
Fred Doolittle
Gregory Hoerz

June 1989

Manpower Demonstration Research Corporation

BOARD OF DIRECTORS

CE

IMPLEMENTING JOBSTART:

A DEMONSTRATION FOR SCHOOL DROPOUTS IN THE JTPA SYSTEM

Patricia Auspos
George Cave
Fred Doolittle
Gregory Hoerz

Manpower Demonstration
Research Corporation

June 1989

Funders of the JOBSTART Demonstration:

Aetna Life & Casualty Foundation
ARCO Foundation
AT&T Foundation
The Chase Manhattan Bank, N.A.
Exxon Corporation
The Ford Foundation
The William and Flora Hewlett Foundation
Charles Stewart Mott Foundation
National Commission for Employment Policy
The Rockefeller Foundation
Stuart Foundations
U.S. Department of Labor

Dissemination of MDRC reports is also supported by our Public Policy Outreach funders:

Aetna Life & Casualty Foundation
Alcoa Foundation
BellSouth Corporation
The Bristol-Myers Fund, Inc.
The Ford Foundation
Metropolitan Life Foundation
The Ambrose Monell Foundation
Philip Morris Companies Inc.
The Florence and John Schumann Foundation
The G. Unger Vetlesen Foundation

The production of this report was made possible by a grant from Exxon Corporation.

The findings and conclusions stated in this report do not necessarily represent the official positions or policies of the funders.

ACKNOWLEDGMENTS

This report benefited from the assistance of many people at the demonstration sites, on MDRC's staff, and on MDRC's Board of Directors and JOBSTART Advisory Committee. It is truly a collaborative effort of a team with experience operating and evaluating programs.

Grateful acknowledgment is made to the many staff at the demonstration sites, and especially to the JOBSTART counselor/coordinators. Staffs' efforts in operating the programs and assisting in the research made the project a reality.

At MDRC, numerous people were important in shaping the report. Robert Ivry was, in many ways, the driving force behind JOBSTART, active in its conception, fundraising, and site development. Barbara Goldman provided general oversight of the evaluation and served as a reviewer of the report. Judith Gueron reviewed and provided comments on the many drafts of the report. The operational lessons of the demonstration (reported in Chapter 10) reflect the work of Robert Ivry, Milton Little, Michael Bangser, and John Wallace, all of whom also reviewed the entire draft, as did Daniel Friedlander.

Members of MDRC's Operations Department -- Milton Little, Tom Brock, John Morgan, Marilyn Price, Sharon Rowser, and Kay Sardo -- were active in the development phase of the demonstration, monitored the implementation of the research design, and assisted the data collection effort at the sites by providing on-going information about site operations and by conducting some structured interviews with site staff. Cynthia Guy of the Research Department conducted the interviews at the Job Corps sites and contributed to Chapter 3.

Processing the data required the assistance of many individuals at MDRC. In the Information Services Department, Karen Paget supervised the processing of the data files, aided by Patti Anderson, who was instrumental in designing and monitoring the JOBSTART management information system and random assignment procedures. Darlene Hasselbring coordinated the survey effort, which was conducted by Abt Associates, Inc. Anita Kraus did the computer programming and Shirley James supervised the data clerks. Karla Hanson, Steve Walsh, and Barbara Fink produced and helped analyze the implementation data; Jan Bryant and Mark Levenson did the same for the impact evaluation. Anna Lapinska coordinated production of the tables for the report, while Elizabeth Eisner coordinated the final stages of report production. Judith Greissman edited the report with the assistance of Sylvia Newman; Patt Pontevolpe, Claudette Edwards, and Stephanie Cowell typed numerous drafts of the manuscripts and tables.

Our work was guided by members of MDRC's Board of Directors and its JOBSTART Advisory Committee, chaired by Bernard Anderson. In particular, the authors wish to thank

Bernard Anderson, Eli Ginzberg, Robinson Hollister, Alan Kistler, Marion Pines, Isabel Sawhill, and Margaret Simms for their comments on an earlier draft of this report. In addition, we are especially grateful to Richard Elmore, who provided thoughtful insights about educational policy, program design, and evaluation issues as well as comments on earlier drafts.

A number of other consultants also aided the evaluation. Burt Barnow provided on-going review and advice, especially concerning Chapter 9. Carl Van Horn designed the topic guide and analyzed the focus group sessions. Other consultants who assisted in the design or implementation of the research and focus groups included Janice Ballou, Terry Clark, Paul Osterman, Bruce Ransom, and Jim Sleeper.

The Authors

PREFACE

Since its creation in 1974, the Manpower Demonstration Research Corporation (MDRC) has sought to build knowledge about effective strategies to improve the self-sufficiency of disadvantaged young people. This issue is commanding increasing national attention among business leaders, policymakers, and program administrators. They voice concern about the personal and social costs of high youth joblessness rates, particularly among disadvantaged school dropouts, as well as the widening gap between the low skills levels of many of these youths and the changing requirements of the economy. Unfortunately, there is limited information available on proven ways to close the skills gap and improve the employment prospects of these young people.

Against this setting, MDRC launched a demonstration, called JOBSTART, in 1985. It was designed to test the effectiveness of a promising, comprehensive program model targeted to disadvantaged high school dropouts. The program was implemented at thirteen diverse program sites, with operational funding provided primarily through the Job Training Partnership Act (JTPA), the nation's federally funded employment and training system. This report is devoted largely to a description of the implementation process at the sites, but it also includes early findings about the program's impact and suggestions for operating a program like JOBSTART within the JTPA system.

The report's publication coincides with heightened Congressional interest in the youth joblessness problem and with efforts by the U.S. Department of Labor, which has endorsed the recommendations of an advisory committee to redirect JTPA toward serving less job-ready people. This shift in focus is prompted by both the business community's concern about the quality of the future labor force and the JTPA community's reflections on the lessons of the past five years.

Another important dimension of the JOBSTART story is the process by which the demonstration was developed and assembled. In the past, most large-scale research and demonstration projects were funded by the federal government. Generally, the funding included substantial resources to cover both the evaluation and the program costs of implementing the model. At the time JOBSTART was launched, however, the federal government was taking a less active role in funding such projects than it had in the past. This led MDRC to undertake an entirely new, and necessarily unproven, approach to funding the demonstration. It also meant that program operators would be joining the demonstration without the inducement of significant financial compensation.

The success of this process is a tribute to an unusual consortium of funders and program operators, who shared a common vision and concern about improving the employment prospects of disadvantaged young people, while also building a knowledge base that could guide future

policy. Many people deserve special credit and acknowledgment for helping to convert a promising idea into a full-scale demonstration.

First is the initial group of public and private funders who made early, substantial commitments to supporting core demonstration activities. The leaders were Jon Blyth at the Charles Stewart Mott Foundation; Gordon Berlin, then at The Ford Foundation and now at the Human Resources Administration of New York City; James Gibson and Phoebe Cottingham at The Rockefeller Foundation; Roger Heyns at The William and Flora Hewlett Foundation; and Hugh Burroughs, then at The William and Flora Hewlett Foundation and now at The Henry J. Kaiser Family Foundation. They provided the nucleus of support that enabled the demonstration to go forward. They did more than write checks; they offered guidance and insights that helped shape the JOBSTART Demonstration.

Once a critical mass of private funding had been secured, it became easier to enlist the support of public funders. Both the U.S. Department of Labor and the National Commission for Employment Policy joined as funding partners. Patricia McNeil, then at the National Commission and now at the Department of Labor, and Raymond Uhalde and Mamoru Ishikawa, both at the Department of Labor, helped to solidify the public investment in JOBSTART. They deserve credit for their farsightedness in recognizing the importance of identifying effective programs for disadvantaged school dropouts.

Lacking special federal demonstration funding to support program activities, MDRC depended on state and local JTPA funding for implementation of the JOBSTART model. JOBSTART was a more intensive and costly program than was typical during this stage in JTPA's evolution. Thus, it was unclear whether the program funding could be generated from within the system. Fortunately, a group of innovative and determined JTPA administrators at the state and local levels bucked the trend of short-term, low-cost programs and agreed to commit to JOBSTART more than $2 million of JTPA funds. The people responsible at the state level included Gerald Kilbert (California State Department of Education); Carmen Velasquez (State of Colorado Governor's Job Training Office); John Taylor (Illinois Department of Commerce and Community Affairs); Walker Crewson (New York State Department of Education); and Cynthia Mugerauer (Texas Department of Community Affairs).

At the local level, the people included Brenda McDuffie (Buffalo Private Industry Council); David Gonzales and Betty Sparrow (Denver Employment and Training); Larry Kwalwaser and Susan Rosenblum (Mayor's Office of Employment and Training, Chicago); Irma Caballero (Private Industry Council, Corpus Christi); Jim Jones (Employment Resources Development Agency, Hartford); William Bruce (Community Development Department of City Hall, Los Angeles); Gabriel Cortina (Los Angeles Unified School District); Melanie Smith and Dave Farley (City of Pittsburgh); Irv Rubinstein (Pittsburgh-Allegheny County Private Industry Council); Jane Burger (then at the Allegheny Conference on Community Development and now at the Henry C. Frick Educational Commission, Pittsburgh); and Nancy Bunt (Allegheny Conference on Community Development).

Corporate sponsors were another important source of funding. Their grants offered the program sites needed flexibility and provided a vehicle for nonfinancial corporate involvement, such as donation of equipment and recognition awards; corporate staff to serve as "mentors"; and entree for the JOBSTART youths to the corporations themselves. The individuals responsible for facilitating grants for site sponsorship include Gail Promboin and Kathy Peak at the Aetna Life & Casualty Foundation; Reynold Levy and Charles Evans at the AT&T Foundation; Eugene Wilson, Toni Martinez, Russell Sakaguchi, and Richard Ostler at the ARCO Foundation; Andrew Fisher at The Chase Manhattan Bank, N.A.; Leonard Fleischer and Wilma McCarley at the Exxon Corporation; and Theodore Lobman at the Stuart Foundations.

Finally, implementation of the JOBSTART Demonstration would not have been possible without the extraordinary dedication and cooperation of a number of other people as well. Peter Rell, Director of the Job Corps, deserves special recognition for his willingness to include the nonresidential component of three Job Corps Centers in the evaluation. At the thirteen demonstration sites, staff showed unusual commitment in agreeing to participate in the demonstration, knowing that it would entail sacrifices and burdensome data and reporting requirements. They joined the demonstration to help provide answers that could substantially benefit disadvantaged youths in the future. The program staff include Kenneth Cowdery and Douglas Ruffin (Allentown Youth Services Consortium); Willie Barnes and Lonnie Hall (Atlanta Job Corps); Virginia Kwarta and Walter Manley (Basic Skills Academy, New York City); Rosanne Singer and Vickie Green (Capitol Region Education Council, Hartford); Russell Tershey and Robert Johnston (Center for Employment Training, San Jose); Ric Gudell and Newton Moore (Chicago Commons Association's Industrial and Business Training Programs); Alfred Fascetti, Deborah Liddle, and Malcolm Taylor (Connelley Skill Learning Center, Pittsburgh); Pete Fernandez and Dora-Maria Antillon (East Los Angeles Skills Center); Marshall Holman, Antonio Mendoza, and Margarita Ramos (El Centro Community College Job Training Center, Dallas); George Adian, Chris Millius, and Betsy Seifried (Emily Griffith Opportunity School, Denver); David Maranville (Los Angeles Job Corps); Don Screes and Oscar Gibbons (Phoenix Job Corps); and Mary Lozano (SER/Jobs for Progress, Inc., Corpus Christi).

The participation of so many different partners in this five-year demonstration effort shows a shared recognition of the importance of the problem and a determination to design better programs for disadvantaged youths.

Robert J. Ivry
Senior Vice President

EXECUTIVE SUMMARY

Growing concern about the labor market problems of high school dropouts has led policymakers and program operators to seek more effective ways to increase the employability of these youths. The JOBSTART Demonstration addresses this concern by testing a program of basic education, occupational skills training, support services, and job placement assistance for young, economically disadvantaged dropouts who read below the eighth grade level.

The demonstration, which was developed and is being evaluated by the Manpower Demonstration Research Corporation (MDRC), provides an important opportunity to learn about how this intensive combination of services was implemented at thirteen diverse sites, operating primarily with funds provided under the Job Training Partnership Act, the nation's principal employment and training system for economically disadvantaged persons. In addition, the demonstration includes a rigorous study of the JOBSTART program's costs and its impact on participants' educational attainment, earnings, welfare receipt, and other key outcomes.

This report, the second of three, deals primarily with issues of program operation: the process by which the sites recruited eligible youths, the nature of the services that were provided, and the extent to which the youths participated in these services. A concluding chapter identifies lessons for implementing programs like JOBSTART within the JTPA system.

The report also provides an early indication of the JOBSTART program's impact on educational attainment, employment, and earnings during a twelve-month follow-up period, which for many of the youths was taken up largely by their participation in the program. A more complete picture, including post-program impacts as well as a comparison of the program's economic benefits and costs, will be presented in a final report scheduled for the fall of 1990. The final report will be based on follow-up surveys conducted twenty-four months after youths became a part of the demonstration. The impact findings at both the twelve- and twenty-four-month points should be seen as unusually reliable because the outcomes for JOBSTART youths are compared to those for a control group created through a random assignment research design.

An Overall Assessment of the JOBSTART Demonstration

Highlights of the evaluation to date are:

- The thirteen sites were generally able to recruit the youths and to implement the program. This included sites unaccustomed to serving young dropouts or to offering JOBSTART's range of services.

- JOBSTART was a more intensive program than is typically offered to dropouts under the Job Training Partnership Act (JTPA), with a median participation of 6.0 months compared to 3.4 months for all

dropouts served within Title IIA of JTPA. Its intensity approached that of the services offered in the Job Corps. Males and females participated with virtually equal intensity.

- Implementation of the program model varied considerably. Important sources of variation were (1) whether education and training were offered concurrently from the beginning of the program or provided as a sequence, with education preceding training; and (2) whether all services were provided directly by the sponsoring organization or participants were referred to other agencies for some activities.

- Participants at sites offering a sequence of basic education followed by occupational skills training received more instruction in education than did those at sites providing education and training concurrently. Average education hours were highest at sites providing education in-house and referring participants to other agencies for training (sequential/brokered sites). Participants at concurrent sites attended more hours of training classes than did those at sequential sites. Participation in training was particularly low at sequential/brokered sites.

- Youths given the opportunity to participate in JOBSTART were substantially more likely to receive General Educational Development (GED) certification or a high school degree than those in the control group. However, because JOBSTART youths spent time in the program during the twelve-month follow-up period, they earned less than those in the control group. Additional follow-up will be necessary to see whether this investment had a longer term payoff.

- While it was possible to operate such a program within JTPA, the sites' experience highlighted the constraints created by the JTPA system's performance standards and contracting practices. State and local officials had to find creative solutions to the challenges presented.

Policy Significance of the Demonstration

The JOBSTART Demonstration is significant for three reasons. First, it serves a group of youths -- economically disadvantaged, low-skilled, predominately black or Hispanic high school dropouts -- who face particularly severe employment problems. For example, in 1988 only 21 percent of black dropouts between the ages of sixteen and twenty-four were employed full-time. Moreover, long-term poverty, welfare dependency, criminal activity, and unwed parenthood are all significantly higher for those with poor basic skills. The potential effects on the economy are equally glaring, as the number of young people entering the labor force will

continue to decline through the year 2000 and a growing proportion of them will come from minority groups with above-average dropout rates and serious educational deficiencies.

Second, the JOBSTART Demonstration provides a rigorous test of a promising approach to working with these dropouts, for whom very few program models have been proven effective. Evaluations of programs for school dropouts have produced a few success stories, some negative findings, and many "inconclusive" results. Only the residential Job Corps (providing basic education, occupational training, and other services to youths who live at centers operating the program) has been considered effective over the long term for seriously disadvantaged dropouts. In practice, however, the residential Job Corps' services cannot be offered to every young dropout; it is a relatively expensive program, operated in specialized centers, and available only to young people willing and able to live away from home for an extended period of time.

The JOBSTART program model draws on the Job Corps' experience by offering a similar set of services. However, these services are provided in a nonresidential setting (as is the case for 10 percent of the Job Corps' participants), and the JOBSTART model does not include the full range of support services available at Job Corps Centers.

The third significance of the demonstration is its operation within the JTPA system. In many past demonstrations, local programs have received substantial special funds to implement innovative programs. In contrast, JOBSTART was conducted without any special federal funding for program expenses. Participating sites had to raise money through existing sources, with JTPA being the primary one in nearly all cases. As a consequence, sites operated JOBSTART within that system's constraints and performance requirements.

When the demonstration began, it ran counter to many of JTPA's prevailing practices. In the early and mid-1980s, federal regulations and administrative procedures encouraged state and local JTPA programs to emphasize shorter term, lower-cost programs and to enroll participants who were more employable than the JOBSTART target group. The implementation of JOBSTART was a major challenge for the participating sites, coming as it did when JTPA was less hospitable to such programs than it is now.

Recently, the U.S. Department of Labor has encouraged greater provision of intensive services to disadvantaged school dropouts. Thus early research findings in this report come at a time when many officials in the JTPA system -- federal, state, and local -- are interested in devising ways to pursue that goal.

The JOBSTART Program Guidelines

JOBSTART was open to economically disadvantaged school dropouts between the ages of seventeen and twenty-one who read below the eighth grade level. The program consisted of four main elements:

1. instruction in basic academic skills using individualized curricula that allow youths to proceed at their own pace toward competency goals in reading, communication, and basic computational skills;

2. occupational skills training in a classroom setting that combines theory and hands-on experience to prepare participants for jobs in high-demand occupations;

3. training-related support services including assistance with transportation, childcare, counseling, and, where possible, additional support such as work readiness and life skills (practical everyday knowledge) training, and needs-based payments or incentive payments tied to program performance; and

4. job development and placement assistance in finding training-related jobs.

Sites were required to offer at least 200 hours of basic education and at least 500 hours of occupational training courses so that the youths would have a real opportunity to become competitive in the labor market. The program guidelines defined the core elements of the model; however, within this general framework, the thirteen JOBSTART programs showed great variation, reflecting the diverse character and operating histories of the participating sites. By leaving the guidelines flexible, MDRC increased the number of sites that could adapt their existing programs to fit the model and fund JOBSTART from existing sources.

The sites, which overall operated the JOBSTART program between 1985 and 1988, are listed in Table 1. They included six community-based organizations (CBOs), three adult vocational schools, a community college, and three Job Corps Centers that already operated a nonresidential Job Corps program.

Findings on the Recruitment and Characteristics of Participants

- **As was the case throughout the employment and training system, the JOBSTART sites faced serious challenges recruiting economically disadvantaged young dropouts into their programs.**

Many programs offering education and training for young dropouts have faced recruitment problems. These youths often are reluctant to return to a school setting, require extensive support services to participate, or seek immediate employment to meet pressing needs. In addition, the lengthy eligibility determination process that is a part of many programs (including JTPA's) may discourage some of those initially interested. Most JOBSTART sites found that they had to increase their recruitment efforts for the demonstration and that they received more applications from young dropouts than they had in the past.

Table 1
The JOBSTART Sites

Agency Name	Location	Type of Organization	Program Structure[a]
Allentown Youth Services Consortium	Buffalo, NY	Community based	Sequential/brokered
Atlanta Job Corps	Atlanta, GA	Job Corps Center	Concurrent
Basic Skills Academy (BSA)	New York, NY	Community based	Sequential/brokered
Capitol Region Education Council (CREC)	Hartford, CT	Community based	Sequential/brokered
Center for Employment Training (CET)	San Jose, CA	Community based	Concurrent
Chicago Commons Association's Industrial and Business Training Programs	Chicago, IL	Community based	Concurrent
Connelley Skill Learning Center	Pittsburgh, PA	Adult vocational school	Concurrent
East Los Angeles Skills Center	Monterey Park, CA	Adult vocational school	Concurrent
El Centro Community College Job Training Center[b]	Dallas, TX	Community college	Sequential/in-house
Emily Griffith Opportunity School (EGOS)	Denver, CO	Adult vocational school	Concurrent
Los Angeles Job Corps	Los Angeles CA	Job Corps Center	Sequential/in-house
Phoenix Job Corps	Phoenix, AZ	Job Corps Center	Concurrent
SER/Jobs for Progress	Corpus Christi, TX	Community based	Concurrent

NOTES: [a]Concurrent programs offer basic education and occupational training concurrently from the beginning of participation. Sequential/in-house programs offer basic education followed by occupational training, with both components provided in-house by the agency. Sequential/brokered programs provide basic education and then serve as a broker for occupational training, referring participants to other agencies.

[b]In September 1988 this site was renamed the Edmund J. Kahn Job Training Center.

- **Participants in JOBSTART were more disadvantaged than youths typically served in the JTPA system.**

The JOBSTART programs were designed for youths with serious employment problems, and sites reported that these youths were often more disadvantaged than those they normally served. JOBSTART participants were overwhelmingly members of minority groups (46 percent black and 44 percent Hispanic), averaged 18.5 years of age, and were nearly equally divided between males and females (53 percent to 47 percent, respectively). At program entry, they had completed an average of 10.1 grades in school but read at an average grade level of 6.9 (with 29 percent reading below the sixth grade level). Forty-seven percent had not worked within the previous year. About one-half of the female participants were mothers, most of whom lived with their children. One-fourth of the males reported having been arrested since their sixteenth birthday. Slightly more than one-half of all participants received some form of public assistance.

Nationally, youths served by Title IIA of JTPA, the major funder of JTPA youth programs, tend to be more employable than the JOBSTART youths. In program year 1986, for example, 72 percent of the JTPA participants were either still in school or already high school graduates. When compared to the young dropouts served nationally in JTPA, the JOBSTART participants appear to have been more disadvantaged: 39 percent of JTPA young dropouts were receiving public assistance at entry into the program, 19 percentage points below the figure for JOBSTART.

Findings on the Nature of JOBSTART Services

Basic education, occupational training, support services, and job placement assistance were available to participants at each site. For community-based organizations, operating JOBSTART required changing their course offerings, and their programs typically evolved over the course of the demonstration.

As noted earlier, the programs were not identical across the sites. There were various types of agencies, as well as differences in the sequence of activities, schedules, duration of training, and nature and intensity of support services. Two central areas of variation were:

1. whether participants began JOBSTART by attending concurrent classes in basic education and occupational skills or by attending a sequence of classes beginning with basic education and followed by occupational training; and

2. whether the JOBSTART site provided occupational training in-house or served as a broker, referring youths to other organizations when they were ready for training.

Research and operational experience did not provide solid evidence about which would

be the better course to follow. Proponents of concurrent instruction in basic education and occupational skills argue that it motivates students in their educational classwork because they can directly apply what they learn to their occupational training. Supporters of a sequence of basic education followed by occupational training believe that it builds the foundation of reading and computational skills needed to take full advantage of training.

Operational experience also did not yield a definitive answer as to whether training should be offered in-house by the organization providing basic education or by another organization. Sites offering both education and training could more easily coordinate curricula, entry requirements, support services, counseling, and schedules. But many agencies that provided basic education to young dropouts did not also offer occupational training in-house. Requiring this combination in-house would have eliminated many experienced agencies from the demonstration, thereby diminishing the representativeness of the sites and the replicability of the program model should it prove to be effective.

Eight of the thirteen demonstration sites provided basic education and occupational skills training concurrently ("concurrent" sites); two provided a sequence of education followed by training ("sequential/in-house" sites); and three provided education and then referred participants to other agencies for training ("sequential/brokered" sites). As discussed later, participation rates by component, participation hours, and the emphasis on JOBSTART components differed among these three types of sites, as did the administrative issues that arose.

Basic Educational Activities

- **The sites implemented the JOBSTART basic education component, and both teachers and students liked the instruction provided.**

The education component typically consisted of individualized curricula, which allowed students to proceed at their own pace to study reading, mathematics, and other subjects needed to pass the General Educational Development (GED) examination. In general, students worked on their own, doing exercises. They used computers or, more often, workbooks. At sites offering education and training concurrently, participants usually attended two hours of education classes and four hours of vocational training a day. At sites operating a sequential program, participants generally attended three hours a day of basic skills classes during the education phase, with the remaining three hours a day devoted to life skills classes.

Teachers at sites felt that the individualized, self-paced instruction provided a better learning environment than participants had typically found in high school. The competency-based courses allowed the youths to see incremental progress as they advanced toward what was, for many, a remote goal of mastering basic skills and receiving a GED. Most students preferred this instructional approach because they felt that it made them active participants in the process of learning and allowed them to master one topic before beginning another. Yet students also valued interaction with instructors, as much for the personal attention and motivation it provided as for instruction in specific skills.

Despite the overall favorable assessment, two concerns emerged. Some instructors feared that students with very low skills or poor motivation might find the work boring and, as a remedy, suggested more group activities. One site did shift to this approach, relying more heavily than other sites on class exercises and lectures. In addition, some instructors thought that the curriculum should include more material on critical thinking and general knowledge.

- **There was evidence of educational progress for participants in JOBSTART.**

Data on participation in education, GED receipt, and reading gains provide evidence of educational progress. Participants averaged 132 hours of basic education, and 55 percent attended for more than 100 hours; those in sequential programs attended significantly more hours of basic education classes than did youths in concurrent programs. Approximately 30 percent of participants reported receiving a GED within twelve months of entering the program. Rates of GED receipt varied among the sites, depending on the characteristics of the youths served, the emphasis staff placed on this as a program goal, and the state standards for passing the GED examinations. As expected, youths with higher reading levels at program entry were more likely to attain a GED: 43 percent of those initially reading at the seventh or eighth grade level received a GED, compared to 20 percent of those initially reading at or below the sixth grade level. The one-third of participants who were tested for reading gains showed increases of approximately seven-tenths of a grade level (from an average of 6.9 to 7.6) after approximately 100 hours of instruction.

Occupational Skills Training

- **JOBSTART youths studied occupations with skills requirements comparable to those for adults served within JTPA nationwide.**

The choices of occupational training available to participants varied among the sites. Participants at large vocational schools could choose courses in more than twenty occupational areas. The Job Corps Centers and the larger community-based organizations (CBOs) also offered a wide range of vocational training. In contrast, smaller CBOs providing training in-house typically offered no more than four or five courses. Youths at sequential/brokered sites could choose courses from a variety of agencies; however, some courses were unavailable to them in practice because they could not satisfy entrance requirements or experienced other difficulties in gaining entry.

As a group, JOBSTART participants were enrolled in training for a broad range of occupations -- clerical and service, machine trades, benchwork occupations, and structural work such as welding. Occupational choices for men and women followed traditional patterns, with 73 percent of the women in clerical fields.

Using categories employed by the U.S. General Accounting Office (GAO) in a recent analysis of JTPA adult training, MDRC classified the JOBSTART training occupations as leading to jobs requiring low or low/moderate skills (17 percent), moderate skills (54 percent),

and higher skills (26 percent). This distribution of skills ratings for training occupations was similar to what the GAO found for JTPA adult programs. This was unexpected, since JOBSTART participants faced more barriers to employment than did the typical JTPA adult client. The jobs that youths trained for at sequential sites did not appear to require higher skills than those at concurrent sites, despite the presumed advantage of initial basic skills instruction.

Services to Facilitate Participation

- **A variety of strategies were important in increasing participation. Youths especially valued personal attention provided by a committed, supportive program staff.**

All sites provided basic support services such as assistance with childcare and transportation, which helped participants attend the program. In addition, to increase participants' motivation and commitment to the program, site staff used a variety of strategies: personal counseling, peer support, rewards for achievement, life skills training, time management training, and group recreational activities. Youths cited personal attention from staff as a crucial aid in helping them move toward self-sufficiency. While agencies that traditionally served disadvantaged youths typically offered these support services from the beginning of the demonstration, a number of sites accustomed to serving adults increased this type of activity as their programs evolved.

Job Placement Services

- **The job placement component of the program was the least developed at many sites. In particular, participants leaving JOBSTART before completion of the curriculum received relatively little aid in finding a job.**

Sites were required to assist youths in finding training-related employment, but this phase of the program typically received less attention than others. Nearly all the sites did provide instruction about employers' expectations as well as job search techniques. About one-half of the sites arranged work experience positions for some participants during the program. Approximately one-fourth of the participants worked at some point -- in program-arranged or self-initiated jobs -- while they were active in the program. Those who were employed worked an average of 56 percent of the weeks they were in the JOBSTART program and were employed an average of 31 hours per week during the weeks they worked. During the months they worked, their hours of classes in JOBSTART were lower than were those of non-working participants.

Efforts to find participants permanent employment typically began near the end of training, with instructor contacts serving as an important source of information about job openings. Since many youths left the program without reaching this stage, it is not surprising that only

about one-fourth of participants reported that program staff referred them to a job or told them about openings.

Findings on Participation Patterns in JOBSTART

Education and training programs serving young dropouts often have had problems retaining youths long enough to make a difference in their skills and employability. As a result, participation patterns were an important issue in the demonstration; unless youths attended JOBSTART classes, there could be no program impacts.

Data available for this report somewhat underestimate participation in JOBSTART. The length of follow-up for this report was twelve months after the youths became part of the study, and sixteen percent were still active in the program at this point. Those whose participation extended past the end of the follow-up period were treated as if their participation ended at twelve months and no further hours of participation occurred.

- **The mean length of stay in the program was 6.7 months; the median was 6.0 months. Youths participated in program activities for an average of 409 hours. Nearly all those who were active attended basic education classes, while 75 percent participated in occupational training and 43 percent participated in other activities, such as life skills instruction, that were optional for the sites.**

As shown in Table 2, these average figures mask great variation in intensity of participation. About one-third of the participants exceeded 500 hours of activity, another one-third participated for 201 to 500 hours, and the remaining one-third attended for 200 hours or less. Average hours for occupational training (238) were almost twice the average for basic skills education (132); the other activities made up a relatively small portion of all class time. As for length of participation in the program, 14 percent of participants stayed less than three months, 32 percent were still active in the ninth month after entering the program, and 16 percent were still active in the twelfth month.

- **Many subgroups participated in JOBSTART with similar intensity; for example, average participation hours for males were virtually identical to those for females.**

Participation hours in JOBSTART did not show statistically significant differences by participant age, grade when leaving school, initial reading level, or public assistance receip.. Young males, a group of increasing concern to policymakers, participated in JOBSTART education and training at rates and in amounts similar to those of females. However, young mothers faced special barriers to participation in the program and registered somewhat lower average hours of participation than did males and other females.

Table 2
Participation Rates, Hours of Participation, and Length of Stay, for Participants

Activity Measure	Participants
Percent participating in	
Education	96.0
Training	74.8
Education and training	71.5
Other activities	42.5
Average hours in	
Education	131.9
Training	237.8
Education and training	369.8
Other activities	39.0
All activities	408.9
Percentage distribution of hours in education and training	
Less than or equal to 200	39.7
201 to 500	27.0
501 to 700	17.8
701 or more	15.4
Total	100.0
Percentage distribution of hours in all activities	
Less than or equal to 200	33.9
201 to 500	30.4
501 to 700	16.7
701 or more	18.9
Total	100.0
Length of stay (months)	
Average	6.65
Median	6.00
Percent still participating in month	
3	86.0
6	58.1
9	32.1
12	16.4
Number of participants	999

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment and apply to the entire participant sample including those with zero hours in an individual component. Since some participants remained in JOBSTART longer than twelve months, these measures underestimate actual participation.

- **The amount of participation and mix of JOBSTART components varied among the sites, with local employment opportunities and program structure appearing to affect measures of participation intensity.**

Across the sites, average total hours of participation ranged from a high of 577 hours to a low of 167 hours, a spread of 410 hours. This variation could have had several possible sources, including differences in the characteristics of the youths at the sites, in local employment opportunities, and in program characteristics. Although differences in demographic and other measured characteristics of participants appear to explain only a small amount of the variation, strong labor markets were associated with lower participation hours, probably because participants left the program to take jobs. Furthermore, in strong labor markets, those youths who cannot get jobs and who enroll in programs are likely to be harder to serve.

The experience of participants in sequential and concurrent programs differed in several ways, as shown in Table 3. Total participation hours were highest for the sites providing a sequence of basic education and training in-house (sequential/in-house sites) and lowest for sites providing basic education and then referring participants to another agency for training (sequential/brokered sites). Hours in education also varied: sequential sites placed more emphasis on education than did concurrent sites, with the former having a slightly higher percentage of participants attending education classes and considerably higher education hours. Sequential/brokered sites had the highest average hours in education. One possible reason for greater education hours in sequential sites was that many youths recruited at these sites were more interested in attaining a GED than in receiving occupational training.

Participants at the concurrent sites received the most occupational training. In sharp contrast, only about one-fourth of the participants at sequential/brokered sites made the transition from education to training; therefore average hours in training were low. This occurred because of the usual attrition over the course of a lengthy sequence, problems in developing linkages with training organizations, and many participants' greater interest in basic education at these sites.

- **JOBSTART succeeded in providing a more intensive program than was typically offered youths in JTPA.**

JOBSTART participation can be put in context by comparing it to that reported for other programs. Length of participation is a measure that permits approximate comparisons among several types of youth programs, including JTPA Title IIA programs for young dropouts and the Job Corps. Overall, JOBSTART's median length of participation of 6.0 months greatly exceeded the 3.4-month median for young dropouts served in JTPA Title IIA programs during the period of the demonstration. Length of stay in the Job Corps program slightly exceeded that of JOBSTART. This suggests that JTPA, JOBSTART, and the Job Corps provided services of varying intensity to youths of varying backgrounds: the socioeconomic status of JOBSTART participants and the intensity of JOBSTART services were closer to the Job Corps than to JTPA.

Table 3
Participation Rates and Hours of Participation
for Participants, by Program Structure

Activity Measure	Concurrent	Sequential/ In-House	Sequential/ Brokered	Total
Percent participating in				
Education	94.2	98.6	99.4	96.0
Training	95.0	54.3	25.9	74.8
Education and training	89.7	54.3	25.9	71.5
Other activities	14.7	100.0	74.1	42.5
Average hours in				
Education	107.5	161.8	184.7	131.9
Training	289.6	221.6	68.4	237.8
Education and training	397.1	383.3	253.2	369.8
Other activities	9.9	105.7	63.7	39.0
All activities	407.0	489.6	316.8	408.9
Number of participants	621	208	170	999

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment and apply to the entire participant sample including those with zero hours in an individual component. Since some participants remained in JOBSTART longer than twelve months, these measures underestimate actual participation.

Concurrent programs offer basic education and occupational training concurrently from the beginning of participation. Sequential/in-house programs offer basic education followed by occupational training, with both components provided in-house by the agency. Sequential/brokered programs provide basic education and then serve as a broker for occupational training, referring participants to other agencies.

Findings on Early Program Impacts

The analysis of JOBSTART's impacts relied on a rigorous random assignment research design Using this approach, 2,312 youths who applied for JOBSTART were randomly assigned to one of two groups: the "experimental" group was offered a chance to participate in the program, whereas the "control" group was not offered the JOBSTART program but could receive any other services in the community. Since the two groups were created by a chance or lottery process, the only systematic difference between them was that only those in the experimental group could receive JOBSTART services. Thus, the control group provided information on what the behavior of experimentals would have been in the absence of the program. The research design called for interviewing the individuals in both groups twelve and twenty-four months after they were randomly assigned. This report presents results from only the twelve-month follow-up survey.

For two reasons, the program impact findings reported here must be viewed as preliminary. First, the twelve-month follow-up period was short; 15 percent of experimentals were still in the program at the time of the survey. Second, these findings are based on a partial sample of all JOBSTART youths: at the time data collection for this report was completed, the twelve-month survey had been fielded for the first 1,709 of the 2,312 youths randomly assigned. The final impact report will present results for all survey respondents based on two years of follow-up.

The impact results presented in this report are based on the 1,401 people (82 percent of the 1,709) who responded to the first survey. The findings compare all experimentals who responded to the survey to all controls who responded. As mentioned earlier, participation varied and these results are the average for experimentals with little or no participation in JOBSTART and those with hundreds of hours in the program. Outcome differences are considered statistically significant if there was no more than a 10 percent probability that they could have occurred by chance.

- **Experimentals had much higher rates of participation in education and training programs than did controls.**

For the demonstration to be a clear test of the effectiveness of JOBSTART services, a much higher percentage of experimentals than controls must have received basic education and occupational training. Table 4 shows that this did occur: 95 percent of experimentals participated in education or training in the year after random assignment, compared to only 29 percent of controls. Over the course of the year, experimentals received an average of 460 hours of education and training (both within and outside the demonstration), while controls averaged only 116 hours. By the fourth quarter after random assignment, many participants had left the program, but the difference in service hours remained statistically significant.

Table 4
Preliminary Impacts of JOBSTART During the Twelve Months After Random Assignment

Outcome and Follow-Up Period	Experimentals	Controls	Difference
Percent who ever received any education or training in months 1-12	94.5	29.3	65.2***
Total hours of education or training received in months 1-12	459.7	115.9	343.8***
Percent who received a GED or high school diploma by end of			
Month 3	6.6	4.4	2.2*
Month 6	18.6	5.9	12.7***
Month 9	24.9	7.4	17.5***
Month 12	27.5	9.9	17.6***
Percent ever employed in months 1-12	58.2	62.8	-4.7**
Percent ever employed in			
Months 1-3	18.4	29.2	-10.9***
Months 4-6	29.0	38.4	-9.5***
Months 7-9	41.0	45.3	-4.2*
Months 10-12	48.2	50.9	-2.6
Total number of weeks employed in months 1-12	11.8	15.2	-3.4***
Total earnings in months 1-12 ($)	1772.78	2490.25	-717.47***
Total earnings ($) in			
Months 1-3	193.73	361.67	-167.94***
Months 4-6	353.93	603.08	-249.15***
Months 7-9	561.74	709.53	-147.79***
Months 10-12	663.37	815.96	-152.59***
Number of youths randomly assigned	714	687	

NOTES: All impact calculations for this report use survey completers randomly assigned between August 1985 and March 1987, including those with values of zero for outcomes and those who were assigned to JOBSTART but did not participate.

Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

"Education or training" includes JOBSTART and non-JOBSTART educational, occupational, and related activities.

- **JOBSTART led to substantially higher educational attainment (especially receipt of GED) for experimentals compared to controls during the twelve months after random assignment. There were positive impacts on educational attainment for virtually all subgroups in the study.**

Clearly, experimentals' investment of time and effort paid off in increased educational attainment during the year after random assignment, as shown in Table 4. By year's end, 28 percent of experimentals had received a high school degree or GED, compared to only 10 percent of controls, a difference of 18 percentage points -- almost a tripling of the rate for controls. Nearly all of this increase came through attainment of a GED; few experimentals or controls completed regular high school. This impact on educational attainment was similar to that found in the Job Corps study, where, within a similar follow-up period, 24 percent of participants attained a GED or high school diploma over a comparison group rate of 5 percent, a 19 percentage point increase.

Virtually all subgroups of youths showed statistically significant increases in educational attainment, compared to the corresponding control group. Importantly, the educational impacts were substantial for both males and young mothers, two groups of special concern to policymakers. This was also the case for those who had dropped out before completing the tenth grade and those receiving public assistance.

While these impacts were large, the proportion of experimentals with a high school degree or GED was still relatively low, as would be expected for a population reading below the eighth grade level at entry into the program.

- **This investment in "human capital" by experimentals came at the cost of forgone employment and earnings in the short term. However, the employment rate difference narrowed over the follow-up period as increasing numbers of experimentals left JOBSTART and found employment.**

Since participation in JOBSTART took up considerable time for many experimentals, it was expected that during the first year after random assignment controls would show greater employment and earnings. This did occur: 63 percent of controls worked at some point, compared to 58 percent of experimentals. Over the year, controls earned $717 more than experimentals. (See Table 4.)

The difference in the proportion of experimentals and controls working declined over the follow-up period. In the fourth quarter after random assignment, the employment rate for experimentals was nearly equal to that of controls, and the earnings difference had dropped from $249 (in the second quarter) to $153.

These employment results highlight the importance of longer follow-up in assessing the effectiveness of an intensive program designed to improve the long-term employment prospects of youths. Short follow-up captures primarily the costs of the program without a full assessment of its benefits.

Operational Lessons for Programs of Education and Training Within JTPA

While a final decision on JOBSTART's potential must await more definitive results on its impact and cost effectiveness, this report is being issued at a time when there is an emerging consensus that comprehensive programs (similar to JOBSTART) are needed for low-skilled youths, including dropouts. This consensus coincides with increasing pressure to shift the JTPA system in this direction. Therefore, lessons on how to operate this type of program within the JTPA system are particularly timely. The report's lessons in this area draw on both the demonstration and the experience of other youth programs. For this reason, they move explicitly beyond the data and research findings from the demonstration to reflect a more wide-ranging knowledge base.

The ability of the JOBSTART sites to implement the program model shows the potential for operating an intensive program of education and training within JTPA, even before recent changes in performance standards and the new federal emphasis on service to youths with basic skills deficits. But experience during and after the demonstration also highlights the difficulties posed by the JTPA system's emphasis on high placement rates and low costs, and the central role that state and local officials must play in supporting programs like JOBSTART:

- **Lessons for State JTPA Officials:** States can encourage programs like JOBSTART through policy statements emphasizing the importance of intensive services to young dropouts, through flexibility in administering the performance standards used to assess SDAs, and through use of discretionary funds to support this type of program. The states should also seek opportunities to leverage other state, local, or foundation resources for these programs.

- **Lessons for Local JTPA Officials:** SDAs can fund programs like JOBSTART, using their JTPA formula allocation (the "78 percent" funds) supplemented with 6 and 8 percent set-aside funding distributed by states. SDAs can also seek out funding partners among local schools, community colleges, and welfare agencies. In performance-based contracts with organizations serving youths, SDAs can designate payment points that recognize other program goals besides job placement, such as program participation by hard-to-serve youths or attainment of a GED.

The demonstration also provides many lessons for program operators providing education and training to disadvantaged youths:

- **Recruitment:** Sites must actively recruit, rather than rely on word-of-mouth and walk-ins to the agency. The disadvantaged youths who are the target group for programs like JOBSTART are often outside the mainstream of social service agencies and unlikely to hear about the programs without an aggressive outreach effort. Intake procedures should be streamlined, and orientation and other early contacts with the client should emphasize the benefits of participating rather than eligibility rules. If programs are interested in attracting disadvantaged youths, they should not create extra steps in enrollment (such as multiple appointments and unnecessary documentation of eligibility) to tes the motivation of youths.

- **Retention Strategies:** Once enrolled in a program, youths need extensive support services such as assistance with childcare and transportation, counseling, life skills training, and informal activities to create a supportive environment and build a commitment to the program. Program counselors who can play a continuing role as case managers and advocates for participants are an important part of the program.

- **Basic Education:** In today's labor market, employers increasingly seek workers who not only possess basic reading and math skills but can also think through problems. These needs of employers must be reflected in the content of basic education; programs should move beyond the teaching of basic skills to assist students to develop their reasoning skills. Computer-assisted, individualized instruction is useful in teaching basic skills, but development of analytical skills may call for a combination of methods, including interaction with teachers and other students in a group.

- **Occupational Training:** Participants should be given opportunities to explore different training options early in a program to make an informed choice about what courses to take. Course entrance requirements should be training-related and not artificially high. so as not to exclude those who could do the classwork. Training instructors must see their role as extending beyond the presentation of technical material; they can be part of a network of staff helping to address the many needs of young dropouts.

- **Job Placement Assistance:** Instruction in job search techniques is important, but young dropouts also need direct job development and referrals to specific jobs. While independent job search will be the

norm, group job search may be appropriate for some participants. Training instructors can play a crucial role in developing job leads, but job development specialists are also needed. Programs should also develop ways to help youths who do not complete the program to find employment.

The demonstration also highlighted the tradeoffs associated with three key program design issues:

- **Choice of an Institutional Sponsor**: Schools and community-based organizations have different strengths and weaknesses in operating a program like JOBSTART. CBOs are likely to see such a program as central to their organizational mission, to be familiar with the interests and needs of disadvantaged young dropouts, and to provide the range of support services needed by participants. Schools, in contrast, typically have a greater variety of occupational courses and more stable funding. Avenues are available for increasing the capacity of either type of organization to implement a program like JOBSTART.

- **Choice of a Concurrent Versus a Sequential Program**: Staff at concurrent programs must develop ways to include life skills training, group activities, and counseling in the busy schedules of participants attending both education and training classes. The greatest challenges for sequential programs are to motivate youths during the education phase (when a job may seem quite distant) and to increase the proportion of youths making the transition to training.

- **Choice of a Brokered Versus an In-House Sequential Program**: Operating brokered programs increases the number of agencies able to participate in a program like JOBSTART. However, the feasibility of this approach hinges on developing ways to facilitate the transition from educational services offered by one agency to training provided by another. The likelihood of brokered arrangements succeeding is increased if training agencies give priority to youths who meet their clearly specified entrance requirements. Flexible scheduling to allow youths to continue with their basic education even after they have moved on to their training provider would increase the appeal of a brokered approach. The SDA can play a crucial role by structuring contracts to encourage cooperation between education and training agencies.

These operational lessons, discussed in greater detail in Chapter 10 of the report, may help states, SDAs, and service providers to better serve young dropouts.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

THE NATURE OF THE JOBSTART DEMONSTRATION

More than 5 million Americans aged sixteen to twenty-four are school dropouts. In many large cities dropout rates reach or exceed 50 percent. Inadequately equipped with basic skills such as reading, writing, and simple computational ability, most dropouts cannot earn a decent living, especially in a service-oriented economy where high-paying blue-collar jobs are increasingly a thing of the past. For eighteen- to twenty-four-year-old males, a key group, the discrepancy between the average annual income of a high school graduate and that of a dropout was 31 percent in the early 1960s; by the early 1980s it had increased to 59 percent.[1]

The JOBSTART Demonstration is a test of a program designed to give disadvantaged dropouts a "second chance" through a combination of basic education, occupational skills training, job development and placement assistance, and support services (such as counseling, childcare, and transportation expenses).

This report is about the implementation of the demonstration at the thirteen organizations participating in it. The report analyzes the issues encountered in setting up the demonstration, the characteristics and experiences of participants in the program, and the nature of the services offered. It concludes with a preliminary analysis of the early effects of the program on educational attainment, employment, and other measures of economic self-sufficiency, and with lessons for implementing this type of program.

I. The Nature of the Youth Employment Problem

It is widely acknowledged that the United States has a youth employment problem, but it has become increasingly clear that the heart of the problem is "a small group of young people who remain out of work a large portion of the time."[2] In fact, using data from the late 1970s, the Congressional Budget Office estimated that about 10 percent of all youths accounted for 61 percent of all youth unemployment.[3] Overwhelmingly, they are from poor families and have dropped out of school. Many are members of minority groups. For example, in 1988 only 21 percent of black school dropouts aged sixteen to twenty-four were employed full-time compared to 39 percent of whites.[4] For the same group, only 52 percent all blacks were in the labor force (which is officially defined as those people working or ac ely seeking work) compared

---

[1]Berlin and Sum, 1988, p. 9.

[2]Clark and Summers, 1982, p. 200. See also Ellwood, 1982; Rees, 1986; and Hahn and Lerman, 1985, p. 6.

[3]U.S. Congress, 1982, p. 12.

[4]U.S. Department of Labor, 1989, p. 168.

to 67 percent of whites. Moreover, there may well be lingering, if not lifelong, effects of dropping out of school and being jobless.

The consequences are societal as well as personal. Strong evidence indicates that the incidence of poverty, welfare receipt, criminal activity, and unwed parenthood is significantly higher for those with poor basic skills.[5] Society bears the cost in the form of social disruption and increased public services.

There is a still broader context for the dropout problem. The U.S. Department of Labor projects that the number of young people will have declined sharply -- by 38 percent -- between 1975 and 2000, and that a growing proportion of them will come from groups with traditionally higher-than-average school dropout rates and basic skills deficiencies (minorities, recent immigrants, youths from single-parent families, and the poor).[6] This does not bode well for the future competitiveness of the country.

For all these reasons, attention is now being directed to young, poor dropouts, the target group for the JOBSTART program.

II. The Policy and Research Context of the JOBSTART Demonstration

Several conditions made it difficult throughout much of the 1980s to develop an effective policy to combat the problem of young dropouts: public attention was diverted to a different labor market problem, the need for highly skilled workers; the federal employment and training system did not encourage serving young dropouts; and past research efforts had identified few effective programs. Looming over all was the federal budget deficit.

A. Responses to the "Skills Crisis"

The drive for competitiveness in the international economy highlighted the growing need for very skilled workers, while the problems of the low-skilled received less attention.[7] Educational reform efforts and initiatives in the employment and training field tended to focus on improving the math and science performance of those who had already mastered basic skills. Many reforms, such as strengthening curricula and raising required competencies, left those with basic skills deficiencies even further behind.[8] Recently, labor market analysts have recognized that all workers must have math, communication, and reasoning skills. Yet in the United States a recent study of young adults found that while nearly all could read simple material, a relatively small proportion were proficient with more complex material.[9]

---

[5]Berlin and Sum, 1988, pp. 24-35.
[6]Fullerton, 1987.
[7]Public/Private Ventures, 1987, p. 19.
[8]MDC, 1985.
[9]Kirsch and Jungeblut, 1986.

B. JTPA Program Features

The Job Training Partnership Act (JTPA) of 1982 is the federal government's major program for funding employment and training programs for economically disadvantaged adults and youths. The manner in which it was implemented during the mid-1980s posed a second impediment to developing new programs of education and training for young school dropouts. JTPA distributes the majority of its funds to states according to a formula based on the number of unemployed and economically disadvantaged residents in states. These funds, in turn, are distributed by the states to local administrative entities called service delivery areas (SDAs). The federal JTPA statute sets general rules for program eligibility and types of services. Within this framework, each SDA's staff and private industry council (PIC) -- often operating like a board of directors for the agency -- determine the types of services to be offered, the priority groups for services, and how service providers under contract to the SDA are to be evaluated and paid.

The incentives embedded in Title IIA, the largest part of JTPA and the one that finances most youth programs, made SDAs and JTPA-funded education and training agencies hesitant to enroll youths with very low basic skills who are in need of intensive programs of education and training and support services. In JTPA, Congress mandated a system of performance standards -- increased employment and earnings, decreased receipt of welfare -- that were intended to measure the "return on the JTPA program investment."[10] These standards were supposed to hold SDAs accountable for the quality and cost of program outcomes. In designing the actual performance measures used during the first five years of JTPA, federal, state, and local administrators focused on the proportion of participants placed in a job, their wages, and the cost per "success story."[11] This encouraged SDAs and service providers to choose people who were most likely to achieve these successes.[12] In addition, the statute limited spending on support services (such as transportation and childcare assistance) and needs-based cash payments.

---

[10]See section 106 of the act.

[11]From the early 1980s until program year 1987 (ending in June 1988), the performance of SDAs serving adults was judged by the following standards: the percentage of adults who found a job; the percentage of adults who were receiving welfare when they enrolled in JTPA who found a job; the average wage at placement in a job; and the program cost per person entering employment. For youths, the standards included the percentage who found employment and the "positive termination rate," defined as entering employment or other quantifiable measures of program success. These included attainment of employment competencies recognized by local private industry councils, completion of a level of schooling, enrollment in further non-Title IIA training, enlistment in the armed forces, returning to school full time, or (for fourteen- and fifteen-year-olds) completing specified program objectives. The youth standards included the cost per "positive termination." For each measure, the U.S. Department of Labor set national levels which -- at state option -- could be adjusted to reflect the characteristics of those served and the conditions in the local labor market.

[12]See Walker et al., 1985; Grinker Associates, 1986; Cook et al., 1985; and Auspos with Price, 1987.

Data from the mid-1980s illustrate the effects of these incentives. During program years 1984 to 1986, young dropouts constituted only 11 percent of all Title IIA participants and 27 percent of all youth participants. Among young dropouts who were served under Title IIA in 1986, only 23 percent received basic education, a service likely to promote their long-term success but unlikely to lead to immediate placement in a job.[13]

Responding to this problem, the U.S. Department of Labor changed its administrative practices and regulations. In late 1987 the department stated that "more emphasis must be placed on intensive investments in youth within JTPA" and recommended that "a significant portion of youths who participate . . . should receive competency-based instruction in either basic education or occupational skills."[14] Soon thereafter, amendments to the regulations (effective in program year 1988) encouraged states to choose as the key standard for youth programs one which includes measures of increased educational and skills competencies; this increased the opportunities to include young, low-skilled dropouts in JTPA. An advisory committee to the Department of Labor also recommended shifting more resources to harder-to-serve youths and ending restrictions on the support services these youths are likely to need.[15]

While these changes came too late to affect the implementation of the demonstration, they have heightened interest in the project as an early test of a new direction for JTPA and have increased the chances that the JOBSTART program will be successfully replicated if the research findings are positive.

C. Research on Program Effectiveness

The third barrier to policy development was the scarcity of programs proven effective for young dropouts.[16] Many had been tried, but nearly all evaluations either found unfavorable results, were inconclusive, or were seriously flawed. A common methodological problem was the absence of an appropriate group (one that was not served by the program) against which the group that was served could be compared. Without such a comparison, evaluators frequently confused outcomes that followed a program with the real program impacts.

The one notable exception to this pattern was the residential Job Corps, which a study

---

[13]U.S. Department of Labor, 1988. The remaining youth dropout participants were active in other classroom training (20 percent), on-the-job-training (12 percent), job search (15 percent), work experience (8 percent), and other activities (22 percent).

[14]Federal Register, 1987. Similarly, U.S. Department of Labor officials were urging SDAs to spend more money on youth programs, noting that such "investments" have long-term payoffs and that the average cost per termination for youths is less than one-half of the allowed standard. Moreover, DOL officials were stressing the importance of increasing enrollment of at-risk and "hard-to-serve" youth in JTPA programs. This new interest in a more intensive program of education to address basic skills deficiencies carried over into Congressionally mandated changes in the summer youth employment program under Title IIB of JTPA.

[15]Job Training Partnership Act Advisory Panel, 1989.

[16]Betsey et al., 1985, summarizes this literature.

found to be effective in increasing the educational attainment and earnings of young dropouts.[17] The residential Job Corps provides basic skills education, occupational training, life skills instruction, job placement assistance, health care, counseling, and other support services to youths who live at centers (often outside urban areas) and participate in the program for up to two years.[18] About 80 percent of Job Corps participants have not completed high school. The residential Job Corps, however, could not be offered to all dropouts; it was a relatively expensive program, of interest only to those willing and able to live away from home, and clearly not the answer for all disadvantaged youths.

One simple approach -- helping youths look for work more effectively -- was tested in a demonstration in the early 1980s. The demonstration assessed the effectiveness of a program providing job search assistance through simulated interviews, seminars on job-seeking techniques, and assistance in making contact with potential employers. The evaluation found that the program produced short-term increases in employment and earnings but that in the long run participants were no better off than a comparison group.[19]

In a careful evaluation, the most common youth employment strategy -- subsidized work experience -- also did not show any long-term impacts on educational attainment, employment, or earnings for dropouts. The National Supported Work Demonstration, managed by the Manpower Demonstration Research Corporation (MDRC) in the late 1970s, enrolled very disadvantaged young dropouts (many with a criminal record) in a twelve- to eighteen-month program of paid work experience with gradually increasing job responsibilities. Program impacts for this group were not positive even though the program proved successful for long-term welfare recipients.[20] This experience led MDRC to develop the Youth Variation of Supported Work, which added basic education and skills training to work experience. Early results were encouraging (longer participation in the program, better job placement rates), but funding was not available for an assessment of long-term program impacts.

The Youth Incentive Entitlement Pilot Projects (YIEPP), which offered subsidized minimum-wage jobs to high school students and dropouts who returned to school, also provided a negative lesson on program design. While the program did increase the employment and earnings of students, evaluators found that the offer did not induce dropouts to return to and remain in regular high school. Many of those who did return dropped out a second time.[21]

With this research record the Job Corps stood alone as a program considered effective for young school dropouts. Its evaluation found increases in participants' employment rates, earnings, educational attainment, and health status, and a reduction in their dependence on public assistance and arrests for serious crimes. Moreover, these program impacts persisted over a four-year follow-up period. Although program costs per participant were much higher

---

[17]Mallar et al., 1982.

[18]The Job Corps also operates a nonresidential program at some sites, three of which participated in the JOBSTART Demonstration.

[19]Public/Private Ventures, 1983.

[20]Manpower Demonstration Research Corporation, 1980.

[21]Farkas et al., 1984.

than for most other programs (averaging $6,800 in 1980), the benefits exceeded the costs. Especially encouraging was the program's effectiveness for young male dropouts, a group that had proven especially hard to serve in many previous programs. Among the questions left open was whether the Job Corps model of education, training, and other services could be adopted by agencies (other than Job Corps Centers) that operated nonresidential programs with less comprehensive support services.

In 1983 the National Academy of Sciences convened a panel of experts on youth programs. Their assessment -- summing up research findings -- recommended further testing of the Job Corps program model in a nonresidential setting using random assignment to produce reliable findings.[22]

III. Development of the JOBSTART Demonstration

MDRC began the JOBSTART Demonstration in 1985 to provide a rigorous test of the wider applicability of the kind of program already being used in the residential Job Corps. In the past such a demonstration would have been specially funded: local agencies operating the program would have received substantial funding, primarily from the federal government, to support program implementation. In the changed fiscal environment of the 1980s, such full-scale funding was not forthcoming. Local and state JTPA agencies provided most of the operational funding for the JOBSTART sites, but the MDRC evaluation was funded by an unusual consortium consisting of the Rockefeller, Ford, Charles Stewart Mott, William and Flora Hewlett, AT&T, ARCO, Aetna Life & Casualty, and Stuart Foundations; the Exxon Corporation; the Chase Manhattan Bank, N.A.; the U.S. Department of Labor; and the National Commission for Employment Policy. Funding from this consortium also enabled MDRC to award a modest $25,000 grant to each site.

This financial structure powerfully shaped the character of the demonstration at the local level. The JOBSTART program would have to operate within existing agencies and programs under the rules of Title IIA of JTPA or, for the nonresidential Job Corps Centers, under Title IVB of JTPA. It proved a serious challenge for sites to simultaneously follow the demonstration guidelines, the rules of Title IIA, and provisions in their contracts with SDAs. Sites could not be sure that the local SDAs would continue to fund them under Title IIA, since JOBSTART was such a departure from the typical JTPA program. The Job Corps Centers had much less difficulty because the program was modeled on their own.

The lack of special funding also placed limits on what could be asked of the sites in terms of changing and standardizing their curricula. Instead, they were given general guidelines. Even so, there were major challenges. Some of the sites normally offered only basic skills education or vocational training; the demonstration called for both, requiring them either to add a whole new kind of activity or to link up with other local agencies providing it. Some sites also had to adapt to a younger and less skilled student body than they normally served.

---

[22]Betsey et al., 1985, Chap. 1.

The demonstration was thus a hybrid: part evaluation of existing programs and part test of a new program. The basic program differed from site to site in myriad details, but the variety did permit a test of how a scaled-down Job Corps-type program could operate under existing rules in different kinds of established agencies. If the demonstration showed positive results, it would be easier to replicate the program widely.

IV. The JOBSTART Program Guidelines

Drawing on the lessons of the Job Corps and applying them within the constraints of JTPA, the demonstration developed a new alternative program. The key elements, shown in Table 1.1, include the core components of the Job Corps (basic education, occupational training, job search) but a less extensive system of support services. In some respects (the definition of the target population and the requirement that certain activities be included), the program model was quite specific, while in others it allowed for considerable variation. The model set requirements as to the type and intensity of education and training services that were to be offered to participants, and it placed strong emphasis on the need for strategies to increase program retention. However, sites were given a great deal of flexibility in implementing these core requirements.

Since the program was designed to reach a population largely unserved by existing programs, eligibility requirements were quite specific. Participation was limited to school dropouts who were between seventeen and twenty-one years of age, did not have a diploma or GED, read below the eighth grade level, and satisfied the JTPA definition of economically disadvantaged (defined primarily by household income or receipt of public assistance).[23] Recognizing that program operators needed to meet enrollment and performance standard targets, however, the guidelines allowed for up to 20 percent of participants to read at or above the eighth grade level.

The demonstration sought to test an intervention that would be relatively intensive and lengthy compared to the usual JTPA activities and would address the multiple deficits in participants' skills. As a result, the program model required sites to offer a specified minimum amount of both basic education and occupational training. This combination of services, as noted earlier, differed from the usual situation under Title IIA of JTPA. The two-hundred-hour minimum of education was based on an estimate of what would be needed to bring participants' basic skills up to the point where they could qualify for a GED or enter skills training. The five hundred hours of training was a compromise between the very lengthy training research suggested was useful and what was practical in most JTPA environments. The total time in the program was expected to be a year or less.

---

[23]To be eligible for JTPA services, a person must be receiving public assistance; have family income at or below the poverty line or 70 percent of the lower living standard income level; be homeless, under the definition of federal statutes; or, in some cases, be a handicapped adult whose own income fits within the guidelines but whose family income exceeds it.

Table 1.1

The JOBSTART Program Guidelines

Target Population	To be eligible for JOBSTART, individuals had to be: o 17 to 21 years old o school dropouts without a diploma or GED o reading below the eighth grade level on a standardized test[a] o economically disadvantaged[b]
Basic Education Instruction	Sites were to implement a curriculum that was: o self-paced and competency based o computer-managed and -assisted, if possible o a minimum of 200 hours in length o focused on reading, communication, and basic computation skills
Occupational Skills Training	Sites were to implement a curriculum that: o was in a classroom setting o combined theory and hands-on experience o prepared enrollees for jobs in high-demand occupations o provided at least 500 hours of training o had been developed with the assistance of the private sector to ensure that graduates would meet the entry-level requirements of local employers
Training-Related Support Services	Services were to be tailored to individual need and were to include, in addition to transportation and childcare, some combination of the following: o work readiness and life skills training o personal and vocational counseling, mentoring, tutorial assistance, and referral to external support systems o needs-based payments or incentive payments tied to length of stay, program attendance, or performance
Job Development and Placement Assistance	JOBSTART operators and/or their subcontractors were to be responsible for assisting participants in finding training-related jobs

SOURCE: JOBSTART Demonstration Guidelines.

NOTES: [a]To help meet enrollment targets, each site was allowed to enroll individuals -- up to 20 percent of its total JOBSTART enrollment -- who read at or above the eighth grade level.

[b]To be eligible for JTPA services -- economically disadvantaged by JOBSTART standards -- a person must be receiving public assistance; have family income at or below the poverty line or 70 percent of the lowest living standard income level; be homeless, under the definition of federal statutes; or, in some cases, be a handicapped adult whose own income fits within the guidelines but whose family income exceeds it.

The basic education component offered instruction in reading, communication, and basic computational skills, using individualized curricula that allowed youths to proceed at their own pace toward required competency goals. The program model also encouraged -- but did not require -- sites to offer computer-managed and computer-assisted instruction.

The occupational skills component required classroom rather than on-the-job training, in the belief that participants would benefit from the intensive, closely supervised instruction possible in a classroom setting. Recognizing the advantages of applying learning to practical problems, however, the program model required that the training include a combination of theory and hands-on experience. Seeking to increase chances of placement following training, the program model required that the training prepare participants for jobs in high-demand occupations and be developed in cooperation with local representatives of the private sector.

Attracting and keeping disadvantaged youths in education and training programs is a common problem, and the sites were expected to provide assistance with transportation and childcare. They were also encouraged to develop a package of other support services to facilitate program participation. Finally, the guidelines required sites to identify possible training-related jobs for participants and to assist them in securing employment. The model did not require the use of a specific curriculum in the basic education component, and it left the choice of occupational areas for training up to the sites.

The model also allowed variation in how the core pieces of the program were to be linked. For example, youths could be served in the same classes as adults or in separate classes; they could be offered basic education classes and vocational skills instruction at the same time (a concurrent model) or participate in basic education before entering skills training (a sequential model). Youths could receive education and training at the same agency, or the agency providing basic education could serve as a broker, helping participants who were completing the education phase to find appropriate training at other institutions (sequential/brokered sites).

V. The JOBSTART Sites

The program model was implemented at the thirteen sites listed in Table 1.2. All had applied to be part of the national demonstration, had the capacity to implement the program model, and had secured funding for its operation.[24] The sites, all of which had experience running programs similar to the model or working with young dropouts, represented a variety of JTPA service providers as well as Job Corps nonresidential programs. Most of the operating funds for the demonstration sites were provided through the regular JTPA system under Title

[24]Three other sites initially agreed to participate subsequently withdrew from the demonstration because of difficulties satisfying the requirements of the demonstration and their own existing performance priorities. They were SER/Jobs for Progress in Milwaukee, Wisconsin; the Sacramento (California) Job Corps Center; and Stanly Technical College in Albemarle, North Carolina.

Table 1.2

The JOBSTART Sites

Agency Name	Location	JTPA Service Delivery Area
Allentown Youth Services Consortium	Buffalo, NY	Buffalo/Cheektowaga/ Tonawanda Consortium
Atlanta Job Corps	Atlanta, GA	--[a]
Basic Skills Academy (BSA)	New York, NY	New York City
Capitol Region Education Council (CREC)	Hartford, CT	City of Hartford
Center for Employment Training (CET)	San Jose, CA	Santa Clara County
Chicago Commons Association's Industrial and Business Training Programs	Chicago, IL	City of Chicago
Connelley Skill Learning Center	Pittsburgh, PA	City of Pittsburgh
East Los Angeles Skills Center	Monterey Park, CA	City of Los Angeles
El Centro Community College Job Training Center[b]	Dallas, TX	City of Dallas
Emily Griffith Opportunity School (EGOS)	Denver, CO	City and County of Denver
Los Angeles Job Corps	Los Angeles, CA	--[a]
Phoenix Job Corps	Phoenix, AZ	--[a]
SER/Jobs for Progress	Corpus Christi, TX	City of Corpus Christi/ Nueces County

SOURCE: Program records and staff interviews.

NOTES: [a]Job Corps sites are federally administered and are not part of any service delivery area.

[b]In September 1988 this site was renamed the Edmund J. Kahn Job Training Center.

IIA of the legislation. (The Job Corps, as noted earlier, is separately funded and administered under a different title of JTPA.) As will be discussed in detail in Chapter 2, the participating organizations included vocational schools, a community college, community-based organizations that focus on literacy development and GED preparation, community-based organizations that focus on occupational skills training, and the nonresidential components of three Job Corps Centers.

VI. Evaluation of the JOBSTART Demonstration

The evaluation of the demonstration is divided into three main parts. The first deals with the implementation of the program at the various kinds of sites. Implementation began in 1985. Launching JOBSTART, the initial report on the demonstration, discussed site selection and characteristics, the operation of the program within JTPA, and early experiences implementing it.[25] This second report completes the implementation analysis by describing the content of JOBSTART activities, the participation patterns of the young people in the program, and operational lessons to be drawn from the demonstration.

The second part of the evaluation is an analysis of the program's impacts. The research was designed to separate out the effects of JOBSTART itself from events attributable to other factors (such as other services participants were receiving and events in their lives outside the program). To accomplish this, all people who applied for JOBSTART and were found to be eligible were randomly assigned to either an experimental or a control group. Those in the experimental group were given access to the program services; those in the control group were not, though they could receive other services the community offered. Since they were all randomly assigned, the two groups were similar except that only the experimental group could receive JOBSTART services.

Individuals in both groups were scheduled to be surveyed twelve and twenty-four months after they were randomly assigned to their groups. (The time frame for applying to JOBSTART varied from site to site but ranged overall from August 1985 through November 1987; hence the fielding of each wave of the survey also extended over two years.) Using these surveys the experiences of the two groups can be compared to estimate the effect of the program on educational attainment (the most important early outcome measure), employment, earnings, welfare dependency, family formation, and other matters.

This report includes early impact findings based on the twelve-month survey for a partial sample of all youths randomly assigned to the demonstration. It thus presents short-term results, which must be interpreted carefully since the findings on employment and several other key outcomes are heavily influenced by the fact that JOBSTART youths spent much of this twelve-month period enrolled in the program. The twenty-four-month follow-up survey of the full sample is currently in progress. The final report on the JOBSTART Demonstration, to be completed in 1990, will analyze program impacts for the full sample based on this twenty-four-month survey.

---

[25] Auspos with Price, 1987.

The third part of the evaluation will compare the benefits of JOBSTART to its costs and will ascertain the cost effectiveness of the program. This topic will be covered only in the final report.

Sources of the data for the evaluation are discussed in detail in Appendix A. They include enrollment forms completed just prior to random assignment; a management information system that provided data on participation in the program; results from the Test of Adult Basic Education (TABE) administered to members of the experimental group; follow-up surveys (for this report) conducted twelve months after random assignment and (for the final report) twenty-four months after random assignment; and qualitative data based on interviews with the program staff, field observations of program operations, and focus group discussions with participants.

VII. Content and Organization of This Report

The major research questions that this report addresses are:

1. Who participated in JOBSTART? How did participation vary among the different versions of the program and among subgroups of participants?

2. How intensive was the program in itself and in comparison to the usual JTPA programs?

3. Was the program sufficiently well implemented so that the demonstration was a fair test of its effectiveness?

4. One year after JOBSTART was offered to youths, did it make a difference in their lives? How did its effects vary among subgroups such as males and females?

5. What lessons did the demonstration yield about serving young, low-skilled school dropouts?

Chapter 2 of this report reviews the characteristics of the sites and describes their programs, including features that varied among the sites and might have affected implementation. Chapter 3 describes the research design of the study, client recruitment and intake procedures, and participant characteristics. Chapter 4 presents n overview of client participation, including comparisons with similar programs; it also analyzes differences in participation among demographic groups and among participants in varying types of sites. Chapter 5 discusses efforts by the sites to facilitate and encourage continued participation by those active in the program. Chapter 6, on the basic skills education component, is the first of three chapters discussing the nature of the program's activities. Chapter 7 covers the occupational skills training component, while Chapter 8 describes efforts of sites to assist participants in finding employment after JOBSTART. Chapter 9 presents the impacts of the program one year after random assignment. Chapter 10 summarizes lessons for operating programs like JOBSTART.

CHAPTER 2

JOBSTART SITES AND PROGRAM VARIATIONS

This chapter describes the characteristics and program variations of the sites in the JOBSTART Demonstration. It discusses site selection, including background information on the sites chosen; JOBSTART's implementation within the JTPA system; the modifications that sites made in their existing programs to conform to the JOBSTART guidelines; and the program variations and other factors that were likely to have affected participants' experiences. The final section provides brief profiles of the individual sites.

I. The JOBSTART Demonstration Sites

For reasons discussed in Chapter 1, the sites selected for the demonstration were service agencies that were already providing key elements of the JOBSTART program model, were able to adapt their programs to the model, and could meet other demonstration requirements.

A. Site Selection

In selecting sites, two objectives had to be balanced. First, sites had to be able to implement the program so as to provide a real test of its underlying design. They needed the appropriate capacities and experience, and an ability to comply with evaluation requirements. Second, sites could not have such extraordinary resources that the demonstration would provide little evidence about whether the program could be replicated on a larger scale. This concern led to selecting sites that were at least somewhat representative of the variety of service providers throughout the country.

In this demonstration many sites would be adapting their programs to conform to the JOBSTART model. To minimize the effects of evaluating programs that would be in a state of change, and thus to assure a fair test of the model, MDRC looked for sites with a history of strong program management, effective leadership, fiscal stability, and experience in offering basic education and/or vocational skills training or in working with the target population of young dropouts who are poor readers.

The selection and development of sites was a lengthy process, as described in an earlier report.[1] Once potential sites were identified, MDRC staff worked with the program operators to secure additional funding and to develop services consistent with the program model. They

[1]Auspos with Price, 1987.

also worked with service delivery area (SDA) and state staff to make adjustments in existing JTPA procedures to facilitate JOBSTART implementation.[2]

Sixteen sites initially joined the demonstration and began random assignment between August 1985 and October 1986. As Chapter 1 noted, three subsequently withdrew because of problems meeting the demonstration guidelines (especially recruitment) while satisfying their own performance requirements. The thirteen sites that remained in the demonstration are the subject of this report.

B. Pre-Demonstration Characteristics of the Sites

While all the sites were experienced service providers, they were by no means all similar in organization, size, type of enrollee traditionally served, or prior service emphasis, as shown in Table 2.1.

1. Type of Agency. The thirteen sites represented a variety of institutional sponsors. Three were the nonresidential component of Job Corps Centers. The remaining sites were four schools (adult vocational schools and a community college) and six community-based organizations (CBOs).

2. Site Size. The participating sites varied greatly in overall size. The largest sites (two of the adult vocational schools) had annual enrollments of 1,000 or more, while the smallest served only 120 enrollees a year. At SER/Corpus Christi, JOBSTART participants made up the entire enrollment during the training cycles in which they were active, but in most cases JOBSTART was a small fraction of the site's total enrollment.

3. Population Traditionally Served. For most sites, the anticipated enrollment levels in JOBSTART represented an increase in service levels to young, economically disadvantaged dropouts who read below the eighth grade level. Seven of the thirteen sites traditionally served both adults and youths. The majority of students at these sites were adults, many of them high school graduates, but four of the seven served substantial numbers of young people. The three Job Corps sites and the three education agencies -- Allentown in Buffalo, BSA in New York City, and CREC in Hartford -- were established to serve youths, and were not serving adults when the demonstration started. As for income levels, the three Job Corps sites served a low-income group exclusively. Since the six CBOs relied on JTPA or other funding that imposed income limits on eligibility, these sites enrolled primarily low-income students. The four schools (including the community college) served a broader range of students.

---

[2]At the time the JOBSTART Demonstration began, the emphasis in the JTPA system was on achieving high placement rates at low costs and on exceeding established standards. In addition, performance levels in service provider contracts generally reflected the type of program operated (for example, classroom training in occupational skills or on-the-job training) but did not differentiate between adult and youth participants. This was the general practice, despite the fact that the federal standards did recognize outcomes other than placement in a job as a positive termination from JTPA for youths. See Auspos with Price, 1987.

Table 2.1

Pre-Demonstration Characteristics of JOBSTART Sites

Site	Total Annual Enrollment	Traditional Population Served	Traditional Service Emphasis
Job Corps			
Atlanta Job Corps	340 residential 190 nonresidential	Youths	Basic education and vocational training
Los Angeles Job Corps	380 residential 355 nonresidential	Youths	Basic education and vocational training
Phoenix Job Corps	200 residential 200 nonresidential	Youths	Basic education and vocational training
Schools			
Connelley (Pittsburgh)	1,000	Adults primarily, some youths	Vocational training, basic education also available
East Los Angeles Skills Center	500	Adults and youths	Vocational training, basic education also available
EGOS (Denver)	15,000[a]	Adults primarily, some youths	Vocational training, basic education also available
El Centro (Dallas)	500	Adults and youths	Vocational training, basic education also available
Community-based organizations			
Allentown (Buffalo)	400	Youths	Basic education
BSA (New York City)	420	Youths	Basic education
CET/San Jose	775	Adults and youths	Vocational training which incorporated basic skills instruction plus separate GED class
Chicago Commons	220	Adults primarily, some youths	Vocational training which incorporated basic skills instruction
CREC (Hartford)	400	Youths	Basic education
SER/Corpus Christi	120	Adults and youths	Vocational training

SOURCE: Program records and staff interviews.

NOTES: [a]EGOS is a multi-site school serving many short-term students. Approximately 2,000 students were enrolled at the main building and the satellite locations at any point in time.

4. Prior Service Emphasis. As shown in Table 2.1, the four schools and the three Job Corps sites were experienced in offering the type of education and training components called for in the JOBSTART guidelines, although, as discussed below, they differed in the emphasis placed on basic education and the degree to which the two components were integrated. In contrast, only one of the six CBOs offered the JOBSTART combination of education and training. Three CBOs were education providers, whose traditional mission was to provide adult basic education, literacy training, and/or GED preparation. Because they did not offer any vocational training, they had to provide it through other local organizations in order to operate JOBSTART. The other two CBOs had to add an education component to comply with the demonstration guidelines.

II. Implementing JOBSTART Within JTPA

As discussed in Chapter 1, at the time the JOBSTART Demonstration was launched there were many disincentives to serving young dropouts within JTPA. Sites wishing to participate in the demonstration faced two major obstacles: securing JTPA funding and developing flexible arrangements within the existing system of performance standards and contracting practices. Their experience shows that the obstacles can be overcome when such programs are a state or local priority and creative approaches are adopted. JTPA administrators did provide special funding for JOBSTART sites or adjusted performance and contract standards, but they did so largely because the sites were participating in a demonstration that would be rigorously evaluated. Recognizing the seriousness of the dropout problem, these officials welcomed the opportunity to increase service to these at-risk youths and to learn more about effective strategies for serving them. The responsiveness of the JTPA system to a continuation of the program model after the demonstration period is discussed in Chapter 10.

A. Funding Sources for JOBSTART

JTPA funds constituted the overwhelming majority of operating support for the JOBSTART program. The Job Corps Centers utilized moneys distributed under Title IVB, the title authorizing federally administered programs.[3] Other sites received JTPA funding from several parts of the Title IIA program (as shown in Table 2.2), but most of their JTPA money came through contracts with the local SDAs, which distribute the so-called 78 percent funds.[4] The six CBOs, but none of the schools, used 78 percent money. At four of them the 78 percent money was new funding secured for JOBSTART, while in two cases it was existing funding designated for the program.

---

[3]During the operation of JOBSTART, the Jobs Corps received approximately $600 million to $650 million annually for its national operations, which provided more than 40,000 annual slots for participants at 105 centers.

[4]Seventy-eight percent of Title IIA funds are distributed within a state by a formula based on the number of unemployed and economically disadvantaged individuals.

Table 2.2

Funding Sources for JOBSTART Programs at Schools and Community-Based Organizations

Site[a]	JTPA Title IIA Funding			Other	$25,000 Corporate and Foundation Grants Awarded Through MDRC	Type of JTPA Contract
	78%[b]	Local 8%[c]	State 8%[d]			
Schools						
Connelley (Pittsburgh)		o	x	A,B	o	Cost reimbursement
East Los Angeles Skills Center		o	o	A	o	Performance based
EGOS (Denver)		o	o	A	o	Cost reimbursement
El Centro (Dallas)		o	o	A	o	Performance based
Community-based organizations						
Allentown (Buffalo)	x		o		o	Performance based
BSA (New York City) Pilot Phase	o			A,B,C		Performance based
BSA (New York City)			o	A,B,C	o	Not applicable[e]
CET/San Jose	x		o	C	o	Performance based
Chicago Commons	o		o		o	Performance based
CREC (Hartford)						
Program years 1 and 2	o		x	C	o	Performance based
Program year 3				A,C		Not applicable[e]
SER/Corpus Christi	o		o		o	Performance based

KEY: x indicates existing funding designated for JOBSTART
o indicates supplemental funding secured for JOBSTART
A includes in-kind school contributions or other education funds
B includes contributions from local foundations or other organizations
C includes other federal, state, or local monies

SOURCE: Program records and staff interviews.

NOTES: [a]Job Corps sites are funded under Title IVB and are excluded from this table.

(continued)

Table 2.2 (continued)

[b]78% of JTPA Title IIA funds are allocated by formula to states.

[c]8% of a state's JTPA Title IIA allocation is reserved for education programs. Local 8% funding refers to that portion which is distributed, at state discretion, to local service delivery areas to spend on projects of their choice.

[d]State 8% funding refers to the portion of the 8% education set-aside distributed directly by a state to specific programs or projects.

[e]BSA (New York City) stopped using JTPA 78% funding and CREC (Hartford) stopped using all JTPA funding while in the JOBSTART Demonstration.

Efforts by site staff and MDRC during the development of the demonstration were also successful in obtaining discretionary JTPA funds distributed by the states or, in some cases, the local SDAs. This money was obtained from the 8 percent of the JTPA Title IIA funds reserved for linkages with educational programs (8 percent funds) awarded by local SDAs and states. In all but two cases this money was supplemental funding secured for JOBSTART. Each site also received a grant of $25,000 from foundation and corporate sources supporting the demonstration. Seven of the school and CBO sites also secured other, non-JTPA funding.

In most cases the 78 percent funds were used primarily for the basic education and training components, while the supplemental funding was used mostly for the added teaching staff, equipment, and coordination, plus some added support services, such as counseling and incentive payments. The JTPA funds were distributed through both cost-reimbursement and performance-based contracts. Under the cost-reimbursement contracts, a site was paid for costs incurred under an approved budget for activities provided, while a performance-based contract paid service providers when participants achieved specified milestones such as attainment of a General Educational Development (GED) certificate, completion of training, or placement in a job. Performance-based contracts could lead to problems in serving JOBSTART youths if intermediate attainments short of placement in a job were not recognized or the milestones for payment were set at a level difficult to attain.

In fact, two sites originally receiving JTPA funding under a performance-based contract did shift to other funding arrangements. CREC in Hartford began its JOBSTART program in the middle of a program year, using 78 percent money, and continued using it in the following program year. In the third program year the site switched to non-JTPA funds. In New York City, BSA's original contract for 78 percent funds called for the agency to achieve educational attainment goals in what program staff felt was too short a time. BSA stopped using 78 percent money after an initial pilot phase of the program and shifted to using 8 percent funds and non-JTPA sources.

B. Modifications of JTPA Practices

In addition to providing funds, some state and local JTPA agencies aided the demonstration in other ways.[5] SDAs changed their performance-based contracting procedures, or usual funding rules for about half the sites in recognition of the fact that the JOBSTART operators were working with a harder-to-serve population and in the interest of contributing to the development of a knowledge base on effective programs for the target population. Two SDAs wrote cost-reimbursement contracts for JOBSTART, whereas their usual policy was performance-based contracts. Three adjusted their placement or positive termination standards for JOBSTART operators, reflecting the fact that they were working with a more difficult to serve population than were most service providers. Another developed a payment and performance evaluation system to reward the JOBSTART operator for the transition of youths from basic education to occupational training. A few earmarked more money for training or support services than is usual, in recognition of the need to provide more assistance to the JOBSTART participants than to the typical JTPA enrollees.

[5]See Auspos with Price, 1987, for a full discussion of this topic.

Still, certain practices commonly used in SDAs continued to pose problems. Funding constraints in the federal statute, particularly on the use of funds for support services and administration, made it necessary for many sites to seek outside funding to operate the program. Most JTPA contracts continued to hold program operators to higher standards than the SDA as a whole was required to meet under the federal performance standards. Performance-based contracts that withheld payment until late in the training period also created short-term cash-flow problems for some sites. Finally, serious problems were posed by JTPA contracts with education providers that stressed placement or failed to reward operators for moving individuals into vocational skills training with other organizations.

III. Program Modifications

A. Job Corps Sites

As would be expected, given the origins of the program model, the three Job Corps Centers in the demonstration did not make many changes in their existing programs to operate JOBSTART. Each conducted more aggressive outreach and recruitment in order to generate a large enough pool of applicants to accommodate creation of the control group for the impact evaluation. In addition, each designated a coordinator for the demonstration, but in most cases this person primarily dealt with collection of demonstration data and did not supplement the strong counseling already available. JOBSTART members were treated like regular nonresidential Job Corpsmembers at these three sites, though they were discouraged from entering two-year training programs because of the one-year limit on JOBSTART participation.

B. Schools and CBOs

The schools and CBOs, on the other hand, made a number of changes for the demonstration.

1. Recruitment. All the sites developed plans to expand and intensity their recruitment efforts in order to meet the JOBSTART enrollment goals; most hired additional staff to carry out the plans. These efforts are discussed in Chapter 3.

2. Counselor/Coordinator Role. All the sites created a coordinator position, with responsibility for monitoring student progress and, with one exception, serving as a counselor for the JOBSTART participants. (At CET/San Jose the vocational skills instructors doubled as counselors.) As discussed in Chapter 5, the counselor/coordinator position was pivotal in implementing the program model at the schools and CBOs.

3. Support Services. The sites made a number of efforts to increase retention. In addition to expanding their counseling capacity, they frequently arranged with local agencies to provide additional support services. Some provided enriched financial assistance: a few sites offered financial incentives to reward participants for attendance or performance; another provided needs-based payments to its JOBSTART participants even though it did not provide

such assistance to other enrollees and local JTPA policy was not to pay them. These services are discussed in Chapter 5.

4. Education. Two sites (SER/Corpus Christi and Chicago Commons) developed an education component specially for the demonstration. Other sites were in the process of augmenting their educational offerings as the demonstration started. For example, three sites were using computer-assisted instructional systems that had been installed at the start of the demonstration. The details of the education component are discussed in Chapter 6.

5. Training. The three education-oriented sites that did not offer occupational training prior to the demonstration had to make new arrangements with local training organizations to provide it for JOBSTART participants. They also had to integrate preparation for vocational training into their educational offerings and establish new procedures for moving students into training and monitoring their progress after they made the transition. At other sites most of the existing training curricula met the JOBSTART criteria, although a few courses were deemed inappropriate for JOBSTART participants because they did not provide the required five-hundred-hour minimum. No site developed a training course specifically for JOBSTART. Chapter 7 discusses the training component.

6. Job Placement Assistance. Most sites made no changes in their job placement strategies for the demonstration. Two schools (EGOS in Denver and Connelley in Pittsburgh) delegated the primary responsibility for placement to the program counselor/coordinator. Placement efforts are discussed in Chapter 8.

C. Other Activities

In addition to providing the components specified in the model (education, occupational skills training, support services, and job placement), about half the demonstration sites scheduled an additional activity for JOBSTART. Allentown in Buffalo, BSA in New York City, and El Centro in Dallas enrolled JOBSTART participants in existing "life skills" courses covering such topics as personal budgeting, interpersonal relationships, health and nutrition, and employment preparation. Participants at the Job Corps sites were enrolled in similar courses and also in "avocational" activities including athletics, driver education, and opportunities to learn about different cultures and ethnic groups. Because the life skills training constituted a significant portion of the services that JOBSTART participants received at these sites, hours spent in life skills classes are included in this study, despite the fact that they were not a required part of the program model. Some sites also provided opportunities for paid or unpaid work experience, as discussed in Chapter 8.

IV. Key Dimensions of Program Variation Among the Sites

Within the general framework provided by the program guidelines, sites operated programs with important differences, which, as noted above, typically arose from their past experience and practices. Five dimensions of program variation that seemed particularly likely to affect the experiences of participants are discussed below and analyzed in later chapters of this report.

A. Concurrent Versus Sequential Education and Training

A fundamental design issue in the JOBSTART Demonstration was whether young dropouts should participate in both basic skills instruction and occupational skills training from the beginning of the program (the concurrent model) or strengthen their basic skills before they started occupational training (the sequential model). Since there was no consensus on which approach was more effective, the program guidelines did not prescribe one.

One argument for sequential education and training is that employers value workers with solid basic skills because they learn new job skills more quickly and in the long run are more productive than other workers.[6] While recognizing that young dropouts will not receive a broad liberal education in a program such as JOBSTART, proponents of this view nevertheless value the type of general knowledge imparted in courses designed to prepare students for the GED test. They believe that sequential programs are more likely than concurrent ones to provide this type of general knowledge because they face fewer time constraints.

A second, related argument is that youths reading at low levels will benefit if their basic education skills are improved before they enter occupational skills training.[7] In this view, youths who enroll in concurrent programs, and read at the level of most JOBSTART participants when they entered the program, will find their training options limited to occupational areas requiring few basic skills or, if admitted to more advanced courses, will have to struggle to comprehend the material. Sequential programing, in theory, therefore, offers participants a wider range of occupational options and a better basis on which to build vocational skills competencies.

Another presumed advantage of sequential programing is that it eases the burden of scheduling classes. Students are freed from the pressure of simultaneously participating in two types of intensive coursework, and their daily schedule can allow time for activities designed to address a variety of needs, such as life skills training, recreational activities, or part-time jobs.

Sequential programing is not without problems, however. Students may find the education phase similar to past high school experience, since basic skills are not integrated with occupational training. Students may leave the program before they get to the occupational skills training component, and there may be logistical difficulties in making the transition from one component to another. As discussed below, such difficulties are exacerbated if different agencies provide the education and occupational training classes.

Supporters of concurrent programing, on the other hand, argue that since most dropouts have had negative experiences in school, being able to combine basic education with skills training -- which has a more obvious connection to the job market -- makes the education component more appealing.[8] It is argued, for example, that if students see that they need

---

[6]See, for example, National Academy of Sciences, 1984; Johnson and Packer, 1987; National Association of Manufacturers, 1982.

[7]Hahn and Lerman, 1985.

[8]Mathematica Policy Research, 1988.

basic math in order to make measurements for carpentry, they will be more motivated to apply themselves to learn basic skills.

Another argument for concurrent programing rests on a narrower view of the purpose of basic skills education for young dropouts. Its proponents hold that instruction in basic skills should focus on the particular skills needed in occupational training rather than on imparting general knowledge. This approach supports concurrent programing, even integration of the two curricula into a single course. The experience of the U.S. Armed Forces in teaching military occupations to recruits with poor basic skills is often cited as a successful example of such a strategy.[9]

Both the concurrent and sequential approaches were represented in the JOBSTART Demonstration. Eight sites operated concurrent programs, while five offered a sequence of education followed by occupational skills training, as shown in Table 2.3. The differences reflected, in part, different philosophies about the appropriate relationship between basic education and occupational skills training as well as prior experience. At one end of the spectrum the three sites that traditionally offered only education (Allentown in Buffalo, BSA in New York City, and CREC in Hartford) chose to operate the JOBSTART program sequentially, and emphasized educational preparation and GED certification as a goal even if it did not lead to entry into occupational skills training. At the other end two concurrent sites (CET/San Jose and Chicago Commons) traditionally viewed education as a means to learn the basic skills needed in vocational skills classwork and had developed curricula that integrated training-specific basic skills into the vocational training courses. (CET/San Jose also offered GED preparation classes, which were used for the JOBSTART youths, but Chicago Commons had to add an education component for the demonstration.) Other sites tended to balance the two components more equally, although, as discussed in Chapters 6 and 7, there were strong differences across the sites in the emphasis placed on GED attainment within the JOBSTART program.

B. Brokered Versus In-House Services

The second important dimension of program variation studied in this report is whether, at the sequential sites, the JOBSTART program operator provided both the education and training components on-site, or instead served as a "broker" for the JOBSTART participants, linking those ready to leave the basic skills component with occupational training providers. Three of the sites followed the latter practice (they are referred to as "sequential/brokered" sites in this report), and two provided their own training on-site (referred to as "sequential/in-house" sites).[10] Participants at the sequential/brokered sites remained in the JOBSTART program while they were in skills training, but they typically ceased to attend classes at the JOBSTART operator's site.

Practically speaking, brokering may be the only way that small agencies specializing in

---

[9]Sticht, 1987.

[10]One other site -- SER/Corpus Christi -- brokered its job placement component through another organization, the Texas Employment Commission.

Table 2.3

Program Structure of JOBSTART Sites, by Prior Service Emphasis

Prior Service Emphasis	Concurrent	Sequential/ In-House	Sequential/ Brokered
Education only	None	None	Allentown (Buffalo) BSA (New York City) CREC (Hartford)
Training only	CET/San Jose[a] Chicago Commons[a] SER/Corpus Christi	None	None
Both education and training	Atlanta Job Corps Connelley (Pittsburgh) East Los Angeles Skills Center EGOS (Denver) Phoenix Job Corps	El Centro (Dallas) Los Angeles Job Corps	None

SOURCE: Program records and staff interviews.

NOTES: Concurrent programs offer basic education and occupational training concurrently from the beginning of participation. Sequential/in-house programs offer basic education followed by occupational training, with both components provided in-house by the agency. Sequential/ brokered programs provide basic education and then serve as a broker for occupational training, referring participants to other agencies.

[a]CET/San Jose and Chicago Commons offered vocational training which incorporated basic skills instruction.

one type of service can provide multi-component, comprehensive programs. None of the small, community-based educational providers participating in the demonstration, for example, had the capability to develop on-site training facilities offering a variety of training options. Agencies with a limited number of training courses might also choose to broker training for some participants in order to increase the range or quality of training available to them.

Brokered programs increase the operational challenges for the program operator, however. There are potential difficulties, for example, in ensuring that participants in education will be accepted for training by other agencies, in scheduling the end of the education phase to coincide with a variety of different training schedules, and in monitoring the progress of students referred to other agencies and the quality of the services provided to them. Chapter 7 discusses how the JOBSTART operators met these challenges.

C. Serving JOBSTART Youths in Adult Classes

The three Job Corps Centers and SER/Corpus Christi enrolled only youths in their programs during the demonstration, and Allentown in Buffalo and BSA in New York City enrolled only youths in the education phase of JOBSTART. The remaining seven sites, which enrolled adults as well as youths, had to decide whether to serve the JOBSTART youths in separate classes or to combine ("mainstream") them in classes with adults.[11]

Mainstreaming youths in classes with adults can provide young students with role models and a helpful maturing influence. At the same time, however, it can be harder for the youths to develop a sense of belonging or to feel that staff take a personal interest in them, especially if they entered the program with fewer skills than adults have. Immaturity or lack of seriousness on the part of some youths can also pose problems for older students in their courses and for teachers, who must try to juggle two teaching styles and devote more time to discipline than they might otherwise do. An open question is whether youths respond to different teaching techniques than do adults.

Nearly all the sites that traditionally served adults and youths made a special effort to place JOBSTART participants in education classes by themselves or with other youths during at least part of the demonstration, but none, except SER/Corpus Christi, operated youths-only training classes. (See Table 2.4.) The implications of teaching youths and adults in the same training classes are discussed in Chapters 7 and 8; Chapters 5 and 6 discuss the advantages of having them in separate classes for other activities, such as education and life skills training.

D. Intensity of Support Services

In programs serving disadvantaged youths, the level and type of available support services are likely to have an important effect on participation. As discussed earlier, most of the sites strengthened their support services for the demonstration. Nevertheless, the level of support

[11]CREC in Hartford, which had traditionally served only youths, began enrolling adult AFDC recipients while JOBSTART was operated. SER/Corpus Christi enrolled the JOBSTART youths in separate cycles during the demonstration.

Table 2.4

Characteristics of JOBSTART Activities, by Site

Site	Fixed Cycle or Open Entry and Exit	Separate Classes for Youths	Expected Duration of Occupational Training	Scheduled Hours per Day			
				Education[a]	Training	Other Activities	Total
Concurrent							
Atlanta Job Corps	Open entry and exit	Yes	1 year maximum[b]	Individualized, usually 2 hours	Individualized, usually 2.5 hours at start, more in subsequent weeks	Usually 2 hours in life skills and avocational activities at start, less in subsequent weeks[c,d]	6.5 hours
CET/San Jose	Open entry and exit	In education only	600-1000 hours during 23-37 weeks	2 hours, may vary	4.5 hours, may vary	None	6.5 hours
Chicago Commons	Fixed cycle	In education only	500-1380 hours during 22-42 weeks	1-2 hours, 3-5 days per week	4.5-7 hours, depending on course	None	6.5-8 hours
Connelley (Pittsburg)	Fixed cycle with semesters	Sometimes in education	700-1000 hours	2 hours	4 hours	1 hour of counseling and other supports, school year 1986-87[c]	6 hours in school year 1985-86, 7 hours in school year 1986-87
East Los Angeles Skills Center	Open entry and exit	No	600-840 hours during 20-28 weeks	2 hours, may vary	4 hours, may vary	None	6 hours
EGOS (Denver)	Open entry and exit with semesters	In education only	600-1000 hours	2 hours, may vary	4 hours, may vary	None[c]	6 hours

(continued)

Table 2.4 (continued)

Site	Fixed Cycle or Open Entry and Exit	Separate Classes for Youths	Expected Duration of Occupational Training	Scheduled Hours per Day			
				Education[a]	Training	Other Activities	Total
Phoenix Job Corps	Open entry and exit	Yes	1 year maximum[b]	Individualized, usually 2 hours	Individualized, usually 2.5 hours at start, more in subsequent weeks	Usually 2 hours in life skills and avocational activities at start, less in subsequent weeks[c,d]	6.5 hours
SER/Corpus Christi	Fixed cycle	Yes	500-660 hours during 22-23 weeks	2.5 hours for first 12-16 weeks[e]	3.5 hours for first 12-16 weeks, then 6 hours	None	6 hours
Sequential/in-house							
El Centro (Dallas)	Open entry and exit	In education only	720 hours over 24 weeks	3-4 hours	6 hours	2-3 hours in life skills during education phase[c,d]	6 hours
Los Angeles Job Corps	Open entry and exit	Yes	1 year maximum[b]	3 hours for first 10-12 weeks, then individualized	6 hours, may vary	3 hours in life skills or avocational activities during education phase[c,d]	6 hours
Sequential/brokered							
Allentown (Buffalo)	Open entry and exit for education, varied in training	In education only	Varied -/ training provider	3 hours	Varied by training provider	3 hours in life skills during education phase[d]	6 hours during education phase

(continued)

Table 2.4 (continued)

Site	Fixed Cycle of Open Entry or Exit	Separate Classes for Youths	Expected Duration of Occupational Training	Scheduled Hours per Day			
				Education[a]	Training	Other Activities	Total
BSA (New York City)	Open entry and exit for education, varied in training	In education only	Varied by training provider	3 hours, 4 days per week	Varied by training provider	3 hours in life skills during education phase, 4 days per week[d]	6 hours during education phase, 4 days per week
CREC (Hartford)	Open entry and exit for education, varied in training	No	Varied by training provider	3 hours	Varied by training provider	None[c]	3 hours during education phase

SOURCE: Program records and staff interviews.

NOTES: [a]Education hours refer to time spent in a basic education or GED-preparation class and do not include education provided as part of an occupational training course.

[b]Job Corps Centers offer a maximum of 2 years of training, but JOBSTART participants were supposed to be enrolled in courses that could be completed in 1 year.

[c]Some participants worked in paid or unpaid work experience positions for limited periods.

[d]Life skills classes typically provided instruction in work behaviors, goal setting, personal budgeting, health, and interpersonal relations. Avocational activities included physical education and driver education.

[e]Additional hours were available on an individualized basis after the course ended.

varied, for fiscal and philosophical reasons. The Job Corps sites offered the most comprehensive array of support services, including access to health care and recreational facilities; the most financial assistance and incentives; and the program best designed to convey a sense of belonging. Other sites had more modest resources to draw upon and relied more heavily on referrals to other providers Chapter 5 discusses this variety and describes how sites that initially offered little special support to JOBSTART participants expanded their efforts as the demonstration progressed. Particular attention is paid to the process by which sites accustomed to serving adults adapted their programs to the special needs of youths.

E. Hours and Service Mix per Day and Program Duration

Sites also varied in the expected duration of the program and the schedule of class hours and activities per day, as shown in Table 2.4. The demonstration sites scheduled JOBSTART classes in three basic ways. The majority of sites that operated both the education and training components themselves scheduled the classes on an "open entry/open exit" basis. This means that participants could enter the program at any time, progress through the material at their own pace, and complete the course whenever they reached the specified competency levels. The duration of training was open-ended, but sites anticipated that participants would typically be able to complete the prescribed training curriculum in many fields in approximately six hundred to eight hundred hours. Individuals who needed additional time to complete competencies could stay longer, however.

Some concurrent sites, in contrast, operated JOBSTART as a series of "fixed cycles," meaning that all participants started and completed training together on specified dates and the maximum length of training was prescribed. The third variation was the education provider's schedule: these three sites operated the education component on an open entry/open exit schedule, but the training schedule was determined by the variety of training organizations at which JOBSTART participants were enrolled.

These differences were important because they affected the intensity of the training available in JOBSTART. As Table 2.4 shows, the duration of the occupational training component (the major source of variation among the sites) ranged from 22 to 23 weeks at SER/Corpus Christi to a year at the Job Corps sites. Even within a site, there could be significant variation among the different training options. At Chicago Commons, for example, scheduled training ranged from 500 hours in industrial inspection to 1,380 hours in packaging machine repair.

Sites also showed great variety in the number of hours scheduled for activities each day. The usual schedule ranged from a low of three hours per day at CREC in Hartford to seven to eight hours per day in some courses at Chicago Commons. A typical day can be described in terms of three basic models:

1. Concurrent Sites That Were CBOs or Schools. Students typically had six hours of classes per day, five days a week. In general, two hours were spent in education classes, with training classes scheduled for the remaining four hours.

2. Concurrent Sites That Were Job Corps Centers. These sites had six and a half class hours per day. Schedules were highly individualized and changed frequently, but commonly included two hours of education, two and a half hours of vocational training, and two hours devoted to life skills or avocational activities such as sports.

3. Sequential Sites. These also scheduled a six-hour day during the education phase, but the daily distribution of activities was quite different. Typically three hours were spent in education classes and another three hours were spent in life skills training. The training schedules were set by the training providers at the brokered sites, but typically involved five to six hours of classes per day. Training classes ran for six hours a day at the sequential/in-house sites.

The variation in training duration and in scheduled daily hours meant that the planned participation over a period such as six months could also vary greatly. At SER/Corpus Christi a participant completing education and training in about six months, as planned, would have no more than 660 hours of occupational training. In many of the training sequences at Connelley in Pittsburgh, however participants with such lengths of participation and hours would not have neared completion.

V. Other Factors That Could Have Affected Program Implementation

A number of other conditions, not intrinsic to the JOBSTART model itself, were also likely to have affected the way the program model was implemented.

A. Local Labor Market Conditions

JOBSTART sites operated in very different labor markets. The unemployment rates in the metropolitan areas where the sites were located varied from a low of 3 percent in 1987 in Hartford, where CREC was located, to 12 percent in 1986 in Corpus Christi, where SER operated. Youth unemployment rates varied from 6 percent in 1986 in Hartford to 27 percent in 1985 in New York City, where BSA was located.[12] Chapters 3 and 4 discuss the effect of labor market conditions on recruitment efforts and participation in JOBSTART.

B. General Instability and Staff Turnover

As noted earlier, all the sites selected for participation in the demonstration had shown evidence of good management and adaptability. Nevertheless, some sites underwent major changes in funding or management over the course of the demonstration, resulting in major cutbacks in staffing, reorganization of responsibilities, and/or physical relocation. These changes

[12]U.S. Department of Labor, Bureau of Labor Statistics, unpublished figures.

placed unanticipated stresses on the JOBSTART implementation, which in some cases had an adverse effect on program operations. In addition, over the approximately two and a half years that the demonstration was in operation at most sites, there was a considerable amount of staff turnover among the education instructors and counselor/coordinators who had been hired especially for the demonstration. As a result, at most sites the program model continued to evolve over the course of the demonstration.

VI. Profiles of the Sites

The following sketches are designed to convey further the character of the individual sites, their variety, and their accommodations to the JOBSTART Demonstration.

A. Schools

1. Connelley Skill Learning Center, Pittsburgh, Pennsylvania. Housed in a sprawling, five-story structure in downtown Pittsburgh, Connelley is Pittsburgh's Area Vocational Technical School, a division of the Pittsburgh Public School System. It served 1,000 students a year, most of them adults, providing occupational skills training in more than twenty fields as well as basic education and GED preparation. It operates on a fixed cycle semester basis, and no classes are offered during the summer.

The 109 JOBSTART participants were distinguished from the typical Connelley enrollees by their youth, basic skills deficiencies, and ethnic background -- most were black, while the staff and other students were typically white. The JOBSTART youths were offered the same courses as the others, but their occupational skills training was cut from the usual 6 hours a day to 4, to allow for 2 hours of basic education, one of which was devoted to computer-assisted instruction. The school tried many other adaptations for JOBSTART: it placed the JOBSTART participants in a basic education class of their own but subsequently mainstreamed them (they were mainstreamed in training from the start); it first used a staff member to coordinate the program but later hired an outside management firm; and it provided special supports for JOBSTART participants, including needs-based payments, financial rewards for attendance and achievement, individual and group counseling, workshops and lectures on such topics as family planning and substance abuse, and mentorships with local employers. Scheduling these activities within the regular class day was a problem; eventually they formed an "after school" component. Representatives from Connelley, the Allegheny Conference on Community Development, the local JTPA staff, and several community-based organizations formed an ad-hoc advisory committee that helped establish the JOBSTART program at Connelley and continued to provide oversight throughout the demonstration.

2. East Los Angeles Skills Center, Monterey Park, California. Founded in 1966, this is one of six skills training centers operated by the Los Angeles Unified School District. Located seven miles from downtown Los Angeles, it served about 500 enrollees annually, 200 of them disadvantaged youths. Typical of the neighborhood in which the center is located, most of the 53 JOBSTART participants were Hispanic.

The center offers vocational training in electronics repair and installation, auto mechanics,

industrial drafting, machine shop, and a variety of clerical courses. It also offers classes in basic education, GED, and English as a Second Language (ESL). During the demonstration, the site expanded its education programs with new curricula, audiovisual equipment, and staff. It operated on an open entry/open exit basis, with education and training scheduled concurrently.

With the exception of more intensive counseling services, there was little to distinguish JOBSTART from the ongoing programs at the skills center. The site did not provide needs-based payments, although participants were given bus passes and money for gasoline, and emergency funds were available to help them pay rent or buy groceries. JOBSTART youths were mainstreamed in both their education and training classes. Training classes ran for 6 hours a day; JOBSTART participants left them to work on basic skills in the learning lab for an hour or two, following individualized schedules.

3. El Centro Community College Job Training Center, Dallas, Texas. El Centro[13] traditionally served about 500 low-income youths and adults per year, using an open entry/open exit schedule. The center operated a sequential program for JOBSTART's 99 youths, two-thirds of whom were black and one-fifth of whom were Hispanic. The education classes -- developed especially for the demonstration -- enrolled only JOBSTART youths and emphasized small group instruction and use of audiovisual materials. Participants attended education classes for 3 to 4 hours a day and spent another 2 to 3 hours in life skills training. Support services were expanded for the demonstration: only JOBSTART participants were provided with needs-based payments, intensive counseling, monthly field trips, and mentors from local businesses. Bus passes, emergency payments, and referrals for childcare were also available.

Students continued to work on basic skills for 2 hours a week while enrolled in training, using materials tailored to their specific training area. El Centro offered training in air conditioning and refrigeration, auto-body repair and auto mechanics, cable TV installation, home health care, painting and wallcovering, and a variety of clerical areas, for 6 hours a day.

4. Emily Griffith Opportunity School (EGOS), Denver, Colorado. Part of the Denver Public School System, EGOS, like Connelley, is a large vocational school more accustomed to serving adults than youths. Founded in 1916, it has 15,000 students a year in some thirty occupational training courses and several hundred other courses, many of them avocational.

The main adaptations made for JOBSTART were in the counseling services and the education component. Two counselors were assigned to the 113 JOBSTART participants and also had responsibility for recruitment and job placement. The school did not provide needs-based payments, but assistance with transportation and childcare was available.

JOBSTART participants were mainstreamed with adults in training, but were either in education classes by themselves or with other youths. Computer-assisted instruction and new curriculum series were introduced at EGOS about the time the demonstration began. Group discussions on nonacademic topics were incorporated into the education classes once a week.

---

[13]Renamed the Edmund J. Kahn Job Training Center in September 1988.

EGOS's standard schedule was 6 hours a day of vocational training, but JOBSTART participants normally attended 4 hours a day to allow time for the education classes. EGOS operated on a semester schedule, but students could start at any time. JOBSTART students could take education courses during the summer, but no occupational training courses were in session then.

B. Community-Based Organizations

1. Allentown Youth Services Consortium, Buffalo, New York. Allentown is the largest and most diversified of the community-based education agencies that operated JOBSTART, and the major provider of youth services in the local JTPA system. In addition to basic education and life skills training, Allentown offers vocational assessment, employability development, and placement services. It traditionally enrolled about 400 youths a year, almost one-half of them dropouts. The 71 JOBSTART participants attended the same education and life skills classes and received the same support services (needs-based payments and childcare assistance) as other youths; more counseling was available for JOBSTART, however. Education classes using Comprehensive Competency Program (CCP) materials (a computer-assisted program of basic skills instruction) were scheduled for 3 hours in the morning or afternoon; life skills activities made up the remaining 3 hours. Allentown subcontracted with local proprietary schools for the JOBSTART vocational training. During training Allentown continued to fund participants' needs-based payments, scheduled regular meetings with the trainees, and required the training providers to submit written progress reports. Placement assistance was available through the training provider or Allentown's placement unit.

2. Basic Skills Academy (BSA), New York, New York. BSA operated an alternative education program which traditionally served approximately 400 economically disadvantaged young dropouts a year. Small capacity (60 students at a time), intimate size, and an open, comfortable atmosphere created a "family" feeling integral to BSA's instructional philosophy. The 51 JOBSTART participants worked on basic education using CCP materials for 3 hours every morning, four days a week, and life skills materials in the afternoon. In addition to teaching basic skills, the staff focused on building self-esteem and personal responsibility. Participants were referred to JTPA-funded agencies throughout the city for occupational training. During the education phase, BSA provided counseling, transportation and childcare assistance, and, at times, needs-based payments or incentive payments. Thereafter, the training organizations were responsible for support services and placement assistance.

BSA operated JOBSTART as a pilot program during the winter of 1985-86. Before entering the demonstration in October 1986, BSA relocated and changed its funding base from JTPA funds to money provided through the Mayor's Office of Youth Programs.

3. Capitol Region Education Council (CREC), Hartford, Connecticut. CREC was established in 1981 to provide alternative education programs for young high school dropouts. Its Work and Learn Center traditionally served about 400 youths a year, and added adults during the demonstration.

CREC's learning center underwent major program funding and staffing changes during

the demonstration period. Most of the 48 JOBSTART participants were enrolled in the 3-hour afternoon education class, along with other youths and adults (there were morning and evening classes as well). Basic skills instruction used CCP, which was installed at the start of the demonstration. CREC was the only sequential site that did not schedule intensive work in life skills training, although it added more of such activities over the course of the demonstration. Support services were limited to counseling, bus passes, and assistance with childcare. Paid work experience or internships were available after the education phase. Participants were referred to local community colleges and JTPA-funded organizations for occupational skills training. The training providers were responsible for support services and placement assistance during the training phase of the program, although CREC counselors were available to work with JOBSTART youths.

4. Center for Employment Training (CET), San Jose, California. CET was founded in 1967 to provide vocational training to farmworkers and other disadvantaged groups; CET/San Jose is the headquarters for a network of CET affiliates in six western states. CET uses a "holistic" approach that seeks to develop an individual's full potential and emphasizes the need for positive reinforcement to build self-esteem. CET has no entrance requirements and does no screening of participants. Vocational instructors are expected to serve as counselors and role models as well as subject-matter teachers.

The CET training model integrates basic skills into the vocational training curriculum (although GED and ESL classes are offered). The ten or so training areas include clerical work, building maintenance, electronics assembly and repair, and industrial trades, such as machine tool operator and sheet metal worker. The site operates on an open entry/open exit basis, and classes are scheduled for 6.5 hours a day. Youths and adults are typically served together in classes.

No program changes were made for JOBSTART participants except for enrolling them in a youths-only GED class concurrently with their occupational training. CET did not provide needs-based payments but supplied free groceries once a week, help with transportation costs, and on-site daycare.

Prior to the demonstration, CET served over 700 enrollees, approximately one-third of them youths. The majority were Hispanic, as were the majority of the 62 JOBSTART participants. During the demonstration, the organization adjusted to significant changes in its traditional funding and staffing patterns.

5. Chicago Commons Association's Industrial and Business Training Programs, Chicago, Illinois. Chicago Commons is the training arm of a ninety-year-old organization that began as a settlement house and serves residents of low-income neighborhoods in Chicago. It offered rigorous training in word-processing and various industrial trades including screw machine operation, plastic mold setting, industrial inspection, and packaging machine repair. The site typically served adults, most of whom already had high school diplomas or GEDs, and it screened applicants carefully. As at CET, basic skills instruction was incorporated as needed into the training curriculum. Prior to JOBSTART, the site did not offer GED-preparation classes. Courses operated on fixed cycles of 22 to 42 weeks, with 6 to 7 hours of training a day the norm.

The 42 JOBSTART participants, most of them black, were typically older and had higher average reading scores than the participants at other sites. Chicago Commons made a number of changes for JOBSTART (adding a counselor/coordinator and classes in basic education) but expected the youths to perform at the same level as the adults. Like the other enrollees, they were provided with needs-based payments. Placement efforts focused on training-related jobs.

6. SER/Jobs for Progress, Corpus Christi, Texas. SER/Jobs for Progress, Inc. is a national community-based organization, with local affiliates, which places a special emphasis on serving Hispanic Americans. SER/Corpus Christi is one of 110 autonomous training centers affiliated with the national SER (Service, Employment, Redevelopment) organization. The JOBSTART program operated at SER/Corpus Christi was unique among the schools and CBOs in the demonstration because this organization developed an entirely new program consistent with the JOBSTART program model. The site operated JOBSTART in a series of 22- to 23-week fixed cycles. The 146 JOBSTART participants, most of them Hispanic, made up the entire enrollment at the site in their cycles.

The site's small size -- only 120 individuals were served annually -- contributed to its supportive atmosphere. Participants received considerable attention from teachers and other staff, who closely monitored their progress. In addition to need-based payments and financial rewards for academic performance, participants were provided with individual and group counseling, special workshops and lectures, and on-site daycare.

The 6-hour class day was split between basic education and training until the last weeks of the cycle, when participants were in training classes full-time. The basic education class -- new for JOBSTART -- devoted over an hour a day to computer-assisted instruction. Training options were limited to auto-body repair, auto mechanics, clerical work in accounting, and secretarial skills; in the second year only the clerical and auto-mechanic training were available. Placement services were provided by the local office of the Texas Employment Commission.

C. Job Corps Centers

The Job Corps is a federal education and training program for disadvantaged youths, which aims "to break permanently the cycle of poverty by improving life-time earning prospects" of participants. It was established by the Economic Opportunity Act of 1964, is funded under Title IVB of JTPA, and during the operation of JOBSTART received about $600 million to $650 million a year. The Job Corps has the capacity to serve approximately 40,500 youths between the ages of sixteen and twenty-one who are economically disadvantaged, as defined by JTPA.

Centrally administered by the U.S. Department of Labor, the program consists of individual centers operated by businesses, nonprofit organizations, or local government agencies, under contract to the Department of Labor, or by federal departments, under executive agreement with the Department of Labor. The Job Corps is primarily a residential program, but approximately 10 percent of corpsmembers live on their own or with their families. The full array of educational, occupational, and support services are available to residents and nonresidents alike. JOBSTART youths were part of the nonresidential component.

There is some variation from center to center, particularly in occupational skills training, but many aspects of the Job Corps are standardized by the Department of Labor. The Job Corps is designed to provide a comprehensive program of services to corpsmembers, including education, occupational skills training, avocational studies (such as employability development, health, cultural awareness, physical fitness, and arts and crafts). Educational studies are open entry/open exit and self-paced. All centers also provide a full array of support services, including personal and group counseling, medical and dental services, meals, and assistance with transportation, childcare, and job placement. Corpsmembers are subject to a highly structured disciplinary system, which is designed to maintain order and attendance standards, and they participate in an incentive system, which provides graduated cash payments to encourage attendance, retention, and achievement in the classroom.

JOBSTART youths received education, training, and support services that were no different from those offered to other corpsmembers, and they participated fully in the Job Corps disciplinary and incentive systems.

1. Atlanta Job Corps Center, Atlanta, Georgia. The Atlanta Job Corps is housed in a former apartment building on the outskirts of the city. The Management and Training Corporation -- a for-profit organization -- operates the center under contract to the Department of Labor. It has the capacity to serve 340 residents, drawn from all over the southeastern United States, and 190 male and female nonresidents who live in the Atlanta area. Almost all the corpsmembers are black. Thirty nonresident youths participated in JOBSTART.

For the JOBSTART Demonstration, the center doubled its enrollment of nonresident males, added a second full-time recruiter to intensify the outreach effort, and hired an additional counselor to serve JOBSTART youths. There was frequent turnover in the counselor position, leaving it vacant for significant periods of time.

As at other Job Corps sites, JOBSTART youths received the same educational services, occupational skills training, and support services as all other corpsmembers. Education and training were organized concurrently. The center offered a number of occupational skills training courses on-site, including clerical training, culinary arts, child development, health occupations, and building maintenance. Corpsmembers were also eligible to train off-site for such occupations as licensed practical nurse, medical office assistant, welder, and auto mechanic.

2. Los Angeles Job Corps Center, Los Angeles, California. The Los Angeles Job Corps, operated by the YWCA of Los Angeles, is the fifth largest Job Corps Center in the nation, and one of the oldest. The central facility is located in downtown Los Angeles and the center has three satellite facilities. Overall, the Los Angeles Job Corps can serve approximately 750 youths, about one-half of them in the nonresidential component. The membership is largely black, Hispanic, and Asian, but the center serves a number of white youths as well. There were 109 nonresidential youths who participated in the JOBSTART Demonstration.

Corpsmembers in Los Angeles complete their basic educational training before moving into occupational skills training. A particularly wide array of skills training courses is available through the center, affiliated training institutions, and union-sponsored pre-apprenticeship programs. Corpsmembers can train for jobs in health occupations, automotive repair, construc-

tion, electrical appliance repair, clerical work, childcare, building maintenance, culinary arts, and industrial production.

3. Phoenix Job Corps Center, Phoenix, Arizona. The Phoenix Job Corps is located in South Phoenix and operated by the Teledyne Economic Development Corporation, a for-profit organization. The center is distinctly multicultural. Immigrant Asian and Native American youths are represented, along with a majority of Hispanic youths and a significant number of blacks and whites. Enrollment was about 400, equally divided between the residential and nonresidential components. Sixty-six nonresidential youths, mostly from the Hispanic, white, and black communities, participated in JOBSTART at the Phoenix Job Corps.

Apart from adding two full-time recruiters, the center made no changes for the JOBSTART Demonstration. Education and skills training classes were held concurrently. The center offered occupational skills training in business and clerical work, retail sales, electronic assembly, health occupations, building maintenance, and stock room assistance. In addition, local unions provided pre-apprenticeship training programs in such trades as masonry, carpentry, painting, and plastering.

CHAPTER 3

RESEARCH DESIGN, RECRUITMENT, AND SAMPLE CHARACTERISTICS

This chapter describes the research design of the JOBSTART Demonstration and the characteristics of the study's samples. It begins with an overview of the intake procedures for applicants and then discusses the challenge of recruiting young dropouts for a program like JOBSTART. Next is a description of the four samples of applicants that underlie the analysis: the full research sample, participant sample, survey sample, and surveyed participant sample. Finally, the characteristics of the participant sample -- the basis of Chapters 4 through 8 -- are presented. Technical discussions of the data analysis are provided in Appendix B.

I. Overview of the Research Design

Although education and training services for young school dropouts are limited, some youths who entered JOBSTART would have gotten General Educational Development certificates (GEDs) or high school diplomas, found jobs, increased their earnings, or gotten off welfare even if they had not been in the program. As noted in Chapter 1, to isolate the impact of JOBSTART from other factors that may produce such outcomes, MDRC randomly assigned applicants to experimental and control groups. The two groups were similar except that only the experimental group could receive JOBSTART services. Comparison of the two groups' experiences during the year after random assignment (the follow-up information available for this report) provided a reliable estimate of the difference the program made during a period when most experimentals spent much of the time in the program.

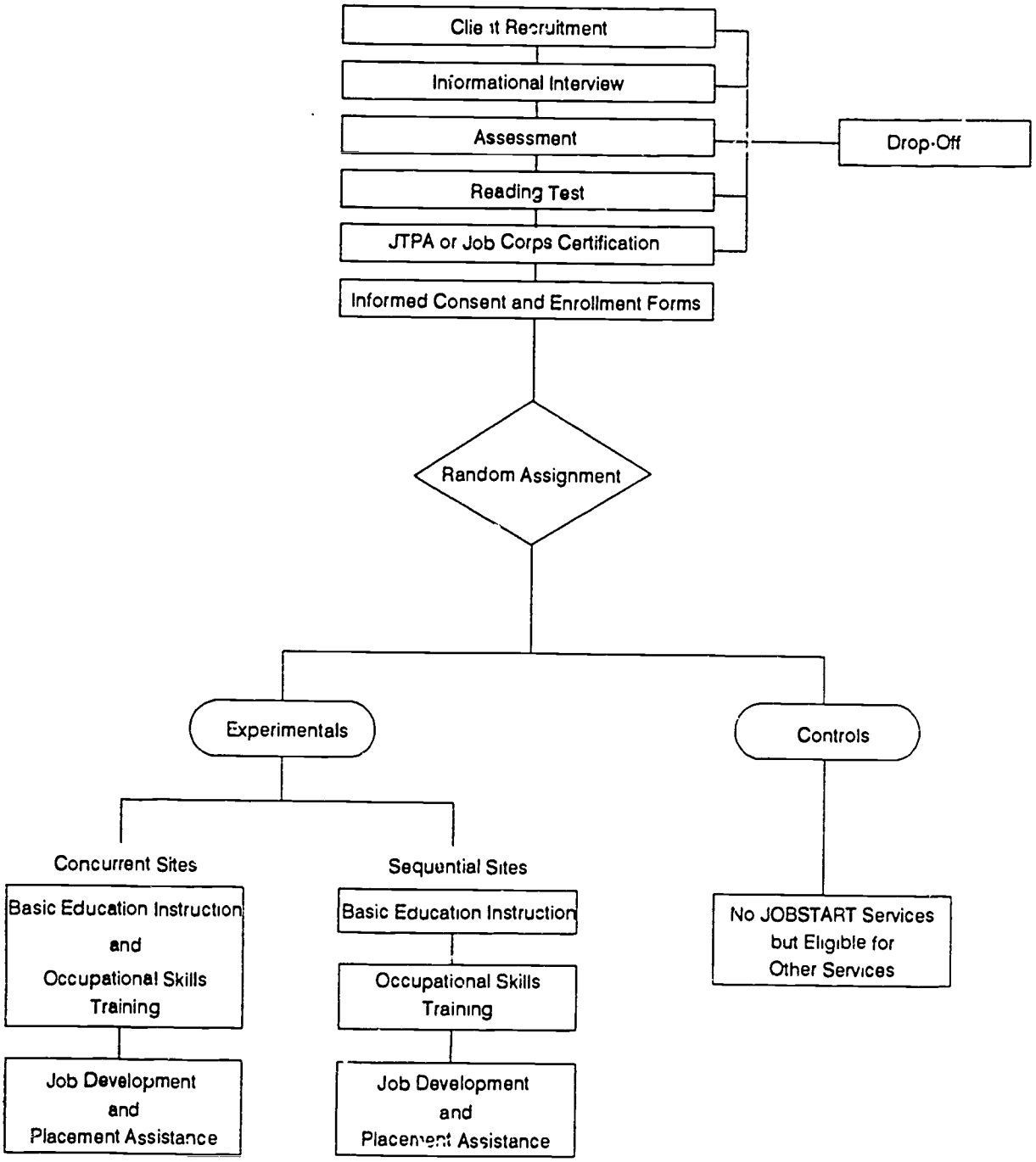
Figure 3.1 shows the steps in the intake and random assignment procedures. Youths who expressed an interest in program services entered the program through a process that took from one day to one month (ten days on average), depending on the site. Most of the steps were part of the usual JTPA or Job Corps intake process; at most sites only the reading test and random assignment were added for the JOBSTART Demonstration.[1]

The order of steps varied from site to site, as did the division of responsibility between the program operator and the local service delivery area (SDA). The process included:

- Client recruitment: JOBSTART was voluntary, so the program operator and, in some cases, the SDA actively recruited youths to apply, using a variety of techniques to meet their enrollment goals.

[1]Starting in program year 1988 (July 1988), SDAs were required to have a reading test as part of intake. This new JTPA requirement was not in force during intake for JOBSTART.

Figure 3.1
The JOBSTART Program Design



- Informational interview: In a brief interview, JOBSTART staff explained to potential applicants the program's services and obligations and, often, the random assignment procedures. Some sites also regularly included a tour of their facilities to help recruits understand program services, opportunities, and demands.

- Assessment: Program staff made an assessment of whether applicants met the age (seventeen to twenty-one), educational status (school dropout), and income requirements for JOBSTART. They also ascertained the youths' support service needs and appropriateness for the program, screening out those with problems the program was not equipped to handle. The assessment process was relatively extensive at the Job Corps sites, which had the broadest array of support services. Job Corps staff assessed recruits for emotional problems, drug and alcohol abuse, trouble with the law, unstable living situations, health problems, and motivation. Other sites screened mostly to identify youths who were likely to prove dangerous or disruptive, such as those with evident drug or alcohol problems.

- Reading test: Most program operators tested the reading level of recruits early in the intake process to determine that applicants read below the eighth grade level, as required by JOBSTART eligibility criteria. (Four sites, including the three Job Corps Centers, delayed testing until later in the program, limiting their testing to participants.) As noted earlier, sites were permitted to enroll up to 20 percent of their recruits with higher reading scores to help meet enrollment goals. Some sites set a lower limit -- a fourth, fifth, or sixth grade level. These program operators felt that the youths would need to read at least at these levels in order to benefit from the education and training services that were available locally.

- JTPA/Job Corps certification: Recruits had to prove that they fulfilled eligibility criteria for JTPA-funded services. At the Job Corps sites, recruits also had to meet Job Corps eligibility criteria. At all the sites, certification of eligibility required proof of residency, age, and economic disadvantage. SDAs at most sites required applicants to provide supporting documentation of all aspects of JTPA eligibility for approval of enrollment into JOBSTART. Local regulations and practices affecting the certification process strongly influenced the speed and ease of certification. JTPA certification procedures were cited by program operators at six sites as a major bottleneck in the intake and enrollment process.

- Informed consent form, enrollment form, and random assignment: After staff described the random assignment process, the applicant signed an informed consent form, agreeing to accept the results of random assignment and to cooperate in follow-up survey interviews. Program or SDA staff then filled out the enrollment form, using information provided by the applicant. Staff then telephoned MDRC, where random assignment was made. Youths entering the experimental group were told to report

to classes or, at some sites, to an orientation session. Program staff contacted experimentals who did not appear for program activities, encouraging them to participate and assisting them with needed support services. Applicants assigned to the control group were reminded that they were part of the research project and would be contacted later. They were also told that they could seek services elsewhere on their own.

A total of 2,312 people were randomly assigned: 1,163 to the experimental group and 1,149 to the control group. Sites conducted random assignment over varying periods of time, as shown in Table 3.1. Open entry/open exit sites continuously recruited applicants to maintain enrollment levels, while sites operating fixed cycle programs -- such as Connelley in Pittsburgh, Chicago Commons, and SER/Corpus Christi -- intensified recruitment efforts before the start of classes.

Random assignment proceeded smoothly and resulted in experimental and control groups with nearly identical demographic characteristics. (Appendix B, Table B.1, presents the demographic characteristics of the experimental and control groups.) The two groups together made up the full research sample for the demonstration. Each consisted predominantly of youths who satisfied the JOBSTART eligibility criteria. The only real exception was a slightly larger than planned number of youths who read at the eighth grade level or above. This happened because of the testing practices of some sites. Only minor differences between the two groups were statistically significant: experimentals included a slightly higher percentage of male parents living with their children (3 percent to 2 percent of controls), of persons receiving Aid to Families with Dependent Children (AFDC) in a case headed by someone other than the applicant (20 percent to 17 percent of controls), and of persons receiving public assistance other than AFDC (19 percent to 23 percent of controls). As would be expected, the demographic characteristics of those randomly assigned varied among the sites.

II. Recruiting Youths for JOBSTART

Recruitment was a continuing problem, and the total number of youths fell short of the demonstration's original goal. This situation was not unique to JOBSTART. Throughout the 1970s and 1980s recruitment of young school dropouts has been a major stumbling block for education and training programs. During the late 1970s service providers running programs funded by the Youth Employment and Demonstration Projects Act (YEDPA) found young dropouts much more difficult to recruit than in-school youths.[2] The Comprehensive Employment and Training Act (CETA), which operated from 1974 to 1982, did enroll a relatively high proportion of dropouts, but many participated in the public service employment titles rather than in education and training. Under JTPA youth dropouts have accounted for about 10 percent of all enrollees under Title IIA.[3]

---

[2]See Betsey et al., 1985, p. 23.

[3]U.S. Department of Labor, various years.

Table 3.1

Distribution of the Research Sample by Site and Month of Random Assignment

Site	1985					1986											1987											Total
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
Allentown (Buffalo)											4	7	4	7	9	5	6	8	20	29	5	8		4	7	14	3	7	147
Atlanta Job Corps													3	9	3	6	3	12			5	7	1	7	8	3	13		80
BSA (New York City)															10	7	8	20	9	6	4	2	7	29	6	22	16	5	151
CET/San Jose				18			8	19	23	9		20							22	17	10	[illegible]		13	4	[illegible]5	12	4	200
Chicago Commons													5	27				13	29					2	8	7		2	93
Connelley (Pittsburgh)	134		11										47				26	1										219
CREC (Hartford)									15	10	6	4	1	8	2		7		2	3	13	2	4	7	6	19			109
East Los Angeles Skills Center										7	3	13	5	19	13	8	8	19	15	16									126
EGOS (Denver)									26	36	7		20	33	15	5		22	25	4	13	13	1			16	1		237
El Centro (Dallas)								3	6	10	21	12	4	16	18	18	10	12	28	15	13	14							200
Los Angeles Job Corps													25	14	15	8	15	17	6	11	7	25	33	55	31	22	13		297
Phoenix Job Corps											8	13	16	17	8	7	11	11	9	24	5	5	2	6	2	8	1		153
SER/Corpus Christi			83	59	30	28												[illegible]8	2										300
Total	134	0	94	77	30	[illegible]8	8	22	70	72	49	69	130	150	93	64	94	233	167	125	75	82	48	123	72	126	59	18	2312
Cumulative total	134	134	228	305	335	363	371	393	463	535	584	653	783	933	1026	1090	1184	1417	1584	1709	1784	1866	1914	2037	2109	2235	2294	2312	2312

SOURCE: MDRC calculations from the JOBSTART Enrollment Forms.

NOTES: This table includes data for all youths randomly assigned between August 1985 and November 1987.

Within the JOBSTART Demonstration recruitment posed special problems because one-half of all applicants were assigned to the control group and therefore could not be served by the agency. Some staff at JOBSTART sites reported that they had serious problems meeting JTPA enrollment quotas.

Successful recruitment of young dropouts requires (1) reaching out to potential applicants and getting them interested in the program and (2) developing intake procedures that encourage a large proportion of those expressing an interest to formally apply. In JOBSTART both were difficult.

A. Developing Interest in the JOBSTART Program

Recruitment efforts were often frustrated by the same problems that originally motivated the youths to leave school. Many eligible youths had only negative experiences in school. In the follow-up survey young men most frequently cited dislike of school as their reason for originally dropping out; suspension or expulsion was their second most common reason. Among young women dislike for school was second only to pregnancy as their reason for dropping out. Many potential recruits viewed employment and training agencies as just one more school and would not enroll.

JOBSTART staff suggested that the dominance of the drug trade in many neighborhoods undermined motivation: drug dealing presented a quick and lucrative alternative to vocational training. Also, the home situation of some potential recruits was so unsettled that they could hardly deal with day-to-day problems, much less intensive program commitments. An Allentown staff member explained that in his area -- Buffalo, New York -- many eligible youths were recent migrants from the South, who had to deal with the disorientation and daily stress of living with relatives in a strange city.

Staff also agreed that a poor local labor market (such as Corpus Christi's) made it easier to recruit, while a strong one (such as Atlanta's), in which jobs are easy to find, made it harder.

Some characteristics of the program operators themselves hampered recruitment. Several agencies were primarily adult-oriented service providers and had to develop a good reputation for youth services within the community and among referral agencies. Some program operators limited recruitment to the start-up of class cycles or suspended recruitment in the summer, so youths could not be certain that classes would be available when they wanted to begin.

Finally, the sponsor agencies' recruitment efforts were adversely affected by the research requirements of the demonstration. At several sites staff reported that referral agencies were reluctant to send potential recruits to the program operator because they might be randomly assigned to the control group and denied JOBSTART services.

1. Building on the Goals of Potential Clients. Focus group interviews with participants illuminated their motivations for enrolling. While these youths, having actually enrolled, were not representative of the entire population of potential applicants, their motivations were instructive.

These youths were successfully recruited because they wanted to get a good job and believed that JOBSTART would help them get one. They appreciated the difference between jobs they could get without education and training and those they might get after completing the program. One man explained his decision to enroll in JOBSTART rather than to seek immediate employment: "There's really no need for me to try and look for a job because I don't want to be working in a hamburger stand all my life." In many cases parenthood was a motivator. A Job Corps participant viewed the birth of his child as a turning point: "When you have kids, it's just something that clicks. . . . I know I'm going to make it for myself and my child because I have to do it."

Another motivator was the rejection of crime and violence as ways to make money. One youth, comparing his possible future with that of his drug-dealing friends, said that over "the next four or five years I'll be able to [get things I want] the legal way and they'll get into jail or be dead or broke and poor."

While such personal considerations often provided the "push," the program itself exerted the "pull," by offering services that youths viewed as necessary for getting a good job. A young woman summed up the feelings of many when she said, "You need a GED today . . . If you ain't got that, they're going to look at you like you're nobody." Others focused on occupational skills training; one youth explained that he came to JOBSTART looking for "experience, and hopefully to get my contractor's license."

2. Recruitment Techniques. At most sites, recruitment was the program operator's responsibility.[4] Generally, because of JTPA limits on administrative expenses, sites did not employ a full-time recruiter. Recruitment staff also had other administrative or counseling duties.

All sites actively recruited clients rather than relying on walk-in inquiries or word-of-mouth, and all used a variety of methods. Program staff approached potential recruits through media announcements; mailings to dropouts and welfare recipients; and outreach visits to schools, parks, and other youth gathering places. They distributed posters and fliers advertising program services and sought referrals of eligible youths from JTPA, community organizations, schools, and social service agencies. Recruitment activities frequently took staff beyond the boundaries of the office and the nine-to-five workday. Street recruitment was cited as important at several sites. As a staff member of Allentown in Buffalo explained, direct contact with teenagers on their own "turf" makes a strong impression upon them.

Recruitment through public school referrals or outreach was productive in school-based JOBSTART programs. Program staff obtained lists of dropouts from the public schools or individual referrals from school counselors. They then contacted these youths by phone or mail to tell them about the program. Staff in three of the four school-based programs --

[4]The exceptions to this arrangement were Connelley in Pittsburgh, for which the local SDA carried out recruitment, and SER/Corpus Christi, in which recruitment was jointly undertaken by the program operator and the local SDA.

Connelley in Pittsburgh, EGOS in Denver, and the East Los Angeles Skills Center -- felt that this was their most effective strategy. One staff member noted that the recruits brought in this way were accustomed to a school setting and structure, and therefore more likely to adjust to JOBSTART. Another staff member maintained that school counselors cooperated because they were often happy to find some place to send their problem students. Most community-based organizations (CBOs) and Job Corps sites did not rely on public school referrals, partly because of difficulty gaining access to accurate lists of recent dropouts.

Newspaper, television, and radio advertising played a recruitment role at every site. Most CBOs and Job Corps sites identified this as one of their most effective strategies. Staff said that in some cases youths received information directly from the media, while in other cases friends and relatives noticed the advertisements and brought them to the youths' attention.

3. The Recruitment Message. In formulating their recruitment message, staff at most sites stressed the in-program benefits of participation, such as particular training courses, support services, and incentives. The staff of CREC in Hartford highlighted the educational services, including the availability of individualized, computer-assisted learning, while the Los Angeles Job Corps staff saw vocational training courses as their strongest selling point. Needs-based payments, though small, were viewed by staff at a few sites as a particularly popular program feature, probably because applicants had serious financial need.[5] For example, at El Centro in Dallas recruitment staff reported that needs-based payments were their biggest selling point. At the Atlanta Job Corps recruitment staff always highlighted training opportunities. They also emphasized the availability of childcare to young women and stressed needs-based payments to young men. Corpus Christi SDA staff recruiting for SER similarly emphasized vocational training opportunities and needs-based payments.

Two other sites stressed the desirable outcomes of program participation, an approach often recommended by recruiting experts.[6] For example, Chicago Commons stressed the good wages and advancement opportunities awaiting program completers. The East Los Angeles Skills Center staff similarly stressed the important post-program benefits of having a skill, independence, and money.

B. Drop-Off of Potential Applicants During Intake

In JOBSTART, as in other JTPA programs, there was an ongoing drop-off of youths throughout the intake and enrollment process. Applicants were screened out because they did not meet -- or could not show they met -- the eligibility criteria of JTPA, the program operator, or the demonstration. Some youths dropped out of the process because they found work or other training or did not have the perseverance or bureaucratic skills to complete the paperwork. Some parents were unwilling or unable to cooperate with the documentation requirements, particularly those that probed their financial status. Because the more difficult

[5]See Chapter 5 for a discussion of needs-based payments. In general, they were less than $8 per day.

[6]Kelly, 1987.

and time-consuming steps (assessment and eligibility certification) were part of the normal JTPA intake process, the sites had little flexibility in streamlining the process to lessen applicant drop-off and alleviate recruiting problems.

Figure 3.2 illustrates the drop-off of recruits at SER/Corpus Christi as they moved through the intake process to enroll; the figure uses data for program year 1985. The intake and enrollment processes were not standardized across sites. However, the SER/Corpus Christi site's general rate of attrition was consistent with that found at other sites, and the points at which attrition occurred were similar among all sites.

At the top of the chart are youths who heard about JOBSTART or JTPA services and contacted the SDA or service provider to learn more about them. Out of 1,200 youths who contacted the SDA or program staff during program year 1985, 950 continued to the next step of filling out applications at the SDA office for JTPA services. Of those who filled out applications, 769 were certified as eligible for services. Many who were not certified had failed to present full documentation.

The next two steps at SER/Corpus Christi (certification of dropout status and testing for appropriate reading level) were unique to the JOBSTART Demonstration. Many youths who did not meet these special requirements left the intake process at this point and were routed to other JTPA programs. A total of 360 young dropouts tested within the approved reading levels or were accepted under the limited exception for better readers; 200 of these completed the enrollment forms and were randomly assigned. Overall, 21 percent of the original pool of applicants for JTPA youth services became part of the research sample.

III. Samples of Youths Used in the Evaluation

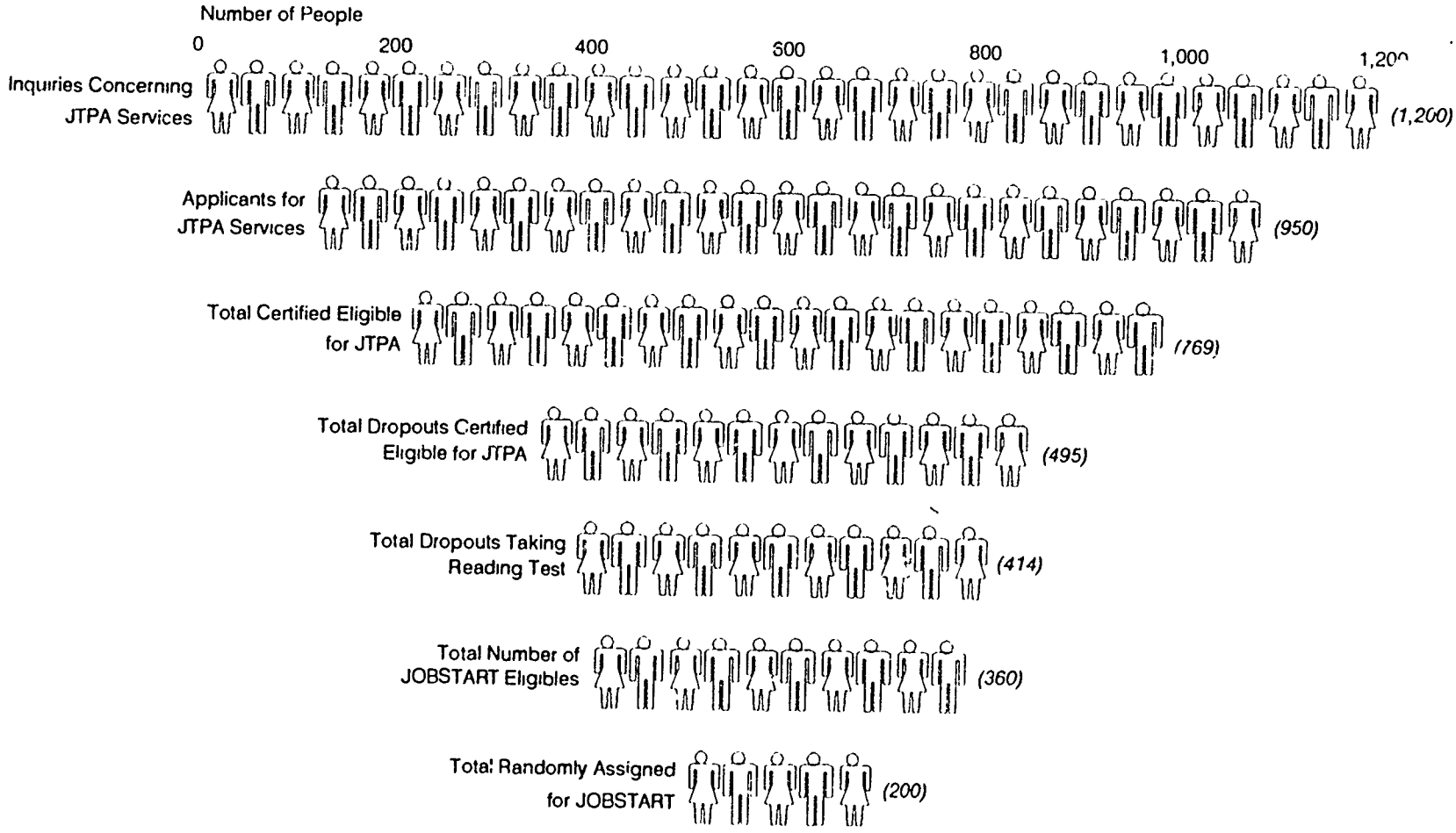
All youths who were randomly assigned formed the full research sample of 2,312 people. Three subsamples of youths are analyzed in this report, as shown in Table 3.2. The participant sample (all experimentals randomly assigned between August 1985 and September 1987 who participated in JOBSTART) is used in much of the implementation analysis in Chapters 4 through 8. The survey sample (experimentals and controls who were randomly assigned between August 1985 and March 1987 and who responded to the twelve-month follow-up survey) is the subject of the impact analysis in Chapter 9. The surveyed participant sample, a subsample of those surveyed, provides information about participants' reactions to JOBSTART, discussed in Chapters 5 through 8.

A. The Participant Sample

This sample is used to analyze the characteristics of participants and patterns of participation. To be included in this sample a youth had to participate in JOBSTART activities for at least one hour during the twelve months following random assignment. This twelve-month follow-up period was chosen because nearly all participation was expected to occur within a year of enrollment. The sample includes 89 percent (999 out of 1,123) of all experimentals randomly assigned by September 1987, the cutoff date for the participation analysis in this

Figure 3.2

JOBSTART Intake Flow for Youths at SER/Corpus Christi
in Program Year 1985



SOURCE: Tabulations from records of the Corpus Christi SDA.

Table 3.2

Research Samples for the Implementation and Impact Studies

Sample	Period During Which Sample Was Randomly Assigned	Definition	Sample Size
Full research sample	August 1985 - November 1987	JOBSTART-eligible youths randomly assigned into the experimental and control groups. All other samples are a subset of this group.	1163 Experimentals 1149 Controls 2312 Total
Participant sample	August 1985 - September 1987[a]	All JOBSTART experimentals with 12 months of follow-up data who participated in a JOBSTART education, training, or other component for at least one hour. This sample includes 89.0% of the 1123 experimentals randomly assigned during this period.	999 Experimentals
Survey sample	August 1985 - March 1987[b]	All JOBSTART experimentals and controls who responded to the twelve-month survey. This sample includes 82.0% of the 1709 experimentals and controls randomly assigned during this period.	714 Experimentals 687 Controls 1401 Total
Surveyed participant sample	August 1985 - March 1987[b]	All JOBSTART experimentals who participated in a JOBSTART education, training, or other component for at least one hour and who responded to the twelve-month survey. This sample includes 93.3% of the 714 experimentals randomly assigned during this period.	666 Experimentals

SOURCE: MDRC calculations from the JOBSTART Enrollment Forms, Monthly Participation Reports, and the twelve-month survey.

NOTES: [a]The implementation study in this report is based on experimentals for whom MDRC has twelve months of follow-up data from the time of random assignment.

[b]March 1987 is the latest random assignment month for which fielding of the twelve-month survey is complete. Those youths randomly assigned after March 1987 could not be included in analyses based on survey data.

report.[7] Only 40 experimentals were randomly assigned in October and November 1987 (the last months of random assignment), so the participant sample included the vast majority of all participants. However, sequential/brokered sites tended to start random assignment later in the demonstration, and these last 40 experimentals included 16 at sequential/brokered sites. This was a relatively small number compared to the 170 people at sequential/ brokered sites who are included in the participant sample, but it does mean that participants at these sites were somewhat underrepresented.

The proportion of experimentals who were randomly assigned by September 1987 and who participated was similar among the sites except that participation rates tended to be higher in sites that (1) had short periods between random assignment and program start-up, (2) made extensive efforts to pursue youths who did not initially appear for the program, and (3) operated under cost reimbursement contracts.[8] Those experimentals randomly assigned by September 1987 who did not participate were similar to participants in most respects. A slightly lower percentage of nonparticipants than participants had been employed in the twelve months prior to random assignment (44 percent to 53 percent) and a slightly higher percentage had been arrested since age sixteen (25 percent to 15 percent).

B. The Survey Sample

The twelve-month follow-up survey is the source of data on post-random assignment outcomes of the experimental and control groups. The survey sample consists of 1,401 experimentals and controls who were randomly assigned from August 1985 to March 1987 and who responded to the twelve-month follow-up survey by the cutoff date for this report. The response rate was 82 percent, with inability to locate the youths the most common reason for nonresponse.[9] The survey sample is discussed in more detail in Chapter 9, which presents program impact results based on these data. The surveyed participant sample consists of survey responders who participated in JOBSTART at least one hour.

IV. Characteristics of JOBSTART Participants

The next five chapters rely heavily on the participant sample.[10] This final section of the chapter describes the socioeconomic and demographic characteristics of these participants as well as differences in participant characteristics among the sites and among subgroups of the

---

[7]Youths randomly assigned in September 1987 would have had twelve months of follow-up in September 1988, when data collection on participation for this report ended.

[8]One possible explanation is that sites with performance-based contracts were less likely to pursue youths who did not show up initially because staff might view them as less motivated and, therefore, less likely to have favorable outcomes after the program. Cost reimbursement contracts would not create these incentives.

[9]Three-quarters of the nonrespondents could not be contacted or located, or had moved more than fifty miles away, and their new phone number was not available. The next most common reason for nonresponse was the refusal of the person to be interviewed.

[10]A detailed demographic description of the survey sample is presented in Appendix B.

youths. As will be discussed in Chapter 4, however, these variations do not explain fully differences in participation among the thirteen sites.

A. Characteristics of the Participant Sample

The participant sample was made up of 999 youths, whose characteristics are summarized in Table 3.3. Nearly three-quarters of JOBSTART participants were teenagers. On average, there was a two-year gap between dropping out of school and beginning JOBSTART. Although their average initial reading score was grade 6.9, about 26 percent read at the eighth grade level or above, more than the planned ceiling of 20 percent.[11] Most participants were black (46 percent) or Hispanic (44 percent). At six sites more than two-thirds of the participants were black, while in four two-thirds or more were Hispanic. Most participants had never been married and were not parents. Many had no recent opportunity to learn marketable skills or to gain work experience: only 17 percent had vocational training in the year prior to random assignment, and 47 percent had not held a job during that time.

Fifty-eight percent of all participants were receiving government assistance -- including cash, Medicaid, food stamps, or subsidized housing -- at random assignment. The proportion was particularly high at three sites in large northern cities: Chicago Commons, 95 percent; Connelley in Pittsburgh, 91 percent; and Allentown in Buffalo, 86 percent. Across all sites about one-fifth of the participants had AFDC cases in their own names at random assignment; since only one-third were parents, a large proportion of these individuals must have been receiving this assistance.

B. Comparison of Participant Sample Subgroups

An important question in evaluating JOBSTART is whether participation and program impacts varied among subgroups. Table 3.4 shows that men and women in the participant sample were similar in many characteristics, including age, ethnic background, educational attainment, and initial reading levels. However, men were more likely to have had recent work experience and vocational training and to have been arrested since age sixteen, and less likely to have been married, to be a parent, and to be receiving public assistance.[12] Some of these differences between men and women may be explained by characteristics of women living with

[11]This occurred for three reasons. Some sites, as mentioned earlier, did not administer a reading test before random assignment. Some that did test before random assignment used the Test of Adult Basic Education (TABE) screener test, designed to determine which skill level of the complete TABE to administer. It is less accurate than the full TABE, which was administered to participants after random assignment. In some cases the full TABE gave different scores. Finally, some sites used other tests of reading ability. Applicants who tested as reading below the eighth grade level on these tests might test higher on the TABE.

[12]The characteristics listed in Table 3.4 are self-reported by the youths at the time of random assignment. It is likely that these data underreported such events as arrests and convictions. Youths at this point in intake did not have a close relationship with program staff and may have avoided mentioning events that they believed might lessen their chances for admission into the program.

Table 3.3

Selected Characteristics at Time of Random Assignment
for Participants, by Site

Characteristic	Allentown (Buffalo)	Atlanta Job Corps	BSA (New York City)	CET/ San Jose	Chicago Commons	Connelley (Pittsburgh)	CREC (Hartford)	East Los Angeles Skills Center	EGOS (Denver)	El Centro (Dallas)	Los Angeles Job Corps	Phoenix Job Corps	SER/ Corpus Cristi	Total
Age in years (%)														
17	31.0	20.0	25.5	32.3	16.7	9.2***	37.5	39.6	33.6	37.4*	25.7	47.0***	26.7	29.0
18	25.4	33.3	29.4	27.4	16.7	20.2	29.2	22.6	19.5	22.2	29.4	27.3	24.7	24.5
19	11.3*	26.7	17.6	17.7	23.8	33.0***	16.7	13.2	23.0	20.2	22.9	12.1	16.4	20.0
20	16.9	13.3	13.7	17.7	28.6**	24.8***	8.3	15.1	16.8	10.1	12.8	9.1	15.1	15.6
21	15.5	6.7	13.7	4.8	14.3	12.8	8.3	9.4	7.1	10.1	9.2	4.5	17.1**	10.8
Average age (years)	18.6	18.5	18.6	18.4	19.1***	19.1***	18.2*	18.3	18.4	18.3	18.5	18.0***	18.7	18.5
Sex (%)														
Male	36.6*	50.0	60.8*	51.6	59.5	45.0	39.6	54.7	34.5***	51.5	31.2***	43.9	64.4***	47.3
Female	63.4*	50.0	39.2*	48.4	40.5	55.0	60.4	45.3	65.5***	48.5	68.8***	56.1	35.6***	52.7
Ethnicity (%)														
White	14.1*	0.0	2.0	9.7	11.9	6.4	0.0*	1.9	7.1	7.1	2.8*	19.7***	9.6	7.5
Black	76.1***	100.0***	72.5***	4.8***	81.0***	93.6***	54.2	1.9***	28.3***	68.7***	48.6	10.6***	7.5***	45.8
Hisparic	9.9***	0.0***	25.5**	75.8***	7.1***	0.0***	45.8	94.3***	62.8***	23.2***	34.9*	66.7***	82.2***	43.8
Other	0.0	0.0	0.0	9.7***	0.0	0.0	0.0	1.9	1.8	1.0	13.8***	3.0	0.7	2.8
School grade at dropout (%)														
3-8	9.9	10.3	4.0	6.7	0.0	0.9**	4.2	3.9	3.6	5.1	2.9	11.3	19.2***	6.9
9	11.3*	3.4**	24.0	16.7	11.9	24.1	22.9	19.6	24.1	30.3**	10.6**	27.4	22.6	20.5
10	28.2	48.3*	22.0	25.0	31.0	40.7*	45.8*	45.1*	33.0	32.3	28.8	19.4**	28.8	32.1
11	38.0	24.1	38.0	40.0	47.6**	26.9	25.0	27.5	27.7	24.2	48.1***	29.0	24.7*	31.7
12	12.7	13.8	12.0	11.7	9.5	7.4	2.1	3.9	11.6	8.1	9.6	12.9	4.8*	8.9
Average school grade at dropout	10.3	10.2	10.3	10.3	10.5**	10.2	10.0	10.0	10.2	10.0	10.5***	10.0	9.7***	10.1
Average time between dropout and random assignment (months)	23.9	27.2	19.3	21.8	27.9	29.0***	19.0*	18.2**	24.7	22.3	18.6***	23.3	26.5**	23.6
Limited English (%)	1.4	0.0	0.0	25.8***	0.0	3.7	4.2	5.7	0.0**	1.0	11.0***	0.0	0.0**	3.9

(continued)

Table 3.3 (continued)

Characteristic	Allentown (Buffalo)	Atlanta Job Corps	BSA (New York City)	CET/ San Jose	Chicago Commons	Connelley (Pittsburgh)	CREC (Hartford)	East Los Angeles Skills Center	EGOS (Denver)	El Centro (Dallas)	Los Angeles Job Corps	Phoenix Job Corps	SER/ Corpus Cristi	Total
Reading grade level[a]														
1-4	0.0	35.7	3.9	10.3	2.4	7.5	16.7	5.7	1.8	5.4	22.2	20.0	5.8	8.1
5	12.5	25.0	27.5	10.3	7.1	24.5	29.2	35.8	18.6	30.1	29.6	15.4	15.3	21.1
6	25.0	3.6	31.4	10.3	26.2	23.6	18.8	18.9	29.2	26.9	18.5	13.8	24.1	22.7
7	28.1	17.9	23.5	12.8	21.4	21.7	20.8	30.2	31.0	22.6	3.7	18.5	19.0	22.3
8	10.9	3.6	13.7	17.9	23.8	12.3	10.4	9.4	16.8	8.6	7.4	9.2	21.9	13.9
9-12	23.4	14.3	0.0	38.5	19.0	10.4	4.2	0.0	2.7	6.5	18.5	23.1	13.9	11.9
Average reading grade level	7.6	5.9	6.6	8.0	7.6	6.7	6.5	6.3	6.9	6.6	6.3	6.8	7.3	6.9
Never married (%)	94.4	96.7	100.0**	88.7	95.2	97.2**	93.8	96.2	89.4	87.8	96.3**	84.8	71.7***	89.9
Parenting status (%)														
Not a parent	57.7	70.0	86.3***	85.5***	54.8	56.0**	75.0	79.2*	58.4*	69.7	60.6	63.6	67.8	66.4
Female parent	31.0	23.3	11.8*	6.5***	26.2	36.7**	20.8	17.0	36.3**	25.3	37.6***	30.3	20.5*	26.6
Male parent	11.3	6.7	2.0	8.1	19.0**	7.3	4.2	3.8	5.3	5.1	1.8**	6.1	11.6**	7.0
Not living with own child	69.0	76.7	86.3**	88.7***	64.3	64.2	81.3	84.9**	61.1**	74.7	61.5**	69.7	69.9	71.1
Female living with own child	28.2	23.3	11.8*	6.5***	26.2	35.8**	18.8	15.1*	36.3***	24.2	36.7***	28.8	20.5	25.8
Male living with own child	2.8	0.0	2.0	4.8	9.5**	0.0*	0.0	0.0	2.7	1.0	1.8	1.5	9.6***	3.1
Benefits received (%)														
None	14.1***	76.7***	51.0	53.2*	4.8***	9.2***	37.5	47.2	54.0**	64.6***	31.2**	59.1***	53.4***	42.3
Own AFDC case	29.6**	3.3*	13.7	4.8***	28.6	30.3***	16.7	20.8	20.4	11.1*	36.7***	6.1**	8.2***	18.6
Household AFDC case	26.8	16.7	17.6	19.4	21.4	41.3***	16.7	11.3	9.7***	14.1	22.9	27.3	9.6***	19.5
Other public assistance[b]	29.6**	3.3**	17.6	22.6	45.2***	19.3	29.2	20.8	15.9	10.1**	9.2***	7.6**	28.8***	19.5
Employed within 12 months prior to random assignment (%)	49.3	70.0*	27.5***	46.8	47.6	68.8***	66.7*	45.3	65.5***	47.5	19.4***	43.9	73.1***	52.8

(continued)

Table 3.3 (continued)

Characteristic	Allentown (Buffalo)	Atlanta Job Corps	BSA (New York City)	CET/ San Jose	Chicago Commons	Connelley (Pittsburgh)	CREC (Hartford)	East Los Angeles Skills Center	EGOS (Denver)	El Centro (Dallas)	Los Angeles Job Corps	Phoenix Job Corps	SER/ Corpus Cristi	Total
Received occupational training within 12 months prior to random assignment (%)	18.3	40.0***	17.6	3.2***	11.9	32.1***	14.6	13.2	8.8**	10.1*	9.2**	4.5**	29.5***	16.6
Arrested since age 16 (%)	15.5	10.0	9.8	21.0	11.9	12.8	20.8	17.0	15.9	12.1	9.2*	4.5**	25.3***	15.0
Convicted since age 16 (%)	2.8	0.0	7.8	12.9**	0.0	1.8	4.2	17.0***	2.7	6.1	4.6	1.5	8.2	5.4
Number of participants	71	30	51	62	42	109	48	53	113	99	109	66	146	990

SOURCE: MDRC calculations from the JOBSTART Enrollment Forms and TABE reading scores.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment.

For selected characteristics other than reading levels, sample sizes may vary up to 21 sample points because of missing data.

Distributions may not add to 100.0 percent because of rounding.

A two-tailed t-test or chi-square test was applied to differences between a site and the average for all the other sites for each characteristic. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

[a]Only the 866 experimentals who were administered the TABE at random assignment are included in this measure. Tests of statistical significance were not examined for this measure.

[b]"Other public assistance" indicates receipt of benefits by either the participant or another member of the participant's household.

Table 3.4

Selected Characteristics at Time of Random Assignment for Participants, by Sex and Parental Status

Characteristic	Males	Females			Males and Females
		Living with Children	Not Living with Children	All Females	
Age in years (%)					
17	30.2	18.2	37.3	27.9	29.0
18	24.3	20.9	28.4	24.7	24.5
19	18.6	22.1	20.5	21.3	20.0
20	15.6	22.9	8.6	15.6	[illegible]
21	11.2	15.9	5.2	10.5	10.8
Average age (years)	18.5	19.0	18.2	18.6	18.5
Ethnicity (%)					
White	7.0	5.4	10.4	8.0	7.5
Black	44.8	52.7	41.0	46.8	45.8
Hispanic	45.5	40 7	44.0	42.4	43.8
Other	2.7	1.2	4.5	2.9	2.8
School grade at dropout (%)					
3-8	6.4	7.9	6.9	7.4	6.9
9	19.1	24.0	19.5	21.7	20.5
10	34.3	28.0	32.1	30.0	32.1
11	32.2	31.5	30.9	31.2	31.7
12	7.9	8.7	10.7	9.7	8.9
Average school grade at dropout	10.2	10.1	10.2	10.1	10.1
Average time between dropout and random assignment (months)	21.4	32.9	18.2	25.6	23.6
Limited English (%)	3.4	1.9	6.7	4.4	3.9
Reading grade level (%)[a]					
1-4	9.9	4.6	8.0	6.3	8.1
5	18.8	23.0	23.7	23.4	21.1
6	21.4	29.0	19.2	24.0	22.7
7	23.5	24.9	17.4	21.1	22.3
8	13.2	11.5	17.4	14.5	13.9
9-12	13.2	6.9	14.3	10.7	11.9
Average reading grade level[a]	6.9	6.8	7.0	6.9	6.9
Never married (%)	93.0	79.0	94.8	87.0	89.9

(continued)

Table 3.4 (continued)

Characteristic	Male	Females			Males and Females
		Living with Children	Not Living with Children	All Females	
Parenting status (%)					
Not a parent	85.2		97.0	49.4	66.4
Female parent	--	100.0	3.0	50.6	26.6
Male parent	14.8	--	--	--	7.0
Not living with own child	93.4	--	100.0	51.0	71.1
Female living with own child	--	100.0	--	49.0	25.8
Male living with own child	6.6	--	--	--	3.1
Benefits received (%)					
None	50.5	19.4	50.0	35.0	42.3
Own AFDC case	5.3	53.5	8.6	30.6	18.6
Household AFDC case	19.5	17.8	21.3	19.6	19.5
Other public assistance[b]	24.7	9.3	20.1	14.8	19.5
Employed within 12 months prior to random assignment (%)	62.6	37.4	50.6	44.1	52.8
Received occupational training within 12 months prior to random assignment (%)	21.6	10.5	13.8	12.2	16.6
Arrested since age 16 (%)	26.4	3.1	6.3	4.8	15.0
Convicted since age 16 (%)	9.9	1.2	1.5	1.3	5.4
Number of participants	473	258	268	526	999

SOURCE: MDRC calculations from the JOBSTART Enrollment Forms and TABE reading scores.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment.

For selected characteristics other than reading levels, sample sizes may vary up to 44 sample points because of missing data.

Distributions may not add to 100.0 percent because of rounding.

Tests of statistical significance were not examined.

[a]Only the 866 experimentals who were administered the TABE at random assignment are included in this measure.

[b]"Other public assistance" indicates receipt of benefits by either the participant or another member of the participant's household.

their children (also shown in Table 3.4), who tend to be more disadvantaged than other women; most important, they are much more likely to be receiving public assistance and less likely to have had recent work experience.

Table 3.5 compares teenage participants to those age twenty and twenty-one The older group included a higher proportion of blacks and a lower proportion of Hispanics. This group was more likely to have married, to be parents, and to be receiving public assistance, and their years of schooling were slightly higher. They were also more likely to have been arrested and convicted since age sixteen. There was no significant difference between older and younger participants with regard to employment or receipt of occupational training in the twelve months prior to random assignment. However, the period between dropping out of school and enrolling was much longer for older participants, who averaged 40.6 months between school and JOBSTART, compared to 17.6 months for younger participants.

C. Comparison of JOBSTART Participants to JTPA Enrollees and Job Corpsmembers

JOBSTART participants appear to have been more disadvantaged than the majority of youths served nationwide by JTPA Title IIA programs. In the effort to serve those youths at risk of chronic unemployment, JOBSTART worked exclusively with dropouts, a segment of the youth population that makes up a relatively small part of JTPA participants. Even when the comparison of participants is limited to young dropouts, it appears that JOBSTART reached a more disadvantaged population than did most other JTPA-funded programs.[13] Approximately 58 percent of JOBSTART participants were receiving some form of public assistance at the time they entered the program, compared to 39 percent of young dropouts served by JTPA. Moreover, the proportion of JOBSTART participants who received AFDC funds (38 percent) was much higher than that of young dropouts in other JTPA programs (21 percent). This higher rate of welfare receipt partly reflects the fact that a greater proportion of JOBSTART participants were young women (53 percent), compared to the dropout group participating in other JTPA programs (45 percent female). Also, minorities were much more heavily represented in JOBSTART than in other JTPA-funded services for young dropouts. Hispanic dropouts constituted 44 percent of JOBSTART participants, but only 14 percent of JTPA dropouts, and JOBSTART served proportionally more black dropouts (46 percent) than did other JTPA programs (34 percent).

The Job Corps serves youths who appear to have more barriers to employment than do JOBSTART participants. Eighty percent of Job Corpsmembers nationwide were school dropouts in program year 1986, when the JOBSTART Demonstration was in operation.[14] Job Corpsmembers tend to be younger than JOBSTART participants: 42 percent were age seventeen or under in 1986 compared to 29 percent in JOBSTART. Sixty-one percent read at the sixth grade level or below at entry into the Job Corps compared to 52 percent in

---

[13]U.S. Department of Labor, Division of Performance Management and Evaluation, 1988, Table B-2.

[14]U.S. Department of Labor, Employment and Training Administration Job Corps, 1987. This publication reviews program operations during the period of the JOBSTART Demonstration and presents characteristics of corpmember.

Table 3.5

Selected Characteristics at Time of Random Assignment for Participants, by Age Group

Characteristic	Below Age 20	Age 20 and Above	Total
Age in years (%)			
17	39.5	--	29.0
18	33.3	--	24.5
19	27.2	--	20.0
20	--	59.1	15.6
21	--	40.9	10.8
Average age (years)	17.9	20.4	18.5
Sex (%)			
Male	47.1	48.1	47.3
Female	52.9	51.9	52.7
Ethnicity (%)			
White	8.0	6.1	7.5
Black	43.0	53.8	45.8
Hispanic	46.0	37.9	43.8
Other	3.0	2.3	2.8
School grade at dropout (%)			
3-8	7.1	6.5	6.9
9	23.3	12.6	20.5
10	32.9	29.8	32.1
11	28.9	39.3	31.7
12	7.8	11.8	8.9
Average school grade at dropout	10.1	10.4	10.1
Average time between dropout and random assignment (months)	17.6	40.6	23.6
Limited English (%)	3.0	4.2	3.9
Reading grade level (%)[a]			
1-4	8.4	7.3	8.1
5	20.9	21.8	21.1
6	22.0	24.8	22.7
7	22.2	22.6	22.3
8	14.7	11.5	13.9
Grade 9-12	11.9	12.0	11.9
Average reading grade level[a]	6.9	6.9	6.9
Never married (%)	93.4	79.9	89.9
Parenting Status (%)			
Not a parent (%)	72.2	50.0	66.4
Female parent	22.6	36.9	26.6
Male parent	5.2	12.1	7.0
Not living with own child	76.3	56.4	71.1
Female living with own child	21.5	37.9	25.8
Male living with own child	2.2	5.7	3.1

(continued)

Table 3.5 (continued)

Characteristic	Below Age 20	Age 20 and Above	Total
Benefits received (%)			
None	44.8	35.6	42.3
Own AFDC case	13.9	31.8	18.6
Household AFDC case	21.6	13.6	19.5
Other public assistance[b]	19.7	18.9	19.5
Employed within 12 months prior to random assignment (%)	52.7	53.1	52.8
Received occupational training within 12 months prior to random assignment (%)	16.9	15.9	16.6
Arrested since age 16 (%)	13.5	19.3	15.0
Convicted since age 16 (%)	4.2	8.7	5.4
Number of participants	735	264	999

SOURCE: MDRC calculations from the JOBSTART Enrollment Forms and TABE reading scores.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment.

For selected characteristics other than reading levels, sample sizes may vary up to 44 sample points owing to missing data.

Distributions may not add to 100.0 percent because of rounding.

Tests of statistical significance were not examined.

[a]Only the 866 experimentals who were administered the TABE at random assignment are included in this measure.

[b]"Other public assistance" indicates receipt of benefits by either the participant or another member of the participant's household.

JOBSTART. In JOBSTART, JTPA performance standards and practices led some JTPA-funded sites to exclude those with very low reading scores; the Job Corps sites in JOBSTART included a higher proportion of youths with very low reading scores than did other sites. On the other hand, a higher proportion of JOBSTART participants were receiving public assistance and were members of minority groups than were Job Corpsmembers.

Because JOBSTART participants faced greater barriers to employment than did most youths in JTPA, and were in many ways similar to the Job Corpsmembers, operating JOBSTART posed many challenges. The following four chapters analyze how the sites addressed them.

CHAPTER 4

OVERVIEW OF PARTICIPATION IN JOBSTART

The JOBSTART program model requires that sites offer relatively long-term classes in basic education and occupational skills training and that youths take advantage of these opportunities. Retention of young, economically disadvantaged dropouts, or even high school graduates, in education and training programs has been a common problem.[1] As a result, an important question in the evaluation is whether youths active in JOBSTART do actually participate in lengthy, intensive services.

This chapter addresses the topic two ways. First, it summarizes participation patterns of youths who were active in the JOBSTART Demonstration and compares that experience to other programs for young school dropouts. The analysis shows that JOBSTART participation was, in general, longer and more substantial than that of most other JTPA-funded activities for young dropouts and was roughly comparable to that of intensive programs such as the nonresidential Job Corps and the National Supported Work Demonstration.

Second, the chapter then analyzes the extent to which participation varied among different groups of youths and types of sites. This analysis finds that participation hours were similar for many groups: males and females, various ethnic groups, older and younger participants, youths with relatively higher and lower reading skills, and recipients and nonrecipients of public assistance. Participation hours tended to be higher in labor markets with poorer employment opportunities. Finally, average total participation hours were higher at sites that operated concurrent programs or sequential programs with all services provided in-house than in those that referred participants to another agency for training. Average education hours were highest at sequential sites, while average training hours were highest at current sites.

I. Intensity of JOBSTART Participation

Participation was measured by participation rates in each activity, hours of participation in each activity, and overall length of participation. Table 4.1 shows these summary measures for the participant sample for whom twelve months of follow-up was available:

- Participation rates: Nearly all (96 percent) of those who were active in JOBSTART attended basic skills education classes, while 75

[1]U.S. Department of Education, 1988; Public/Private Ventures, 1988; Kelly, 1987.

Table 4.1

Participation Rates, Hours of Participation, and Length of Stay, for Participants

Activity Measure	Participants
Percent participating in	
Education	96.0
Training	74.8
Education and training	71.5
Other activities	42.5
Average hours in	
Education	131.9
Training	237.8
Education and training	369.8
Other activities	39.0
All activities	408.9
Percentage distribution of hours in education and training	
Less than or equal to 200	39.7
201 to 500	27.0
501 to 700	17.8
701 or more	15.4
Total	100.0
Percentage distribution of hours in all activities	
Less than or equal to 200	33.9
201 to 500	30.4
501 to 700	16.7
701 or more	18.9
Total	100.0
Length of stay (months)	
Average	6.65
Median	6.00
Percent still participating in month	
3	86.0
6	58.1
9	32.1
12	16.4
Number of participants	999

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment and apply to the entire participant sample including those with zero hours in an individual component. Since some participants remained in JOBSTART longer than twelve months, these measures underestimate actual participation.

Distributions may not add to 100.0 percent because of rounding.

percent participated in training, and 43 percent participated in other activities, that were optional for sites.[2]

- Participation hours: Average hours were 132 in education, 238 in training, and 39 in other activities, for a total of 409 hours. Participants were about equally divided into those who spent fewer than 201 hours in all JOBSTART activities, those who spent 201 to 500 hours, and those who spent more than 500 hours.

- Length of participation: The average length of participation was 6.7 months, with the median length slightly less, 6.0 months; 86 percent of participants were active for 3 months or more, while 58 percent stayed in the program for 6 months or more. This was measured from the time of random assignment through the last month that included any hours of participation.[3]

About 16 percent of the participant sample were still active in the program in the twelfth month after random assignment. In the calculations presented in this report, the hours and length of participation for this group were measured as of the end of this twelve-month follow-up period, even though some will have participated more in later months. Therefore, all averages and distributions underestimate the final participation of the full participant sample.[4]

These findings show that JOBSTART succeeded in engaging a significant proportion of the youths in the program and its activities, but that for about one-third of them participation was much below desired levels.

For context, JOBSTART participation may be compared to that reported for other programs for young, disadvantaged school dropouts. Length of participation is a simple measure that permits comparisons with three types of youth programs: JTPA Title IIA programs for

---

[2]The analysis in this and the next four chapters concerns the experiences of youths who were active in JOBSTART for at least one hour. Because of this, 100 percent of youths in this analysis participated in some JOBSTART activity.

[3]The period of participation could include months of inactivity if a person stopped attending classes and then returned to the program within the twelve-month follow-up period. However, this does not appear to have been a serious problem: 87 percent of participants did not have any months of inactivity within the period they were counted as active, and among the 13 percent with inactivity, the average period of inactivity was about two months. Youths who attended JOBSTART were counted as participating for the entire month in which they were randomly assigned and all months in which they showed any JOBSTART hours. The measure might have overestimated the length of participation somewhat when a youth was randomly assigned late in a month or ended participation early in a month.

[4]This means that the length of participation for those still active in the twelfth month was counted as twelve months and their hours were measured as of the end of this follow-up period. The final report will present complete participation data for the sample.

young dropouts, the Job Corps, and the National Supported Work Demonstration.[5] JTPA typically provides relatively short-term activities, while the Job Corps and the National Supported Work Demonstration are among the most intensive employment and training programs for disadvantaged youths. In these comparisons, either the average or median length of participation is used, depending on the availability of data.

Overall, JOBSTART participants stayed in the program considerably longer than did young dropouts in JTPA Title IIA activities, as shown in Table 4.2, even though JOBSTART's length of stay was probably underestimated. During program year 1986, when the demonstration was in operation, the median length of participation for all young dropouts in JTPA Title IIA programs was 3.4 months compared to 6.0 months for JOBSTART.[6] JOBSTART's median length of participation exceeded that for youth dropouts in all JTPA components except one. The exception was a program combining basic education and occupational skills training, a mix similar to JOBSTART's, which had a median length of 7 months but was offered to only 5 percent of all young dropouts in JTPA. For JOBSTART participants active in both education and skills training, the median length of stay in the program was also 7 months. These data support the conclusion that JOBSTART achieved its goal of operating a program more intensive than that typically offered in JTPA for young dropouts.

JOBSTART's average length of participation was similar to those of the Job Corps and the National Supported Work Demonstration. During program year 1986, the average stay in the Job Corps was 6.9 months compared to JOBSTART's average of 6.7 months.[7] The National Supported Work Demonstration was an experimental program of paid work experience under conditions of gradually increasing responsibility on the job, close supervision, and work in association with a crew of peers. It operated from 1975 to 1979 and included young school dropouts, many with a criminal record, as one of its target groups. While precise comparisons are impossible, the length of participation in the two programs appears to be similar.[8] Measured twelve months after enrollment, the average length of participation in Supported Work (as it is generally called) was 6.7 months and the median was approximately 6 months (both the same as JOBSTART), but 25 percent of Supported Work participants were still active in the program, as opposed to 16 percent for JOBSTART.

The experience of the control group in the JOBSTART Demonstration provides another benchmark against which to compare participation in the program. As discussed in detail in Chapter 9, only about 29 percent of the controls in the survey sample participated in any education or training activities in the twelve months following random assignment. These activities tended to be either basic education, occupational skills training, or job search assistance (but rarely all three in combination), and they were provided by community colleges,

---

[5]For information on the Job Corps, see Richardson and Burghardt, 1985; U.S. Department of Labor, 1986. On the Supported Work Program, see Maynard, 1980.

[6]The average length of participation in JTPA is not available from published sources.

[7]The median for the Job Corps is not available.

[8]The JOBSTART measure of length of participation included some periods of inactivity in the midst of participation, while the Supported Work measure factored these out. As discussed above, however, this problem does not appear to have been serious in the JOBSTART data.

Table 4.2

Participation and Length of Stay for Youth Dropouts in JTPA Title IIA, by Activity

Activity	Percentage Distribution of Youths in JTPA	Median Length of Participation (Months)
Classroom activities		
Basic education	22.8	3.71
Occupational skills training	15.6	3.98
Combined basic education and occupational skills training[a]	4.6	6.97
Total	42.9	3.97
On-the-job training	12.2	3.14
Job search assistance	15.3	0.81
Work experience	7.8	3.67
Other services	21.8	3.59
Any activity	100.0	3.40

SOURCE: U.S. Department of Labor, 1988.

NOTES: This table includes data for youth dropouts served under JTPA Title IIA during program year 1986.

[a]JTPA data (as recorded by the U.S. Department of Labor, 1988) combined basic education and occupational skills training under the label CT-Other.

community-based organizations, and proprietary training institutes. Length of participation in these programs for controls is not available, but the average number of hours of education and training for all controls (that is, including nonparticipants) was 116 hours, almost 350 hours fewer than the average for all experimentals.[9] The small and -- given the limited services participate in alternative programs averaged 395 hours of activities, 91 hours fewer than the average for JOBSTART experimentals in the survey sample who participated in some type of education or training.

In summary, while only crude comparisons can be made, it appears that JOBSTART achieved its goal of providing young school dropouts more intensive education and training than are usual within the JTPA system. The data also suggest that JOBSTART offered an intensity of activity close to that of the Job Corps and Supported Work, which operated through special agencies with the sole mission of providing services to very disadvantaged individuals.

II. Moving Behind the Aggregate Participation Measures

Aggregate measures, however, tell only part of the story. Table 4.1 makes clear that JOBSTART was not the same experience for all youths; about one-third participated for 200 or fewer total hours, while one-third exceeded 500 total hours. For the latter group, average hours in education and average hours in training each exceeded the required offerings under the demonstration (200 hours of education and 500 hours of training). Clear differences in average participation also existed among the sites, as discussed later in this chapter. Understanding the sources of these variations in participation is the first step in developing ways to improve the design and implementation of the program.

The following analysis begins with subgroups of JOBSTART participants. It shows that while there were differences among subgroups, they did not seem to account for all the variation in participation. This implies that factors such as unmeasured differences among youths, local employment opportunities, and program characteristics associated with particular sites may also have affected participation.

The key finding on program characteristics is that youths at sites operating sequential/brokered programs tended to have lower rates of participation in occupational skills training, although they tended to receive more intensive instruction in basic skills.

---

[9]This information was collected from the twelve-month follow-up survey and was for the survey sample rather than the participant sample. The survey was the only source of non-JOBSTART services for experimentals and of all services for controls. The survey asked about types of non-JOBSTART education and training received, estimated average hours per week, and start and end dates. For controls, there was no measure of length of participation similar to that used for JOBSTART or the other programs discussed above because controls could participate in several programs, with periods of work or inactivity interspersed between episodes of education or training. Average hours of education and training for experimentals in the survey sample may include participation in programs other than JOBSTART.

III. Differences in Participation Among Subgroups

Although JOBSTART participants all satisfied the program's eligibility requirements, they varied in gender, age, marital and parental status, criminal records, and educational attainment, among other characteristics. Research and operational experience suggest that these types of factors can influence participation in programs.[10] For example, an evaluation of the Job Corps program in the mid-1980s found that teenagers were more likely to leave the program before ninety days of participation than were older enrollees, and that whites were more likely to leave early than were blacks.[11] Importantly for JOBSTART, the report also found that high school dropouts were more likely to leave before ninety days than were those with a high school diploma, and that nonresidential enrollees (as compared to residential enrollees) were less likely to leave before this cutoff.[12]

Among JOBSTART participants two groups are of special concern: males and young mothers. As Table 4.3 shows, average total hours and several other measures of participation were similar for all males and females, although a higher percentage of females were active in the twelfth month after random assignment. There were some differences, however, for females living with their children, compared to males and to other women; mothers averaged somewhat fewer hours of participation, and a higher percentage received fewer than 200 hours of services.

Table 4.4 presents average total hours of participation in JOBSTART for several other subgroups. Although past research and experience suggest that the characteristics listed in the table might affect participation, many of the comparisons do not show significant differences in average hours for the groups under review. Parents, those with recent employment, and those with an arrest record did show lower average hours in these comparisons. But other groupings -- based on last grade in school, reading level, and public assistance status -- did not show differences in hours.[13]

IV. Differences in Participation Among Sites

Hours of participation at the sites in the demonstration varied considerably, as shown in Table 4.5. Average total hours ranged from a high of 577 for participants at the Los Angeles Job Corps to a low of 167 at CREC in Hartford, a spread of 410 hours. As noted earlier, this

---

[10]See, for example, Public/Private Ventures, 1988; and Mathematica Policy Research, 1985.

[11]The ninety-day cutoff is important in the Job Corps, since those who remain this long are counted as program completers. See Mathematica Policy Research, 1985, p. IX-1.

[12]Within the Job Corps, nonresidential enrollees tend to have fewer barriers to employment and to be less disadvantaged than residential enrollees. To the extent that the characteristics used to measure this in the multiple regression analysis done for the Mathematica Policy Research study did not capture all aspects of a youth's labor market prospects, the nonresidential indicator would be a mixture of program effects and enrollee characteristics.

[13]The mix of activities did differ by initial reading score. Those testing in the low group averaged 143 hours in education and 228 hours in training, while those testing in the highest group averaged 122 hours in education and 297 hours in training.

Table 4.3

Participation Rates, Hours of Participation, and Length of Stay, for Participants, by Sex and Parental Status

Activity Measure	Males	Females			Males and Females
		Living with Children	Not Living with Children	All Females	
Percent participating in					
Education	95.1	96.5	97.0	96.8	96.0
Training	75.5	77.1	71.3	74.1	74.8
Education and training	71.2	74.4	69.0	71.7	71.5
Other activities	39.1	43.8	47.4	45.6	42.5**
Average hours in					
Education	127.4	118.6	152.7	136.0	131.9
Training	247.6	225.1	232.8	229.1	237.8
Education and training	375.0	343.8	385.6	365.1	369.8
Other activities	33.8	38.6	48.5	43.7	39.0***
All activities	408.8	382.9	434.1	408.9	408.9
Percentage distribution of hours in education and training					
Less than or equal to 200	36.8	45.7	39.2	42.4	39.7*
201 to 500	29.2	23.3	26.9	25.1	27.0
501 to 700	19.7	16.7	15.7	16.2	17.8
701 or more	14.4	14.3	18.3	16.3	15.4
Total	100.0	100.0	100.0	100.0	100.0
Percentage distribution of hours in all activities					
Less than or equal to 200	32.1	38.0	33.2	35.6	33.9
201 to 500	31.7	29.5	29.1	29.3	30.4
501 to 700	18.0	15.9	15.3	15.6	16.7
701 or more	18.2	16.7	22.4	19.6	18.9
Total	100.0	100.0	100.0	100.0	100.0
Average length of stay (months)	6.39	6.82	6.93	6.87	6.65**
Percent still participating in month					
3	84.8	86.4	87.7	87.1	86.0
6	56.9	58.1	60.1	59.1	58.1
9	29.2	34.9	34.7	34.8	32.1*
12	11.4	20.5	21.3	20.9	16.4***
Number of participants	473	258	268	526	999

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment and apply to the entire participant sample including those with zero hours in an individual component. Since some participants remained in JOBSTART longer than twelve months, these measures underestimate actual participation.

Distributions may not add to 100.0 percent because of rounding.

A chi-square test or two-tailed t-test was applied to differences between all males and all females for each activity measure. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

Table 4.4

Average Total Participation Hours, by Characteristics of Participants at the Time of Random Assignment

Characteristic	Average Total Hours	Number of Participants
Age in years		
19 and under	401.3	735
20 or 21	429.8	264
Ethnicity[a]		
White	405.3	75
Black	391.2*	458
Hispanic	403.9	438
School grade at time of dropout		
Grade 10 or under	408.8	601
Grade 11 or 12	409.0	398
Reading grade level		
1-6	408.6	450
7-8	411.2	313
9 or above	452.9	103
Employment history		
Ever employed during 12 months prior to random assignment	391.1	544
Never employed during 12 months prior to random assignment	431.1**	455
Sex		
Male	408.8	473
Female	408.9	526
Marital status		
Ever married	403.6	101
Never married	410.0	895
Parenting status		
Female living with child	382.9	258
Female not living with child	434.1*	268
Benefits received		
None	394.4	423
Own AFDC case	432.3	186
Household AFDC case	447.8*	195
Other public assistance	379.0	195
Received occupational training within 12 months prior to random assignment		
No	411.9	833
Yes	393.9	166
Criminal record		
No arrest since age 16	423.6	849
Arrested since age 16	325.6***	150

SOURCE: MDRC calculations from JOBSTART Enrollment Forms, Monthly Participation Reports, and TABE reading scores.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment. Since some participants remained in JOBSTART longer than twelve months, these measures underestimate actual participation.

A two-tailed t-test was applied to the difference between participants with a characteristic and the remainder of the sample. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

[a]The sample also included 28 participants who were members of other ethnic groups.

Table 4.5

Average Total Participation Hours for Participants, by Site

Site	Average Total Hours	Number of Participants
Concurrent		
Atlanta Job Corps	358.4	30
CET/San Jose	478.8	62
Chicago Commons	495.0	42
Connelley (Pittsburgh)	482.3	109
East Los Angeles Skills Center	387.5	53
EGOS (Denver)	252.8	113
Phoenix Job Corps	465.9	66
SER/Corpus Christi	404.8	146
Sequential/in-house		
El Centro (Dallas)	393.0	99
Los Angeles Job Corps	577.4	109
Sequential/brokered		
Allentown (Buffalo)	365.2	71
BSA (New York City)	390.1	51
CREC (Hartford)	167.4	48
All sites	408.9	999

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment. Since some participants remained in JOBSTART longer than twelve months, these measures underestimate actual participation.

Tests of statistical significance were not examined.

variation could have had several possible sources such as characteristics of the youths, local employment opportunities, and program characteristics.

With only thirteen sites in the demonstration, it is impossible to isolate the effects on participation of the many differences among programs (discussed in Chapter 2). If, for example, the sites with the most support services were also Job Corps sites and also operated a youths-only program, it would be impossible to separate out the effects of these individual factors on participation hours.

Further, the demonstration was not designed to address this type of question. Applicants were randomly assigned to the experimental or control group, but there was no random assignment to various types of sites, and within each labor market there was usually only one site. This means that experimental results, the most reliable analysis, are available only for differences between experimentals and controls or for differences among subgroups (as defined by pre-random assignment characteristics) within experimentals and controls. Other types of comparisons, such as between types of sites, are inherently less reliable than pure experimental results.

Choices about the most useful ways of grouping sites in this report rested on an examination of the operational experience of the sites and a statistical analysis of participation hours. Neither alone was conclusive, but together they suggested implications of site characteristics and program design features for participation and program operations.

A. Participant Characteristics

As discussed in Chapter 3, the characteristics of participants at the sites did vary and this could explain part of the difference in average hours among the sites. After adjusting for site differences in the characteristics of the youths measured at the time of random assignment, there was still a considerable difference in average total hours among the sites.[14] Site averages in all but one case changed by less than 10 percent with this adjustment; the ranking of sites by average hours changed very little; and the spread in site averages was still 370 hours.[15]

---

[14]This adjustment (using linear analysis of covariance) was designed to take account of differences in site averages due to differences in participant characteristics. Characteristics used in making the adjustment included whether a youth was a teenager, a parent, a member of the "other ethnic" group, or a person with limited English skills, and whether the youth had been arrested since age sixteen. Other possible characteristics for the adjustment model included grade level on leaving school, public assistance status, and reading level, but these were not related to participation hours in a statistically significant way and were not included in the final adjustment model. This adjustment lowered the variance of the average hours among the sites by about 18 percent.

[15]Unmeasured differences of individuals, such as their desire for basic education and their desire for training, may also have differed among the sites. For example, programs without on-site facilities for occupational skills training might have drawn youths who were more interested in education than in training.

B. Employment Opportunities in the Local Economy

Participation in the JOBSTART program is an investment in current training with the goal of improving future employment prospects. But time spent in JOBSTART may mean time lost for current employment. Staff at the sites said that it was easier to recruit when the local economy offered few employment opportunities for disadvantaged youths.

Analysis of participation data indicate that better employment opportunities were also associated with lower total hours of participation.[16] For example, estimates suggest that total participation hours would have been about 65 hours higher in the site with the fewest employment opportunities compared to the site with the best employment opportunities, other things being equal. One probable explanation: in good labor markets, youths who were interested primarily in employment found a job more easily and left JOBSTART after fewer hours of participation. Alternatively, unmeasured differences in the characteristics of JOBSTART participants in strong and weak labor markets could have been the source of this relationship. For example, in a strong labor market those without work who enrolled in education and training programs may have been less motivated or had greater barriers to employment (which were not measured in the demonstration) than those who participated in weak economies.

C. Program Structure

As discussed in Chapter 2, eight sites provided concurrent basic education and occupational skills training ("concurrent" sites); two provided a sequence of education followed by training ("sequential/in-house" sites); and three provided education and then referred participants to other agencies for training ("sequential/brokered" sites). Participation rates by component, participation hours, and the emphasis among components of JOBSTART all differed among these three types of sites, as shown in Table 4.6 (for the three categories of sites) and Table 4.7 (for individual sites).

Four conclusions about program structure can be drawn:

> Participants at sequential/in-house sites had the highest average participation hours, while those at sequential/brokered sites had by far the lowest because of very low average hours in training.

[16]When a measure of local employment opportunities for JOBSTART participants was included with individual demographic characteristics of participants as independent variables and participation hours were the dependent variable, linear analysis of covariance found a negative and statistically significant relationship between employment opportunities and total hours of participation. A similar relationship also held for employment opportunities and education plus training hours, and training hours alone. It did not hold for education hours alone; youths may have participated in the education component for reasons less closely tied to immediate employment opportunities. These same relationships held using several different measures of local employment opportunities.

Table 4.6

Participation Rates, Hours of Participation, and Length of Stay, for Participants, by Program Structure

Activity Measure	Concurrent	Sequential/ In-House	Sequential/ Brokered	Total
Percent participating in				
Education	94.2	98.6	99.4	96.0
Training	95.0	54.3	25.9	74.8
Education and training	89.7	54.3	25.9	71.5
Other activities	14.7	100.0	74.1	42.5
Average hours in				
Education	107.5	161.8	184.7	131.9
Training	289.6	221.6	68.4	237.8
Education and training	397.1	383.3	253.2	369.8
Other activities	9.9	105.7	63.7	39.0
All activities	407.0	489.6	316.8	408.9
Percentage distribution of hours in education and training				
Less than or equal to 200	33.5	46.6	54.1	39.7
201 to 500	29.6	17.8	28.8	27.0
501 to 700	21.7	13.0	9.4	17.8
701 or more	15.1	22.6	7.6	15.4
Total	100.0	100.0	100.0	100.0
Percentage distribution of hours in all activities				
Less than or equal to 200	32.4	28.8	45.9	33.9
201 to 500	30.0	31.7	30.6	30.4
501 to 700	21.6	8.2	9.4	16.7
701 or more	16.1	31.3	14.1	18.9
Total	100.0	100.0	100.0	100.0
Average length of stay (months)	6.40	6.75	7.40	6.65
Percent still participating in month				
3	85.8	87.0	85.3	86.0
6	58.8	52.9	61.8	58.1
9	27.5	37.0	42.9	32.1
12	11.9	19.7	28.8	16.4
Number of participants	621	208	170	999

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment and apply to the entire participant sample including those with zero hours in an individual component. Since some participants remained in JOBSTART longer than twelve months, these measures underestimate actual participation.

Distributions may not add to 100.0 percent because of rounding.

Tests of statistical significance were not examined.

Table 4.7

Participation Rates, Hours of Participation, and Length of Stay, for Participants, by Site

Activity Measure	Concurrent								Sequential/ In-House		Sequential/ Brokered			Total
	Atlanta Job Corps	CET/ San Jose	Chicago Commons	Connelley (Pittsburgh)	East Los Angeles Skills Center	EGOS (Denver)	Phoenix Job Corps	SER/ Corpus Christi	El Centro (Dallas)	Los Angeles Job Corps	Allentown (Buffalo)	BSA (New York City)	CREC (Hartford)	
Percent participating in														
Education	96.7	71.0	85.7	97.2	100.0	100.0	97.0	95.9	100.0	[illegible]	100.0	98.0	100.0	96.0
Training	93.3	88.7	100.0	100.0	100.0	82.3	97.0	100.0	46.5	[illegible]	29.6	27.5	18.8	74.8
Education and training	93.3	59.7	85.7	97.2	100.0	82.3	97.0	95.9	46.5	61.5	29.6	27.5	18.8	71.5
Other activities	100.0	0.0	0.0	0.0	0.0	0.0	92.4	0.0	100.0	100.0	93.0	100.0	18.8	42.5
Average hours in														
Education	104.0	40.7	75.7	91.7	81.8	126.8	179.2	119.5	143.1	178.8	213.8	198.6	127.0	131.9
Training	196.8	438.2	419.3	390.5	305.7	126.0	220.0	285.4	170.2	268.2	75.2	94.2	31.0	237.8
Education and training	300.8	478.8	495.0	482.3	387.5	252.8	399.2	404.8	313.2	447.0	289.0	292.8	158.0	369.8
Other activities	57.6	0.0	0.0	0.0	0.0	0.0	66.7	0.0	79.8	129.3	76.2	97.3	9.4	39.0
All activities	358.4	478.8	495.0	482.3	387.5	252.8	465.9	404.8	393.0	577.4	365.2	390.1	167.4	408.9
Percentage distribution of hours in education and training														
Less than or equal to 200	43.3	32.3	33.3	24.8	34.0	54.9	37.9	19.9	53.5	40.4	47.9	43.1	75.0	39.7
201 to 500	30.0	24.2	19.0	24.8	30.2	30.1	27.3	39.0	18.2	17.4	29.6	35.3	20.8	27.0
501 to 700	26.7	11.3	14.3	22.0	17.0	11.5	12.1	41.1	16.2	10.1	14.1	9.8	2.1	17.8
701 or more	0.0	32.3	33.3	28.4	18.9	3.5	22.7	0.0	12.1	32.1	8.5	11.8	2.1	15.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage distribution of hours in all activities														
Less than or equal to 200	30.0	32.3	33.3	24.8	34.0	54.9	33.3	19.9	34.3	23.9	39.4	31.4	70.8	33.9
201 to 500	36.7	24.2	19.0	24.8	30.2	30.1	27.3	39.0	36.4	27.5	26.8	41.2	25.0	30.4
501 to 700	20.0	11.3	14.3	22.0	17.0	11.5	13.6	41.1	9.1	7.3	16.9	5.9	2.1	16.7
701 or more	13.3	32.3	33.3	28.4	18.9	3.5	25.8	0.0	20.2	41.3	16.9	21.6	2.1	18.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(continued)

Table 4.7 (continued)

Activity Measure	Concurrent								Sequential/ In-House		Sequential/ Brokered			Total
	Atlanta Job Corps	CET/ San Jose	Chicago Commons	Connelley (Pittsburgh)	East Los Angeles Skills Center	EGOS (Denver)	Phoenix Job Corps	SER/ Corpus Christi	El Centro (Dallas)	Los Angeles Job Corps	Allentown (Buffalo)	BSA (New York City)	CREC (Hartford)	
Average length of stay (months)	6.10	6.02	4.98	8.51	6.13	6.70	6.88	5.12	5.81	7.61	8.68	6.75	6.21	6.65
Percent still participating in month														
3	76.7	82.3	71.4	97.2	77.4	85.8	89.4	86.3	83.8	89.9	93.0	86.3	72.9	86.0
6	46.7	51.6	50.0	71.6	58.5	56.6	59.1	58.9	46.5	58.7	78.9	52.9	45.8	58.1
9	33.3	25.8	11.9	59.6	28.3	32.7	34.8	0.0	25.3	47.7	54.9	35.3	33.3	32.1
12	16.7	9.7	0.0	22.9	7.5	18.6	19.7	0.0	8.1	30.3	40.8	19.6	20.8	16.4
Number of participants	30	62	42	109	53	113	66	146	99	109	71	51	48	999

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment and apply to the entire participant sample including those with zero hours in an individual component. Since some participants remained in JOBSTART longer than twelve months, these measures underestimate actual participation

Distributions may not add to 100.0 percent because of rounding.

Tests of statistical significance were not examined.

Activities included in "training" and "other activities" can vary by site as explained in Appendix A. Hours in education refer to time spent in a basic education or GED-preparation class and do not include education provided as part of an occupational training course.

The mix of education, training, and other activities varied by type of site. The concurrent sites, other than two Job Corps sites, did not offer the optional "other activities" and emphasized occupational training; as a result, average training hours for participants amounted to 71 percent of average total hours. The sequential/brokered sites emphasized education and other services, both of which were provided in-house. They had the highest average hours in education, and training hours were only about 20 percent of average total hours.

Sequential/brokered sites had difficulties moving participants from education to training. Only 26 percent of participants at sequential/brokered sites made the transition to occupational training, although those who made the transition did receive substantial training. As discussed in Chapter 7, this low rate of participation in training occurred because of difficulties creating strong linkages with other organizations. Possibly, it also arose because participants at these sites (which were primarily basic education organizations) were more interested in receiving a GED than in occupational training.

These relationships do not appear to be the result of measured differences in participant characteristics or local employment opportunities. Even after the adjustments for differences in participant characteristics and local employment opportunities discussed above, these patterns of participation among sites with different program structure still appear.[17]

While these three categories of sites do clarify patterns of participation, the sites within each category were clearly not identical. Among the concurrent sites, EGOS in Denver stood out with especially low hours -- possibly because of its very large size and limited support services and group activities (as discussed in Chapter 5). CREC in Hartford, among the sequential/brokered sites, had very low hours because it only scheduled three hours of education per day. Furthermore, CREC offered very limited support services and had staffing problems. The high total hours for sequential/in-house sites were primarily due to the Los Angeles Job Corps, with the highest average hours among all sites. El Centro in Dallas, the other site in this category, ranked seventh in total hours.

D. Type of Agency

JOBSTART programs were operated by Job Corps Centers, schools, and community-based organizations (CBOs). There were reasons to hypothesize that participants at Job Corps sites might have greater amounts of participation. Job Corps Centers had experience running a program like JOBSTART and offered an extra array of activities and support services, which

[17]When dummy variables for type of site were added as independent variables to a regression equation with individual demographic characteristics and a measure of local employment opportunities, the relationships still held.

might have facilitated higher participation. Large schools had the advantage of many different types of training available on-site, but often lacked the support services available through the Job Corps. CBOs may have had advantages providing basic education without recreating the environment of high school, but typically they did not have the variety of training offerings available at the Job Corps.

Table 4.8 shows that the Job Corps sites did have higher average hours of participation as a group; each measure of average hours was higher for Job Corps sites than for the other sites. Average total hours were approximately equal for schools and CBOs. However, this finding is not conclusive evidence of superior performance for the Job Corps type of agency, for several reasons. First, there were only three Job Corps Centers, and the Los Angeles Job Corps Center was not typical of other Job Corps sites: it has repeatedly been designated among the best administered centers in the country.[18] Second, there were other differences among the two groups of sites besides their agency type. Most important, none of the Job Corps Centers operated sequential/brokered programs, which had the most difficulties implementing JOBSTART. Additionally, the participant mix at the three types of sites differed somewhat, as did employment opportunities in the community. The analytic problems mentioned earlier prevented a conclusive analysis of the independent effect of each of these factors on participation levels.

The most appropriate generalization is that all types of sites were able to implement the model. The Job Corps Centers did have advantages, with a unique combination of education classes, varied training, and extensive support services. But other types of agencies found ways to address the needs of participants and to implement the program.

In summary, this analysis -- plus the operational analysis in subsequent chapters -- supports the crucial influence of program structure on the experience of youth in JOBSTART. Concurrent, sequential/in-house, and sequential/brokered sites operated differently in important ways. The differences among agency types -- schools, CBOs, and Job Corps Centers -- were less clear and also tended to have fewer operational implications. Therefore, in the following four chapters sites will often be grouped according to the type of program they operated.

[18]See Malnic, 1988, p. 1. As a further complication, some "other activity" hours (avocational activities) were included in the count at the Los Angeles Job Corps (and also at the Atlanta Job Corps) that were not counted at other sites. See the discussion in Appendix A.

Table 4.8

Participation Rates, Hours of Participation, and Length of Stay, for Participants, by Job Corps Sites and Schools and CBOs

Activity Measure	Atlanta Job Corps	Phoenix Job Corps	Los Angeles Job Corps	All Job Corps Sites	Schools and CBOs	All Sites
Percent participating in						
Education	96.7	97.0	97.2	97.1	95.7	96.0
Training	93.3	97.0	61.5	77.6	74.1	74.8
Education and training	93.3	97.0	61.5	77.6	69.9	71.5**
Other activities	100.0	92.4	100.0	97.6	28.3	42.5***
Average hours in						
Education	104.0	179.2	178.8	168.0	122.6	131.9***
Training	196.8	220.0	268.2	242.2	236.7	237.8
Education and training	300.8	399.2	447.0	410.2	359.3	369.8**
Other activities	57.6	66.7	129.3	98.7	23.6	39.0***
All activities	358.4	465.9	577.4	509.4	382.9	408.9***
Percentage distribution of hours in education and training						
Less than or equal to 200	43.3	37.9	40.4	40.0	39.7	39.7
201 to 500	30.0	27.3	17.4	22.4	28.2	27.0
501 to 700	26.7	12.1	10.1	13.2	19.0	17.8*
701 or more	0.0	22.7	32.1	24.4	13.1	15.4***
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage distribution of hours in all activities						
Less than or equal to 200	30.0	33.3	23.9	27.8	35.5	33.9**
201 to 500	36.7	27.3	27.5	28.8	30.9	30.4
501 to 700	20.0	13.6	7.3	11.2	18.1	16.7**
701 or more	13.3	25.8	41.3	32.2	15.5	18.9***
Total	100.0	100.0	100.0	100.0	100.0	100.0
Average length of stay (months)	6.10	6.88	7.61	7.15	6.52	6.65**

(continued)

Table 4.8 (continued)

Activity Measure	Atlanta Job Corps	Phoenix Job Corps	Los Angeles Job Corps	All Job Corps Sites	Schools and CBOs	All Sites
Percent still participating in month						
3	76.7	89.4	89.9	87.8	85.5	86.0
6	46.7	59.1	58.7	57.1	58.3	58.1
9	33.3	34.8	47.7	41.5	29.7	32.1***
12	16.7	19.7	30.3	24.9	14.2	16.4***
Number of participants	30	66	109	205	794	999

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment and apply to the entire participant sample including those with zero hours in an individual component. Since some participants remained in JOBSTART longer than twelve months, these measures underestimate actual participation.

Distributions may not add to 100.0 percent because of rounding.

An F-test or chi-square test was applied to differences between all Job Corps sites and all schools and CBOS for each activity measure. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

CHAPTER 5

RETENTION STRATEGIES

This chapter describes the principal strategies JOBSTART operators used to strengthen participants' commitment to the program. It also assesses the effectiveness of those strategies, using data on length of stay in the program and the reasons participants left it. The analysis draws in part on participants' own evaluations of their experiences.

As noted in Chapter 4, a major challenge facing operators of any lengthy, intensive program like JOBSTART is keeping participants active over a long enough time for the intervention to make a difference. The nature of the population targeted for the program accentuated the potential difficulty. As school dropouts, the youths had a history of negative experiences in school; if JOBSTART were to exert a more positive influence it had to offer a different environment. In addition, their personal circumstances suggested that there would be conflicting demands on their time and attention. For the one-third who were parents, childcare responsibilities were likely to loom large. Peer pressure from friends and acquaintances and the lure of easy money in the underground economy might also exert a powerful negative influence. Financial pressures -- to provide for themselves, their children, or their parents and siblings -- might create a need for immediate income that would conflict with the longer term goal of getting trained for a job that would pay a higher wage and be more secure.

To counter these rival pulls JOBSTART staff used three principal strategies. First, the sites defrayed the cost of childcare and transportation and provided some other basic supports. Second, recognizing that quality training and educational services were not always enough to wed people to the program, most sites tried to create a warm, supportive environment intended to bolster the youths' confidence, sense of self-worth, and expectations. Third, most sites provided participants with life skills training -- covering such topics as health, personal finances, and workplace routines -- to help them function more responsibly in a variety of roles and situations. Retention was not a goal in itself; the aim was to keep youths active in JOBSTART as long as necessary to enhance their employment prospects.

Despite these efforts many youths had sporadic attendance records and many dropped out of JOBSTART before completing training. About one-third of all participants left the program because of such circumstances as childcare problems, pregnancy, family difficulties, or a need for immediate employment. Approximately one-fifth left because they did not like something about the program or had difficulty meeting the sites' standards of attendance or behavior.

I. Strategies to Increase Retention

A. Meeting Basic Needs of Participants at the Schools and Community-Based Organizations

Recognizing that participants would need to be reimbursed for training-related expenses, the sites paid for their transportation and helped arrange daycare for their children. Most of the community-based organizations (CBOs) and schools provided modest needs-based payments -- typically $5 to $8 per day -- tied to attendance. At most sites this money was expected to cover the costs of transportation and lunch, and was thus an alternate way of reimbursing participants for training-related expenses. Only one site provided bus passes in addition to a needs-based payment. (Table 5.1 shows the range of support services.)

The East Los Angeles Skills Center, EGOS in Denver, CET/San Jose, and CREC in Hartford did not offer needs-based payments but did otherwise attempt to meet participants' basic needs by supplying free bus passes, lunch money, groceries, or emergency funds.[1] Nevertheless, as discussed below, many participants did seek alternative sources of income, combining work with education and training classes; others left the program because they found the available support services inadequate.

JOBSTART counselors/coordinators placed a high priority on adequate childcare arrangements. Most often staff referred students to other agencies to make the arrangements, but some helped the students deal directly with service providers. Childcare costs were generally covered by JTPA or the Work Incentive (WIN) Program, which provides support services for AFDC recipients enrolled in education or training programs. Two CBOs and one school had on-site daycare facilities, but staff reported that students frequently preferred to make their own arrangements in their own neighborhoods. Counselors experienced the following difficulties: delays in coordinating action between agencies; lack of slots for children of certain ages, particularly infants; a local JTPA policy that would not reimburse unlicensed caretakers, making it difficult for women using relatives for childcare; and a gap between the amount charged by local childcare providers and the amount paid by JTPA or WIN.

Staff dealt with participants' needs for medical care, housing assistance, or counseling for substance abuse or serious psychological problems by referral to other agencies. In most cases they had informal or "networking" relations with these other agencies. A few, however, made special arrangements to provide low-cost eye care to participants during the demonstration.

B. Meeting Basic Needs of Participants at the Job Corps Sites

Compared to the CBOs and schools, Job Corps sites were able to provide far more enriched and comprehensive services, including financial supports. Participants received a

---

[1]CET/San Jose provided needs-based payments only for farmworkers. BSA in New York City did not provide needs-based payments during some periods in the demonstration.

Table 5.1

Basic Support Services Available in JOBSTART, by Site

Site	Needs-Based Payments	Transportation	Childcare	Other	Incentive Payments
Job Corps					
Atlanta Job Corps	Basic allowance of $40 per month for first 2 months, $60 for next 3 months, $80 after 5 months	Bus passes	On-site	Free meals; clothing allowance of $75 in first month, $50 in third month, $96 in sixth and tenth months, $51 in twelfth month; on-site medical and dental care	Merit raises can increase basic allowance to $100 per month after 6 months; $75 per month is placed in escrow for enrollees who stay 6 months, which increases to $100 per month after 6 months; $150 bonus in tenth month
Los Angeles Job Corps	Basic allowance of $40 per month for first 2 months, $60 for next 3 months, $80 after 5 months	Bus passes	By referral	Free meals; clothing allowance of $75 in first month, $50 in third month, $96 in sixth and tenth months, $51 in twelfth month; on-site medical and dental care	Merit raises can increase basic allowance to $100 per month after 6 months; $75 per month is placed in escrow for enrollees who stay 6 months, which increases to $100 per month after 6 months; $150 bonus in tenth month
Phoenix Job Corps	Basic allowance of $40 per month for first 2 months, $60 for next 3 months, $80 after 5 months	Bus passes	By referral	Free meals; clothing allowance of $75 in first month, $50 in third month, $96 in sixth and tenth months, $51 in twelfth month; on-site medical and dental care	Merit raises can increase basic allowance to $100 per month after 6 months; $75 per month is placed in escrow for enrollees who stay 6 months, which increases to $100 per month after 6 months; $150 bonus in tenth month
Schools					
Connelley (Pittsburgh)	$5 per day[a]	$2 per day or bus passes[a]	On-site and by referral	$50 one-time clothing grant	$50 for passing GED[b], $50 for each month of perfect attendance, quarterly payment of $50 for "A" average, $25 for "B" average, $10 for "C" average
East Los Angeles Skills Center	None	Bus passes, gasoline vouchers	By referral	Emergency funds, lunch money during a brief period	None

(continued)

Table 5.1 (continued)

Site	Needs-Based Payments	Transportation	Childcare	Other	Incentive Payments
EGOS (Denver)	None	Bus passes, gasoline vouchers	By referral	Lunch money during a brief period	None
El Centro (Dallas)	$5 per day	Bus passes	By referral	Emergency rent funds	$5 per week for perfect attendance
Community-based organizations					
Allentown (Buffalo)	$1 per hour if on AFDC, otherwise $2 per hour, during education and training	Included in needs-based payment	By referral	None	None
BSA (New York City)	$23-30 per week during education,[c] $30 per week during JTPA training	Included in needs-based payment, tokens available otherwise	By referral, $15 per week for expenses	Free breakfast	$5 for weekly academic progress, $5 for perfect weekly attendance[d]
CET/San Jose	$1 per hour, for farm-workers only	Bus passes for farm-workers and others who demonstrate need	On-site and by referral	Weekly food bank provided free groceries	None
Chicago Commons	$6 per day	Included in needs-based payment	By referral	None	None
CREC (Hartford)	None	Bus passes	By referral	None	None
SER/Corpus Christi	$8 per day	Included in needs-based payment	On-site for children over 18 months, and by referral	None	$20 for each grade level gain in reading, $20 for passing GED pre-test, $40 for passing GED, $45 for "A" average throughout occupational training, $25 for "B" average

SOURCE: Program records and staff interviews.

NOTES: [a]At intervals, site combined transportation and needs-based payment into one $7 per day payment.

[b]Available during 1986-87 school year.

[c]For period October 1986-August 1987.

[d]Available after October 1987.

monthly allowance (based on attendance), transportation costs, a clothing allowance, and free meals while they were at the centers. Incentives were built into the system: the monthly allowance was increased for good behavior or performance, and the Job Corps contributed $75 per month (with increases over time) into an escrow account for each participant. Participants who stayed at least six months were entitled to withdraw the amount in escrow in a lump sum when they left; the others got none of the money. Participants could use some of the escrow account for family expenses or childcare while they were enrolled. The Job Corps sites also provided free, on-site medical and dental care. Atlanta was the only site of the three to provide on-site childcare.

C. Enhancing Engagement and Commitment

Another set of strategies was designed to engage the youths more fully in JOBSTART and to build a sense of identity with the program. In general counselors wanted to create an atmosphere different from what participants had experienced in high school and to provide opportunities for students to develop confidence and pride in themselves and their work. The structure of the individualized, self-paced classes contributed to this, since students could take pride in achieving competencies and in having daily reinforcement that they were making progress. But the key to the approach was personal attention from a committed, supportive staff, including teachers as well as counselors. The following sections of this chapter discuss the ways in which teachers and counselors implemented such a philosophy, but it should be noted that not all instructors shared this vision, especially at sites that were used to working with adult learners. Examples of teaching staff who took a different attitude are discussed in Chapters 6 and 7.

1. Counseling. At many sites, the counselor/coordinator was intended to be the linchpin of the program. Counselors monitored students' progress through all the components, helped them deal with family and personal problems, and made sure that support services were in place. Their offices were a "drop in" place for students, and they had daily informal contact with the students as well as formal meetings. The counselors were intermediaries between the students and teachers and were also advocates for the program within the larger institution. In addition, at most sites counselors tried hard to get in touch with absentee students and to help improve their attendance. One even made wake-up calls to students who had trouble getting to class on time.

The intensity and breadth of the issues that counselors dealt with in trying to retain participants in the program are illustrated in the following examples. A participant who was enrolled in clerical training quit JOBSTART to take a low-paying factory job when the aunt with whom she was living lost her job and demanded that the youth pay some rent; the counselor tracked down the student, arranged to pay the rent out of emergency funds available to the program, convinced the student to return to JOBSTART, and helped the aunt find another job. At another site, a counselor worked closely with a participant during her pregnancy to arrange enough supports so that the woman could return after a short maternity leave; the counselor attended a shower for the student and visited her while she was on leave.

Crisis intervention was important, but counselors also spent a good deal of time serving as

a sympathetic ear when participants needed to let off steam, encouraging them when they were depressed or discouraged, and urging them to be patient. In the process, counselors tried to teach the youths that they had to learn to anticipate the consequences of their actions, take responsibility for their lives, plan ahead, set incremental goals, and take pride in their accomplishments.

2. Building Group Cohesion. Sites sought to foster a sense of group identity and to reward participants who reached specified goals or showed exemplary behavior. Helping the person feel like part of a group is an important "bonding" strategy for young adults, especially in programs that have to work against the pull of negative reference groups -- gangs, friends who are dropouts, and unsupportive families.

Some sites provided regular opportunities for students to meet as a group to discuss their experiences in JOBSTART and other concerns. Some scheduled occasional extracurricular activities such as trips and outings, recreational events, sports contests, or fundraising activities to make money for a group project. A number of sites that mainstreamed the JOBSTART youths with other enrollees tried to build a sense of group identity around the program per se, but at other sites, the reference group was the training class rather than the program as a whole. At the latter, individual instructors would schedule class trips or class projects, but there were few if any activities that brought the participants together as a group.

Extracurricular activities, outings, and team competitions were widely used at the Job Corps sites but were infrequent at the other sites. If scheduled during the day, they conflicted with training and education classes; if scheduled after class hours, it was difficult for many students to attend. Developing a sense of group solidarity was particularly difficult at sites where the program was only a small part of a very large institution, such as Connelley in Pittsburgh and EGOS in Denver. Scheduling separate education classes for JOBSTART youths at the mainstreamed sites facilitated the process. Building a group identity also posed more of a challenge for sites that operated on an open entry/open exit basis because the composition of the group frequently changed.

3. Motivational Techniques. As noted above, the Job Corps sites offered financial rewards and so did a few others. SER/Corpus Christi and Connelley in Pittsburgh rewarded participants who maintained specified grade averages, passed the pre-GED test, or received the GED, as shown in Table 5.1. Connelley, El Centro in Dallas, and BSA in New York City provided financial incentives for good attendance.

An analysis of length of participation and average hours attended at the sites with the major incentives (the three Job Corps sites, SER/Corpus Christi, and Connelley), compared to the others, did not reveal that the provision of such financial incentives by itself increased program retention. However, as discussed in Chapter 6, the payments for GED receipt appear to have been a factor in the relatively high rates of GED receipt at Connelley and SER/Corpus Christi. Such payments may thus have functioned more as a performance than a retention incentive.

Teachers and counselors provided nonmaterial rewards by praising individuals who

achieved certain levels in occupational training and basic education and recognizing their accomplishments in class, sometimes taking participants who passed the GED or got jobs out to lunch or organizing a class party for them.

A supportive atmosphere, however, did not mean low expectations. Participants who failed to meet a site's standards of performance, attendance, or general conduct were terminated from the program. However, most sites that mainstreamed the youths with adults were inclined to bend the rules for the JOBSTART participants and to give them a number of chances to demonstrate improvement before terminating them. Nevertheless, counselors said that they sometimes found it difficult to strike the right balance between providing encouragement and maintaining meaningful standards.

D. Life Skills Instruction

Many sites also tried to improve the participants' life skills or "human development" in more systematic ways. The intent was to help teach participants how to deal with adult problems, on and off the job, and to enhance retention and performance in the program by addressing issues that mattered to participants.

About half the sites (the three Job Corps sites, El Centro in Dallas, and the sequential/brokered sites except for CREC in Hartford) incorporated two to three hours of formal life skills classes into the regular program day. (Except at El Centro such classes were traditionally offered at these sites.) As discussed in Chapter 4, participation in the life skills classes was a significant proportion of the total participation hours at these sites.

The life skills curricula were oriented around daily living. For example, units on health education taught about good nutrition, the consequences of substance abuse, and sexuality and family planning. Units on personal budgeting taught about budgeting for a household, services that are available through banks, and deductions that are made from paychecks. Units on government and civics taught about exercising the rights of a citizen and the ways that government functions. Other parts of the curricula focused on interactions with other people, means of bolstering self-esteem, and ways to identify students' values and to establish goals in keeping with them. Still other units dealt with finding a job and appropriate behavior in the workplace. The life skills classes typically combined group activities -- lecture, discussion, and role-playing -- with written exercises that students completed individually. A life skills component thus helped to develop a group identity in JOBSTART.

The seven other demonstration sites did not focus so intensely or systematically on life skills. Instead, they addressed such topics as part of the training curriculum, in special counseling or discussion sessions, or through occasional lectures. Two sites (SER/Corpus Christi and CET/San Jose) devoted about forty or fifty hours of their vocational training courses to human development. However, the focus was on job-related behavior. Connelley in Pittsburgh developed an "after school" component, just for JOBSTART participants. It included individual counseling, ten weeks of group sessions on "human relations" led by an outside expert, and six one-hour sessions on sexuality and family planning conducted by a local community organization.

Staff at sites that initially made few provisions for human development education (primarily sites that were used to serving adults) identified this lack as a chief weakness of the program. As the demonstration progressed some added regular life skills training, set aside a week or two of special work at the start of the program, or scheduled group sessions in which staff and students could address such problems as motivation and time management.

II. Assessing the Retention Strategies

A. Meeting Basic Needs

Analyses of length of participation in JOBSTART and the reasons why participants left the program suggest that, on the whole, the sites were able to provide basic supports and to retain participants over a relatively lengthy period of time -- more than six months, on average, with 16 percent of the participants still active in the twelfth month after random assignment.

MDRC used the survey fielded twelve months after random assignment to collect data on the reasons participants left JOBSTART. Those who had left the concurrent and sequential/in-house sites were asked their main reason for leaving. Those who had left the sequential/brokered sites but had not entered training were asked their main reason for leaving the education component, those who had enrolled in training but subsequently left were asked their main reason for leaving the training provider. Responses to the questions were open-ended.

As shown in Table 5.2, 32 percent of the respondents said that they had left because they had completed the program and 7 percent, to take a job. Only 20 percent left because they did not like something about JOBSTART or were unable to meet the standards of attendance or behavior. Another 36 percent cited personal problems such as the need to get a job, childcare or family problems, or pregnancy.[2] Among males the most common problem was the need for a job; 16 percent of the male participants said that they left for this reason. For females, childcare needs and pregnancy were major obstacles to participation; 11 percent of the female participants said that they left because of childcare problems, and 14 percent left because of pregnancy.

Other data, too, indicate that financial need was a crucial issue for many participants. Asked to name things they did not like about JOBSTART, 7 percent of the respondents said that the support services were inadequate (Table 5.3). Twenty-six percent of participants worked while they were in the program (see below and Chapter 8).

Overall, the survey responses suggest that while most participants had their basic needs met while they were in the program, more could have been done in such key areas as financial support and childcare. Another area of weakness was pregnancy prevention. As noted above,

---

[2]The large proportion of participants who reported leaving because of personal problems is consistent with findings from other programs serving at-risk or dropout youths. See Public/Private Ventures, 1988.

Table 5.2

Main Reason for Leaving JOBSTART
As Reported by Surveyed Participants, by Sex

Reason	Males	Females	Total
Completed program	34.5%	30.2%	32.4%
Entered employment	8.5	4.7	6.6
Program-related reasons			
Disliked training	1.6	2.7	2.1
Disliked education	3.9	0.8	2.3
Problems with staff	3.1	3.5	3.3
Couldn't keep up with work	2.7	1.6	2.1
Asked to leave	3.9	1.2	2.5
Lost interest	1.9	3.5	2.7
Other program-related reasons	5.0	4.3	4.7
Total	22.1	17.4	19.8
Personal reasons			
Needed a job	15.5	5.0	10.3
Transportation difficulties	2.7	3.5	3.1
Family illness	4.7	7.8	6.2
Childcare difficulties	0.8	10.5	5.6
Own health problems	1.6	2.7	2.1
Pregnancy	0.8	14.0	7.4
Other personal reasons	2.7	0.0	1.4
Total	28.7	43.4	36.0
Other[a]	6.2	4.3	5.2
Number of surveyed participants	258	258	516

SOURCE: MDRC calculations from the JOBSTART twelve-month survey.

NOTES: This table includes data for all youths randomly assigned between August 1985 and March 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment, who responded to the twelve-month survey, and who left JOBSTART within twelve months of random assignment. Participants who remained in JOBSTART beyond twelve months and those who did not respond to this question are not included in this table.

Distributions may not add to 100.0 percent because of rounding.

Tests of statistical significance were not examined.

[a]Reasons that were cited by fewer than 2.0 percent of respondents are included in the "other" category.

Table 5.3

Things Disliked About JOBSTART
As Reported by Surveyed Participants, by Program Structure

Disliked	Concurrent	Sequential/ In-House	Sequential/ Brokered[a]	Total
Nothing	51.8%	65.1%	37.8%	52.1%
Disliked program rules or staff attitudes	9.4	5.5	21.1	10.4
Support services were inadequate	9.2	0.9	3.3	7.1
Disliked staff	7.7	1.8	4.4	6.3
Class day was too long	6.2	3.7	7.8	6.0
Problems with other students	6.4	0.9	7.8	5.7
Disliked type of education or training	3.9	10.1	6.7	5.3
Problems with staff	3.6	6.4	2.2	3.9
Received no assistance on job placement	3.4	1.8	4.4	3.3
Couldn't keep up with work	2.4	3.7	3.3	2.7
Other[b]	12.4	7.3	27.8	13.7
Number of surveyed participants	467	109	90	666

SOURCE: MDRC calculations from the JOBSTART twelve-month survey.

NOTES: This table includes data for all youths randomly assigned between August 1985 and March 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment and who responded to the twelve-month survey.

Distributions will not add to 100.0 percent because sample members were allowed up to three responses.

Tests of statistical significance were not examined.

[a]At sequential/brokered sites, these questions refer to the education phase only.

[b]Reasons that were cited by fewer than 2.0 percent of respondents are included in the "other" category.

14 percent of the female participants said that they left the program because they were pregnant, but only a few sites addressed family planning issues with any intensity.

A major policy issue for the JTPA system as a whole is whether service providers should offer needs-based payments. Opponents emphasize the need to avoid a replay of programs operated under the Comprehensive Employment and Training Act (CETA), where enrollees were allegedly attracted by the minimum-wage stipend and not because they were interested in training for a better job. They argue that if JTPA succeeds in enrolling a more motivated population, it will be more successful in moving trainees into jobs. Proponents, on the other hand, fear that the lack of any financial support excludes or deters a population that is motivated but financially needy, and skews the system in the direction of shorter, less intensive training programs. They note that males may find it especially difficult to participate, since they are less likely than are young single mothers to be receiving AFDC benefits.

Because the demonstration was not set up to address this issue, it cannot offer any definitive evidence on the value of providing needs-based payments. Although, as the previous discussion makes clear, financial need was a problem for a substantial minority of participants, it proved impossible to isolate the effects of needs-based payments on recruitment, length of participation, or average hours attended. Nevertheless, the reactions of both staff and participants to the payment policies at the sites provide useful insights.

Discussions with staff indicated that they were divided about the importance of needs-based payments. Where sites did not provide them, counselors felt that part-time jobs -- or emergency funds -- were a better way of providing income. They agreed, however, that it was essential to provide transportation and childcare assistance.

In contrast, staff at the other sites thought that it was very important that participants not be totally dependent on relatives or friends for spending money. They believed that tying the payment to attendance taught the youths an important lesson about the consequences of their behavior and helped prepare them for the work world. Most seemed to feel that the money was an attraction, especially at the start of the program, but that it was not the only -- and probably not the primary -- reason why people came to classes.

Participants who took part in focus group discussions at four sites also expressed mixed emotions about needs-based payments. A few students felt that they were essential, while others claimed that they would have attended regardless of the size of the payment, and even if there had been no payment at all. Everyone agreed that the money seemed to help people stay in JOBSTART and lessened their need to take a job while in the program. But, like the staff, the majority stressed that money alone was not sufficient motivation to keep them coming for months.

Two points should be noted. First, the difference in the level of support provided by sites that offered needs-based payments and sites that reimbursed participants for training-related expenses was frequently not very great. Second, the needs-based payments available to participants were not sufficient to cover the cost of essentials such as rent, utilities, and food. Support systems that provided $1 or so per hour attended were not comparable to the CETA

minimum-wage stipends. Even with needs-based payments, participants had to have an alternative source of support.

B. Enhancing Engagement and Commitment

Student assessments of JOBSTART indicated that staff efforts to instill a caring, supportive atmosphere were highly valued. The information provided below is based on three sources: survey questions fielded twelve months after participants entered JOBSTART, focus group discussions with forty-six participants at four sites, and conversations with program participants who were delegates to MDRC's Youth Employment Initiatives Conference.[3]

The overwhelming majority (82 percent) of the participants interviewed for the twelve-month survey thought that JOBSTART was different from high school; and 50 percent of the participants thought that it was very different (Table 5.4). Among those who found it different, the most frequently cited reasons were the attention participants received from teachers and staff (43 percent), the self-paced nature of the instruction (41 percent), and the fact that they were treated "like adults" (31 percent). (See Table 5.5.)

Male and female participants responded almost identically when asked whether JOBSTART was different from high school. Differences in the responses of participants at different types of sites were striking, however: 71 percent of the respondents at the sequential/brokered sites said that JOBSTART was very different, while only about 47 percent of those at the other sites responded in this way (Table 5.4). In explaining the differences from high school, much higher percentages of respondents at the sequential/brokered sites noted the use of self-paced instruction and computer-aided instruction. At the concurrent sites greater proportions of respondents cited being treated like adults and having education linked with training (Table 5.5).

Seventy-eight percent of respondents believed that the time spent in JOBSTART had been or would be helpful in getting a job. Fully 92 percent of respondents at the sequential/brokered sites believed so compared to 79 percent at the concurrent sites and 68 percent at the sequential/in-house sites. Participants who found JOBSTART helpful most frequently cited learning occupational skills, followed by learning job search skills, GED receipt, increased self-confidence, and improved math and reading skills (Table 5.6). Males and females responded similarly, but the pattern of responses varied by type of site: among other differences, respondents from concurrent and sequential/in-house sites most frequently cited occupational training, while those from sequential/brokered sites named job search skills as reasons why JOBSTART would help them get a job.

Asked to name things they liked about the program, more respondents cited teachers and

---

[3]JOBSTART staff and one participant selected by each site attended the conference which brought them together with Congressional and federal agency staff, representatives of foundations and corporations, and advocacy group members to discuss ways to strengthen youth employment policy. See MDRC, 1988.

Table 5.4

Surveyed Participants' Views on the
Comparison of JOBSTART to High School,
by Program Structure

Response	Concurrent	Sequential/ In-House	Sequential/ Brokered	Total
Very different	46.2%	47.4%	70.9%	49.8%
Somewhat different	36.2	20.0	23.3	31.9
Not different	17.6	32.6	5.8	18.3
Number of surveyed participants	437	95	86	618

SOURCE: MDRC calculations from the JOBSTART twelve-month survey.

NOTES: This table includes data for all youths randomly assigned between August 1985 and March 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment and who responded to the twelve-month survey. Only those participants who attended high school and answered this question are included in this table.

Distributions may not add to 100.0 percent because of rounding.

Tests of statistical significance were not examined.

Table 5.5

Differences Between JOBSTART and High School,
As Reported by Surveyed Participants, by Program Structure

Difference[a]	Concurrent	Sequential/ In-House	Sequential/ Brokered[b]	Total
More attention from teachers and staff	41.4%	53.1%	44.4%	43.4%
Use of self-paced instruction	35.8	43.8	64.2	41.4
Treated like adults	34.7	20.3	18.5	30.8
Smaller classes	13.1	25.0	27.2	16.8
Linkage of education and skills training	18.3	7.8	4.9	14.9
Use of computer-assisted instruction	12.2	0.0	21.0	12.1
Learned a skill	12.8	7.8	3.7	10.7
Instruction was more meaningful	8.9	1.6	6.2	7.5
Never felt like a failure	3.1	3.1	3.7	3.2
Received needs-based payment	1.7	1.6	3.7	2.0
Number of surveyed participants	360	64	81	505

SOURCE: MDRC calculations from the JOBSTART twelve-month survey.

NOTES: This table includes data for all youths randomly assigned between August 1985 and March 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment and who responded to the twelve-month survey. Only those participants who found JOBSTART different from high school and those who answered this question are included in this table.

Distributions will not add to 100.0 percent because sample members were allowed up to three responses.

Tests of statistical significance were not examined.

[a]Reasons that were cited by fewer than 2.0 percent of respondents are excluded from this table.

[b]At sequential/brokered sites these questions refer to the education phase only.

Table 5.6

How JOBSTART Would Be Helpful in Getting a Job,
As Reported by Surveyed Participants, by Program Structure

How JOBSTART Was or Would Be Helpful	Concurrent	Sequential/ In-House	Sequential/ Brokered[a]	Total
Learned occupational training	61.0%	46.4%	41.9%	57.3%
Learned job search skills	30.6	16.1	53.5	31.0
Got a GED	21.7	41.1	23.3	24.3
Improved self-confidence	22.8	23.2	32.6	23.8
Improved math and reading skills	17.3	7.1	34.9	17.8
Learned good work habits	8.4	5.4	11.6	8.3
Support from staff	8.1	3.6	9.3	7.6
Made contacts with employers	6.4	7.1	2.3	6.1
Got work experience	4.9	3.6	7.0	4.9
Interviews were arranged	3.5	5.4	4.7	3.8
Got good references	1.7	3.6	7.0	2.5
Other[b]	7.8	5.4	18.6	8.5
Number of surveyed participants	346	56	43	445

SOURCE: MDRC calculations from the JOBSTART twelve-month survey.

NOTES: This table includes data for all youths randomly assigned between August 1985 and March 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment and who responded to the twelve-month survey. Participants who did not think JOBSTART was or would be helpful in getting a job are not included in this table.

Distributions will not add to 100.0 percent because sample members were allowed up to three responses.

Tests of statistical significance were not examined.

[a]At sequential/brokered sites, these responses refer to either the education or training phase.

[b]Reasons that were cited by fewer than 2.0 percent of respondents are included in the "other" category.

the personal attention they received from staff than GED receipt, improvement in basic skills, or learning a vocational skill (Table 5.7). The male and female respondents tended to give similar answers when asked what they liked about the program. However, a greater proportion of females cited liking the personal attention they received from staff (31 percent to 23 percent), while a higher proportion of males mentioned learning a skill (26 percent to 17 percent) and "hands-on" training (11 percent to 5 percent). Asked what they did not like, only a small percentage mentioned staff-related issues, and fully 52 percent said that there was nothing that they disliked. (See Table 5.3.)

Focus group discussions with participants at four sites and participant presentations at the Youth Employment Initiatives Conference added information about the kinds of things youths valued about the program. Their views were not typical of all participants in that these youths tended to be long stayers; their statements expressed the views of participants who responded well to JOBSTART. Their insights were nevertheless valuable for understanding the effect of the program and the kinds of opportunities it offered to young dropouts. The following comments, made by participants at four focus group sites, reinforce the idea suggested by the survey responses: participants valued increased self-esteem and self-confidence as highly as educational attainments and skill competencies.

> I wasn't winning before I got into JOBSTART. Now I feel I can do anything.
>
> Before I had a pretty negative attitude about my life. . . . And then I came to [JOBSTART] and my attitude started changing around and I started setting more goals.
>
> I just came [to JOBSTART] with a whole different outlook. I grew up . . . now I don't want nobody stopping me from getting what I wanted when I came up here.
>
> This program has given me self-esteem. It used to be I would talk with people and feel small because I didn't have my GED and a trade. But now I do. I feel bigger, stronger. Now I can give people advice about what to do because I have accomplished something.
>
> When I left [JOBSTART], my whole attitude about my life and myself changed drastically.

Some participants expressed new confidence that they could take control of their lives and act responsibly in an adult world. One took pride, for example, in "mastering things I didn't like before." Others valued having learned patience, self-discipline, and self-motivation.

Many emphasized the role of their counselors and teachers in this transformation: "If it wasn't [for the staff], I don't know where I'd be right now," one young woman commented. One young man explained:

Table 5.7

Things Liked About JOBSTART,
As Reported by Surveyed Participants, by Sex

Liked[a]	Males	Females	Total
Nothing	6.1%	5.9%	6.0%
Everything	1.6	3.1	2.4
Staff-related aspects			
Teachers	27.7	27.8	27.8
Personal attention from staff	22.6	31.2	27.2
Counselors, mentors, support groups	10.3	11.8	11.1
Treated like an adult	3.9	4.5	4.2
Program-related aspects			
Individualized, self-paced instruction	16.8	18.5	17.7
Linkage of education and training	9.4	7.9	8.6
Use of computers	6.5	9.8	8.3
Financial support	8.7	7.0	7.8
"Hands-on" training	10.6	5.1	7.7
Job placement assistance	5.2	7.9	6.6
Other students	6.1	4.5	5.3
Practical examples	3.9	5.3	4.7
Schedule of hours	3.5	3.4	3.5
Discipline	3.5	2.5	3.0
Ease of work	1.9	2.0	2.0
Surroundings	2.3	1.7	2.0
Personal accomplishments			
Learned a skill	25.8	16.6	20.9
Received GED	13.5	12.9	13.2
Improved basic skills	7.1	9.8	8.6
Other[b]	10.3	12.6	11.6
Number of surveyed participants	310	356	666

SOURCE: MDRC calculations from the JOBSTART twelve-month survey.

NOTES: This table includes data for all youths randomly assigned between August 1985 and March 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment and who responded to the twelve-month survey.

Distributions will not add to 100.0 percent because sample members were allowed up to three responses.

Tests of statistical significance were not examined.

[a]At sequential/brokered sites, these responses refer to the education phase only.

[b]Reasons that were cited by fewer than 2.0 percent of respondents are included in the "other" category.

> The teachers show you that they care. . . . Once I got in JOBSTART, the teachers showed me that I can be someone, that I can do something for myself and that is what I'm doing now. I'm showing myself that I can do what was impossible for me about a year ago.

Other participants referred to their counselors as "family." But the focus group at Connelley in Pittsburgh revealed that some participants resented what they regarded as a counselor's intrusiveness, feeling that they were being treated like children when the counselor called their homes whenever they were absent.

Interestingly, when they were asked why other participants had dropped out of JOBSTART, the focus group participants and youth delegates cited lack of maturity rather than any deficiency in the program -- an indirect way of praising their own tenacity and motivation:

> When we first started, we had students in here who were living their life for someone else. It can't be like that. You have to live your life for yourself. That's what's holding them back.
>
> They get frustrated and can't deal with the pressure. . . . You have to have will power. And ambition. If you don't have those things, you won't make it in your job.
>
> Some are just here for the joyride. And when the joyride's over, they're ready to go.
>
> A lot of them feel that if they can sit in class all day long and goof around they can get rich like that. Instead of going and pursuing their career and getting into it, they want to clown around. And you've got others who just don't care about anything.

III. Attendance Patterns

Despite the success of program operators in retaining participants for relatively long periods, data on the average number of hours attended per month by participants while they were active in the program -- 61 hours -- indicate that there was a considerable amount of absenteeism. Although this figure cannot be used to create an attendance rate because it includes people who left the program at the beginning of a month or entered it late in a month, it nevertheless confirms what staff reported: a substantial proportion of the participants were frequently absent from classes.

Staff described two patterns of absenteeism: some students routinely missed one or two days of classes a week, while others would come regularly for some weeks, but then not show up for a week or more at a time. In addition, 13 percent of the participant sample interrupted their participation for a month or more at a time, but then returned to the program. The

average length of the interrupted period was two months, as shown in Table 5.8. Female and male participants had about equal rates of interruption, but the average length of inactivity was longer for females than for males (2.3 months to 1.5 months). Participants at sequential/ brokered sites had the highest rate (21 percent) and longest average length of interruption (2.5 months), possibly owing to delays between the end of education and the start of training.

Often participants had legitimate and unavoidable reasons for missing classes. Most sites recognized the following situations as "excused absences" as long as staff were notified: illness, family emergencies, court appearances, breakdowns in daycare arrangements, and appointments with welfare workers, physicians, or other officials. Staff nevertheless tried to impress upon the youths that class attendance -- like attendance on a job -- should take precedence over other activities, that appointments should be scheduled after class hours, and that alternative arrangements should be made in advance. They felt, however, that the often chaotic circumstances of the participants' lives, their age, and the habits of absenteeism developed in high school made it difficult for this message to take hold. Indeed, given school records of chronic absenteeism, many staff thought that the participants were doing comparatively well.

Attendance was also affected by some participants' efforts to combine work with training. As discussed in Chapter 8, 26 percent of participants had jobs while they were in the program, working an average of 31 hours per week while they were employed. Participants who combined work with training stayed longer than did most of those in the program, but their employment had an adverse effect on their monthly participation. Participants who worked stayed in the program for an average of 8.3 months compared to 6.7 months for participants as a whole. Employed participants also had more hours of participation and more hours in education and training activities than did participants who did not hold jobs. The differences are statistically significant. However, on average, they attended classes for fewer hours in the months they were working than in the months they were not working. In addition, during the months they were working, their monthly participation hours in JOBSTART were consistently lower, on average, than those of participants who never worked, although they were roughly comparable in other months.

The JOBSTART implementation suggests 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. Nevertheless, information about the sites' attendance policies, participation data, and staff reports of attendance problems suggest that some approaches may be more effective than others. For example, sites that had vague standards of attendance, used poor monitoring systems, and did not contact absentee students for several days or weeks had greater problems with absenteeism than did those that set clear rules, carefully monitored daily attendance, quickly contacted absentee students, and worked closely with absentees to resolve underlying problems.

Table 5.8

Inactivity for Participants, by Program Structure

Measure	Concurrent	Sequential/ In-House	Sequential/ Brokered	Total
Number of months inactive (%)[a]				
1	58.2	66.7	40.0	55.3
2	22.4	13.3	25.7	21.2
3	9.0	10.0	11.4	9.8
4	3.0	6.7	5.7	4.5
5	7.5	3.3	11.4	7.6
6 or more	0.0	0.0	5.7	1.5
Total	100.0	100.0	100.0	100.0
Average length of inactivity (months)	1.79	1.67	2.49	1.95
Number of inactive participants[b]	67	30	35	132
Percent of participants ever inactive	10.8	14.4	20.6	13.2
Number of all participants	621	208	170	999

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment.

Distributions may not add to 100.0 percent because of rounding.

[a]Inactivity is defined as a period without participation (excluding the month in which random assignment took place) if participation resumed in a later month.

[b]This sample includes only those JOBSTART participants who were ever inactive within twelve months of follow-up excluding the month random assignment took place.

CHAPTER 6

THE JOBSTART EDUCATION COMPONENT

This chapter starts by describing the key characteristics of the education component in JOBSTART. It then discusses linkages with the training component, participation in the education classes, attainment of General Educational Development certificates (GEDs), and improvements in reading scores. The chapter also assesses the strengths and weaknesses of the education component, from the perspective of teachers and students as well as MDRC observers. It does not evaluate the different curricula, instructional techniques, mix of class activities, or computer-assisted instructional systems used by the sites. Rather, the intention is to describe both the common elements and key variations and to communicate the main features of a competency-based, individualized education program.

I. JOBSTART Guidelines for the Education Component

The model called for sites to use instructional modules of increasing difficulty, through which students would progress at their own pace, demonstrating their acquisition of required skills as they moved from level to level. MDRC recommended this model for several reasons. First, it was the type of learning program that had proven successful in increasing GED attainment at Job Corps Centers.[1] Second, it could accommodate students of varying skills levels within a single class. Third, it promised to provide rapid feedback, register incremental progress, and free teachers to work individually with students, potentially offering advantages for school dropouts who had been unsuccessful in traditional classroom settings. Fourth, there were available instructional programs -- the Comprehensive Competencies Program (CCP), the Computer Curriculum Corporation (CCC) program, and Programmed Logic for Automatic Teaching Operations (PLATO), among others -- that incorporated the key elements of the Job Corps system and combined paper and pencil exercises with computer-assisted instruction (CAI).

Sites were asked to provide a minimum of two hundred hours of education classes to ensure that participants would have time to improve their skills substantially. Although it was anticipated that some participants would be able to attain their GEDs during this period -- especially those with higher reading scores at entry -- GED receipt was not considered the only successful outcome. An alternative goal -- especially for those reading at lower levels -- was to raise basic skills enough for participants to benefit from or qualify for training. The degree to which sites emphasized one outcome over the other reflected site priorities, not the design guidelines.

As discussed in Chapter 1, MDRC did not further specify the education component because there was no rigorous research indicating that some strategies were more effective than others, and, in the absence of special demonstration funding, it was desirable that sites be able to adopt

[1]Mallar et al., 1982.

the model without radically changing their current programing. Within the stated parameters, sites were free to hire instructors and choose their curriculum materials, classroom activities, and class structure. Use of computer-assisted instruction was encouraged but not required.

II. Characteristics of the JOBSTART Education Program

The following discussion applies to classes devoted exclusively to teaching basic skills or GED preparation. Some participants could work further on basic English and math skills as part of the training curriculum, as discussed in Chapter 7.[2]

With rare exceptions the sites followed the guidelines. The exceptions were at El Centro in Dallas, where the instructor began using an individualized approach but changed to small group instruction because she believed it to be more effective, and Chicago Commons, where classes sometimes functioned more as tutorials for the vocational skills courses than as classes for improving basic skills.

Participants were given standardized tests such as the Test of Adult Basic Education (TABE), practice tests for the GED exam, or some combination of both soon after they entered the program.[3] Teachers used the results to assess a participant's reading and math levels, diagnose his or her strengths and weaknesses, and develop an individualized plan. Using this plan teachers assigned exercises that addressed a student's particular weaknesses. The exercises were in workbooks, computer curricula, or other forms. After completing the practice materials for each unit or level in the curriculum, students took a mastery test to demonstrate their proficiency in the required competencies. If they scored well enough they progressed to the next unit or lesson; if problems remained they would be assigned additional work in those areas. Before starting a new unit or lesson students took a diagnostic test to identify the areas that needed attention and those that could be skipped over. This same process was repeated at each increasingly difficult level of the curriculum.

Students could work independently and at their own pace. Teachers were readily available to answer questions, monitor progress, and provide assistance when needed, but students could advance through the assignments on their individualized plan without constant direction from the teacher. Students were tested when their performance on daily assignments indicated that they had mastered a topic rather than at scheduled intervals.

Record keeping was key. A copy of the individualized plan, a list of assignments, a record of assignments completed, and the grade on each test were kept in each student's personal file, along with work papers and tests. Students used these files daily to see what they should be working on, what they had accomplished, and what remained to be done. In this way, the system thus provided considerable structure for the students and allowed them to see incremental progress as they worked toward their long-term goals.

---

[2]In this report hours in education include time spent in classes devoted to basic education or GED preparation. Hours spent in Business English or Business Math courses, or working on basic skills in occupational training courses, are counted as training hours.

[3]Administration of the TABE is discussed in Chapter 3 and Appendix A.

A. Variation Across Sites

Within this common framework there was considerable variation in curricula and instructional materials, classroom activities, class structures and schedules, and the emphasis placed on GED attainment. Key di .ences are shown in Table 6.1 and discussed below.

Sites also varied in terms of their prior experience implementing a JOBSTART-like education component. As discussed in Chapter 2, SER/Corpus Christi and Chicago Commons had to add a basic education component for the demonstration; other sites introduced computer-assisted instruction at the start of the demonstration, or developed separate classes and curricula for the JOBSTART youths. A number experimented with different ways of structuring and staffing their education classes. Thus, at many sites, the education component was evolving throughout the demonstration.

B. Curriculum

The Job Corps instructional system is a prototype of the kind of programed learning encouraged in JOBSTART. The curriculum used in the basic education component at the Job Corps demonstration sites is fairly standardized through the Job Corps system, and includes instructional series in reading, language and study skills, mathematics, and general educational development. It accesses workbooks, textbooks, and audiovisual material from a variety of publishers, integrating them into a menu of assignments for specific competencies. Supplemental software materials for computer-assisted instruction were also available at the Phoenix and Atlanta Job Corps sites.

CCP, developed by U.S. Basics in 1983 and used at the three sequential/brokered sites, is a similar type of comprehensive curriculum, integrating a variety of published textbooks and workbooks, computer software, and audiovisual materia.. It covers the following subject areas: reading, mathematics, English as a Second Language, language skills, social studies, preparation for work, and consumer economics.

At the other seven sites teachers developed their own curricula using a variety of published materials, such as GED preparation series and reading and mathematics textbooks that used the mastery approach. Paper and pencil exercises were supplemented with computer-assisted instruction at four of these sites: Connelley used CCC; SER/Corpus Christi used PLATO; EGOS in Denver used various software and LUCI, a computerized management system that maintains records and tracks student progress and assignments; CET/San Jose also used various software. CCC, developed by the Computer Curriculum Corporati- · 1967, includes curricula in reading, English as a Second Language, writing, language skills, mathematics, GED preparation, and survival skills. PLATO, developed by the Control Data Corporation in 1979, includes curricula in reading, mathematics, English, and GED preparation.

As sho. . in Chapter 3 the majority of participants were reading between the fifth and the eighth grade levels when they entered the program; about 12 percent were reading at or above the ninth grade level, and 8 percent were reading below the fifth grade level. The average reading score on the TABE across all sites was 6.9; the range was from 5.9 at the Atlanta Job Corps to 8.0 at CET/San Jose. (See Table 3.3.) All the sites used curricula

Table 6.1

Selected Characteristics of the JOBSTART Education Component, by Site

Site	Scheduled Hours per Day[a]	Program Duration	Type of Computer-Assisted Instruction	Classroom Mix	Changes from Usual Program	Priority Placed on GED Receipt
Concurrent						
Atlanta Job Corps	Individualized, usually 2 hours	Open entry and exit	Varied software	Mainstreamed with other youths	None	Long-term goal
CET/San Jose	2 hours, may vary	Open entry and exit	Varied software	Mainstreamed with other youths	None	Secondary to skills training
Chicago Commons	1-2 hours, 3-5 days per week	22-42 weeks, depending on training course	None	JOBSTART only	New program for JOBSTART	Not a goal
Connelley (Pittsburgh)	2 hours	9 month school year	CCC[b]	Sometimes only JOBSTART, sometimes mainstreamed with adults and other youths	None	Short-term goal; incentive payments for GED receipt
East Los Angeles Skills Center	2 hours, may vary	Open entry and exit	None	Mainstreamed with adults and other youths	Program expanded during demonstration	Secondary to skills training
EGOS (Denver)	2 hours, may vary	Open entry and exit, with semesters	LUCI[c] and varied software	Sometimes only JOBSTART, sometimes mainstreamed with other youths	New program for JOBSTART, LUCI[c] and computer-assisted instruction installed at start of demonstration	Short-term goal
Phoenix Job Corps	Individualized, usually 2 hours	Open entry and exit	PLATO[d]	Mainstreamed with other youths	None	Long-term goal
S[illegible]s Christi	2.5 hours	12-16 weeks[e]	PLATO[d]	JOBSTART only	New program for JOBSTART, PLATO[d] installed at start of demonstration	Short-term goal; incentive payments for GED receipt, frequent testing

(continued)

Table 6.1 (continued)

Site	Scheduled Hours Per Day[a]	Program Duration	Type of Computer-Assisted Instruction	Classroom Mix	Changes from Usual Program	Priority Placed on GED Receipt
Sequential/in-house						
El Centro (Dallas)	3-4 hours	Open entry and exit	None	JOBSTART only	New program for JOBSTART	Short-term goal, frequent testing
Los Angeles Job Corps	3 hours for first 10-12 weeks, then individualized	Expected duration of 10-12 weeks, more possible	None	Mainstreamed with other youths	None	Long-term goal
Sequential/brokered						
Allentown (Buffalo)	3 hours	Open entry and exit	CCP[f]	Mainstreamed with other youths	None	Long-term goal
BSA (New York City)	3 hours, 4 days per week	Open entry and exit	CCP[f]	Mainstreamed with other youths	None	Long-term goal
CREC (Hartford)	3 hours	Open entry and exit	CCP[f]	Mainstreamed with adults and other youths	CCP[f] installed at start of demonstration	Long-term goal

SOURCE: Program records and staff interviews.

NOTES: [a]Education hours refer to time spent in a basic education or GED preparation class and do not include education provided as part of an occupational training course. Unless otherwise noted, classes were scheduled five days per week.

[b]Computer Curriculum Corporation (CCC), developed in 1967, is a computer-based basic instructional system that includes curricula in reading, English as a Second language, writing, language skills, mathematics, GED preparation, and survival skills.

[c]LUCI is a computerized management system which maintains records and tracks student progress and assignments.

[d]The Programmed Logic for Automatic Teaching Operations (PLATO), developed by the Control Data Corporation in 1979, is a computer-based instructional system that includes curricula in reading, mathematics, English, and GED preparation.

[e]Additional hours were available on an individualized basis after the course ended.

[f]Comprehensive Competencies Program (CCP), developed by U.S. Basics in 1983, is a computer-based instructional system that includes curricula in reading, mathematics, English as a Second Language, language skills, social studies, preparation for work, and consumer economics PLATO and CCC are optional sequences within CCP, which also includes extensive audiovisual materials and paper and pencil exercises.

appropriate for readers at the fifth grade level and above, but only some had systems in place for those reading at even lower levels. Each site offered classes in what would generally be characterized as "adult basic education," geared for fifth to seventh or eighth grade reading levels and concentrating on math, reading, and English language skills. For those with higher reading levels, sites used curricula designed to help prepare them for the GED examination, which included social studies and science as well as basic English, reading, and math.

It is less clear that education classes were appropriate for students reading below the fifth grade level. Most of the education teachers viewed them as learners who required special assistance beyond that available in JOBSTART. Feeling ill-prepared to deal with these students, some sites had set a floor to screen them out of JOBSTART. If they did enter, staff at a few sites referred them to other programs or classes if they failed to progress in their early months in JOBSTART.

Other individuals requiring specialized help were those with limited English skills -- only 4 percent of the sample (39 individuals). As shown in Table 3.3 they were concentrated at CET/San Jose and the Los Angeles Job Corps, both of which offered classes in English as a Second Language.[4]

C. Classroom Activities

Participants spent most of their time working on their own, doing multiple-choice drill and practice exercises (using either paper and pencil or a computer). To provide variety and stimulation, a few sites introduced group activities or educational games into the weekly program. For example, the teacher at SER/Corpus Christi made up crossword puzzles to teach vocabulary and also devised her own version of Trivial Pursuit for her GED students. At EGOS in Denver, education classes included weekly discussion periods, during which participants talked about current events and nonacademic issues of interest to them. At BSA in New York City, one day a week was devoted to games that used vocabulary or math skills (such as Scrabble and Monopoly) and to small group tutorials.

Over one-half of the sites had audiovisual materials available, but they were not widely used except at El Centro in Dallas. Although nine of the thirteen sites offered computer-assisted instruction, only two (Connelley and SER/Corpus Christi) regularly assigned all students to an hour or more of computer work per day. Elsewhere the use of computers depended on student interest and teacher discretion. Overall, teachers estimated that students spent no more than 20 to 25 percent of their time (probably less) on computers. At five sites students worked on paper and pencil exercises and computers in the same room; at four sites the computers were housed in a separate classroom. Observations by MDRC staff indicated that it was rare for all the computers in a room to be in use throughout the class period.

The evaluation was not designed to determine whether computer-assisted instruction is more successful at increasing educational achievement than are similar paper and pencil exercises or the comparative effectiveness of any particular computer program. Nor, as mentioned in

[4]The East Los Angeles Skills Center, Connelley in Pittsburgh, and CREC in Hartford also enrolled a few limited-English speakers and offered classes in English as a Second Language.

Chapter 4, was it possible to isolate the impact of the availability of computers on average participation or length of stay in JOBSTART.

Many teachers used computers only as a supplemental tool, to motivate students when they were bored. Not all were enthusiastic about computer-assisted instruction, and some were reluctant to use it: they thought it was too impersonal, did not provide adequate instruction, or allowed students to simply guess at the right answers. In general, however, teachers liked the systems and found that they could help motivate students. Teachers also liked the computerized management systems that were part of the programed learning packages. Using them to diagnose students' weaknesses, track assignments, and monitor test results, teachers felt that they could spend less time filling out forms and more time assisting students.

Focus group discussions with students at BSA in New York City and at Connelley in Pittsburgh indicated that they liked using the computers and preferred them to exclusive reliance on paper and pencil exercises. Some felt that the exposure to computers would help them in the work world, even though they were not taught basic computer skills or word-processing systems. Participants interviewed for the twelve-month survey expressed similar views. Asked how helpful they had found computers in improving their basic skills, 63 percent said that they were "very helpful"; only 7 percent said that they were not helpful at all.[5] Overall, computer use was not one of the most popular aspects of JOBSTART; asked to name things they liked about the program, only 8 percent of the survey respondents mentioned computers. (See Table 5.7.)

D. El Centro's Learning Program

As noted earlier, the program at El Centro in Dallas was different. There the education teacher began by using a competency-based, self-paced system but gradually came to devote the majority of class time to group instruction and review. She felt that students progressed faster in a group learning situation, with everyone working on the same problems, in the same books, at the same time. In groups the students reinforced one another; when they worked on their own they seemed to feel overwhelmed or bored by their assignments.

As at the other sites, the levels of students' skills were tested when they entered, and the teacher counseled each of them about what he or she needed to accomplish in class. To facilitate group instruction, she divided the students into separate classes for basic education and GED preparation. Group instruction did not mean lack of individual attention, however, since there were generally no more than eight youths enrolled in a class at any time during the demonstration.

Computers were not available at El Centro, and the curriculum materials were fairly limited. In addition to drill and practice, class time was spent in discussions of current events (newspaper articles were also used to teach vocabulary), writing poetry, and writing essays about personal experiences. The teacher also made extensive use of audiovisual materials. Sensitive to the fact that the JOBSTART youths might have short attention spans, the teacher was careful to vary

[5]Of the respondents, 124 did not answer the question, probably because they attended sites where computers were not available.

activities frequently and to intersperse review drills with class discussions and filmstrips.

E. Class Schedule and Organization

As discussed in Chapter 2, sequential and concurrent sites scheduled different numbers of hours of education classes per day. Typically, sequential sites scheduled three hours of education classes in a six-hour day; the remainder of class time was spent in life skills classes, described in more detail in Chapter 5. In contrast, CBOs and schools with concurrent programs typically scheduled two hours of education classes in a six-hour day, with the other four hours devoted to vocational training. Schedules at the concurrent Job Corps sites were quite individualized, but participants frequently had two hours of basic education, two and a half hours of skills training, and a variety of recreational and avocational (life skills) activities for the rest of the six-and-a-half-hour day.

Because the education program was individualized, students at both the adult basic education and GED preparation level could be accommodated in the same classes and did not have to be segregated by subject. Only the Job Corps sites and El Centro provided separate classes for basic education and GED preparation, and only the very large sites (the Job Corps, Connelley, and EGOS) had students work on reading and math in separate classes.

A more important distinction was whether participants were mainstreamed with other students. As shown in Table 6.1, five of the thirteen sites operated separate education classes just for the JOBSTART students at some point in the demonstration. At the other sites, participants were in classes with other youths (six sites) or youths and adults (two sites). Where sites established special JOBSTART classes, staff generally tried to use them to "bond" the students to the program and to help develop their social skills and self-discipline. These classes were considered more supportive than the skills classes at the same sites. However, a number of the education teachers who taught only JOBSTART youths felt that some of their behavior problems might have been lessened had they been in classes with adults who could have provided a steadying influence.

F. Background of the Teachers

There was no clear hiring pattern. All three types of sites hired teachers with prior experience in public school systems and community colleges. Many of these teachers had prior experience with disadvantaged youths or adults, or had taught GED classes or remedial education. Other staff were drawn from private industry and other employment-related programs for disadvantaged groups. Most of the teachers at Connelley had been at the site for many years; turnover was more frequent at the other sites.

G. General Environment

Classroom observations indicated that, for the most part, students in the education classes were engaged in their work and worked steadily. The classroom environments did differ, however. At some sites, where students were involved in an array of activities and moved freely about the room, the classrooms felt like one-room schoolhouses; other sites, where students sat quietly at desks, worked steadily on assignments, and talked only with the teacher, had the feel of a high school study hall.

1. Physical Setting. The physical setting varied from BSA in New York City, where participants sat at work tables in a large, bright room with curtained windows, carpets, and plants; to Chicago Commons, where the education classes for trainees in the industrial occupations were held in makeshift arrangements in a corner of the shop floor; to the East Los Angeles Skills Center, where students sat at long rows of desks in a crowded, windowless room. In between were a variety of settings that were more or less like high school classrooms. In most classrooms, the configuration of work tables or desks facilitated interaction. In a few, however, the layout seemed to impede access and movement. The East Los Angeles Skills Center was too crowded, for example, and the use of individual study carrels throughout the room at Allentown in Buffalo and in some of Connelley's classrooms obstructed the teacher's view of the class and isolated the students from one another. In some locations, students had to ask the teacher for workbooks and other materials; in most, they were kept on open shelves or tables and students helped themselves.

2. Class Size. Class size was kept small to maximize opportunities for interaction between teachers and students. Six of the sites had all students in a large room with more than one teacher present; the rest divided participants into two or more classes, each staffed by a single teacher. Enrollment rarely exceeded twenty to twenty-five students per class and was frequently lower. Student/teacher ratios were typically low -- about one teacher or aide for every ten students enrolled. Actual classroom ratios could be much lower, however, owing to absenteeism and fluctuating enrollment levels. Class size varied considerably at the open entry/open exit sites as students left and new ones entered; in the fixed cycle programs, class size dwindled as some students got their GEDs and stopped attending classes, and others dropped out of the program. Classes were generally considerably smaller during the summer months.

3. Interaction Between Students and Teachers. Teachers were involved with students, not busy with paperwork, during the class period. Typically, they moved about the room and made a point of talking with each student. Observations at Connelley and at the East Los Angeles Skills Center suggested that teachers at those sites had less interaction, in large part because they sat at their desks and waited for students to come to them. The instructors characteristically gave students a lot of positive reinforcement: they used words of praise and encouragement, and exercised patience and imagination in explaining concepts with which students had trouble. Students spent less time waiting for a teacher's assistance in those classes that were staffed with an additional teacher or aide.

Teachers at SER/Corpus Christi, EGOS in Denver, BSA in New York City, and El Centro in Dallas seemed particularly lively and enthusiastic and conveyed an upbeat message. They felt that it was important to provide structure as well as support and to give students opportunities to take responsibility and plan for themselves. They set high goals and encouraged students to succeed, but made it clear that they would provide the necessary help and support. For example, the El Centro instructor told her class:

> All I want to hear from you is "I can do it." If you think you can, I'll get you there. I don't set people up for failure. My standards are very strict, but if I send you to take the GED exam, you'll pass. No one from my class has failed yet.

4. Emphasis on GED Attainment. The education programs at the sites reflected different philosophies. For some sites -- notably SER/Corpus Christi, Connelley, EGOS, and El Centro -- GED attainment in the short term was the primary goal of the education program and was heavily emphasized in the JOBSTART program as a whole. These sites tended to test participants frequently. Two (SER/Corpus Christi and Connelley) also provided financial incentives for passing the GED. In part they focused on GED attainment as a tangible measure of success, and one that would help them meet their performance standards; in part they valued the GED as a credential to enhance job placement.

The three sequential/brokered sites and the Job Corps sites saw GED attainment as a longer term goal: to be achieved in JOBSTART if possible but only after students worked their way through the structured sequences of the learning program and were thoroughly grounded in basic skills. They assumed that GED preparation would take many months, especially for those reading below the seventh grade level.

The remaining sites -- CET/San Jose, the East Los Angeles Skills Center, and especially Chicago Commons -- also tended to see GED attainment as a long-term goal and did not stress it as an outcome in the JOBSTART program. They focused more on placement and on improving basic skills as an aid to vocational training.

III. Assessment of the Education Component

A. Teacher Assessment

The education instructors noted in interviews with MDRC staff that, overall, they felt that the individualized, self-paced instruction provided a better learning environment than the JOBSTART students had typically experienced in high school. They emphasized that the students were protected from failure and from looking foolish in front of their peers, while being allowed to see progress as they advanced toward a potentially remote goal.

But the teachers also pointed out weaknesses. They were particularly concerned that the minority of individuals with lower-level reading skills or short attention spans, and those who were not very motivated, found the work boring and isolating. They recommended more group instruction, small group tutorials, and team learning situations. Although some education teachers had intended to use such methods, they found it difficult to implement their plans during the demonstration because they lacked the necessary staff, time, or space to break the class into groups.

A more profound criticism was expressed by the teachers and counselors who felt that the learning program focused much on developing test-taking skills and not enough on critical thinking or substantive content. They thought the material covered in the classes was shaped too much by the content and types of questions on the GED test. Thus, drill and practice exercises concentrated on answering multiple-choice questions, and students had little opportunity to learn about many topics in social science or literature. Similarly, some staff regretted that students were not required to do much problem solving (other than basic computation), develop a line of argument, or work on writing skills (as opposed to vocabulary and grammar). Teachers anticipated major adjustments in their learning programs -- and greater

difficulties for their students in passing the GED -- when the standardized test added a writing sample in 1988.

B. Student Reaction

The self-paced nature of the instruction and interaction with teachers were most prominent in student assessments of the education component. Focus group participants favorably compared self-paced learning to high school classes, which sometimes moved too quickly from topic to topic. Self-paced learning also got a strongly positive response from survey respondents interviewed a year after entering JOBSTART. Seventy-six percent found it "very helpful," and only 1 percent said that it had not been helpful at all.

Youths in a number of the focus groups felt that they mastered the material more fully because of their active involvement in the process. As one woman at BSA in New York City put it: "When you learn something in here, it sticks. [The teacher] gets the glue and makes it stick. It's you that's learning it. It's not someone teaching you. . . . And if you learn something on your own, you can't forget it." Conversely, participants at El Centro in Dallas were enthusiastic about the group learning process because of the quality of the teacher. One male student noted: "The teacher doesn't just show you a book and say you're on your own. . . . She's in there teaching. And that's what makes you take your own career seriously."

Participants clearly valued interaction with teachers. Overall, 75 percent of the survey respondents who participated in JOBSTART rated support from teachers and students as "very helpful," while only 2 percent said that it was not helpful at all. Similarly, personal attention from staff was something that students most liked about JOBSTART, as discussed in Chapter 5. Participants in the focus groups at BSA and at El Centro credited teachers with motivating them to excel and raising their self-confidence. Focus group participants were less enthusiastic about the education component at two other sites (Los Angeles Job Corps and Connelley), but they nevertheless felt that the classes had been helpful in raising their skills levels and advancing their job prospects.

IV. Integrating the Education Classes with Training

A. Linkages Between Education and Training

With some important exceptions, there was little integration between the basic education classes described above and the skills training programs. There was little or no joint planning on curriculum or program design; the two components were developed and generally implemented along two separate tracks. As a result, the education classes did not use reading materials or math lessons specifically related to the students' vocational training areas. An exception was El Centro in Dallas, where students who made the transition to training spent two hours a week in a basic skills lab, for which the teacher had developed special exercises for different types of training courses. Additional efforts were made at CET/San Jose and Chicago Commons, where the training curricula incorporated work on basic skills, as discussed in Chapter 7.

Some sites attempted to bring the vocational staff and education instructors together to

monitor student progress. The Job Corps sites scheduled monthly reviews with representatives of both staffs present (although not necessarily the actual instructors of the students being reviewed). SER/Corpus Christi, where the training instructors also taught the education classes in the first year of the demonstration, scheduled frequent monitoring conferences between the skills teachers and the education teacher in the second year. At other concurrent sites the education teachers made special efforts to reinforce the specific basic skills required in vocational training. At Chicago Commons, for example, the education classes tended to function as tutorial sessions for the vocational classes. At EGOS in Denver, the education teacher worked closely with the secretarial training staff to identify students' weaknesses that could be worked on in the basic skills classes.

B. Scheduling

Scheduling the education classes was a particular problem for the five concurrent sites (EGOS in Denver, Connelley in Pittsburgh, the East Los Angeles Skills Center, Chicago Commons, and CET/San Jose), where the usual training schedule did not leave time for education classes. As a result students had to either miss part of their skills classes or attend education classes after the close of the regular school day. Neither situation was ideal. Skills teachers were annoyed at having students leave their classes for two hours a day and felt that it adversely affected performance. Students did not like adding the education classes to the end of the day: they were tired, often had conflicts with family obligations or other commitments, and resented having to stay longer hours than other trainees. Scheduling problems were further compounded at Chicago Commons, the East Los Angeles Skills Center, and CET/San Jose, because some of the training classes were held at a location different from the basic education or GED-preparation classes. The extra time and trouble traveling from place to place created an obstacle to attendance, which accounts, in part, for these sites having had the demonstration's lowest average hours of participation in education. (See Table 4.7.)

V. Participation Patterns

The variations described above help to explain differences in participation patterns. As shown in Table 6.2, participants at concurrent sites had slightly lower participation rates in education.[6] They also spent considerably less time in education classes, on average, than did participants at the five sequential sites. A larger proportion of participants at concurrent sites had very low average hours of education (fifty or fewer), and a much smaller proportion had a very high number of hours (more than two hundred).

Several factors help to explain these differences. First, as noted above, the concurrent sites scheduled fewer hours of education classes per day than did the sequential sites. In addition, students at many concurrent sites had to leave training classes to go to education classes, attend education after regular program hours, or travel to a different location for the education classes. (Average hours for individual sites are shown in Table 4.7.) Second, a

[6]This is owing primarily to comparatively low rates of participation at CET/San Jose and Chicago Commons. Both sites did not have an education teacher during part of the demonstration.

Table 6.2

Participation in Education,
by Program Structure

Measure	Concurrent	Sequential/ In-House	Sequential/ Brokered	Total
Percent participating in education	94.2	98.6	99.4	96.0 ***
Percentage distribution of hours in education				
None	5.8	1.4	0.6	4.0 ***
1 to 50	25.9	13.5	18.2	22.0 ***
51 to 100	18.2	24.5	17.6	19.4
101 to 150	23.2	22.6	11.2	21.0 ***
151 to 200	16.1	14.4	12.9	15.2
201 or more	10.8	23.6	39.4	18.3 ***
Total	100.0	100.0	100.0	100.0
Average hours in education	107.5	161.8	184.7	131.9 ***
Number of participants	621	208	170	999

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment and apply to the entire participant sample including those with zero hours in education. Since some participants remained in JOBSTART longer than twelve months, these measures underestimate actual participation.

Distributions may not add to 100.0 percent because of rounding.

An F-test or chi-square test was applied to differences among program structures. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

number of the concurrent sites operated on fixed cycles, which limited the maximum number of education hours, while participation was open-ended at the sequential sites. Thus, sites -- and participants -- placed different emphases on the education component. For example, the sequential/brokered sites all placed a higher priority on raising participants' basic skills levels and helping them pass the GED test than on moving them into skills training; the tendency was to retain students in education until they received the GED. In contrast, at the concurrent sites with the lowest average number of hours in education (CET/San Jose, Chicago Commons, and the East Los Angeles Skills Center), basic education was clearly a lower priority than was skills training and placement in a job. As discussed in Chapters 3 and 7, some participants also placed a higher priority on education than on skills training; it is likely that the sequential programs attracted a greater proportion of these individuals than did the concurrent sites.

VI. Reading Level Gains Among Participants

One of the expected effects of the JOBSTART program was an increase in the reading level of participants. To measure this increase, the reading part of the TABE was administered to participants after about one hundred hours of education. The score was then compared to the reading level at enrollment.[7] The 362 participants who received the follow-up test increased their reading level score by 0.7 of a grade level, from 6.9 to 7.6.

A number of factors make this analysis tentative. The JOBSTART youths included in this analysis, participants who received a second TABE, may not have been representative of all participants. Not all participants who received substantial amounts of basic education were retested, either because the site did not regularly retest or because the participant left the program before retesting.[8] It is not known whether participants who were not tested increased their reading ability more or less than those who were tested. Further, not all the gains can be attributed to the program; a portion of the observed increase may have resulted from such factors as learning to take tests, maturation, or other experiences.

VII. GED Receipt Among Participants

It was anticipated that the education classes would increase GED receipt. The extent to which the experimentals outpaced controls in GED receipt -- the measure of the program's impact -- is discussed in Chapter 9. This section discusses GED receipt among participants only. As shown in Table 6.3, 31 percent of the survey respondents who participated in

---

[7]The actual hours of education received before the retest varied considerably. Sixteen percent had received fewer than 50 hours, while 8 percent had received more than 200 hours. Participants who were retested either before receiving 10 hours of education or after receiving 300 hours were excluded from the analysis. Two sites -- the Los Angeles Job Corps and CET/San Jose -- were also excluded because only a few follow-up TABEs were given. For the remaining retested participants, the follow-up test was given, on average, after about 112 hours.

[8]About 30 percent of the participants who received more than 100 hours of education were not retested and are not included in this analysis.

Table 6.3

Rate of GED Receipt for Surveyed Participants,
by Site and Program Structure

Site and Program Structure	Percent Who Received GED	Number of Surveyed Participants
Concurrent		
Atlanta Job Corps	18.8%	16
CET/San Jose	28.6	42
Chicago Commons	0.0	29
Connelley (Pittsburgh)	49.5	95
East Los Angeles Skills Center	0.0	37
EGOS (Denver)	25.0	80
Phoenix Job Corps	19.2	52
SER/Corpus Christi	49.5	109
Total	31.7	460
Sequential/in-house		
El Centro (Dallas)	43.2	74
Los Angeles Job Corps	5.7	35
Total	31.2	109
Sequential/brokered		
Allentown (Buffalo)	37.0	46
BSA (New York City)	33.3	18
CREC (Hartford)	11.5	26
Total	28.9	90
All sites[a]	31.3	659

SOURCE: MDRC calculations from the JOBSTART twelve-month survey.

NOTES: This table includes data for all youths randomly assigned between August 1985 and March 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment and who responded to the twelve-month survey. All estimates are for a twelve-month period following random assignment.

[a]GED information is not available for seven participants who completed the twelve-month survey.

JOBSTART had received their GED within twelve months after random assignment.[9] Differences in receipt rates across the three program types, and between males and females and females living with children, are not very large, but the differences between individual sites are. Several factors -- the entry reading levels of participants, the priority sites placed on GED receipt, and differences in the ease or difficulty of passing the GED examination in different states -- appear to account for those differences.

First, analysis showed a positive correlation between GED receipt and baseline reading scores on the TABE. Participants who received a GED had an average reading score of 7.7 on the TABE administered just before or shortly after random assignment compared to 6.5 for their counterparts who did not receive a GED. Similarly, 66 percent of the participants who read at the ninth grade level or above when they enrolled received a GED. This compares with 43 percent of the group reading at the seventh or eighth grade level and 20 percent of the group reading at or below the sixth grade level. Not all the variation across sites can be explained by the reading levels of the participants when they entered the program, however. An analysis that controlled for reading scores on the baseline TABE indicated that there were still differences among the sites.

Second, the degree to which sites emphasized GED receipt as a program outcome seems to have affected the rate of GED receipt across the sites. The three sites at which survey respondents reported the highest rates of GED receipt (Connelley, SER/Corpus Christi, and El Centro) were the ones that placed the greatest emphasis on GED receipt as a program goal and performance measure (partly in response to their contractual obligations to JTPA). These sites used curricula that were closely geared to passing the GED and two (SER/Corpus Christi and El Centro) incorporated a substantial amount of practice test-taking into the weekly program. Both Connelley and SER/Corpus Christi awarded participants a financial bonus for passing the GED, as discussed in Chapter 5. El Centro was the site that relied heavily on group instruction in the education component. Conversely, the two sites where participants reported no GED receipt (Chicago Commons and the East Los Angeles Skills Center) did not emphasize the credential or prepare participants with frequent practice tests.

Third, higher rates of GED receipt may have reflected in part the relative ease of passing the GED test in a given state. For example, while all other states with JOBSTART sites require a minimum score in each of the five sections that make up the GED exam, as well as an average score of 45 on all five sections, Texas is unique in requiring either a minimum per section or an overall average of 45. Thus, it is relatively easier to pass the GED test in Texas than elsewhere. Conversely, it is more difficult to pass in New York and California, which require a minimum score of 40 on each section compared to 35 in the other states represented in the demonstration. Age of the JOBSTART youths could also have affected receipt of a GED. New York and Connecticut will not award the GED until the test-taker is nineteen years old, which could have delayed the younger participants. Most of the other states represented in the demonstration require GED recipients to be eighteen years old, but Colorado

[9]The survey responses are considered a more accurate measure of GED receipt than reports from sites because staff do not always know if participants receive the GED after they leave the program.

(where EGOS is located) sets the age at seventeen, and Arizona (Phoenix Job Corps) at sixteen.[10]

VIII. Summary Assessment

The data on reading gains and GED attainment suggest that real learning was occurring in the education component, a point substantiated by the impact findings on GED receipt discussed in Chapter 9. The participation data also suggest that many youths were sufficiently engaged to spend a considerable amount of time in the education classes. For a program serving school dropouts, this is an important achievement.

However, 26 percent of the participants spent fifty or fewer hours in basic education classes. Furthermore, some teachers were concerned about the appropriateness of the education for the less skilled and less motivated participants. Both facts suggest that some adaptations might be helpful -- for example, introducing a greater variety of class activities and providing opportunities for group interaction. The successs of the model used at El Centro in Dallas suggests that alternative strategies can be effectively employed.

[10]American Council on Education, 1988.

CHAPTER 7

THE JOBSTART TRAINING COMPONENT

The training component in JOBSTART was intended to prepare participants for employment in fields that promised to be growth areas in the local labor market, pay more than the minimum wage, and offer opportunities for advancement. To ensure that the training would be sufficiently intense to achieve these goals, the JOBSTART guidelines specified that the curriculum should provide at least five hundred hours of classroom instruction and be developed with input from local employers, that classes be scheduled five days per week, and that class size be sufficiently small to allow for close supervision of trainees. As in the education component, the use of competency-based curricula was recommended to allow students to progress at their own pace. Program guidelines further recommended that the sites provide a training environment that would create an "atmosphere of achievement" and enhance the participants' self-confidence.[1] JOBSTART operators followed these recommendations, for the most part, and provided substantive training for quality jobs. However, actual participation in the training component was less than anticipated, in large part because of low participation rates at sequential sites.

The chapter begins by exploring why the participation rate in training was so much lower at the sequential sites, and the special implementation challenges facing sequential sites that brokered training through other providers. It then describes the range of training options available to JOBSTART participants, the way they selected a training course, and the occupational training areas in which they enrolled. The chapter closes with a description of the characteristics of JOBSTART training at concurrent and sequential sites, and the experience of program staff and participants.

I. Participation in Training at Sequential Sites

As noted in Chapter 4, participation rates in the JOBSTART training component reached 75 percent overall and varied significantly by the way the program was structured. At the concurrent sites, 95 percent of the participants were active in training; at only two sites did the participation rate fall below 93 percent.[2] In contrast, 54 percent of participants entered training

---

[1]See MDRC, 1985.

[2]See Table 4.7. At CET/San Jose, where 89 percent of the JOBSTART participants entered training, slot limitations resulted in delays before participants could enter the training they wanted; at EGOS, where the participation rate was 82 percent, participants could attend education classes for several weeks before adding training classes to their schedule. In both

(continued...)

at the sequential/in-house sites, and only 26 percent moved into training at the sequential/brokered sites.

Chapter 4 has shown that these differences did not result solely from differences in the demographic characteristics of the participants enrolled in different types of programs. Nor were the demographic characteristics of participants who entered training at sequential sites very different from those who did not. Instead, the attrition of the sample prior to training at the sequential sites should be attributed to such factors as the length of time spent in education prior to the start of training, participant preferences for GED attainment or jobs over training, and the inability of participants to meet entry requirements for training courses.

The low participation rate in training at the five sequential sites can be explained in part by natural attrition in a lengthy program. Table 7.1 shows that participants who entered training at these sites did not begin their training courses, on average, until five months after they enrolled in JOBSTART and that about 25 percent did not start until the seventh month or later. By that time many other participants had already left the program for the variety of reasons described in Chapter 5. The delay appears to reflect the time required to raise skills rather than lags between the end of education and start of training. The average lag-time across all sequential sites was about a month or less; 37 percent of the participants in training started their training course while they were still active in education classes; and 91 percent had started by the end of the first month after they stopped attending education classes.[3]

Attrition from JOBSTART prior to skills training also reflected the personal priorities of participants. Focus group discussions and other conversations with participants and staff indicated that some participants were attracted to JOBSTART because they wanted to earn their GED and not because they wanted skills training. Indeed, 9 percent of the survey respondents from the brokered sites, compared to only 2 percent at the other sites, indicated that they had enrolled in JOBSTART without realizing that they were to learn occupational skills. Such students were likely to postpone training until they had passed the GED exam or to leave the program before starting training. At BSA in New York City, for example, an attempt to move participants into skills training after they had completed two hundred hours of education but before they had passed their GED exam was strongly resisted by participants; some elected to stay longer although they became ineligible for needs-based payments. In addition, the fact that staff at one of the sequential/brokered sites encouraged participants to think about attending college may have further distracted JOBSTART participants from the training goal.

Finally, some participants did not enter training because they were unable to meet the entry requirements of the course they wanted. Before being accepted into a training course,

---

[2](...continued)
cases participants who left JOBSTART soon after entering would not have participated in training.

[3]The responses of participants to the twelve-month survey also suggest that lag times between education and training were not a problem. Asked to name three things that they did not like about JOBSTART, only 2 percent of the respondents at sequential sites mentioned that they had to wait too long for training.

Table 7.1

Participation Patterns
for Participants in Training at Sequential Sites,
by Site

Measure	Sequential/In-House		Sequential/Brokered			Total
	El Centro (Dallas)	Los Angel ^ Job Corps	Allentown (Buffalo)	BSA (New York City)	CREC (Hartford)	
Percent who entered training during months						
1-3	30.4	16.4	19.0	0.0	0.0	18.5
4-6	60.9	65.7	28.6	71.4	22.2	57.3
7-9	8.7	16.4	42.9	7.1	44.4	18.5
10-12	0.0	1.5	9.5	21.4	33.3	5.7
Average time between random assignment and start of training (months)	4.22	5.16	6.19	6.71	8.11	5.33
Percent who entered training						
Before education ended	13.0	49.3	57.1	14.3	55.6	36.9
In month education ended	2.2	17.9	28.6	35.7	11.1	15.9
One month after education ended	82.6	25.4	9.5	21.4	0.0	38.2
Two months after education ended	2.2	6.0	0.0	7.1	22.2	5.1
Three months after education ended	0.0	1.5	4.8	0.0	0.0	1.3
Four months or more after education ended	0.0	0.0	0.0	21.4	11.1	2.5
Average time between end of education and start of training (months)	0.87	0.42	1.14	1.21	0.89	0.75
Number of participants in training	46	67	21	14	9	157

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in a JOBSTART training component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment.

Distributions may not add to 100.0 percent because of rounding.

Tests of statistical significance were not examined.

JOBSTART youths had to demonstrate the requisite educational level and be interviewed by training instructors or other staff. When training was brokered through another organization, they might also be required to take an entrance exam. Two types of criteria were commonly applied: minimum skills levels in reading and/or math, and evidence of maturity and motivation. A participant's attendance record in the education component was frequently used to judge the latter. The brokered sites reported that local training providers tended to set a floor of a ninth grade reading level for entry into skills training, and many required applicants to have a GED. Such criteria are typical of many JTPA training programs. In contrast, educational prerequisites for many courses at the two sequential/in-house sites were considerably lower, specifying, for example, a sixth or seventh grade reading level and/or passage of some but not all sections of the GED exam.

In a few instances a JOBSTART participant failed to meet the standard and was denied admission but, in general, staff were quite reluctant to refer students who they felt would not meet the entrance criteria. For example, staff said that they would be hesitant to refer students with poor attendance records -- attending only three days per week -- and might require such students to demonstrate improved attendance for a month before being referred to skills training. (When El Centro in Dallas did this for two students, they dropped out of the program.) Thus, screening by the JOBSTART staff -- generally, the counselor/coordinator in consultation with the education instructor -- was an important step in the transition process at the sequential sites.

Compared to sequential sites that provided training in-house, brokered sites found it more difficult to move participants into training. Sequential/in-house sites were more likely to move students into training when they had upgraded their skills to the sixth or seventh grade level rather than waiting for them to reach the ninth grade level or pass the GED exam. As a result, as shown in Table 7.1, the average period between random assignment and entry into skills training for participants at the in-house sites was shorter than at the brokered sites -- between four and five months compared to between six and eight months -- making it more likely that participants would leave brokered programs prior to training.

Sequential/in-house sites had an easier time creating a unified JOBSTART program. Because training was offered at the same location as the education classes, staff could focus participants on the training goal and better prepare them for the different character of the training classes. While the brokered sites kept participants informed of training options available from local providers, arranged tours of local training institutions, and set up interviews for participants, El Centro in Dallas had participants in the JOBSTART education component sit in on training classes offered on-site for several hours per week as they neared the transition point, developed a special workshop of several weeks' duration to help prepare them for the demands of the training, and continued to work on the trainees' basic skills once they were in vocational training.

The brokered sites had no control over the offerings or entry requirements at local training providers. They could refer their participants but could not guarantee their acceptance. Lack of experience also hurt them: although the demonstration sites had traditionally referred some participants to training providers, they had not done so on the scale required in JOBSTART, nor had entry into skills training been an explicit goal of their program prior to

the demonstration. Finally, JTPA practice and policy also worked against the brokered sites. JTPA contracts that rewarded sites for placements but not for transferring participants from education into training made it difficult for the sequential/brokered sites to meet their performance standards. As noted in Chapter 2, two of the three brokered sites stopped using JTPA funding for JOBSTART because of such difficulties.

II. Selection of Training

A. Range of Options Available

Cumulatively, there were many training options, but sites differed greatly: at the small CBOs, there might be only four or five offerings, while at the two adult vocational schools there were more than twenty. The Job Corps sites and larger CBO also had a fairly broad range of training. In general, the more people served, the more wide-ranging the offerings.

Not all offerings were available to JOBSTART participants, however, since the guidelines advised against enrolling them in training that would take fewer than five hundred hours or more than a year to complete. Skills levels also affected options. All courses at the Job Corps and selected courses at some other sites specified a minimum reading level as a prerequisite. At other sites counselors steered those with low academic skills away from training areas considered too advanced or theoretical. Most of the sites reserved openings for JOBSTART participants, but slot limitations in popular training courses at CET/San Jose and the Job Corps sites meant that some participants did not get their first choice or were delayed in starting.

Theoretically, sequential/brokered sites could offer a broad array of training by drawing on many local providers. In practice, participants at these sites were enrolled at only a handful of providers. Training options at these sites were further limited by the need to meet stiff entry requirements, as noted above.

B. Selecting a Training Course

Selection of a training specialization was quite different at concurrent and sequential sites. At concurrent sites participants typically selected their training courses the day they enrolled in JOBSTART, without much information or guidance. About one-half the sites allowed participants to observe classes first, but only the Job Corps sites and CET/San Jose provided a systematic overview of their training options. JOBSTART staff at the concurrent sites typically did no vocational assessment of participants, other than interviewing them about their interests and prior experience. There were several reasons: lack of time and resources, the counselors' sense that tests would not really show the areas in which students might be successful, and the desire not to overtest people who wanted a second chance.

At all the sequential sites except CREC in Hartford, participants learned something about different occupations, through life skills training, before they had to choose a training course. At Allentown in Buffalo, they also went through a one- to two-week vocational assessment. Still, students in the focus group at the Los Angeles Job Corps said that they did not get enough information about job requirements, pay scales, and career ladders. They felt that only

an in-depth discussion with the skills instructors would have conveyed enough information for an informed choice.

C. Transferring Between Training Courses

Although sites allowed JOBSTART participants to transfer from one training area to another, Table 7.2 shows that few did. Rates for males and females were about the same. However, at three sites (Connelley in Pittsburgh, the Atlanta Job Corps, and the Los Angeles Job Corps), between 24 percent and 37 percent of the participants switched occupational areas. At the Job Corps sites this probably reflected the fact that slot limitations made it difficult for participants to be assigned to their first training preference early in the program. At Connelley staff encouraged students to switch rather than drop out of JOBSTART if they were dissatisfied or having difficulty with the training. Overall, JOBSTART participants appear to have been satisfied: only 5 percent of the survey respondents said that they had not liked the type of training or education, and only 2 percent said that they left JOBSTART because they did not like the training program. (See Tables 5.2 and 5.3.)

III. Training Areas in Which JOBSTART Participants Enrolled

As shown in Table 7.3, JOBSTART participants were enrolled in training for a broad range of occupations including clerical, sales, and service occupations; machine trades occupations; benchwork occupations, such as making and repairing textile goods and plastics; and structural work occupations such as construction or welding.[4] By far the largest proportion (45 percent) were enrolled in clerical courses. Enrollment was fairly evenly distributed across the other occupational categories, although it was much lower in the benchwork trades.

As might be expected, female and male participants had different patterns. The women were clustered in traditionally "female" occupations: 73 percent were in clerical training, and 18 percent were in training for a variety of service occupations, such as home health aide and childcare aide. Fewer than 10 percent of the female participants in training were enrolled in nontraditional areas. Sites did not make -- and had not been asked to make -- special efforts in this regard. The largest proportions of males were enrolled in machine trades and structural work occupations. About 25 percent of the male sample was enrolled in training for clerical and service jobs.

Based on categories used by the U.S. General Accounting Office in a recent analysis of JTPA adult training, MDRC categorized the training provided to JOBSTART participants in terms of whether it was designed to prepare trainees for jobs utilizing "low," "moderate," or

---

[4]If participants were enrolled in more than one training category, they are counted as enrolled in the one they attended for more hours. This categorization of approximately 125 occupational skills training courses available to participants was derived from the U.S. Department of Labor, Dictionary of Occupational Titles, 1977.

Table 7.2

Rate of Participation in Multiple Training Categories,
by Site and Program Structure

Site and Program Structure	Percent Who Participated in Two or More Training Categories	Number of Participants in Training
Concurrent		
Atlanta Job Corps	28.6%	28
CET/San Jose	10.9	55
Chicago Commons	2.4	42
Connelley (Pittsburgh)	23.9	109
East Los Angeles Skills Center	7.5	53
EGOS (Denver)	3.2	93
Phoenix Job Corps	4.7	64
SER/Corpus Christi	2.7	146
Total	9.3	590
Sequential/in-house		
El Centro (Dallas)	8.7	46
Los Angeles Job Corps	37.3	67
Total	25.7	113
Sequential/brokered		
Allentown (Buffalo)	4.8	21
BSA (New York City)	7.1	*
CREC (Hartford)	11.1	9
Total	6.8	44
All sites	11.6	747

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES. This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in a JOBSTART training component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment.

Table 7.3

Percentage Distribution of Training Categories
for Participants in Training, by Sex

Training Category[a]	Males	Females	Total
Clerical and sales occupations			
Stenography, typing, filing, and related occupations	5.0%	51.3%	29.2%
Computing and account-recording	7.0	20.3	13.9
Production and stock clerks, and related occupations	0.3	0.0	0.1
Information and message distribution	1.4	0.0	0.7
Miscellaneous clerical	0.0	0.5	0.3
Sales and consumable commodities	0.8	1.0	0.9
Total	14.6	73.1	45.1
Service occupations			
Food and beverage preparation and services	3.1	4.6	3.9
Miscellaneous personal services	0.6	11.5	6.3
Building and related services	8.4	2.1	5.1
Total	12.0	18.2	15.3
Machine trades occupations			
Metal machining	5.0	0.8	2.8
Mechanics and machinery repair	22.4	1.3	11.4
Printing	0.6	1.3	0.9
Wood machining	0.6	0.5	0.5
Total	28.6	3.8	15.7
Benchwork occupations			
Assembly and repair of electrical equipment	11.5	1.3	6.2
Painting, decorating, and related occupations	0.8	0.3	0.5
Fabrication and repair of plastics, synthetics, rubber, and related products	2.2	0.3	1.2
Fabrication and repair of textile, leather, and related products	1.7	0.3	0.9
Total	16.2	2.1	8.8
Structural work occupations			
Metal fabricating	9.8	0.5	5.0
Welders, cutters, and related occupations	0.8	0.0	0.4
Electrical assembling, installing, and repairing	5.9	0.5	3.1
Painting, plastering, waterproofing, cementing, and related occupations	1.7	0.0	0.8
Construction	8.4	1.3	4.7
Total	26.6	2.3	13.9
Miscellaneous occupations			
Transportation	0.0	0.3	0.1
Graphic art work	2.0	0.3	1.1
Total	2.0	0.5	1.2
All training categories	100.0	100.0	100.0
Number of participants in training	357	390	747

(continued)

Table 7.3 (continued)

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports. This categorization was derived from the U.S. Department of Labor, Dictionary of Occupational Titles, 1977.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in a JOBSTART training component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment.

Distributions may not add to 100.0 percent because of rounding.

Individual categories may not add to the category totals because of rounding.

Tests of statistical significance were not examined.

[a]Individuals participating in more than one training category are included in the category in which they attended the most hours.

"higher" skills levels.[5] Less than a quarter of participants were in training for jobs requiring low or low-to-moderate skills; over half were in training for jobs requiring moderate skills; and a quarter were in training for jobs requiring higher skills levels, as shown in Table 7.4. These rates are roughly comparable to the training adults receive in JTPA: the General Accounting Office report shows that about one-fourth of adult JTPA enrollees are trained for low-skill occupations, about one-half for moderate-skill occupations, and about one-fourth for higher-skill occupations. This suggests that sites were meeting the objective of training the JOBSTART youths for quality jobs.

One presumed advantage of brokering training is that participants will have a wider range of training options. In JOBSTART, however, the range of fields in which participants enrolled was less extensive at the sequential/brokered sites than at the concurrent sites or the sequential/in-house sites. Table 7.5 shows that JOBSTART youths at the three brokered sites were enrolled in eight training areas compared to twenty-two at the eight concurrent sites and fifteen at the two sequential/in-house sites. (The small sample size at the brokered sites may explain some of this difference.) Brokering skills training could nevertheless increase the range of training available at individual sites.

Another presumed advantage of sequential programing for the JOBSTART target population is that participants will be more likely to enter training for higher-skill occupations if they can first improve their basic skills. Once again, the JOBSTART experience suggests otherwise. As shown in Table 7.4 the proportion of JOBSTART participants in training for jobs requiring moderate and higher skills was roughly comparable, but slightly higher at the concurrent sites. As noted, however, some concurrent sites did try to steer poorer readers into training requiring lower skills. It is also not known whether the less skilled readers actually learned as much as the more skilled readers in the concurrent courses.

IV. Intensity of JOBSTART Training

The intensity of the training available in JOBSTART -- measured in terms of the number of weeks of training and the hours scheduled per day -- varied across sites and across training areas but exceeded the minimum criterion. As discussed in Chapter 2, some sites scheduled 1,000 or more training hours per course, while others estimated that participants should complete the prescribed curriculum in approximately 600 to 800 hours, although they could stay longer.

Many did participate to the full extent, however. Table 7.6 shows that 17 percent received a considerable amount of training (more than 500 hours) in the year after random assignment, but 55 percent received 200 or fewer hours, including the 25 percent who never entered training. Average participation hours were lowest and the proportion of participants with high average hours was smallest at the sequential/brokered sites. This reflects the low participation rate at the brokered sites and the greater length of time before participants entered

[5]United States General Accounting Office, 1988. A total of 7 percent of the JOBSTART trainees were enrolled in occupational skills categories that could not be fit into the GAO classification.

Table 7.4

Percentage Distribution of Skills Levels
of Jobs for Which Participants Were Trained,
by Program Structure

Skills Level	Concurrent	Sequential/ In-House	Sequential/ Brokered	All Sequential	All Sites
Low	5.9%	6.2%	4.5%	5.7%	5.9%
Low-moderate	8.5	23.9	13.6	21.0	11.1
Moderate	54.7	44.2	61.4	49.0	53.5
High	26.3	19.5	4.5	15.3	25.6
Indeterminate[a]	2.5	6.2	15.9	8.9	3.9
Total	100.0	100.0	100.0	100.0	100.0
Number of participants in training	590	113	44	157	747

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports. Skills levels were calculated using categories developed by the General Accounting Office, 1988.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in a JOBSTART training component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment.

Distributions may not add to 100.0 percent because of rounding.

[a]Some participants were enrolled in training courses that did not correspond to the General Accounting Office categories.

Table 7.5

Percentage Distribution of Training Categories
for Participants in Training, by Program Structure

Training Category[a]	Concurrent	Sequential/ In-House	Sequential/ Brokered	Total
Clerical and sales occupations				
Stenography, typing, filing, and related occupations	30.8%	13.3%	47.7%	29.2%
Computing and account-recording	12.4	22.1	13.6	13.9
Production and stock clerks, and related occupations	0.2	0.0	0.0	0.1
Information and message distribution	0.8	0.0	0.0	0.7
Miscellaneous clerical	0.2	0.9	0.0	0.3
Sales and consumable commodities	1.0	0.0	2.3	0.9
Total	45.4	36.3	63.6	45.1
Service occupations				
Food and beverage preparation and services	4.6	1.8	0.0	3.9
Miscellaneous personal services	2.9	22.1	11.4	5.3
Building and related services	4.9	6.2	4.5	5.1
Total	12.4	30.1	15.9	15.3
Machine trades occupations				
Metal machining	3.6	0.0	0.0	2.8
Mechanics and machinery repair	13.6	4.4	0.0	11.4
Printing	0.8	1.8	0.0	0.9
Wood machining	0.7	0.0	0.0	0.5
Total	18.6	6.2	0.0	15.7
Benchwork occupations				
Assembly and repair of electrical equipment	6.8	5.3	0.0	6.2
Painting, decorating, and related occupations	0.5	0.9	0.0	0.5
Fabrication and repair of plastics, synthetics, rubber, and related products	1.5	0.0	0.0	1.2
Fabrication and repair of textile, leather, and related products	0.0	0.0	15.9	0.9
Total	8.8	6.2	15.9	8.8
Structural work occupations				
Metal fabricating	6.3	0.0	0.0	5.0
Welders, cutters, and related occupations	0.2	0.9	2.3	0.4
Electrical assembling, installing, and repairing	2.0	8.8	2.3	3.1
Painting, plastering, waterproofing, cementing, and related occupations	1.0	0.0	0.0	0.8
Construction	4.2	8.8	0.0	4.7
Total	13.7	18.6	4.5	13.9
Miscellaneous occupations				
Transportation	0.0	0.9	0.0	0.1
Graphic art work	1.0	1.8	0.0	1.1
Total	1.0	2.7	0.0	1.2
All training categories	100.0	100.0	100.0	100.0
Number of participants in training	590	113	44	747

(continued)

Table 7.5 (continued)

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports. This categorization was derived from the U.S. Department of Labor, Dictionary of Occupational Titles, 1977.

NOTES: This table includes data for all youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in a JOBSTART training component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment.

Distributions may not add to 100.0 percent because of rounding.

Individual categories may not add to the category totals because of rounding.

Tests of statistical significance were not examined.

[a]Individuals participating in more than one training category are included in the category in which they attended the most hours.

Table 7.6

Participation in Training,
by Program Structure

Measure	Concurrent	Sequential/ In-House	Sequential/ Brokered	Total
Percent participating in training	95.0	54.3	25.9	.4.8***
Percentage distribution of hours in training				
None	5.0	45.7	74.1	25.2***
1 to 200	39.9	15.4	11.2	29.9***
201 to 500	36.2	17.8	9.4	27.8***
501 or more	18.8	21.2	5.3	17.0***
Total	100.0	100.0	100.0	100.0
Average hours in training	289.6	221.6	68.4	237.8
Number of participants	621	208	170	999

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES: This table includes all data for youths randomly assigned between August 1985 and September 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment. All estimates are for a twelve-month period following random assignment and apply to the entire participant sample including those with zero hours in training.

Distributions may not add to 100.0 percent because of rounding.

An F-test or chi-square test was applied to differences among program structures. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

aining. Average training hours for participants who actually entered training at the brokered ..s were closer to those achieved at the other types of programs, however (264 hours compared to 305 at concurrent sites and 408 at sequential/in-house sites). The high number of hours at the sequential/in-house sites was primarily due to the Los Angeles Job Corps, which, as explained in Chapter 4, was not a typical site.

V. Characteristics of Training at Concurrent Sites

A. Training Curricula and Instructional Methods

To ensure that their training offerings met employer specifications, all but one of the demonstration sites used advisory boards of employer representatives to develop and review the training curricula. In addition, teachers got informal feedback from employers who had hired their graduates, contacts in the field, and former students who had been placed with local employers. Many teachers were hired from industry and were familiar with employer needs. Most sites reported that they revised their curricula annually (less frequently at some of the school-based sites) in response to employer suggestions or their own research. During the course of the demonstration, a number of sites also revised their training offerings in response to changing demand in the local job market, phasing out courses where employer demand dropped below a critical level, and developing new ones in emerging growth areas.

The training curricula used at the JOBSTART sites involved a mixture of theory and hands-on work. Typically, the theory was taught lecture style to the class as a group, and trainees worked on their own or in small teams during the hands-on sessions. At a few sites training instructors tended to do most of the theoretical work in the first weeks of the course; at other sites it was customary to do an hour or two of theory a day with the rest of the time spent doing hands-on work. Class size was generally in the range of twenty to thirty -- small enough to ensure that trainees could receive individual attention and have access to equipment and tools.[6]

Although all sites measured competency attainments, some used textbooks and lectures rather than self-paced workbooks or instructional guides. A number of sites (schools especially) used letter grades to evaluate student progress in lieu of or in addition to recording competency attainment.

The JOBSTART sites incorporated work on English language skills and basic math into the training curriculum in a number of occupational areas. For example, classes in Business English and Business Math -- covering spelling, grammar, punctuation, and basic math functions -- were a key element in the training curricula for clerical skills and business occupations at all the sites. At CET/San Jose and the East Los Angeles Skills Center these modules accounted for an estimated one-sixth or one-seventh of the total training hours in the curricula; at Chicago

[6]Chicago Commons had the largest classes -- sometimes forty-five to fifty students -- and assigned two teachers per class.

Commons, EGOS in Denver, and Connelley in Pittsb gh, they absorbed about one-fourth of the scheduled training hours.[7]

Considerable time was devoted to review and practice of basic arithmetic in the curricula of many training courses in the machine trades and benchwork occupations. CET/San Jose and Chicago Commons, in particular, had developed courses that incorporated a substantial amount of time for review and drill in basic math skills, utilizing workbook exercises as part of the classroom activity in the early weeks of training. At CET/San Jose, students spent the first few weeks of the course in "feeder" classes doing practical review before moving on to more intensive hands-on work using machinery. The training curricula in other vocational areas, such as food service, custodial training, and auto body repair, did not require students to do additional work on basic skills. As discussed in Chapter 6, these parts of the training curriculum were typically implemented without input from the basic education teachers at the sites.

B. Teacher Attitudes

At all but a few sites JOBSTART participants were enrolled in classes with adult learners; except at SER/Corpus Christi, there were no separate skills training classes just for JOBSTART participants. Most of the teachers and counselors interviewed by MDRC noted that, especially compared to the adults they were used to teaching, JOBSTART students required a great deal of personal attention and one-on-one instruction. They also needed a lot of structure and clearly laid-out schedules and expectations. Teachers tended to respond to these needs in either of two ways; the differences reflected different philosophies about the purpose and goals of skills instruction in a program like JOBSTART.

Many skills teachers who were accustomed to working primarily with adults found it difficult, at least initially, to work with the young dropouts. In interviews with MDRC staff many expressed discomfort and frustration about dealing with what they saw as the youths' immaturity and lack of motivation, attitudes that they believed would be more detrimental than skills deficiencies to the youths' ultimate success. These teachers believed that training should be conducted in a businesslike atmosphere in order to prepare the students for the work world and to test their job readiness. They tended to limit their role to teaching technical skills and did not particularly worry about unmotivated students. They were reluctant to get involved in the young people's lives and felt that the JOBSTART students should not be treated any differently from adult students at the site. One teacher's comment was typical: "In the work world, that won't happen. They have to learn to deal with their problems."

In contrast, teachers at sites that had more experience working with disadvantaged youths viewed the training process as a period during which students should be helped to learn and gradually achieve the goal of becoming job ready; they did not expect the youths to exhibit fully mature behavior at the outset of training. These sites emphasized creation of a supportive learning environment and expected teachers to counsel as well as to instruct.

---

[7]As previously noted, hours spent by JOBSTART participants in Business English and Business Math classes were counted as training hours in this study.

C. Competency Attainment

As already noted, teachers and counselors reported that many JOBSTART participants required more time or assistance than the average enrollee (adults for the most part) to attain required competencies. Staff attributed this to a combination of the youths' skills deficiencies, age, attendance problems, and the extra pressure they were under at concurrent sites to complete education instruction simultaneously with skills training. But many JOBSTART participants did very well in their classes, nonetheless.

As noted in Chapter 2, a major concern about placing the JOBSTART population in programs offering basic education and skills training concurrently is that participants with very low reading levels may be unable to read the required materials and have difficulty communicating what they have learned in written tests. Evidence from JOBSTART suggests that this was probably the case for some participants. For example, some of the textbooks in the JOBSTART training courses were written for students in community colleges and were probably too advanced for trainees reading below the eighth grade level, and some teachers required written assignments (such as outlining the chapters in the text) that would have been beyond the capability of many students. Other sites made strong efforts to use training materials and instructional techniques geared to individuals with lower-level skills. For example, they minimized the use of written materials, provided frequent oral review, allowed trainees to proceed at their own pace, and provided lots of opportunity for students to ask questions and get individual assistance.

Many sites, including the Job Corps Centers, also recognized intermediate competency levels that fell short of the maximum standard. For example, trainees in clerical courses who failed to reach the qualifications for secretary or word processor could be certified as clerk-typists. Other sites gave certificates of completion to individuals who attained the required competency levels and certificates of achievement to those who were still enrolled at the end of the year but had not mastered all the competencies. (Of 28 active enrollees at the end of the first year of the demonstration at Connelley in Pittsburgh, for example, 15 got certificates of achievement and 13 got certificates of completion.)

D. Student Assessments of JOBSTART Training

On the whole, both survey respondents and participants in the four focus group discussions indicated that they were confident that they were being taught useful information that would benefit them on the job and that the time spent in JOBSTART would be helpful in getting a job, as discussed in Chapter 5. The opportunity for hands-on training and the quality of the teaching staff were valued. Youths interviewed in the focus groups repeatedly praised the hands-on nature of the training and were pleased that, as one put it, "it's not book learning." Eight percent of the survey respondents mentioned the opportunities for hands-on learning as one of the things they liked about JOBSTART.

The positive response of the survey respondents to the JOBSTART teachers has already been discussed in Chapter 5. Focus group discussions revealed the important role that teachers played as mentors. As one student explained:

He [the skills instructor] really motivates me. He'll put some education into your head that will stick. He's another one that teaches us things that it took him ten years to learn, and he'll teach us, give it to us so we won't have to struggle the hard way that he did struggle. And I really listen to him now. I look up to him a lot now.

In contrast, where students felt that the JOBSTART training instructors were more like their teachers in high school, they were less enthusiastic. For example, the focus group participants at Connelley were more critical of the program than those at the other three sites because they felt that their teachers were not willing to give them extra time and assistance; they were inclined to think that they were teaching themselves. They acknowledged that they were learning things and improving their skills but were skeptical about getting jobs after completing the program.

Participants appeared to have mixed reactions to being concurrently enrolled in education and training classes. When asked to name things that they liked about JOBSTART, 9 percent of the respondents at concurrent sites mentioned having the two components linked, but other evidence suggests that some participants found the combination too intense, especially at sites where JOBSTART youths were mainstreamed with adult learners and the curriculum had been developed for adults. Participants who took part in the focus group discussion at Connelley, for example, indicated that at times the pressure to pass the GED exam and master occupational skills competencies in a single school year was almost overwhelming. Staff made similar observations at Chicago Commons and EGOS in Denver. In response, these sites began to urge JOBSTART youths to focus on one outcome instead of both. Thus, EGOS and Connelley began to place primary importance on GED attainment, while Chicago Commons concentrated on skills training.

VI. Characteristics of Training at Brokered Sites

At the sequential/brokered sites, training for JOBSTART participants was provided through a variety of organizations and was typical of the kind of training offered in the local JTPA system. The providers included community colleges and for-profit proprietary schools as well as CBOs. In keeping with the JOBSTART guidelines, participants were limited to training options that provided at least five hundred hours of classroom instruction.

The training sites tended to be larger, less personal institutions than the JOBSTART operator. Staff at the three brokered sites noted that the JOBSTART participants frequently experienced adjustment problems when they started training because the training providers were stricter about attendance, assigned homework, and generally offered a less supportive environment. At the focus group at BSA in New York City, women who had already transferred into training felt that their skills training classes were too much like high school and lacked the "family" atmosphere at BSA.

Monitoring participants' progress and maintaining their attachment to JOBSTART once they entered training was difficult for staff at the brokered sites. While enrolled at other training agencies, participants had little direct contact with JOBSTART staff. Allentown in

Buffalo had several advantages over the other brokered sites in trying to maintain systematic contact. First, participants in training were still considered Allentown enrollees until they were terminated from the training program. Second, Allentown continued to issue the biweekly needs-based payments to the trainees. To ensure that she would see the trainees on a regular basis, the JOBSTART coordinator required them to pick up their checks in person and tried to schedule individual or group meetings on those days. Third, because Allentown contracted directly with the training schools, it was able to establish a systematic monitoring system. The training schools were required to supply written progress reports, including attendance records, every two weeks. At the other brokered sites the JOBSTART staff did telephone monitoring on an irregular basis and made occasional visits to the training facilities. When asked whether the JOBSTART staff had been in touch while they were in skills training, about two-thirds of the survey respondents said that they had, with the majority reporting that they had been contacted "several times" as opposed to once a month or less.

CHAPTER 8

MAKING THE CONNECTION TO WORK

Helping youths make the connection from training to work is particularly important in a program like JOBSTART, which targets a population that lacks work experience, access to employers, and knowledge of how to find a job. This chapter describes the types of placement assistance provided by the demonstration sites and participants' characterization of that assistance. The data suggest that job placement activities were a comparatively weak aspect of the program at many sites. The chapter also discusses the employment patterns of participants who worked at paid jobs while they were in JOBSTART and the characteristics of the first jobs participants held after leaving the program.

I. Job Placement Strategies

Job placement strategies used by the sites included employability development or pre-employment training as well as direct placement efforts such as job development, referrals to employers, and supervised job search.

A. Employability Development

To improve the employment prospects of the youths, all but one site instructed participants on work disciplines and job search techniques.[1] Each site developed its own curriculum, but all were designed for two purposes: first, to prepare the youths for work by discussing employer expectations, behavior on the job, and getting along with co-workers; second, to teach them how to look for a job, write a resume, and fill out a job application. The amount of time devoted to this employability development training and the point at which it occurred in the JOBSTART schedule varied considerably across the sites, as shown in Table 8.1.

B. Contact with Employers

To expose participants to the work place and familiarize them with employer expectations, staff occasionally scheduled trips to local business establishments and invited local employers to meet with them at the demonstration site. Although staff thought that these activities were helpful, they were infrequently scheduled at most sites owing to time and resource constraints. The corporations which provided the $25,000 grant to individual sites

[1] An employability development unit in the secretarial training course at EGOS in Denver was dropped for participants because of lack of time; participants received informal guidance from counselors and other staff, however.

Table 8.1

Selected Job Placement Assistance Activities, by Site

Site	Employability Development[a]	Availability of Work Experience, Internships or Mentors	Job Search Assistance	Staff Responsible for Job Placement[b]
Concurrent				
Atlanta Job Corps	Classes at start of program, intensive job search training at end	Training-related work experience positions at end of training for up to 5 hours per day, for a maximum of 6 weeks; on-site work experience	Supervised job search available	3 placement specialists for all enrollees at the site
CET/San Jose	1-2 hours per week throughout occupational training	None	Individual assistance available; some group activities available for program completers	5 placement specialists for all enrollees at the site
Chicago Commons	2 hours per week during occupational training, more in final weeks	None	Individual assistance available	1 placement specialist for all enrollees at the site
Connelley (Pittsburgh)	Up to 30 hours in occupational training; 1 hour per week after regular class hours during 1986-87 school year	Mentor program during 1985-86 school year; unpaid work experience positions of 8-12 hours per week for up to 4 months, during 1986-87 school year	Informal assistance available	Primarily, JOBSTART counselor/coordinator; 2 placement specialists for all JTPA enrollees also available
East Los Angeles Skills Center	2 hours per week, for 8 weeks during occupational training	None	Individual assistance available	1 placement specialist for all enrollees at the site
Erus [illegible]nver)	No formal classes, one workshop[c]	Paid work/study positions for a few participants	Informal assistance available	2 JOBSTART counselor/coordinators
Phoe[illegible]b Corps	Classes at start of program, intensive job search training at end	Training-related work experience positions at end of training, 4 hours per day for 4-6 weeks; on-site work experience	Supervised job search available	3 placement specialists for all enrollees at the site

(continued)

Table 8.1 (continued)

Site	Employability Development[a]	Availability of Work Experience, Internships or Mentors	Job Search Assistance	Staff Responsible for Job Placement[b]
SER/Corpus Christi	30 hours prior to occupational training, 40 additional hours during occupational training in 1987 cycle	None	Supervised job search available at Texas Employment Commission	2 Texas Employment Commission placement specialists for all JTPA enrollees
Sequential/in-house				
El Centro (Dallas)	Part of life skills component; 5 day workshop on job search at end of occupational training	Mentor program; unpaid two-week internships for a few participants	Supervised job search available	2 of 5 placement specialists assigned to JOBSTART
Los Angeles Job Corps	Classes at start of program, intensive job search training at end	Training-related work experience positions for 45 days at end of training; on-site work experience	Supervised job search available	4 placement specialists for all enrollees at site
Sequential/brokered				
Allentown (Buffalo)	90 hours in life skills component (includes vocational assessment)	None	Supervised job search available at Allentown	Staff at training organizations and 2 placement specialists for all JTPA enrollees at Allentown
BSA (New York City)	Part of life skills component	None	Informal assistance from BSA staff	Primarily staff at training organizations
CREC (Hartford)	A few hours included in basic education	Internships paying $3.37 per hour for a few participants after education	Informal assistance from CREC staff	Primarily staff at training organizations

(continued)

Table 8.1 (continued)

SOURCE: Program records and staff interviews.

NOTES: [a]Typically includes instruction in work behaviors, employer expectations, and job search techniques. At sequential/brokered sites, it also includes a career exploration unit.

[b]Individual sites used different titles for placement staff, although the functions were quite similar.

[c]EGOS dropped the unit usually offered in clerical and secretarial training sources for JOBSTART participants because of time pressures.

sometimes facilitated such efforts. For example, AT&T, the corporate sponsor for the Phoenix Job Corps and EGOS in Denver, sponsored tours of the local facility. An AT&T employee joined the Phoenix Job Corps' advisory council, which promoted employer contacts for members.

Two sites tried to provide participants with more personal and ongoing contact with employers by establishing a "mentor" program, matching participants with local employers or employees who could serve as role models and take a personal interest in the youths. The El Centro program was headed by an employee of a local accounting firm, who recruited mentors through the Dallas Chamber of Commerce and other business groups; employees of ARCO, the corporate sponsor for the Dallas site, were also involved. Interested individuals were asked to attend a three-hour orientation and to spend at least two hours a month with a youth. The greatest impediment was lack of employer response. By the time El Centro had arranged eighteen mentorships, student demand began to exceed the supply of employers. A similar effort by Connelley in Pittsburgh ran into problems recruiting employers and supervising the youths who participated. In the second year of the demonstration, Connelley substituted an internship program designed to give students actual work experience before they left training.

C. Work Experience During JOBSTART

About one-half the sites arranged work experience -- paid and unpaid -- for some participants.[2] Work experience was an integral part of the Job Corps program but operated on a much smaller scale at other sites. Table 8.1 shows the sites that offered work experience and the characteristics of the program. Concurrent sites tended to arrange short-term work experience positions during the final weeks of training in order to give well-qualified participants actual job experience before sending them out to look for jobs. To qualify, trainees generally had to demonstrate good attendance, attainment of competencies, and motivation. Sequential sites tended to use internships or on-site work activities (sometimes on an informal basis) to fill the gap between the end of the education component and the start of training.

Staff at sites without work experience thought that such a component would have been useful to supplement classroom training and provide income. JTPA restrictions on funding work experience positions were an impediment that sites found difficult to overcome, however.

D. In-Program Employment

Nevertheless, a substantial proportion of the youths did have paid employment and worked long hours while participating in JOBSTART. Comparing the employment history of the 666 participants who responded to the twelve-month survey with their participation data showed that 26 percent worked in jobs while they were active in the program. This includes

---

[2]The hours participants spent in work experience positions were reported as "other activities" by some sites and training hours by others. See Appendix A.

participants in both subsidized and unsubsidized work.[3] As shown in Table 8.2, employed participants worked an average of 17 weeks -- or about half the period they were active in JOBSTART -- and an average of 31 hours per week during the weeks they were employed. Of those working, 26 percent worked 20 hours or less per week while employed; 60 percent worked between 21 and 40 hours; and 14 percent worked more than 40 hours per week. The effect of this employment on the youths' attendance in the program is discussed in Chapter 5.

Differences in the employment rates across sites may be more easily explained by variations in local labor markets than by variations in program structure. The lowest in-program employment rate was 12 percent at El Centro in Dallas (a sequential site in a poor labor market). The highest rates were 50 percent at BSA in New York City and 53 percent at CREC in Hartford, both sequential sites in relatively strong labor markets. Except for CET/S..n Jose, sites that did not provide needs-based allowances had higher than average in-program employment rates.

In-program employment participation patterns varied by sex. Table 8.2 shows that a higher proportion of males than females were employed. Both groups worked approximately the same number of weeks. The group of working women included women living with children as well as women not living with children.

E. Job Development and Placement

Direct placement efforts began at or near the end of the training courses. Sites relied heavily on instructor contacts for notifications of and referrals to training-related job openings. Most sites also had an in-house job placement unit that did limited job development and helped trainees -- JOBSTART as well as others -- in their job search. Two of the adult vocational schools (Connelley in Pittsburgh and EGOS in Denver) vested primary responsibility for placement in the JOBSTART counselor/coordinator, although there were on-site placement specialists. Other sites delegated placement responsibility to outside organizations. Thus, SER/Corpus Christi's contract with the SDA required it to refer participants who completed training to the Texas Employment Commission, the state's employment service, for placement assistance; two of the three sequential/brokered sites effectively let the training providers take on full responsibility for placement. (Staffing responsibility for job placement is shown in Table 8.1.)

Staff interviews indicated that the job placement assistance available to JOBSTART participants at most of the demonstration sites consisted of help preparing a resume, guidance on interviewing techniques (at some locations, students participated in mock interviews, which were critiqued by the staff or a class), referrals to specific jobs, and guidance on conducting an individual job search. Trainees were expected to play an active role and to take the

---

[3]This figure includes work experience positions arranged by the site, but the analysis did not distinguish between subsidized and unsubsidized positions. It appears that the large majority were unsubsidized: when asked what specific things JOBSTART staff had done to help them get a job, only 8 percent of the 415 respondents -- 33 individuals -- mentioned that staff had arranged part-time jobs or on-the-job training positions [illegible] Table 8.3.

Table 8.2

In-Program Employment Patterns for Surveyed Participants, by Sex and Parental Status

Measure	Males	Females			Males and Females
		Living with Children	Not Living with Children	All Females	
Percent ever employed while in JOBSTART[a]	31.3	17.7	24.9	21.3	26.0
Average number of weeks worked	16.9	16.6	16.6	16.6	16.8
Average hours employed per week while working	32.3	28.2	31.0	29.9	31.2
Percentage distribution of hours worked per week while working					
1 to 20	22.6	36.7	26.6	30.7	26.1
21 to 40	60.2	56.7	62.2	60.0	60.1
41 to 60	16.1	6.7	11.1	9.3	13.1
61 or more	1.1	0.0	0.0	0.0	0.6
Total	100.0	100.0	100.0	100.0	100.0
Percent of weeks in JOBSTART spent working	61.5	45.8	51.3	49.1	56.0
Number of surveyed participants employed[b]	97	31	45	76	173

SOURCE: MDRC calculations from the JOBSTART twelve-month survey and Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and March 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment and who answered the twelve-month survey. All estimates are for a twelve-month period following random assignment. Only those participants who held at least one job while participating in JOBSTART are included in this sample.

Distributions may not add to 100.0 percent because of rounding.

These measures refer to all jobs held by participants during JOBSTART.

[a]These percentages are based on all surveyed participants.

[b]For selected measures, sample sizes may vary up to 5 sample points due to missing data.

initiative in looking for a job. Some sites required participants to schedule regular meetings with the placement specialist, and a few scheduled group or individual job search activities on a daily or weekly basis during the placement phase (Allentown in Buffalo, El Centro in Dallas, and the Job Corps). Elsewhere, procedures were less formal and participants sought assistance as needed.

A common source of job referrals were employers who called the training staff when they had an opening; the teachers' personal contacts as well as job developers' efforts were critical in this. At most sites, the placement staff had only limited time for job development, and neither they nor the skills instructors were likely to conduct customized job development for specific participants. Whether an instructor or placement specialist would refer a student to a specific job opening depended on the trainee's performance and attitude. Staff indicated that they gave priority to participants who had done very well in training and could demonstrate mastery of required skills, good attendance, and strong motivation. As discussed below, this could place JOBSTART youths at a comparative disadvantage.

II. Participant Description of Placement Activities

Responses from the sample of participants surveyed twelve months after random assignment suggest that placement efforts were a relatively weak aspect of the program, either because sites did not offer them or because participants did not make use of what was available. Asked what specific things staff had done to help them get a job (apart from teaching them a skill), 38 percent responded that staff had done nothing. Among those who had received assistance, 47 percent said that they had been taught job search skills, but only 25 percent said that they had been referred to a job or told about openings; 11 percent said that staff had arranged interviews for them. (See Table 8.3.) Other frequently cited forms of assistance were help in filling out applications, making contacts with employers, and dealing with their personal problems.

A comparison of the responses of participants enrolled at different types of sites suggests that the brokered sites provided less placement assistance than did the concurrent or sequential/in-house programs. As shown in Table 8.3, much smaller proportions of participants at the brokered sites said that they had been taught job search skills, received help in filling out applications, had contact with employers, or been referred to or told about job openings. However, a slightly higher proportion reported that staff had arranged interviews for them.

A number of factors appear to account for the relative weakness of job placement efforts at the sites. First, placement assistance was largely reserved for program completers or participants who were close to completion. Participants who left the program early, or who dropped out without notice, had little exposure to employability development, lessons on how to conduct a job search, or direct referrals. Exceptions were the Job Corps sites, where staff made intensive efforts to locate early-leavers and to help place them in jobs.

Second, youth participants could be at a comparative disadvantage at sites where placement staff gave priority to the better-performing trainees. As discussed in Chapter 7, teaching staff reported that JOBSTART youths frequently took longer to reach competencies and lacked the maturity of the adult enrollees.

Table 8.3

Type of Job Placement Help Provided by Staff As Reported by Surveyed Participants, by Program Structure

Help Provided	Concurrent	Sequential/ In-House	Sequential/ Brokered	Total
Taught job search skills	50.7%	54.7%	22.1%	46.5%
Made referrals and announced openings	27.9	32.1	4.4	24.6
Helped with applications	26.2	28.3	8.8	23.6
Arranged contacts with employers	23.5	13.2	7.4	19.5
Helped with personal problems	13.6	7.5	16.2	13.3
Arranged interviews	11.2	5.7	14.7	11.1
Listed job openings	4.8	13.2	1.5	5.3
Arranged for support services	6.5	1.9	0.0	4.8
Arranged part-time jobs	6.1	0.0	1.5	4.6
Arranged on-the-job training	4.1	1.9	1.5	3.4
Made phones and newspapers available	4.4	5.7	4.4	4.6
Helped get GED	3.1	3.8	0.0	2.7
Other[a]	9.5	3.8	5.9	8.2
Number of surveyed patricipants	294	53	68	415

SOURCE: MDRC calculations from the JOBSTART twelve-month survey.

NOTES: This table includes data for all youths randomly assigned between August 1985 and March 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment and who responded to the twelve-month survey. Only those participants who said that JOBSTART staff had been helpful are included in this sample.

Distributions will not add to 100.0 percent because sample members were allowed up to three responses.

Tests of statistical significance were not examined.

[a]Reasons that were cited by fewer than 2.0 percent of respondents are included in the "other" category.

Third, the staff or organization responsible for placement made a great deal of difference. Placement activities looked notably weaker at the sites that placed primary responsibility for job placement in the hands of the JOBSTART counselor/coordinator or relied on outside organizations. JOBSTART coordinators had very little time for job development and placement, given their other responsibilities, and they lacked ties to local employers.

Relying on outside agencies for placement also had problems. The atmosphere at the Texas Employment Commission, responsible for placing the SER/Corpus Christi trainees, was impersonal. The participants tended to get lost in the crowd and had no opportunity to develop ongoing contact with a single staff member. Assistance was available, but the youths had to be aggressive in seeking it out. Placement activities at the training providers used by the sequential/brokered sites were fairly limited. More important, reliance on training providers for placement meant that there was virtually no direct job placement assistance for individuals who never enrolled in training. But even at sites where placement was the responsibility of specialist staff, large client-to-staff ratios limited the efforts that could be made on behalf of any individual. Typically, sites had very few placement staff on board, as shown in Table 8.1.

Fourth, the relative emphasis that sites put on placement reflected the sites' sense of mission and the performance standards spelled out in their funding contracts. Sites that emphasized job development and placement outcomes instead of or in addition to GED attainment (CET/San Jose, Chicago Commons, the East Los Angeles Skills Center, El Centro in Dallas, and the Job Corps sites) tended to be those that were held to high placement standards in performance-based contracts. Conversely, the sites with the weakest placement efforts (EGOS in Denver, Connelley in Pittsburgh, SER/Corpus Christi, and the education agencies) were those with cost-reimbursement contracts or performance-based contracts that did not use placement as a payment benchmark.

III. Post-Program Employment

As discussed in Chapter 5, only a small percentage of the participants reported that they left the program because they had obtained employment. This figure does not measure the full extent of post-program employment, however, since it does not reflect the employment of participants who got jobs after leaving the program or who worked during JOBSTART and continued in the same job afterward.

More complete data on the extent of post-program employment were derived from a comparison of the work histories and participation patterns of the twelve-month survey respondents. This comparison identified the participants who were employed at some point after leaving JOBSTART and the characteristics of the first jobs they held after leaving the program (which may have been the same as a job held during the program). The post-program employment data are not based on a uniform follow-up period; those who left the program early had more months to secure employment than did those who spent a longer time in the program.

The analysis found that, within the year after random assignment, 50 percent of the participants who left JOBSTART had found jobs. Table 8.4 shows selected characteristics of the first jobs held by participants after they left the program. The average hourly wage was $4.37; 67 percent of the jobs paid more than the minimum wage, and 32 percent paid more than $4.50 per hour. Most of the jobs were full-time; 64 percent required 31 or more hours of work per week. Seventy-three percent paid no health insurance, but employers paid the full cost of insurance in 13 percent of the jobs. Ten percent of the jobs were subsidized. Almost 40 percent of the jobs were in areas broadly related to the training JOBSTART participants had received.[4] The jobs were concentrated in a few occupational areas: 32 percent were in clerical and sales positions, 30 percent were in service occupations, and 9 percent were in structural work occupations.

The post-program employment experience of the men was more favorable than that of the women, as indicated in Table 8.4.[5] A higher proportion of JOBSTART males than females held a job after leaving the program (59 percent versus 42 percent), and the average hourly wage earned by the men was higher than that of the women ($4.65 versus $4.02). Only 9 percent of the women who worked earned more than $5.50 per hour compared to 20 percent of the men. Eighty-two percent of the women and 47 percent of the men were working in clerical, sales, or service occupations. Differences between women living with children and women not living with children were not very great.

The post-program employment information described above should not be confused with the employment data provided in the impact analysis in Chapter 9. Earnings and employment data presented in the impact analysis are based on the experiences of the impact survey sample (both experimentals and controls) within twelve months after random assignment. The analysis in this chapter is concerned only with the post-program employment experiences of participants and the characteristics of the first job they held after leaving the program; employment data on individuals who were randomly assigned and never participated in the program or who were still active at the time of the interview are not included. While useful from an operational standpoint, such information should not be used to judge the effectiveness of the program model. That judgment must be reserved until the completion of the impact analysis measuring increases in earnings, employment, education, and other outcomes. Preliminary impact findings are presented in the following chapter.

---

[4]Occupational categories for jobs and training areas were derived from the U.S. Department of Labor, Dictionary of Occupational Titles, 1977. Participants are considered to have been employed in training-related jobs when the first digit of the DOT code for a job corresponds to the first digit of the DOT code of the JOBSTART training category. This definition of training-related may differ from that used in other programs or studies. For participants enrolled in more than one training category, training-related is based on the category they attended for the most hours.

[5]Because of very small sizes at the sequential sites (29 at the sequential/in-house sites and 33 at the sequential/brokered sites), an analysis by type of program structure is not shown.

Table 8.4

Characteristics of First Jobs for Surveyed Participants Employed after JOBSTART, by Sex and Parental Status

Measure	Males	Females			Males and Females
		Living with Children	Not Living with Children	All Females	
Percent employed after JOBSTART (%)[a]	59.1	34.3	48.8	41.6	49.8
Hourly wage (%)					
$3.50 or less	29.1	42.6	35.1	36.3	33.1
3.51-4.50	30.3	35.2	43.2	39.8	34.5
4.51-5.50	20.6	9.3	16.2	13.3	17.4
5.51-8.00	15.2	13.0	5.4	8.6	12.3
8.00 or more	4.8	0.0	0.0	0.0	2.7
Average hourly wage ($)	4.65	4.14	3.94	4.02	4.37
Hours per week (%)					
1-20	15.2	21.8	22.7	22.3	18.3
21-30	17.0	20.0	16.0	17.7	17.3
31-40	55.6	50.9	49.3	50.0	53.2
41 or more	12.3	7.3	12.0	10.0	11.3
Average weekly hours	35.0	31.1	33.7	32.6	33.9
Health insurance available (%)					
Paid in full by employer	12.8	13.8	11.0	12.1	12.5
Paid in part by employer	11.6	13.8	12.2	12.9	12.2
Not paid by employer	2.3	1.7	2.4	2.1	2.2
No insurance	73.3	70.7	74.4	72.9	73.1
Subsidized (%)	9.4	8.9	12.5	11.0	10.1
Training-related job[b] (%)	25.7	47.2	64.3	56.0	38.5
Occupational category (%)					
Professional, technical, and managerial	4.0	7.1	0.0	3.0	3.6
Clerical and sales	14.8	44.6	61.0	54.1	31.7
Service	31.8	32.1	24.7	27.8	30.1
Agricultural, fishery, forestry, and related	3.4	0.0	1.3	0.8	2.3
Processing	1.1	1.8	0.0	0.8	1.0
Machine trades	6.8	3.6	2.6	3.0	5.2
Benchwork	1.1	1.8	0.0	0.8	1.0
Structural work	14.8	0.0	1.3	0.8	8.7
Miscellaneous	22.2	8.9	9.1	9.0	16.5
Number of surveyed participants employed[c]	175	58	83	141	316

(continued)

Table 8.4 (continued)

SOURCE: MDRC calculations from the JOBSTART twelve-month survey.

NOTES: This table includes data for all youths randomly assigned between August 1985 and March 1987 who were active for at least one hour in at least one JOBSTART education, training, or other component within twelve months of random assignment, who responded to the twelve-month survey and who left JOBSTART within twelve months of random assignment. Participants who remained in JOBSTART beyond twelve months and those who did not hold a job after they left JOBSTART are not included in this table.

The first job after JOBSTART refers to the first occurrence of employment following an individual's final participation in JOBSTART. Such employment may include jobs begun prior to leaving the JOBSTART program.

Distributions may not add to 100.0 percent because of rounding.

Tests of statistical significance were not examined.

[a]This measure is based on the number of surveyed participants who left JOBSTART within twelve months of random assignment.

[b]Occupational categories for jobs and training areas were derived from the Department of Labor, Dictionary of Occupational Titles, 1977. Participants are considered to have been employed in training-related jobs when the first digit of the DOT code for a job corresponds to the first digit of the DOT code of the JOBSTART training course. For participants enrolled in more than one training category, training-related is based on the category in which they attended the most hours.

[c]Up to 59 sample members were missing information on the first job after JOBSTART.

CHAPTER 9

PRELIMINARY IN-PROGRAM IMPACTS

I. Introduction

The fundamental goals of the JOBSTART program include enhancing employability, earnings, and educational attainment and reducing dependency on welfare. This chapter uses survey data gathered twelve months after random assignment to report on the effectiveness of the program in achieving these goals in the short run, when many participants were still in the demonstration. Longer run, initial post-program impacts must await the availability of twenty-four-month survey interviews.

To evaluate any program, it is necessary to answer two basic questions. First, on average, what happened to those who were offered the program? Second, on average, what would have happened to them had they not been offered the program? The average effect, or "impact," of a program is the difference between these two outcomes. Since assignment to JOBSTART was random, there were no systematic differences between experimentals and controls at enrollment, and outcomes for controls could be used to measure what would have happened to experimentals without the program.

This chapter addresses five key questions:

1. Did the experimental group receive more basic education and occupational skills training than the control group?

2. Did the experimental group achieve more educationally, as measured by receipt of high school diplomas or General Educational Development (GED) certificates?

3. What was the early impact of the JOBSTART program on employment and earnings? Did participation entail short-term sacrifices of employment opportunities or earnings?

4. Were the effects of JOBSTART different for men than for women? Were they different for those who were parents? Did impacts vary according to age, grade at time of dropout, or other characteristics?

5. Did JOBSTART reduce the birth rate among women, or cut AFDC receipt and AFDC income? Did it reduce criminal arrest rates, especially for men?

II. Summary of Preliminary Impact Findings

All impacts presented in this report are preliminary, for two reasons. First, as noted above, the data cover the experiences of sample members for only the first twelve months after random assignment, when many JOBSTART youths were still receiving program services. Second, as explained in Appendix B, these short-term data are themselves incomplete: surveys were fielded for only 74.0 percent of the full sample, underrepresenting later-starting sites.

From data available now, it is clear that, so far, JOBSTART has had a substantial, statistically significant, favorable effect on educational attainment.[1] By the end of the first year after random assignment, 27.5 percent of experimentals and 9.9 percent of controls had attained high school diplomas or GEDs, for an impact of 17.6 percentage points. The bulk of this impact, sustained throughout the twelve-month follow-up period, was due to attainment of GEDs by experimentals. However, since some controls achieved high school diplomas or GEDs without JOBSTART, and even more may do so after the initial year of the demonstration, it will be important to determine whether the experimental-control difference continues.

As expected, experimentals paid a substantial price in forgone employment and earnings for these impacts on educational attainment. They could not be in two places at the same time. Compared to controls, JOBSTART youths had less time available for work, since they were in an intensive program of education and occupational skills instruction. At some point during the year, 58.2 percent of experimentals worked compared to 62.8 percent of controls (a statistically significant difference). Experimentals (including those who did not work) worked an average of 12 weeks during the year, 3 weeks fewer than the control average of 15 weeks. Controls also earned more than experimentals in that year. However, since neither group worked very many weeks or earned very much during the year, it is the long-run impacts that will indicate whether time spent in the JOBSTART program paid off in subsequent labor market success. Given the favorable educational impacts, experimentals seem better positioned for potentially greater employment and earnings in the future.

Another way to look at the partial substitution of program participation for employment is to examine the extent to which sample members either worked or were in programs of educational or occupational training, in preparation for work. Over the twelve months following random assignment, fully 97.2 percent of experimentals were employed or in education or training compared to 73.9 percent of controls, for a positive impact of 23.3 percentage points.

III. Research Issues

Before further exploring the impacts of the JOBSTART program, it is appropriate to

---

[1]"Statistically significant" means that the difference between the average outcome for experimentals and the average outcome for controls is unlikely to have arisen entirely by chance.

address a few points about the research itself.

First, it is important to understand the nature of the control group. The interpretation and usefulness of evaluation results depend on the extent of differences between research groups (experimentals and controls) in services received. The JOBSTART control group was used as a benchmark for measuring program impacts. If most controls received services similar to those provided in the JOBSTART program, the benchmark would have been useless and it would be impossible to evaluate JOBSTART. Because JOBSTART targeted disadvantaged dropouts with poor reading skills, a group for whom very limited services existed, it was anticipated that JOBSTART controls would not be heavily served.

Even though many performance-driven programs screen out people with very low reading skills, JOBSTART recruits may have been somewhat more determined to receive help than the average school dropout, so JOBSTART controls were not a no-service group: 29.3 percent of them found remedial or occupational instruction elsewhere. The program impacts presented here are the incremental effects of JOBSTART over the mix of other available services.

Second, this report does not present post-program impacts. All the events tracked by the JOBSTART survey (including GED receipt and employment) were reckoned from the date of random assignment, not the date of termination from the program. When did termination occur? There was a great deal of variation in lengths of stay in JOBSTART. However, the twelve-month survey follow-up covered a period when many youths were primarily in program activities. During most of those twelve months, as Table 9.1 shows, many youths in the experimental group were still in JOBSTART.[2] More than 50 percent had never participated or left by the end of the sixth month after random assignment, more than 75 percent had done so by the end of the tenth month, but 15 percent still remained in JOBSTART at the end of the twelve-month period.

Four methodological issues were important to the JOBSTART evaluation. They are discussed in detail in Appendix B but are summarized here.

1. Selection Bias. Random assignment -- in effect, a lottery -- was used to avoid "selection bias" in measuring JOBSTART impacts. Without it, some people (for example, youths who are more or less employable or interested in services) might have bee more likely to have "selected" themselves, or to have been selected by others, for either the experimental or control group, thereby biasing the comparison. Analysis confirms that the random assignment procedure did produce experimental and control groups that were similar in all relevant measurable ways.

---

[2]Table 9.1 presents length of stay information for 714 experimentals -- including participants and nonparticipants -- assigned through March 1987 and responding to the survey. It differs from Table 4.1, which included some experimentals assigned after March 1987 and some who did not complete the survey.

Table 9.1

Length of Stay in JOBSTART, for Surveyed Experimentals

Activity Measure	Number of Experimentals	Percent of Experimentals	Cumulative Percent Terminated from JOBSTART[a]
Never participated	48	6.7	6.7
Participated	666	93.3	--
Last participated in any JOBSTART activity during month			
Of random assignment	31	4.3	11.1
2	47	6.6	17.6
3	64	9.0	26.6
4	47	6.6	33.2
5	66	9.2	42.4
6	76	10.6	53.1
7	71	9.9	63.0
8	26	3.6	66.7
9	31	4.3	71.0
10	31	4.3	75.4
11	51	7.1	82.5
12	18	2.5	85.0
Number of surveyed experimentals	714	100.0	

SOURCE: MDRC calculations from the JOBSTART Monthly Participation Reports.

NOTES: The sample of experimentals for this table consisted of all survey completers randomly assigned between August 1985 and March 1987.

Sums of percentages may not match cumulative percentages exactly due to rounding.

[a]The "cumulative percent terminated from JOBSTART" by the end of each month includes those who never participated and those who last participated in or before the indicated month.

2. Effect of the Enrollment Period. Analysis shows that the 1,709 people who were randomly assigned early in the JOBSTART Demonstration -- and so were over-represented in the twelve-month surveys available for this report -- differed in many ways from the entire sample of 2,311. The effects of those differences on impacts, however, will not be clear until the twelve- and twenty-four-month surveys of the full sample have been analyzed.

3. Nonresponse Bias. Were the 1,401 early sample members who responded to the twelve-month survey representative of the full early sample of 1,709 people assigned through March 1987? Appendix B shows that there were some systematic differences between responders and nonresponders. When such differences exist, impacts calculated using only responders may differ from the impacts that could be calculated if the whole sample were available. (Technically, this is called a "nonresponse bias.") However, the overall response rate was 82.0 percent -- a high rate, given the nature of the population surveyed -- and was not significantly different for experimentals and controls. No corrections for nonresponse bias were attempted in this initial impact analysis.

4. Impact of Participation Versus Impact of Assignment. Some of those who were randomly assigned to the experimental group (the group given access to the JOBSTART program) never participated. However, they were still included as part of the experimental group when average impacts were calculated, somewhat "watering down" the impacts.[3] Fortunately, the number of nonparticipants was small (only 48 of the 714 experimentals in the twelve-month survey), so including them "diluted" the impacts only slightly. In other words, while the impacts refer to all surveyed experimentals (nonparticipants as well as participants), they would be about the same if they were adjusted to apply to surveyed participants only. (See Appendix B for details on such adjustments.)

IV. Impacts on Receipt of Education and Occupational Skills Training

Interpretation of all JOBSTART impact results rests on the nature of the differences in program services received by the two research groups -- the experimentals, who were offered and (for participants) received JOBSTART program services, and the controls, who were free to seek out other services. Table 9.2 shows that, over the year as a whole, 94.5 percent of experimentals and 29.3 percent of controls received some education or training, for an impact of 65.2 percentage points. This impact was statistically significant.[4] The proportion

---

[3]If the nonparticipants had not been counted, the experimental group would no longer have been truly comparable to the control group. Including them in the impact calculations was designed to avoid another form of "selection bias" -- in this case, caused by those who had "selected themselves" out of their chance to join the JOBSTART program.

[4]The righthand column of the table gives the p-value of the impact, that is, the probability it could have arisen entirely by chance. Whenever the p-value of an impact is 0.10 or less, the impact is considered to be statistically significant.

Table 9.2

Twelve-Month Preliminary Impacts
on Receipt of Education and Training

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Ever received any education or training in months 1-12 (%)	94.5	29.3	65.2***	0.000
Total hours of education or training received in months 1-12	459.69	115.87	343.83***	0.000
Ever received education or training (%)				
Months 1-3	92.5	10.2	82.3***	0.000
Months 4-6	74.2	15.0	59.2***	0.000
Months 7-9	49.9	18.2	31.7***	0.000
Months 10-12	33.8	17.6	16.2***	0.000
Hours of education or training received				
Months 1-3	172.96	15.86	157.10***	0.000
Months 4-6	146.19	33.60	112.59***	0.000
Months 7-9	85.84	35.36	50.47***	0.000
Months 10-12	54.70	31.04	23.66***	0.000
Ever received basic education instruction in months 1-12 (%)	91.5	24.0	67.5***	0.000
Ever received basic education (%)				
Months 1-3	89.0	8.8	80.3***	0.000
Months 4-6	65.7	12.8	52.8***	0.000
Months 7-9	35.0	14.7	20.2***	0.000
Months 10-12	21.5	14.6	6.9***	0.001
Ever received occupational skills training in months 1-12 (%)	78.8	17.1	61.7***	0.000
Ever received skills training (%)				
Months 1-3	63.4	4.7	58.8***	0.000
Months 4-6	60.6	8.4	52.2***	0.000
Months 7-9	42.3	10.9	31.5***	0.000
Months 10-12	28.4	10.3	18.1***	0.000
Number of survey completers	714	687		

SOURCE: MDRC calculations from JOBSTART Enrollment Form, Monthly Participation Report, and twelve-month survey data.

NOTES: All impact calculations for this report use survey completers randomly assigned between August 1985 and March 1987, including those with values of zero for outcomes and those who were assigned to JOBSTART but did not participate.

Average experimental and control group outcomes reported here are adjusted means from a linear analysis of covariance procedure controlling for 31 kinds of differences in characteristics before random assignment. See Ostle (1975, p. 461), Cave (1987), and Appendix Table B.6. There may be slight discrepancies in reported sums and differences of these adjusted means due to rounding.

Two-tailed t-tests were applied to differences between average experimental and control outcomes. The column labeled "p" is the statistical significance level of the difference in average outcomes. That is, the probability that average outcomes are different only because of random error is p. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

"Any education or training" includes JOBSTART and non-JOBSTART educational, occupational training, and related activities. For experimentals, "hours of education or training" includes JOBSTART hours data from the Monthly Participation Reports as well as non-JOBSTART hours data from the twelve-month survey.

of experimentals in programs, mainly JOBSTART,[5] was highest during the first three months and fell steadily over time. The proportion of controls in programs always was much smaller and seemed to peak during months seven through nine.

Hours of education and training followed a very similar pattern. Table 9.2 shows that, over the course of the year, experimentals received an average of 460 hours, while controls received an average of 116 hours, for an impact of 344 hours. Experimental hours were highest at the beginning of the year and fell steadily, while control hours, always much lower, seemed to peak during months seven through nine.

Among those 94.5 percent of experimentals and 29.3 percent of controls who received any services during the year -- that is, excluding those who received no services -- experimentals averaged 486 hours, and controls averaged 395 hours. That difference in hours may understate the matter. The controls who actively sought out services were probably comparable to experimentals who were heavy participants in JOBSTART and who thus probably averaged far more than 486 hours. In any case, the planned service differential between experimentals and controls materialized. Not only did experimentals receive education and training at vastly higher rates than controls, but they also on average received more hours.

V. Impacts on Educational Attainment

First-year educational attainment impacts for JOBSTART were quite similar to those for the program that inspired it, the residential Job Corps. An evaluation of the Job Corps found that 24 percent of its members, but only 5 percent of the comparison group, had high school diplomas or GEDs six months after termination time.[6] JOBSTART's first-year impacts on educational attainment are presented in Table 9.3. Low rates of attaining high school credentials for both experimentals and controls reflected severe problems in reading for many of the young adults in the JOBSTART program. Attainment of high school diplomas or GEDs by controls grew from 4.4 percent by the end of the third month to 9.9 percent by the end of the twelfth month. The same measure for experimentals almost tripled from month three to month six, and then grew more slowly, to 24.9 percent by month nine and 27.5 percent by month twelve. The cumulative impact on attainment of diplomas or GEDs was 2.2 percentage points at the end of month three, grew to 12.7 percentage points by the end of month six, and leveled off to 17.6 percentage points by month twelve. Each of these impacts was statistically significant.

---

[5]Fifteen percent of the JOBSTART experimentals received other or additional education or training.

[6]Mallar et al., 1982. See also Betsey et al., 1985, p. 112. Because the median length of stay in JOBSTART was six months (see Table 4.1), twelve months after JOBSTART random assignment is a point in time comparable to six months after termination from JOBSTART. Thus JOBSTART impacts twelve months after random assignment are comparable to Job Corps impacts six months after termination.

Table 9.3

Twelve-Month Preliminary Impacts on
Post-Random Assignment Educational Attainment

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Received GED by end of (%)				
Month 3	5.7	2.5	3.2***	0.003
Month 6	17.6	3.5	14.1***	0.000
Month 9	23.8	4.8	19.0***	0.000
Month 12	26.5	6.9	19.6***	0.000
Received GED or high school diploma by end of (%)				
Month 3	6.6	4.4	2.2*	0.067
Month 6	18.6	5.9	12.7***	0.000
Month 9	24.9	7.4	17.5***	0.000
Month 12	27.5	9.9	17.6***	0.000
Number of survey completers	714	687		

SOURCE: MDRC calculations from JOBSTART Enrollment Form, Monthly Participation Report, and twelve-month survey data.

NOTES: All impact calculations for this report use survey completers randomly assigned between August 1985 and March 1987, including those with values of zero for outcomes and those who were assigned to JOBSTART but did not participate.

Average experimental and control group outcomes reported here are adjusted means from a linear analysis of covariance procedure controlling for 31 kinds of differences in characteristics before random assignment. See Ostle (1975, p. 461), Cave (1987), and Appendix Table B.6. There may be slight discrepancies in reported sums and differences of these adjusted means due to rounding.

Two-tailed t-tests were applied to differences between average experimental and control outcomes. The column labeled "p" is the statistical significance level of the difference in average outcomes. That is, the probability that average outcomes are different only because of random error is p. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

Compared to the impacts just described for attainment of a high school diploma or GED, the impact on attainment of a GED alone was slightly larger. The impact on this measure grew according to a similar pattern, from 3.2 percentage points at the end of month three to 19.6 percentage points by the end of month twelve. This pattern of impacts reflects (1) an emphasis on GED attainment at many sites (as described in Chapters 2 and 6); (2) a slightly greater chance of returning to regular high school for controls than for experimentals, although both events were rare; and (3) apparent availability of alternative GED instruction outside the JOBSTART program for only a minority of controls, at least during the first year after random assignment. While the impacts on educational attainment were very favorable, they may not stay the same over time. Cumulative rates of receipt of either credential still seemed to be growing at the end of the first year, for both experimentals and controls.

VI. Impacts on Employment and Earnings

GED attainment during or after intensive JOBSTART educational instruction ultimately may open up many employment opportunities for JOBSTART participants. While, if the program is effective, long-run impacts of JOBSTART on employment rates will be positive, short-term impacts can be expected to be negative.[7] JOBSTART youth have less time available for work. Some work nonetheless, though they may reduce their hours of work per week; others forgo employment while in the program.

Because young adults tend to apply for employment and training programs when they are between jobs, employment rates grew for both experimentals and controls (see Table 9.4), but in each period a higher fraction of controls than experimentals was employed. The differences declined over time, from a statistically significant 10.9 percentage points in months one through three to 2.6 percentage points in months ten through twelve. During the last three months of the year, about one-half of each group had worked at some point. During the year as a whole, 62.8 percent of controls and 58.2 percent of experimentals worked, for a statistically significant reduction in the experimental employment rate of 4.7 percentage points.

Like employment rates, weeks of employment per quarter grew over time for both groups, but controls always were ahead of experimentals. The difference narrowed to less than two-thirds of a week during the last three months of the year. (See Table 9.4.) Measuring outcomes in dollars reinforces these results. While experimentals earned an average of $1,773, controls earned an average of $2,490, for a statistically significant first-year earnings loss of $717. Earnings grew over time for both groups, but controls stayed ahead of experimentals. The earnings difference declined to $153 during the last three months. Given these trends in impacts on employment and earnings, longer term results will be the

[7]For example, an evaluation of the residential Job Corps estimated that, during the first six months after termination, program effects on employment and weeks of work were negative. These impacts became positive during the next six months and peaked during the following six months, from twelve to eighteen months after termination. See Mallar et al. 1982, p. 135.

Table 9.4

Twelve-Month Preliminary Impacts on Employment and Earnings

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Ever employed in months 1-12 (%)	58.2	62.8	-4.7**	0.049
Total number of weeks employed in months 1-12	11.80	15.23	-3.44***	0.000
Ever employed in (%)				
Months 1-3	18.4	29.2	-10.9***	0.000
Months 4-6	29.0	38.4	-9.5***	0.000
Months 7-9	41.0	45.3	-4.2*	0.088
Months 10-12	48.2	50.9	-2.6	0.286
Total number of weeks employed in				
Months 1-3	1.44	2.27	-0.83***	0.000
Months 4-6	2.43	3.72	-1.29***	0.000
Months 7-9	3.65	4.32	-0.68**	0.012
Months 10-12	4.28	4.92	-0.64**	0.021
Total earnings in months 1-12 ($)	1772.78	2490.25	-717.47***	0.000
Total earnings ($)				
Months 1-3	193.73	361.67	-167.94***	0.000
Months 4-6	353.93	603.08	-249.15***	0.000
Months 7-9	561.74	709.53	-147.79***	0.004
Months 10-12	663.37	815.96	-152.59***	0.006
Ever employed or in education or training in months 1-12 (%)	97.2	73.9	23.3***	0.000
Ever employed or in education or training in (%)				
Months 1-3	94.2	37.2	57.0***	0.000
Months 4-6	83.5	49.4	34.1***	0.000
Months 7-9	72.7	56.6	16.0***	0.000
Months 10-12	67.9	61.3	6.5***	0.008
Number of survey completers	714	687		

SOURCE AND NOTES: See Table 9.3.

key criteria by which to judge JOBSTART's effect on labor market success.

Another indicator of the partial substitution of JOBSTART for employment is the extent to which sample members either worked or were in programs of education or occupational training, preparing for work. The top of the last panel of Table 9.4 shows that, over the twelve months following random assignment, 97.2 percent of experimentals were employed or in training compared to 73.9 percent of controls, for a positive impact of 23.3 percentage points. While the impact was 57.0 percentage points during months one through three, as experimentals left JOBSTART it declined at a decreasing rate to 6.5 percentage points during months ten through twelve.

VII. Impacts for JOBSTART Women Compared to Those for Men

A key question for the evaluation was how the impacts of JOBSTART varied among major subgroups -- especially women (including single parents), whose potential long-term welfare dependency is a concern, and men, who have not fared particularly well in programs for the disadvantaged. This section will focus first on women and then on men, although a comparative perspective will be used throughout. In the final section of the chapter, the impact on various other subgroups will be examined with respect to one central impact: educational attainment.

Many previous evaluations of youth employment and training programs have found larger program impacts for women than for men.[8] For example, while the Job Corps' high school or GED completion impacts were 12.9 percentage points for men, they were 30.3 percentage points for Job Corps women with childcare responsibilities, and 51.8 percentage points for women without such responsibilities.[9] In addition, on a percentage basis Job Corps employment and earnings impacts for women without childcare responsibilities were larger than impacts for males.[10]

One possible explanation for these results is that the Job Corps and similar programs face different challenges increasing the employment of young women than young men. Many of the young women (for example, some mothers of young children) have never worked, or only worked part-time. In contrast, more of the men may have already tried and failed to find and keep steady work. It may be easier to bring the young women into the labor force than to increase the employment of young men who have a track record of failure.

Other factors may help explain better program impacts for women. Women are more likely than men to be custodial parents; thus the main obstacle to their education or employment is more likely to be childcare, which a program can arrange, than a less tractable problem such as poor reading skills. Also, if women are perceived by employers as less likely to be involved in crimes, they would be more likely to be hired. The figures for controls in

---

[8]See Betsey et al., 1985 for survey.
[9]See Mallar et al., 1982, p. 165.
[10]See Mallar et al., 1982, p. 124.

Table 9.5 indicate that some of these factors may be at work in the JOBSTART population. For example, compared to the 12.7 percent arrest rate for all controls, the 4.6 percent arrest rate for women reported in Table 9.5 shows that men must account for most of the arrests in the JOBSTART population.

The first line of Table 9.5 shows that slightly under a third of women in the control group received education or training, while almost all of the women in the experimental group did. The intensity was about the same for women in the experimental group as it was for the full sample of experimentals -- approximately 460 hours. However, women in the control group received a few more hours than did all controls, so that the women's experimental-control difference in service intensity, 320 hours, was slightly smaller than the full sample's.

Educational attainment impacts were even stronger for women than for the full sample. (See Table 9.3.) Table 9.5 shows that while 8.9 percent of women in the control group received high school diplomas or GEDs by the end of the first year after random assignment, 30.1 percent of women in the experimental group received such credentials, for an impact of 21.2 percentage points, compared to the 17.6 percentage point impact for the sample as a whole (including men). The impact on GED receipt alone was slightly larger -- 23.4 percentage points -- compared to 19.6 percentage points for the full sample.

To achieve these impacts, women in the experimental group sacrificed less employment time and less earnings than did all experimentals. About half the women in the experimental group and half in the control group worked at some point during the year; women in the experimental group worked 2 fewer weeks than did women in the control group and earned $386 less. By the end of the year, experimentals had caught up with controls in employment: 38.8 percent of experimentals were employed at some point during the last three months of the year, compared to 37.5 percent of controls. This positive impact was not statistically significant, however.

Young, unmarried women who lack high school diplomas may have relatively high risks of extended welfare dependency.[11] While post-program impacts on AFDC receipt may prove to be favorable, Table 9.5 shows that among the 744 female sample members, there were no significant first-year impacts on receipt of AFDC, time on AFDC, or AFDC income, perhaps because the women needed those AFDC funds to help support themselves while in the JOBSTART program.[12] For the most part, the third of the sample who received AFDC were

---

[11]See, for example, Bane and Ellwood, 1983.

[12]Tables 9.5 and 9.6 indicate that someone is "receiving AFDC" only when a sample member has her own case. A sample member who did not receive AFDC on her own case may have been part of another household member's AFDC case, which would not be indicated in these tables. Table 3.3 showed that a substantial number of sample members were on another person's case at baseline.

Random assignment did not always take place on the first of the month. For some sample members, the month of random assignment may be a partial month from the date of random assignment to the first of the next month. First-month AFDC income for these

(continued...)

Table 9.5

Selected Twelve-Month Preliminary Impacts
for JOBSTART Women

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Ever received any education or training in months 1-12 (%)	94.2	31.7	62.6***	0.000
Total hours of education / training received in months 1-12	462.24	142.62	319.62***	0.000
Received GED by end of month 12 (%)	29.3	5.9	23.4***	0.000
Received GED or high school diploma by end of month 12 (%)	30.1	8.9	21.2***	0.000
Ever employed in months 1-12 (%)	50.2	49.5	0.6	0.858
Ever employed in (%)				
Months 1-3	14.2	19.4	-5.2*	0.052
Months 4-6	21.5	28.2	-6.7**	0.028
Months 7-9	35.1	34.8	0.3	0.928
Months 10-12	38.8	37.5	1.3	0.714
Total number of weeks employed in months 1-12	9.08	10.75	-1.67*	0.096
Total earnings in months 1-12 ($)	1199.75	1585.57	-385.82**	0.021
Ever employed or in education or training in months 1-12 (%)	95.9	65.9	30.0***	0.000
Ever arrested in months 1-12 (%)	3.3	4.6	-1.3	0.363
Ever received AFDC in months 1-12 (%)	38.7	36.4	2.3	0.398
Number of months received AFDC in months 1-12	3.85	3.74	0.11	0.703
Ever received AFDC in (%)				
Months 1-3	31.5	30.5	1.0	0.683
Months 4-6	32.8	32.5	0.4	0.888
Months 7-9	34.3	32.0	2.3	0.390
Months 10-12	34.9	33.9	1.0	0.733
Total AFDC income in months 1-12 ($)	1208.53	1121.07	87.46	0.405
Total AFDC income in ($)				
Months 1-3	275.98	260.25	15.73	0.544
Months 4-6	289.43	280.20	9.23	0.733
Months 7-9	313.51	282.87	30.64	0.275
Months 10-12	329.61	297.75	31.86	0.278
Ever gave birth in months 1-12 (%)	17.9	16.2	1.7	0.538
Number of female survey completers	386	358		

SOURCE and NOTES: See Table 9.2.

the same people from quarter to quarter and for the year as a whole. Among those who received AFDC at some point during the year, the average time on AFDC was about 10 months for experimentals and controls. Controls averaged $1,121 in AFDC income for the year; the average grant among those controls who received grants was about $3,080 per year. A slightly higher proportion of experimentals received grants for the year as a whole and during every quarter. On average, experimentals received $87, or 7.8 percent more AFDC income than controls.

Women with better earnings prospects may be more likely to postpone childbearing in order to join the labor force. The last impact listed in Table 9.5 indicates that controls, who had higher rates of employment than did experimentals during the first year, also had slightly lower rates of childbirth, although the difference was not statistically significant: 16.2 percent of women in the control group and 17.9 percent of women in the experimental group gave birth at some point during the year. The numbers are striking in a sample of volunteers for education and training who have been observed for only one year.

The evaluation of the Job Corps focused special attention on the women who had responsibility for the care of their own children. Table 9.6 presents key impacts for a similarly defined group of JOBSTART young women, who said that they were living with at least one of their own children at the time of random assignment. These impacts generally were in the same direction as impacts for all women and for the full sample. Most notable are the narrower earnings differences between experimentals and controls in this subsample of young mothers, $161, compared to $386 for all women. In part, this difference in earnings impact may have reflected less labor market activity for the women with children: while one-half of all the women controls worked during the year, only 37.9 percent of women controls with children did. These findings suggest less substitution of JOBSTART for labor market work for those with family responsibilities.

Just as the calculations for Table 9.5 excluded all men, so the calculations for Table 9.7 exclude all women. There were important differences in results by sex, although the most important short-term result, the impact on educational attainment, was favorable and strong for both groups. The impact on attainment of a GED or high school diploma was 13.7 percentage points over a control rate of 10.8 percentage points, compared to 21.2 percentage points for women over a control rate of 8.9 percentage points.

Men spent much more time working than women, and they sacrificed more employment and earnings to take part in JOBSTART. Including the approximately one-half who did not work, women in the control group worked an average of 11 weeks during the year and earned an average of $1,585. Including 22.5 percent who did not work, men in the control group worked an average of 20 weeks and earned an average of $3,541. Men in the experimental

---

[12](...continued)
sample members includes income for the period before random assignment. However, with perfect random assignment, any difference in first month outcomes between experimentals and controls would be due to income for the period after random assignment.

Table 9.6

Selected Twelve-Month Preliminary Impacts for
JOBSTART Women Living with Their Children at Random Assignment

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Ever received any education or training in months 1-12 (%)	94.6	27.7	66.9***	0.000
Total hours of education or training received in months 1-12	443.08	132.46	310.62***	0.000
Received GED by end of month 12 (%)	53.2	5.3	27.8***	0.000
Received GED or high school diploma by end of month 12 (%)	33.1	6.4	26.7***	0.000
Ever employed in months 1-12 (%)	43.2	37.9	5.3	0.302
Ever employed in (%)				
Months 1-3	10.5	15.1	-4.7	0.193
Months 4-6	18.1	19.8	-1.6	0.695
Months 7-9	30.4	25.1	5.3	0.253
Months 10-12	34.6	27.8	6.8	0.164
Total number of weeks employed in months 1-12	7.51	8.06	-0.55	0.689
Total earnings in months 1-12 ($)	950.14	1110.79	-160.65	0.448
Ever employed or in education or training in months 1-12 (%)	95.3	56.8	38.6***	0.000
Ever arrested in months 1-12 (%)	4.2	5.9	-1.7	0.471
Ever received AFDC in months 1-12 (%)	65.0	59.3	5.7	0.181
Number of months received AFDC in months 1-12	6.60	6.49	0.11	0.821
Total AFDC income in months 1-12 ($)	2130.50	1911.09	219.42	0.193
Ever gave birth in months 1-12 (%)	17.6	12.8	4.8	0.218
Number of female survey completers living with their children	187	188		

SOURCE and NOTES: See Table 9.2.

Table 9.7

Selected Twelve-Month Preliminary Impacts for JOBSTART Men

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Ever received any education or training in months 1-12 (%)	95.4	26.1	69.3***	0.000
Total hours of education or training received in months 1-12	461.13	82.34	378.79***	0.000
Received GED by end of month 12 (%)	23.6	7.8	15.9***	0.000
Received GED or high school diploma by end of month 12 (%)	24.5	10.8	13.7***	0.000
Ever employed in months 1-12 (%)	67.4	77.5	-10.1***	0.002
Ever employed in (%)				
Months 1-3	22.9	40.4	-17.5***	0.000
Months 4-6	37.1	50.2	-13.1***	0.000
Months 7-9	47.7	57.0	-9.2**	0.013
Months 10-12	58.7	66.1	-7.4**	0.042
Total number of weeks employed in months 1-12	14.69	20.40	-5.71***	0.000
Total earnings in months 1-12 ($)	2380.17	3541.42	-1161.25***	0.000
Ever employed or in education or training in months 1-12 (%)	98.8	82.6	16.2***	0.000
Ever arrested in months 1-12 (%)	18.4	21.8	-3.4	0.271
Number of male survey completers	328	329		

SOURCE and NOTES: See Table 9.2.

group sacrificed $1,161 in earnings to attend JOBSTART, while women in the experimental group gave up $386. By the end of the year, male experimentals still were behind controls in rates of employment, but they had closed much of the initial gap. During the last three months, 58.7 percent of male experimentals were employed at some point, compared to 66.1 percent of controls.

Impacts of the JOBSTART program on criminality are also of interest, especially regarding the young men, 25.1 percent of whom said that they had been arrested at some point between their sixteenth birthday and their recruitment into JOBSTART. (For women this is a far less salient issue, since 6.0 percent of them reported having been arrested at the time.) The residential Job Corps had been found to reduce rates of arrest during program participation and to reduce the seriousness of arrests after termination from the program.[13] The question was: would a nonresidential program such as JOBSTART -- one that did not remove youths from their home environment to a more controlled one -- also show impacts? Analysis shows that there was a favorable, though statistically insignificant, impact on arrest rates for males. More notable were the high proportions of both groups who said that they had been arrested during the year: 18.4 percent of male experimentals and 21.8 percent of male controls.

VIII. Impacts for Other Selected Subgroups

The primary goal of the evaluation is to estimate overall impacts of the JOBSTART program on its target population, and the sample was large enough for that purpose. Although the sample provided considerably less statistical power for estimating impacts on different subgroups, a thorough analysis was carried out for the most important educational attainment outcome, receipt of a high school diploma or GED. Table 9.8 presents different types of comparisons: one shows the impacts for different subgroups of the sample (for example, for older and for younger youths); another indicates whether the impacts are larger for one subgroup or the other (for example, older versus younger youths). To illustrate: the top three rows show findings for younger and older youths. They show (column 6) that for youths age nineteen and under, JOBSTART resulted in a 16.7 percentage point increase in receipt of a GED or high school diploma compared to 19.9 percentage points for older youths, and that both results are significant. Also, in column 2, we learn that the difference between these two impacts is 3.3 percentage points, and that one subgroup did not do significantly better than the other.

Age. In the general youth population, very different patterns of labor market behavior are evinced at each age. Labor force participation, employment, and earnings increase dramatically from age sixteen to the early twenties.[14] Moreover, program operators often suggest that younger enrollees do not derive as much benefit from training as do somewhat older youths. Although the 3.3 percentage point difference in impacts between older and

[13]Betsey et al., 1985, p. 10.

[14]See Cave, 1985, and Rees, 1986.

Table 9.8

Preliminary Impacts on Educational Attainment at Twelve Months, by Selected Baseline Characteristics

Characteristic and Subgroups	Sample Size	Received GED or High School Diploma by End of Month 12 (%)					
		Subgroup Impact Difference	p	Experimentals	Controls	Subgroup Impact	p
Age		-3.3	0.464	---	---	---	---
19 and under	1005	---	---	26.5	9.8	16.7***	0.000
20 or 21	396	---	---	30.0	10.1	19.9***	0.000
School grade at time of dropout		5.4	0.191	---	---	---	---
Grade 10 or under	851	---	---	27.1	7.4	19.7***	0.000
Grade 11 or 12	550	---	---	28.1	13.8	14.3***	0.000
Received occupational training during 12 months prior to random assignment		-9.7*	0.063	---	---	---	---
No	1155	---	---	26.8	11.0	15.9***	0.000
Yes	246	---	---	30.8	5.2	25.6***	0.000
Employed within 12 months prior to random assignment		0.3	0.931	---	---	---	---
Some	813	---	---	27.6	9.9	17.7***	0.000
None	588	---	---	27.2	9.8	17.4***	0.000
Received own AFDC, general assistance, or home relief at random assignment		-5.9	0.186	---	---	---	---
No	1028	---	---	26.1	10.1	16.0***	0.000
Yes (own case)	373	---	---	31.5	9.5	22.0***	0.000
Marital status		-16.5**	0.011	---	---	---	---
Never married	1250	---	---	26.3	10.5	15.8***	0.000
Other	151	---	---	36.5	4.2	32.3***	0.000
Parenting status		-8.3**	0.050	---	---	---	---
No children	920	---	---	26.8	12.1	14.7***	0.000
Has one child or more	481	---	---	28.6	5.7	22.9***	0.000
Lives with own children		-13.1***	0.003	---	---	---	---
No, or no children	991	---	---	25.8	12.1	13.7***	0.000
Yes	410	---	---	31.3	4.6	26.7***	0.000
Ethnicity		---	---	---	---	---	---
Hispanic	649	---	---	25.8	8.6	17.2***	0.000
Black	597	---	---	28.4	9.8	18.5***	0.000
White	120	---	---	39.0	15.6	23.4***	0.001
Other	35	---	---	4.5	14.2	-9.8	0.438
Sex		7.8**	0.050	---	---	---	---
Female	744	---	---	29.9	8.6	21.3***	0.000
Male	657	---	---	24.7	11.2	13.4***	0.000

(continued)

Table 9.8 (continued)

SOURCE: MDRC calculations from JOBSTART Enrollment Form and twelve-month survey data.

NOTES: All impact calculations for this report use survey completers randomly assigned between August 1985 and March 1987, including those with values of zero for outcomes and those who were assigned to JOBSTART but did not participate.

For each characteristic which has only two subgroups, the "subgroup impact difference" is the impact for the first subgroup, less the impact for the second subgroup.

Average subgroup experimental and control group outcomes reported here are adjusted means from two-way analysis of covariance procedures controlling for up to 31 kinds of differences in characteristics, other than the characteristic used to define subgroups, before random assignment. The categorical variables used as factors in each procedure were experimental status and, one at a time, the characteristic used to define each subgroup. See Ostle (1975, p. 461). There may be slight discrepancies in reported sums and differences of these adjusted means due to rounding.

Two-tailed t-tests were applied to differences between subgroup impacts and to within-subgroup impacts. The columns labeled "p" contain statistical significance levels for each estimate. That is, the probability that sample estimates are non-zero only because of random error is p. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

younger subgroups was not statistically significant, Table 9.8 lends some support to such a hypothesis.

Highest grade attended. While all JOBSTART recruits were school dropouts, some left school as early as the ninth grade, while others dropped out during their senior year. Table 9.8 reveals that, although the difference in impacts was not statistically significant, educational attainment was improved by a wider margin for those who dropped out earlier than for those who dropped out later. This difference was driven by lower attainment for controls who dropped out earlier rather than by higher attainment for experimentals who dropped out earlier. However, the impact was quite substantial for both earlier and later dropouts.

Recent prior skills training. For a substantial minority of the sample, JOBSTART was not the first try at a second-chance program. Table 9.8 reveals that the educational attainment impact was significantly higher for those who had tried another program during the twelve months preceding enrollment in JOBSTART.

Recent employment. There was no significant difference in impacts between those who had worked at some point in the year before enrollment and those who had not.

Welfare receipt. Those who receive AFDC or General Assistance may tend to get higher levels of support services such as childcare, and sometimes may be mandated to participate in some program in order to maintain eligibility for their cash benefits. Table 9.8 reveals that the educational attainment impact was 5.9 percentage points higher for the group receiving benefits, as compared to those who were not, although this impact difference was not statistically significant.

Marital status. Family responsibilities might play the same role as age in making more mature sample members get more out of an employment training program. Once again, Table 9.8 provides some support to this view. Those who were married, widowed, divorced, or separated had impacts about twice the size of impacts for those who never had been married.

Number of children. While most JOBSTART recruits were childless, a substantial minority had one or more children. The educational attainment impact was significantly lower for those with no children, suggesting that a desire for better economic status for their children may have outweighed any barriers to program participation posed by family responsibilities.

Ethnicity. Blacks and Hispanics in the control groups had the lowest rates of attainment of diplomas or GEDs. However, while the impacts for blacks and Hispanics were somewhat lower than for white non-Hispanics in absolute terms, they were much larger in percentage terms. Impacts for all three ethnic groups were quite substantial. (A very small number of Asian and other sample members had statistically insignificant negative impacts.)

Sex. Within-subgroup impacts for men and women have already been discussed. The last section of Table 9.8 shows that the previously mentioned difference in impact on educational attainment was statistically significant.

Impacts by sites. As explained in Chapter 4, people recruited in one location may differ from those in other locations in their levels of desire for program services, in their determination to overcome obstacles to attending, and in other ways difficult to measure. Fortunately, it is simple to test whether only program features differed from site to site. If groups of individuals randomly assigned at several locations really differed only in features of the programs experimentals could attend, average outcomes for controls at all locations (adjusted for nonprogram differences) would be substantially the same. As expected, when the JOBSTART sample was subdivided in the ways described in Chapter 4, the data failed this test, even after statistical adjustment for observed differences in individual and site characteristics.

Keeping in mind the serious limitations of comparisons across sites a cursory examination of the impacts across three program types (concurrent/in-house, sequential/in-house, and sequential/brokered) suggests that all program types yielded increases in receipt of high school diplomas or GEDs. Less convincing was an apparently higher impact on educational attainment at concurrent sites than at sequential sites. Observed differences between program types may have been driven more by the extent to which particular programs emphasized GEDs and by the extent to which their recruits wanted GEDs than by their organization and sequencing of program activities. For example, Connelley in Pittsburgh and SER/Corpus Christi, both concurrent sites with large impacts on educational attainment, explicitly geared their curricula toward GED attainment. A more thorough examination of youth subgroups and sites will be conducted when longer term follow-up data become available. Results of that analysis will be included in the final impact report on the JOBSTART Demonstration.

CHAPTER 10

OPERATIONAL LESSONS

The JOBSTART Demonstration was launched during a period in JTPA's evolution when the system placed a premium on short-term, low-cost, placement-oriented programs; programs offering a more comprehensive package of services, such as the JOBSTART program model proposed, were unusual. Convincing state and local JTPA administrators to support the JOBSTART model for low-skilled youth was a major challenge. Yet there is a growing consensus that JTPA needs to make a more intensive investment in services for these young people, although as yet the system has not made major changes in the clients enrolled or the services provided.

The JTPA environment has become more receptive to this type of program for three reasons. First, the economic expansion and tightening of labor markets in the second half of the 1980s has highlighted the need to bring low-skilled school dropouts into the economic mainstream. Second, changes in JTPA performance standards by the Department of Labor now facilitate such efforts.[1] Third, an advisory panel to the department on JTPA policy, made up of state and local JTPA officials and employment policy experts, has recommended changes in JTPA that will increase the incentives to provide more intensive service to young dropouts.[2] These recommendations have been embraced by the Department of Labor, which plans to introduce legislation to amend JTPA. Other proposed amendments have been introduced which also shift JTPA toward providing more intensive services for some harder-to-serve clients.

The increased interest in programs like JOBSTART makes this final chapter on operational lessons and optimal administrative practices particularly relevant for state and local JTPA officials and youth employment program operators. The suggestions in this chapter come from many sources: primarily from the JOBSTART experience itself but also from the experiences of other programs. The chapter, therefore, goes beyond the data and research findings of the demonstration and is more wide-ranging than other parts of this report.

The chapter begins by discussing general lessons for operating a program like JOBSTART funded under Title IIA of JTPA; it highlights issues especially relevant for state and local JTPA policymakers and administrators. The chapter then discusses suggestions for recruiting and retaining youths in a program, and for providing basic skills education, occupational training, and job placement assistance. Finally, it turns to the strengths and weaknesses of alternative

---

[1]A regulation was issued in early 1988 to increase the opportunities to enroll hard-to-serve youth and still comply with performance standards. The accompanying preamble to the regulations makes clear the Department of Labor's goal of offering more intensive services for young dropouts within JTPA.

[2]Job Training Partnership Act Advisory Committee, 1989.

strategies concerning three key program design issues: the type of agency operating JOBSTART, whether education and training activities are offered sequentially or concurrently, and whether all services are provided through a single agency or are brokered among several providers.

I. Lessons for Program Implementation Within JTPA

The JOBSTART Demonstration illustrates both the possibilities and difficulties of operating intensive, multi-component programs for disadvantaged youths within the JTPA system. Securing the necessary funding and adjustments in performance standards often took considerable effort, with success generally resulting from the special status of the national JOBSTART Demonstration and the leadership of states and SDAs committed to the program.

The experience of sites after the operational phase of the demonstration ended provides a cautionary lesson, however. Almost all of the thirteen sites (including the three Job Corps Centers) have continued to offer a program combining basic skills education and occupational training, but only seven (the three Job Corps Centers, one school-based site, and three CBOs) continue to provide the range of support services and counseling called for in the demonstration program model.[3] At most of the remaining six sites, JTPA reverted to business as usual. It continues to fund a portion of the program's costs, so the sites are able to provide at least a scaled-down program of education and training, but the special discretionary funding provided during the demonstration for support services and supplemental staff has largely ended.[4] Furthermore, the post-demonstration programs tend not to focus recruitment exclusively on dropouts with low reading scores, the target group for JOBSTART.

Before offering concrete suggestions, it is important to review the constraints in JTPA facing operators of programs like JOBSTART.[5] First, the effort to develop accountability measures that encourage high placement rates and low cost per placement has also made SDAs and program operators hesitant to enroll hard-to-serve youths or to operate intensive programs. In terms of programs like JOBSTART, the most important of these efforts for accountability are the statutorily mandated performance standards, which emphasize job placement and set maximum costs per "success story." Also important is the way state and local JTPA officials have reacted to these standards. In many cases, state officials judge local programs by how much they exceed these standards and award discretionary funding on that basis. Most SDAs

---

[3]At Connelley in Pittsburgh, a consortium of local foundations, the local JTPA program, and the Board of Education are supporting the education and training components and support services. Three CBOs (Allentown in Buffalo, CET/San Jose, and SER/Corpus Christi) receive support from the local JTPA program and other local education and training programs, which has allowed continuation of nearly the full JOBSTART program model.

[4]As discussed in Chapter 2, many sites received special funding under Title IIA's 8 percent set-aside, which provides funds for basic education programs and for special efforts to link education and training. They used it to buy or lease equipment as well as to hire staff.

[5]These are discussed in more detail in Chapters 1 and 2.

choose to write performance-based contracts with their service providers, often with payment tied exclusively to placement of participants in a job.[6] Frequently, SDAs set performance goals in contracts with service providers above the level the SDA as a whole is required to meet in order to provide a margin of safety in case some programs fail to meet their goals.

A second type of constraint arises out of administrative practices that result partly from concerns about audits of expenditures. Many states require SDAs to provide 100 percent documentation of all aspects of enrollees' eligibility. Some SDAs required youths who were receiving public assistance (automatic grounds for eligibility) also to document their family income (this is but one example). An extra administrative step can be a special hurdle for young school dropouts with poor reading skills, and for their parents. Some SDAs may deliberately erect such barriers in the belief that they screen out applicants who are insufficiently motivated to do well in the program.

A third type of constraint arises because of spending limitations for administration and support services and the contracting rules associated with them. Under Title IIA, expenses for administration (including recruitment and intake) cannot be more than 15 percent of all SDA spending, and the sum of administration, support services, and most types of work experience wages normally cannot exceed 30 percent of SDA spending.

There are two important safety valves for program operators, but neither has solved this problem for operators of programs like JOBSTART. SDAs can allow individual service providers to spend more on administration and support services if the participants they serve have special needs, but many SDAs make limited use of this option. In addition, when SDAs purchase services under properly structured performance-based contracts that are satisfactorily fulfilled, federal rules allow them to charge the entire expenditure against training, even if some activities would otherwise be administration or support services. However, a recent Department of Labor statement on the use of this type of contract (not in force during the operational phase of JOBSTART) restricts its use for programs like JOBSTART.[7] The statement prohibits a payment for recruitment and enrollment of participants, creating possible cash flow problems for CBOs seeking to draw the difficult-to-recruit young school dropouts into programs. In addition, the statement warns SDAs that if the level of performance falls below acceptable limits (which the state and SDA should define), expenditures under the contract can no longer be allocated entirely to training and must be allocated among the cost categories. If SDAs hold all service providers to similar performance benchmarks, no matter what the nature of their client population, programs like JOBSTART could pose special risks.

In fact, the JTPA statute does allow more flexible practices, which can encourage programs like JOBSTART. The goal of this chapter is to suggest ways that states, SDAs, and service providers can capitalize on these possibilities.

---

[6]For agencies providing education in a sequential/brokered program, basing payment on placement in a job poses serious problems, as discussed later in this chapter.

[7]Federal Register, 1989, p. 10459.

A. Lessons for State JTPA Officials

States set priorities for the types of services to be offered and evaluate the programs of local SDAs, using the federal performance standards. A clear state policy that dropouts are a high priority group and that the state will recognize when SDAs enroll them in intensive programs can reinforce the efforts at the federal level.

More specifically, states can support such programs: by structuring JTPA performance standards to encourage programs of this type, by allocating discretionary funds to the program, and by permitting SDAs to streamline JTPA intake.

1. Performance Standards. The 1988 amendments to the federal performance standards make it easier for states to encourage and support programs like JOBSTART.

- Under regulations in effect for program year 1988 and beyond, states can choose eight performance standards from a list of twelve provided by the Department of Labor. For youths, the department strongly encourages states to pick as a key youth standard one of two measures that recognize intermediate program outcomes (such as completing a level of education) in addition to job placement.[8]

- States have the prerogative to decide whether programs financed with 6 percent funds must comply with performance standards. These funds are usually used either as an incentive to reward SDAs that exceed the standards or for initiatives for special target groups. States that exempt 6 percent funds from performance standards will make programs like JOBSTART more viable.

- Most states already take advantage of the option to adjust the national levels of performance for each standard to reflect the characteristics of the labor market and participants in each SDA. This practice reduces the risks from enrolling low-skilled youths. In the near future, participant reading levels will be added to the list of characteristics that are used to adjust the national standards.

---

[8]Governors may choose a new "youth employability enhancement rate" or a redefined "positive termination rate." The first measures the proportion of youths served who attained youth employment competencies recognized by the local private industry council (one competency in program year 1988 and two or more in later years), entered non-Title II training, returned full-time to school, completed a major level of education, or (for fourteen- to fifteen-year-olds) completed program objectives. The second standard measures the proportion of youths served who attained one of the employability enhancements or found a job. Youth employment competencies measure areas such as pre-employment skills (awareness of the world of work, labor market knowledge, career planning, job search techniques), work maturity skills (attendance and reliability), basic educational skills, and job-specific skills.

This will make it even more attractive for states to use the adjustment option.

With this discretion at the state level, governors, members of the state Job Training Coordinating Council, and state JTPA officials can facilitate the implementation of programs like JOBSTART.

2. Allocation of State Discretionary Funds. State officials can also be creative in their use of state-controlled funding. The two key discretionary JTPA funding sources are "6 percent" funds (discussed above) and "8 percent" funds (which are set aside for programs providing basic education or creating linkages between education and occupational training). Each can appropriately be allocated to programs like JOBSTART.

These JTPA funds can be used to encourage further state and local support of intensive programs for dropouts. State departments of education could be joint funders, with state JTPA agencies, of basic education programs for young dropouts. States could offer grants to localities for exemplary programs on the condition that the SDAs raise matching funds. This local match could be SDA-controlled JTPA funds, local education funds, or in-kind contributions (teacher time, facilities) from local agencies.

Perhaps of equal or greater importance are state-controlled funds outside JTPA. The Carl Perkins Vocational Education Act of 1984 provides grants to states for vocational education and mandates coordination between vocational education and JTPA. The Family Support Act of 1988 establishes a new Job Opportunities and Basic Skills (JOBS) program to replace the Work Incentive (WIN) program and requires states to establish education programs for young mothers receiving AFDC who have not completed high school or obtained a GED. State education programs, especially those for community colleges and adult vocational schools, can also be important sources of support.

Finally, states specify the level of documentation needed to establish JTPA eligibility, and this decision can affect SDA success in recruiting young dropouts. States must carefully balance audit concerns against the extra barriers to program operation created by extensive documentation requirements.

B. Lessons for Local JTPA Officials

At the local level, funding allocations and performance eval ion arise for local private industry council (PIC) members and JTPA administrators as they c ide what types of activities to support and how to structure the resulting contracts with service providers. SDA staff and PICs, who set local service priorities, can choose to allocate a portion of locally controlled JTPA funds (including funds distributed by formula and special discretionary allocations from the state) to programs combining basic education and occupational training. SDAs and PICs must also recognize the need for greater support services in long-term programs serv ng low-skilled youths.

SDAs can supplement this JTPA funding by seeking partners for innovative programs from among local foundations, corporations, community colleges and school districts, and welfare agencies. Schools and other agencies that receive state or federal aid based on average daily attendance or the number of participants in their program could be an especially promising source of in-kind contributions. If they were to operate a program like JOBSTART, their enrollment would rise and a portion of the costs would be covered by the increased aid.

As discussed earlier, performance-based contracts can discourage service providers from seeking to enroll high-risk youths. SDAs have two alternatives: (1) cost-reimbursement contracts, which pay for provision of specified services under an approved budget, or (2) performance-based contracts structured to make more intensive services to dropouts feasible. Despite some advantages, cost-reimbursement contracts are rare in JTPA except for activities provided by schools, so the following discussion is limited to performance-based contracts.

When writing performance-based contracts, SDAs can adopt the following approaches:

- Recognize the difficulty of serving low-skilled young dropouts in setting goals for programs. Programs serving job-ready clients can generate a high percentage of post-program success stories, but in fact the services make little difference in participants' lives. Many job-ready participants might have found employment on their own without special assistance. Programs like JOBSTART, serving less skilled people, may have fewer success stories to report but may have made a greater difference. Ideally, programs would be judged on their impacts, not the percentage of success stories, but in practice this is difficult to measure. Hence goals for programs must be tailored to the people enrolled and the type of service offered.

- Define payment benchmarks appropriate for the program. Payment solely for placement is inappropriate in a program like JOBSTART. Earlier payment points are important to reward service providers for the effort of serving this group and the improvement in participants' skills, which can lead to long-term success in the labor market.[9] Even under the recent Department of Labor statements on performance-based contracts, SDAs are permitted to write contracts for this type of program with payment benchmarks short of placement; examples include enrollment and participation at some specified level or attainment of a GED. In fact, for youth programs contracts may be structured without including placement as a payment point.

[9]National Commission for Employment Policy, 1988, found that varying the terms of performance-based contracts does allow SDAs to enroll more hard-to-serve clients.

- Develop payment amounts to reflect the need for support services. Support services are important in programs like JOBSTART, and payment levels to providers must include funds for them.

As a final lesson, the experience of JOBSTART sites showed the crucial importance of SDAs taking full advantage of the flexibility in intake procedures under state rules to streamline application and eligibility certification. The more unnecessary steps are avoided, the easier it will be to recruit and enroll low-skilled young dropouts.

II. Lessons for Implementing Steps or Components in the JOBSTART Model

A. Recruitment Strategies

The experience of the JOBSTART sites reinforces what a growing body of studies has noted: recruitment of the young dropout population is not easy and requires considerable commitment of staff time and energy.[10] Among the JOBSTART sites, staff assessments of the most effective recruitment strategies varied, but some general lessons emerged.

- Programs cannot rely on walk-ins but must aggressively recruit youths. Programs seeking to serve disadvantaged dropouts must recognize that many have little contact with social service or education agencies. While word of mouth is the most credible source of information on program services, many of these "disconnected youths" will never hear about the opportunities available without special efforts to reach them. Full-time recruiting staff can make a big difference.

- Recruiting young men requires special approaches. Young male dropouts are especially likely to live outside the mainstream, out of contact even with welfare or family health-care agencies. In some cases, the attraction of the illegal economy may be strong. Reaching these young men requires special techniques designed to make contact with them on their "own turf" as well as a credible message that this program can be different from their past educational experiences.

- Recruitment messages must appeal to the varied interests and needs of youths. For most youths, descriptions of program features hold little appeal. They will be moved to apply by highlighting how the program can provide something they value; economic independence, security for their children, or more satisfying work, for example.

---

[10]70001 Training and Employment Institute, 1988; Kelly, 1987.

- Staff must try a variety of recruitment methods. Recruitment specialists can offer many imaginative options to reach youths; flyers in welfare checks, public service ads in fast food restaurants, letters and testimonials from former participants, referrals from other agencies, contests and drawings, low-cost radio ads, and on-the-street recruiting have all been successful.[11] Staff must be willing to try new methods, and to work outside the office and the nine-to-five workday, until they find recruiting approaches that succeed.

B. Initial Contact and Intake Procedures

As noted earlier, some JTPA programs have developed intake procedures with many pre-enrollment steps or hurdles, with the intention of screening out those not motivated to pursue training and employment.[12] This approach, subject to criticism generally, is especially inappropriate in the context of programs like JOBSTART.

One of the goals of such a program is to increase the self-confidence and motivation of youths who have already experienced failure in school. The necessary steps to enroll in JTPA are formidable enough to young dropouts without erecting artificial barriers. Instead, programs should seek to streamline the admission process, keeping the number of required visits to a minimum and conducting intake throughout the day rather than at specified hours.[13] To the extent that barriers exist because of concern about job placement-oriented performance standards, the suggestions in the previous section could provide the opportunity to modify the intake process.

In the initial contact with recruits, staff should emphasize the benefits of the program, not dwell on the "hassles" of gaining admission, and should offer assistance in completing the intake process.[14] Staff should limit the documentation required to establish eligibility to the minimum required by federal and state regulations and assist youths in assembling the required paperwork. While some youths may be put off by initial testing of skills, these tests can be presented as necessary to determine the best way to serve them rather than as something they will pass or fail.[15]

---

[11]Kelly, 1987.

[12]Cook et al., 1985; Grinker Associates, 1986.

[13]Mathematica Policy Research, 1988, makes a similar recommendation.

[14]Kelly, 1987.

[15]However, required minimum skills for entry could convert an assessment tool into a test. which can be failed. If there are minimum requirements, staff should be careful to offer alternatives to those who "fail" the test.

C. Strategies to Encourage Participation in the Program

Quality education and occupational skills training alone do not assure participation in a program. Young dropouts may have other important demands on their time (working or caring for children are likely examples). In many cases, there may be opportunities in the underground or illegal economy that could tempt youths to leave a program. To attain the number of class hours needed to boost skills levels, program administrators must find ways to meet participants' basic needs, to create a warm and supportive atmosphere, and to bolster youths' motivation and self-esteem. JOBSTART, like other recent studies of programs for young dropouts, illustrates the importance of addressing youths' social and personal development, as well as deficiencies in basic and occupational skills.[16]

1. Meeting Basic Needs. At a minimum, programs should provide assistance for training-related expenses such as childcare, meals, and transportation. Some type of additional financial assistance seems desirable, but the JOBSTART Demonstration showed no clear evidence that greater -- although still quite limited -- incentive or needs-based payments increased retention or attendance. If, as in JOBSTART, program-provided supports are not sufficient to cover the costs of rent, food, or other major living costs, participants will need some other means of support while in the program. Approximately one-half were receiving Aid to Families with Dependent Children (AFDC) or other public assistance. One-quarter of JOBSTART participants worked at some point while in the program. Program operators could facilitate this mix of classes and work by helping youths find part-time employment if the program schedule permits it. It would be most feasible in programs that offer a sequence of education followed by training, since the daily scheduling demands of programs offering concurrent education and training are already quite high.

2. Creating a Supportive Environment. For disadvantaged young dropouts, their time each day in even an intensive program like JOBSTART is often merely an interruption in what may otherwise be a frustrating and troubled life. Frequently, their living arrangements are unstable, they or their children may have health problems, and drugs may be readily available in their neighborhoods. Events outside the program can potentially undo the progress youths are making in their classes.

Over the course of the demonstration, the importance of creating a supportive environment and safe haven for youths became increasingly apparent.[17] By providing a place in which youths can acknowledge and address the problems in their lives and draw on the resources needed to deal with them, programs can help prevent participants' lives from

---

[16]70001 Training and Employment Institute, 1988; Public/Private Ventures, 1987 and 1988; and Quint and Guy, 1989.

[17]Several recent studies have highlighted the importance of support services, counseling, and group activities. These studies include Mathematica Policy Research, 1988; Public/Private Ventures, 1988; 70001 Training and Employment Institute, 1988; and Quint and Guy, 1989.

overwhelming their efforts to increase their self-sufficiency. Staff who can provide personal attention and encouragement, draw on other resources in the community, and serve as role models are critical to developing the supportive atmosphere needed in programs serving young dropouts.

Specially designated counselor/coordinators were indispensable in the JOBSTART Demonstration. They helped assess support service needs, provided personal attention and counseling, referred youths to other programs in the community when needed, organized activities to help build a sense of group identity, monitored participants' progress in the program, and served as their advocates when needed. Education and occupational instructors should also assist youths in personal development, reinforcing the work of the counselors.

When hiring staff, program operators should look for individuals with experience in these areas. But most important, staff need to see their role as active, rather than reactive. Good counselors and instructors will identify problems before they become crises and work with students outside the classroom and confines of the program to address barriers to program participation and employment. Staff training on these personal development issues, often not done in JTPA programs, is important in making staff sensitive to these needs, especially at sites where teachers are more accustomed to working with adults.

3. Motivational Techniques. Staff need to help participants develop a sense of group identity. This increases commitment to the program and provides a new reference group to reinforce the values of education and training. Useful strategies include:

- enrolling classes of 20 or fewer youths to create a small enough group for youths to form friendships and a group identity;
- empowering students to affect program decisions on such issues as attendance, termination policy, and rewards for achievement (perhaps through formation of a student government);
- scheduling group activities outside the classroom;
- promoting peer support groups for discussion of personal concerns;
- recognizing the achievement of intermediate goals, with financial incentives or other rewards; and
- rewarding completion through appropriate ceremonies and awards.

4. Life Management Skills. Life skills training helps prepare young dropouts to improve their problem-solving skills and accept the demands of the workplace and other adult responsibilities. At sites that did not offer this training, staff identified its absence as a major weakness in the JOBSTART program. The sites found instruction in values and goal-setting, time management, problem-solving, job search techniques, suitable behavior on the job, parenting and sexuality, health, and personal finances important for their students.

Often, group activities and instruction are useful ways to present this material, since this approach requires participants to assess conflicting views and present their own ideas in a clear and persuasive way.

5. Attendance Policies. Even if these recommendations are adopted, absenteeism is still likely to be a problem. It can be diminished, however, if sites set clear rules, monitor attendance closely, and follow up quickly with individuals who are frequently absent to help them resolve the underlying problem. Involving participants in the development and enforcement of attendance rules could build support for their fairness and reinforce the message that the students must take responsibility for their actions.

D. Classroom Mix of Youths and Adults

The JOBSTART experience suggests advantages and disadvantages to setting up separate classes for youths, and the sites in the demonstration tried both youths-only and mixed classes. By offering classes solely for youths, programs can tailor the scheduling, instructional approach, life skills management curriculum, and classroom discipline to address the needs of young participants. Separate classes increase the likelihood that young participants will get a chance to excel in the program and to develop a strong identification with the group and the program. However, with separate classes, youths miss out on the chance to learn from older students -- both as to the need for education and training in the labor market and as to appropriate decorum in the classroom and study habits.

Experience during the demonstration suggests that when youth and adults are together in classrooms, the proportions of each can affect the learning experience. Several sites reported that when adults were the clear majority in a class, the youths seemed to benefit. But adults in classes with one-half or more youths found the experience somewhat frustrating, according to staff; the adults saw the youths as less skilled, less serious, and more disruptive of classroom activities.

E. Basic Skills Education

Employers value workers with basic reading and math skills and the ability to adapt to new situations and master new tasks. To succeed in this labor market, youths must not only be competent in basic skills but must also have the ability to communicate with others, work in a group setting, and think critically. The content of the basic education course in combination with life skills training must respond to these demands of the workplace. Classes in reading and math must be supplemented with opportunities to develop verbal communication skills, teamwork, and reasoning.

Variety in instructional techniques can make the classroom experience more interesting. Competency-based, individualized instruction can be useful in teaching basic reading and math. Instructors and participants in the JOBSTART Demonstration liked this approach, and it allowed sites to serve participants with a wide range of initial reading levels in a single program.

Computers can be useful in automating exercises and feedback, thus helping to administer self-paced instruction.

For teaching verbal communication and critical thinking, group instruction and activities -- with the give and take among those with different views -- can also be useful and can provide a lively change of pace complementing individualized, self-paced instruction for basic education. This suggests that a mix of individual activities and group instruction might be best. The successful implementation of one JOBSTART site's alternative education curricula involving group instruction, discussion, and writing suggests that these techniques -- normally used for students at a similar skills level -- can also be adapted by an effective teacher to serve youths with a wide range of skills.

The demonstration also suggests that it is possible for occupational training agencies to add basic education to their program offerings. With recently developed basic education teaching materials -- much of it computer-assisted -- training agencies can relatively easily offer basic skills instruction as a lead into training.[18]

F. Occupational Skills Training

Most youths participating in occupational training attended typical Job Corps or JTPA classes. Their experience suggests several lessons:

- Youths need clear information on possible occupations. Before selecting a training course, participants should be well-informed about the requirements and opportunities of different jobs -- entry requirements, wage rates, work conditions, and advancement opportunities -- and the specific demands of training curricula. Most JOBSTART sites lacked a career exploration unit; vocational assessment and guidance would help participants make a more informed choice. In small programs offering training in only a few occupations, or at concurrent sites, this could take place before enrollment, while at larger sequential sites, offering training in many occupations, this could occur during the education phase.

- Course entrance requirements should be training-related. Entrance requirements set higher than necessary could exclude lower-skilled young dropouts who might be able to master the essential material. Textbooks and other teaching materials should convey the key skills using the simplest vocabulary and presentation possible.

[18]For a discussion of the use of computers in JTPA, see National Commission for Employment Policy, 1988. For a review of research on computer-assisted instruction, see the Research into Practice Digest, Spring 1986.

- Training instructors must offer special assistance to low-skilled students. At some sites accustomed to serving adults, training instructors saw their role as presenting technical material; for disadvantaged young dropouts, this may not be enough. Instructors -- who see the students more than anyone else during training -- may have to provide special assistance, arrange tutoring, and make sure that needed support services are in place.

- Flexibility in structuring the course schedule and completion requirements will be important. Open entry/open exit scheduling, especially with self-paced, competency-based instruction, may offer young dropouts the greatest opportunity to master needed occupational skills. Courses should recognize intermediate competencies, such as the Job Corps "step-off levels," so that youths who do not complete the entire course can be certified job-ready for a lower-skilled position in the same occupational area.

G. Job Placement Assistance

Overall, job placement assistance was the weakest element of the JOBSTART program at most sites; it received the greatest attention when the JOBSTART site was contractually obligated to arrange placements. This suggests that while an exclusive focus on job placement as the sole goal of the program -- and the sole payment point in a JTPA performance-based contract -- would be ill-advised, contractual incentives can help keep the employment goal in sight.

Instruction in job search techniques, interviewing, and resume writing is important in a program serving school dropouts, but participants also need direct job development and referrals to specific jobs. Job development specialists will be most successful in finding job possibilities and arranging referrals for youths. But training instructors, with their contacts in the field, should also play an important role in job development and referrals; counselors are likely to be much less effective. It is important that job placement staff not focus just on the best students in the program but also aid those less skilled to find appropriate employment.

Independent job search, while appropriate for some participants, might be supplemented by group job search clubs, which teach job finding skills. Instruction in job search techniques should begin early in the program so that those who leave the program early can benefit from it. However, group job search could best be conducted for those completing or nearing the end of training.

H. Linking the Pieces

It is important for all staff -- counselors, basic skills teachers, and occupational training instructors -- to present a consistent message to participants about their obligations in the programs and expectations of performance. Multi-component programs require the presence of a full-time counselor/coordinator to monitor participants' progress, arrange support services,

and serve as a liaison and advocate for youths with instructors and other staff at the site. Their role should be much like that of a case manager.

III. Advantages and Disadvantages of Different Institutional Sponsors

Within the demonstration, a variety of institutions -- adult vocational schools, a community college, community-based organizations, and Job Corps Centers -- put in place the JOBSTART program and enrolled participants. This finding is important because a central question in the demonstration was whether such a program could be operated outside specialized Job Corps Centers.

The experience in the demonstration also suggests that community-based organizations and schools have different strengths and weaknesses, which should be considered in deciding where to base a program like JOBSTART and in planning for its implementation.

A. Familiarity with Disadvantaged Youths

CBOs are more likely than schools to have experience dealing with the problems and special needs of young school dropouts. Often, CBOs have as part of their organizational mission service to this population, and many are based in the neighborhood in which these youths reside. Adult vocational schools and community colleges tend to serve those with high school diplomas and often rely on traditional instructional techniques (lectures and group testing), which are not appealing to most dropouts.

When schools operate a program like JOBSTART, they should supplement their normal staff with instructors and counselors experienced in working with disadvantaged school dropouts. These staff members can help existing instructors adapt their usual curricula and teaching style to the needs of disadvantaged dropouts. They will also be able to plan for the type of support services and special group activities needed to build group cohesiveness and peer support.

B. Support Services

CBOs are more likely than schools to be multi-service agencies, providing assistance with childcare, health care needs, family planning, and other support service needs. When schools or smaller, single-purpose CBOs operate a program like JOBSTART, their staff will need to help students find other agencies able to address support service needs not met by the program.

C. Variety of Courses

Schools normally will have more courses available to participants in occupational skills training. Larger vocational schools in the demonstration had courses in more than 20 occupations at a time, while smaller CBOs did not offer occupational training in-house or had only a few courses.

When small CBOs operate a program like JOBSTART, this problem could be addressed in one of several ways. One option is to develop linkages to other training agencies, as was done in the sequential/brokered sites in the demonstration. As discussed later in this chapter, the demonstration suggests lessons for making this approach more successful.

Alternatively, several small CBOs (each with a basic education program and a small number of occupational training courses) could operate the program as a consortium and conduct recruiting as a group. If youths apply at one agency, seeking occupational training offered at another, they could be referred to the other agency for both education and training. To encourage referrals, the local SDA could possibly set up performance contracts with payments to agencies for youths referred to other agencies who subsequently enroll. This may not be possible to implement if these small CBOs are neighborhood-based, since applicants are unlikely to travel to a CBO in another neighborhood.

D. Stability of Funding

Stability of funding is another clear advantage of schools and community colleges. They often have funding sources tied to average daily attendance or other measures of student enrollment. This frees them from the annual need to compete for contracts under JTPA or other programs. Since they are less dependent on JTPA funds, schools are less constrained by JTPA's performance standards and limits on spending for support services. While it is likely that more funding than the routine educational funds will be needed to offer all the JOBSTART support services, having core funding that is relatively stable will avoid turmoil and the periodic need for large layoffs and restaffing. To the extent that CBOs can receive funding on a multi-year basis for serving young, low-skilled dropouts (perhaps through state welfare employment programs) or diversify their funding sources, their ability to plan and implement lengthy and intensive education and training programs will be enhanced.[19]

IV. Lessons on Concurrent Versus Sequential Programs

The choice of a concurrent versus sequential program also poses tradeoffs for program designers and operators. The experience of the demonstration provides lessons on how to address five key issues.

- Maintaining interest in basic education: Concurrent programs can increase the relevance of education through immediate application of new skills in occupational training. Sequential programs build the foundation of basic skills, increasing the options for training courses. However, sequential program operators face a challenge in

[19]The JTPA Advisory Panel has recommended multi-year contracts to key service providers at the local level. This approach could also increase the funding stability of CBOs operating a program like JOBSTART. See Job Training Partnership Act Advisory Panel, 1989.

maintaining the interest of students seeking occupational training.[20] Life skills instruction, which emphasizes practical knowledge, can supplement basic skills instruction at sequential sites and help maintain interest during the education phase. Youths can also explore occupational options while still in the education phase, with instructors highlighting the basic skill entry requirements.

- Participation in training: At concurrent sites, most youths in the demonstration received both basic skills instruction and occupational training. In fact, at these sites, training was the dominant activity in terms of classroom hours. In sequential programs, the participation rate in training was much lower, so agencies operating this type of program must plan carefully to encourage youths to make the transition. The problem of declining participation over time, which is present in any lengthy program, is aggravated in brokered programs, where youths must gain entry to and begin a new program after having participated for an extended period. During the education phase, introductions to training options, instruction in job search techniques, and a continued focus on the goal of training and a good job can encourage youths to continue in the program.

- Training curriculum: Developing appropriate training curricula and materials can be difficult in a concurrent program, where youths are still working on acquiring basis skills when they begin training. In the demonstration, youths at concurrent sites were able to enroll in a diverse array of courses. Part of the reason was the use by some sites of self-paced, competency-based instruction in training as well as in education. This approach made it much easier to accommodate youths at different skill levels in the same course; youths who were struggling with mastering basic skills were not left completely behind in training, but could proceed at their own pace.

- Daily schedule: In concurrent programs, the daily schedule was a full one from the beginning of participation, with little time for activities other than education and training. Youths can find the work very demanding, especially when training is offered on a fixed cycle, with little scheduling flexibility to accommodate slower progressing students. All of these problems are aggravated if the training is offered by another agency. Activities like life skills management and counseling could help youths acquire the discipline

[20]For this reason, a recent study of programs for minority-group female single parents recommended that youths be given the option of participating in a concurrent program. See Mathematica Policy Research, 1988.

and self-confidence to complete a demanding program. Such activities to promote personal development were more important in sequential programs, where the less crowded schedule allowed time for more life skills instruction and group activities.

Sites operating a concurrent program face a tradeoff in responding to this. They can reduce the daily hours of training at the beginning of the program, allowing time for other activities and making the transition to a highly structured program less stressful for youths who have been out of school for an extended period. However, this will make the youths in a program like JOBSTART fall behind others in the training class unless training is offered on a self-paced basis. Alternatively, sites could provide education classes that include other group activities and life skills training, but this reduces basic skills instruction.

- Duration of training: A curriculum of education and training can be completed in a shorter period when offered concurrently. Completing a program at a sequential site is often a lengthier process because these programs typically spend more time on basic education and other activities apart from training. In lengthier programs, dropout rates will increase as youths lose interest, encounter personal problems that prevent participation, or seek employment to meet immediate needs for income. This suggests that sequential programs may have to provide a fuller array of support services and may have to help participants find part-time employment or arrange formal paid work experience positions as part of the program.

V. Lessons for Operating Brokered Programs

The experience of sites in the JOBSTART Demonstration suggests that it is most difficult to implement a program combining basic education and occupational training at sites that provide the basic education and then refer participants to other agencies for occupational training. Only 26 percent of youths at these feeder sites participated in any occupational training.

Ideally, all services would be offered on-site by the sponsoring agency.[21] In reality, for programs like JOBSTART to be widely available, CBOs offering either basic education or

[21]Mathematica Policy Research, 1988, also recommends "one-stop" programs as best for minimizing attrition from the program, enhancing management control, and strengthening the supportive aspects of the program.

vocational training -- but not both -- must be involved. The problems of sequential/brokered programs encountered in the demonstration must therefore be addressed.

SDAs and agencies interested in operating sequential/brokered programs should consider the following possibilities to ease the transition to training:

- Develop agreements giving referrals from the education agency priority for admission to training. The education and training agencies, with the assistance of the SDA, could develop clearly defined entrance criteria for training agencies. Youths who are referred by an education agency and who meet these requirements should receive priority for admission.

- Provide opportunities to explore training options during the education phase. Coordinators at the education agency could arrange visits to training courses to explore career options and entry requirements and to keep youths focused on the goal of future training.

- Allow youths the option of an early transition to training with continued basic skills instruction. If participants who have achieved the minimum basic skills needed for entry into training are willing to put in longer days to continue their education while beginning skills training, they should be given this option. If they choose it, the self-paced, individualized instruction would permit flexible scheduling for the education coursework.

- Coordinate, as much as possible, the education schedule with start of training. Students are more likely to make the transition to training when it begins soon after they are ready to move out of education. With the many training options possible under sequential/brokered programs, there will not be a single schedule. To the extent that one training starting date is common (for example, the normal school-year calendar), education should be scheduled to prepare people to make the transition at that time. At a minimum, program staff should keep participants in education informed of the schedules of relevant training possibilities.

- Streamline the application process at the training agency. Youths may be put off by paperwork and testing, especially when it repeats what was already required by the education agency. When JTPA funds are used for both phases of the program, avoid terminating youths at the end of education and having them reapply and go through eligibility certification again if accepted into training.

- Designate a counselor/coordinator or case manager to monitor and facilitate the progress of youths in the training phase. Some agency needs to coordinate the many activities of a program like JOBSTART, including support services and counseling. SDAs or other funders of the program should pay for staff at that agency for this effort. Education agencies that provide the initial activities are possibly the best site for this coordination. If arranged this way, training agencies should have a contractual obligation to provide the case manager with information on the experiences of participants.

A potential problem can arise in the contract for educational agencies funded under Title IIA of JTPA when the agencies refer participants completing education to a different organization for occupational training.

As mentioned earlier, under the performance standards, transition to occupational training funded by Title II of JTPA does not count as grounds for a positive termination, and this poses a special problem in brokered programs. When performance contract payment points are linked to performance standards, education providers are paid only if participants attain a GED or find a job. This could force agencies to enroll more skilled youths or to emphasize attainment of a GED over making a transition to training. That would undermine efforts to operate programs combining education and training for disadvantaged, low-skilled dropouts. Here again, it would be useful to make the payment points in performance-based contracts different from the benchmarks that are counted as a positive termination.[22]

VI. A Final Note

This chapter has discussed operational lessons coming out of the JOBSTART Demonstration and other experience operating programs of education and training for disadvantaged school dropouts. More conclusive impact results and the estimation of benefits and costs of the JOBSTART program must await the final report on the demonstration. These early results suggest, however, that with creativity and determination the program can be implemented within JTPA and that it leads to encouraging increases in educational attainment. The implementation lessons from the demonstration summarized in this chapter can help states, SDAs, and service providers move ahead in this important policy area.

---

[22]SDAs can also allow youths to continue to be enrolled in JTPA as they move from the education to training service provider. This means that they become part of the performance standards calculations only after leaving the program after training, when they are more likely to have attained a GED or to have been placed in a job.

APPENDIX A

DATA SOURCES FOR THE EVALUATION

Many data sources were used in this evaluation of the JOBSTART Demonstration. Baseline demographic data were collected at the time of random assignment. Management Information System (MIS) data from the sites were used to measure participation hours. A twelve-month follow-up survey of applicants was conducted to measure impacts on experimentals (including those who did not participate) compared to controls; the impacts concerned amounts of education and training received, employment and earnings, and other relevant information. The twelve-month survey also dealt with the experiences of participants in the JOBSTART program. Much qualitative information, including interviews with program staff and focus groups and in-depth interviews with participants, was used in conjunction with the quantitative information. Each data source is described below

I. JOBSTART Enrollment Forms

The JOBSTART Enrollment Form, designed by MDRC and filled out by program staff at the time of random assignment, was the major source of information about the demographic and socioeconomic characteristics of sample members. It included data on age, sex, ethnicity, family composition, educational attainment and time since dropping out of school as well as basic information on welfare and employment histories. The enrollment form was completed for all but one sample member.[1]

II. JOBSTART Management and Information System Forms

Sites used a number of MDRC-designed forms to report on the progress of participants in JOBSTART. The most important of these were:

A. Monthly Participation Report

The Monthly Participation Report provided the number of hours that participants spent in basic education, occupational skills training, or other kinds of JOBSTART activities each month. It also provided information on the type of occupational skills training in which participants in training enrolled. Sites reported actual hours attended, not the number of hours scheduled.

---

[1]This sample member will be excluded from the impact analysis, since all demographic variables from the enrollment form are missing. For many of the sample members, a few specific pieces of demographic information are missing. In the impact analysis, the predicted values based on similar sample members were substituted for these missing observations.

Participation data used in this report were collected from August 1985 -- the beginning of random assignment -- through August 1988. The month of random assignment is included as a month of follow-up for participation, although the participant may have been randomly assigned late in the month. Those assigned in the last two months of random assignment -- October and November 1987 -- have eleven and ten months of follow-up participation data, respectively. For the purpose of uniformity with the twelve-month follow-up survey, and because most of the JOBSTART programs were designed to last a maximum of twelve-months, the implementation analysis used the part of the sample that had twelve months of follow-up data, that is, members of the experimental sample who were randomly assigned before October 1987.

Collecting strictly comparable data across sites was not always possible, for two reasons: first, the services provided at each site varied; second, there was some inconsistency in the way sites reported hours for activities other than basic education or occupational training classes. For example, a number of sites supplemented education and/or training classes with formal classroom instruction in a variety of topics generally termed "life skills." Some sites reported these as education hours; others counted them as training hours. In order to have similar definitions of the basic components -- education and training -- MDRC modified the reported hours at sites, so that time spent in such activities as life skills classes was counted under "other activities."[2] The education hours reported by CET/San Jose also were adjusted to reflect only hours spent in the site's GED class.[3]

Other differences remained, however. A number of sites offered limited amounts of work experience as part of the JOBSTART program. Some sites reported these hours as training hours; others reported them under "other activities."[4] No adjustments were made in these hours. Finally, the Phoenix Job Corps did not report hours spent by participants in life skills or

---

[2]The sites were El Centro in Dallas, the Los Angeles Job Corps, the Atlanta Job Corps, and Allentown in Buffalo. At El Centro one-half of all education hours prior to December 1986 were spent in life skills. After 1986 one-fourth of the reported education hours were spent in life skills. The hours were counted as hours in "other activities" by MDRC. At the Los Angeles Job Corps, participants spent one-half of their reported education hours in activities such as art, gym, and "world of work" for the first three months after enrollment. MDRC moved one-half of the education hours to hours in "other activities" for those months. At the Atlanta Job Corps, ten hours each week were spent in activities such as life skills, driver education, and health. MDRC moved 28.6 percent of the reported education hours to hours in "other activities." Allentown included such hours in its reported occupational training hours. MDRC moved all reported occupational training hours that did not have an associated type of training to hours in "other activities."

[3]CET/San Jose reported 30 percent of each participant's occupational training hours as education, which included time spent on training-related basic skills in occupational training courses as well as hours in the site's GED class. For consistency with other sites, the education and training hours at CET were recalculated by MDRC, and only hours spent in the separate GED class were included as education hours in this report.

[4]At EGOS in Denver, hours spent by participants in "work study" were not reported.

avocational activities, although the other two Job Corps sites did.

Appendix Table A.1 shows the common elements and variations in component activities across sites. In general, participation hours reported as being in the education component consisted of time spent in classes devoted to basic education or GED preparation; they did not include work on training-related basic skills done in occupational training courses. At all sites, participation hours that were counted in the training component included all activities offered in occupational training curricula, including units on training-related educational skills (such as Business English or Business Math) and employability development (instruction in work behaviors and job search). At the following sites the hours counted as training also included time spent in work experience or on-the-job training: Connelley in Pittsburgh, El Centro in Dallas, the Phoenix Job Corps, and the Los Angeles Job Corps. Hours spent in "other activities" varied considerably across sites and included instruction in life skills, work experience, and orientation and avocational activities.

In order to assess the quality and completeness of the participation data, MDRC staff reviewed the teachers' class attendance records and other source data for a randomly selected sample of participants. For the most part there was agreement between hours found in teachers' records and the Monthly Participation Reports. If more than 20 percent of the cases in a quality control sample had discrepancies greater than 10 percent between site-reported hours and hours obtained in the check, MDRC scheduled either a re-collection of the data or retraining of site staff, depending on the seriousness of the discrepancies.[5]

B. Other MIS Data

As part of the monthly monitoring system, sites also reported on the end-of-month status of each participant; the participants who had been terminated and the reason for termination; and job placement and GED receipt among participants. The twelve-month follow-up survey proved to be a more complete source of data for employment and GED receipt, since it included activity by experimentals that might not have been reported to site operators as well as the experiences of the control group. Consequently, the survey is the only source of these data used in this report.

---

[5]Because it was necessary to obtain records from a number of service providers, many of which did not maintain complete records for long periods, occupational training hours in brokered sites were the most difficult to confirm and probably have the greatest variation between actual and reported hours. The difficulty MDRC staff had in obtaining and verifying data from training providers reflects the difficulty sites had in monitoring hours for participants once they were no longer at the site. Problems were found even at the two sites with the best data from service providers: one site apparently over-reported hours while one site apparently under-reported hours. Because the number of participants who entered training in sequential/brokered sites was small, the misreporting of training hours did not greatly affect the average hours of training reported in the report.

Table A.1

Activities Included in Participation Hours, by Component, by Site

	Education	Training	Other Activities
All sites	Classes in basic education or GED-preparation	ssroom occupational training, including units on training-related basic skills and employability development	Varies
Exceptions by site			
Allentown (Buffalo)	a		Life skills[a]
Atlanta Job Corps	a		10-day orientation, work experience and OJT, life skills and avocational activities[a]
BSA (New York City)	May include a few hours per week in computer-assisted life skills curriculum		Life skills
CET/San Jose	a	a	None
Chicago Commons			None
Connelley (Pittsburgh)		Work experience mentorships	None[b]
CREC (Hartford)	Includes some hours in employability development activities		Work experience internships
East Los Angeles Skills Center			None
EGOS (Denver)		c	None
El Centro (Dallas)	a	Work experience internships	Life skills[a]
Los Angeles Job Corps	a	Work experience and OJT	5 day orientation, life skills and avocational activities[a]
Phoenix Job Corps		Work experience and OJT	8 day orientation[d]
SER/Corpus Christi			None

SOURCE: Program records and staff interviews.

NOTES: [a]Reported hours were adjusted by MDRC.

[b]Site did not report participation in a one-hour after school component consisting of counseling and other support activities in school year 1986-87.

[c]Site did not report participation hours in work/study positions.

[d]Site did not report participation hours in life skills and avocational activities.

III. Test of Adult Basic Education

The Test of Adult Basic Education (TABE), a modification of the California Achievement Test, was used to measure reading levels of experimentals. Prior research has shown the test to be a reliable and valid measure of reading ability. The test was used at two points in time: shortly after random assignment, as a baseline measure;[6] and after participants had spent some time in the program (usually after about one hundred hours of education), as a measure of reading level gains.[7]

About 20 percent of the total experimental sample did not take a baseline TABE. The percentage tested varied by site from a high of 100 percent to a low of 42 percent. The Job Corps sites and CET/San Jose had the lowest percentage of experimentals with baseline TABEs.

IV. Twelve-Month Follow-Up Survey

The twelve-month follow-up survey is the data source for the impact chapter (Chapter 9) and contributes to an understanding of the experiences of JOBSTART participants and nonparticipant experimentals. The survey was conducted[8] either in person or, for the approximately one-fifth of the sample who had moved out of the area, by telephone, a year after random assignment. The interview lasted about forty-five minutes and provided information about the applicant's experience in the year following random assignment. Respondents were asked about their employment history, family status, welfare receipt, and receipt of education or training outside of JOBSTART. Experimentals who did not participate in JOBSTART were asked why participants were asked what they like and disliked about the program and their reasons for [illegible]g.

Eighty-two percent (1,401) of the 1,709 sample members randomly assigned between August 1985 and March 1987, were interviewed. Those randomly assigned into the JOBSTART research sample after March 1987 will be contacted for interviews, and their data will be in-

[6]At five sites the TABE was also used as a test of reading-level eligibility and consequently was administered to controls as well as to experimentals. A number of other reading tests were administered at the other sites. Data from these sites were not included in the analysis because the data were not comparable across sites. Scores on the eligibility test were used as the baseline measure for experimentals in sites where the TABE was used.

[7]The actual number of hours of education between random assignment and the first follow-up test varied considerably because of differences in measuring hours of education and delays in administering the tests. Also, in the first few months of the demonstration, sites were asked to test every three months, which resulted in considerable variation in the number of hours after which participants were tested.

[8]MDRC contracted with Abt Associates, a Boston-based survey firm, to implement, manage, and monitor the survey. Completed surveys were data-entered and checked for completeness by Abt. Members of the Abt staff also assisted in the design of the survey instrument.

cluded in the final report. Appendix B discusses issues of sample bias and data quality for the survey.

Sample members who could be located were generally willing to be interviewed: less than 12 percent of the noncompletions were because of refusals to take part in the survey. The most common reason for noncompletion was an inability to contact the respondent. Three-fourths of the noncompleted interviews were because the respondent could not be contacted, or could not be located or had moved more than 50 miles and a phone number was not available. The completion rate and reasons for non-response did not differ significantly between experimental and control groups.

V. Qualitative Data

Qualitative descriptions of the program and of participants' experiences in it were obtained from a variety of sources and were used to complement the analysis of the quantitative data.

MDRC research staff visited sites and conducted structured interviews with program administrators, counselor/coordinators, and teaching staff to determine recruitment practices, the content of services in the education and training components, job placement and other activities, the range of support services and retention strategies, and staffing patterns and staff experience with JOBSTART. Staff also observed education and training classes at each site, and visited some of the organizations that provided occupational training to JOBSTART participants at the sequential/brokered sites. Sites were typically visited once during the early phase of the demonstration and twice in the second year of program operations. This information was supplemented by on-going reports on program operations and classroom observations provided by MDRC operations staff who visited each site at regular intervals. (Interviews and observations concerning the education component were developed in conjunction with an education expert, who worked with MDRC on a consultant basis.)

Information about participant reactions to JOBSTART was obtained from focus group discussions with forty-six JOBSTART participants at four sites between May 1987 and February 1988. Female participants were interviewed at Connelley in Pittsburgh and at BSA in New York City; males were interviewed at El Centro in Dallas and at the Los Angeles Job Corps. Each session was attended by between nine and fourteen participants and lasted between two and two-and-a-half hours. At Connelley and El Centro, the groups were made up of participants in attendance on the session day; at the Los Angeles Job Corps, staff selected students who were doing well in the program; the BSA group included both current participants in education and women who had already moved on to occupational skills training. Because they included many participants who stayed longer than the average and/or who were doing well in the program, the groups were not representative of all JOBSTART participants. Nevertheless, used in conjunction with the survey responses, the focus group discussions provided valuable insights into participants' expectations about the program, what helped and hindered their participation, their opinions of the education and training components, and their recommendations for improving the program. MDRC hired consultants to develop the discussion topics, moderate the groups, and analyze the responses.

A series of in-depth interviews was conducted by another consultant with fifteen JOBSTART participants at four other sites (CREC in Hartford, EGOS in Denver, Allentown in Buffalo, and the Atlanta Job Corps) between November 1986 and September 1987. These profiles provided additional, although impressionistic, information about the lives of some JOBSTART participants prior to and during the demonstration. The report also drew on the observations of JOBSTART staff and selected participants who attended a conference on Youth Employment Initiatives, sponsored by MDRC, in October 1987.[9]

[9]See Manpower Demonstration Research Corporation, 1988, for a summary of the conference discussions.

APPENDIX B

IN-PROGRAM IMPACTS OF JOBSTART: METHODOLOGICAL ISSUES

As outlined in Chapter 9, four basic methodological issues had to be addressed to answer the key evaluation questions.

1. Selection Bias

Did random assignment succeed in creating a group of JOBSTART controls with the same pre-program characteristics as JOBSTART experimentals? If sample members become "experimentals" or "controls" completely at random, there are no systematic measured or unmeasured differences between the two groups before program treatment. Under those circumstances, average outcomes among controls measure what average outcomes would have been among experimentals had the treatment not been available to them, and the difference in average outcomes between experimentals and controls measures the program's effect. If there are systematic preexisting differences between experimentals and controls, then measured differences in post-treatment outcomes confound true program effects with biases due to the selection of more people from some groups to be experimentals and more people from other groups to be controls.

Table B.1 presents, one at a time, average characteristics for experimentals, controls, and both groups together. There were only slight differences between groups in a few individual characteristics, and no overall pattern of systematic differences between groups.

An alternative, more rigorous way to deal with the same issue is to use linear regression analysis. To implement statistical tests for systematic experimental-control differences in those characteristics used in impact regressions (see Table B.6), Table B.2 presents linear regression results measuring the extent of selection bias for the 2,311 members of the JOBSTART sample who filled out enrollment forms.[1] The first column of Table B.2 shows the same slight differences in individual characteristics and the same absence of systematic differences as Table B.1. The final entry in the column, the p-value of the F statistic, is very close to unity, providing strong evidence that there is no overall pattern of differences between experimentals and controls. It shows that random assignment created two groups without systematic overall differences in characteristics before enrollment. There were slight, statistically significant differences in only three individual characteristics. For the full sample, experimentals were slightly less likely to be male, slightly more likely to be male parents, and slightly more likely to live in a household with someone else who received AFDC.[2] The procedure used to

---

[1]One sample member who did not complete an enrollment form is excluded from the impact analysis (see Appendix A).

[2]Among the 1,709 sample members assigned before April 1987 (see column two of Table B.2) and among the 1,401 first-wave survey completers assigned before April 1987 (column three), the results of random assignment were quite similar. Although, judging from the high

(continued...)

Table B.1

Selected Characteristics at Time of Random Assignment
for the Full Research Sample, by Research Group

Characteristic	Experimentals	Controls	Total
Site (%)			
Allentown (Buffalo)	6.5	6.2	6.4
Atlanta Job Corps	3.4	3.5	3.5
BSA (New York City)	6.4	6.6	6.5
CET/San Jose	8.6	8.7	8.7
Chicago Commons	4.0	4.0	4.0
Connelley (Pittsburgh)	9.5	9.4	9.5
CREC (Hartford)	4.7	4.7	4.7
East Los Angeles Skills Center	5.4	5.5	5.4
EGOS (Denver)	10.3	10.2	10.3
El Centro (Dallas)	8.6	8.7	8.7
Los Angeles Job Corps	12.7	13.0	12.8
Phoenix Job Corps	6.6	6.6	6.6
SER/Corpus Christi	13.0	13.0	13.0
Age in years (%)			
17	29.3	30.8	30.1
18	24.6	25.3	24.9
19	20.0	18.6	19.3
20	15.4	14.0	14.7
21	10.7	11.2	10.9
Average age (years)	18.5	18.5	18.5
Sex (%)			
Male	47.4	50.3	48.9
Female	52.6	49.7	51.1
Ethnicity (%)			
White	8.0	9.1	8.5
Black	45.0	44.8	44.9
Hispanic	44.0	42.7	43.4
Other	3.0	3.5	3.2
School grade at dropout (%)			
3-8	7.0	6.4	6.7
9	20.1	20.0	20.1
10	31.5	33.9	32.7
11	32.1	32.3	32.2
12	9.2	7.5	8.4
Average school grade at dropout	10.2	10.1	10.1
Average time between dropout and random assignment (months)	23.4	23.1	23.2
Limited English (%)	4.2	4.6	4.4
Never married (%)	90.2	91.1	90.7
Parenting status (%)			
Not a parent	67.1	68.9	68.0
Female parent	26.3	25.9	26.1
Male parent	6.6	5.1	5.9
Not living with own child	71.7	73.9	72.8
Female living with own child	24.4	24.4	24.9
Male living with own child	2.9	1.7	2.3*

(continued)

Table B.1 (continued)

Characteristic	Experimentals	Controls	Total
Benefits received (%)[a]			
None	42.6	41.3	42.0
Own AFDC case	18.7	19.6	19.2
Household AFDC case	19.5	16.5	18.0*
Other public assistance	19.2	22.5	20.8*
Employed within 12 months prior to random assignment (%)	51.3	52.4	51.9
Received occupational training within 12 months prior to random assignment (%)	16.0	17.7	16.8
Arrested since age 16 (%)	16.0	15.5	15.8
Convicted since age 16 (%)	5.9	6.9	6.4
Participated in JOBSTART within 9 months of random assignment (%)[b]	88.0	--	--
Number of youths randomly assigned	1163	1149	2312

SOURCE: MDRC calculations from the JOBSTART Enrollment Forms and Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and November 1987.

For selected characteristics, sample sizes may vary up to 88 sample points due to missing data.

A two-tailed t-test or chi-square test was applied to differences between experimentals and controls for each characteristic. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = a percent.

Distributions may not add to 100.0 percent because of rounding.

[a]"Other public assistance" indicates receipt of benefits by either the participant or another member of the participant's household.

[b]Participation is defined as attending a JOBSTART activity for at least one hour. Activities may include education, training, or other activities. Only experimentals may participate. A nine-month participation measure is used in this table because of the availability of only nine months of follow-up for the entire sample.

Table B.2

Estimated Regression Coefficients for the Probability of Assignment to the Experimental Group

Regressor or Statistic	Full Sample	Early Sample	Early Sample Responders
Constant	0.503***	0.505***	0.510***
Site			
Allentown (Buffalo)	0.030	0.057	0.042
Atlanta Job Corps	-0.001	0.004	-0.018
BSA (New York City)	0.000	0.014	-0.047
CET/San Jose	-0.005	-0.019	-0.040
Chicago Commons	-0.002	0.013	0.036
Connelley (Pittsburgh)	0.004	0.006	-0.001
CREC (Hartford)	0.003	0.012	0.031
East Los Angeles Skills Center	0.006	0.010	-0.045
EGOS (Denver)	-0.001	-0.005	-0.020
El Centro (Dallas)	-0.003	-0.007	-0.051
Los Angeles Job Corps	-0.008	0.002	-0.042
Phoenix Job Corps	-0.000	-0.013	-0.016
SER/Corpus Christi	--	--	--
Age 20 or 21	0.011	0.014	0.009
Male	-0.050*	-0.070**	-0.060*
Ethnicity			
White	-0.023	-0.018	-0.050
Black	--	--	--
Hispanic	0.019	0.024	-0.000
Other	-0.013	0.032	-0.006
Quit school during grade 11 or 12	0.015	0.039	0.039
Limited English	-0.014	-0.039	0.001
No phone number on enrollment form	-0.064	-0.053	-0.007
Never married	-0.011	-0.023	-0.035
Male parent	0.080*	0.098*	0.088
Female parent living with child	0.002	-0.025	-0.021
Lived with two parents at age 14	-0.020	-0.014	-0.014
Own AFDC case at random assignment	-0.008	0.029	-0.012
Household AFDC case at random assignment	0.068**	0.082**	0.086**
Received medicaid at random assignment	-0.029	-0.085**	-0.095**

(continued)

Table B.2 (continued)

Regressor or Statistic	Full Sample	Early Sample	Early Sample Responders
Received food stamps at random assignment	-0.020	-0.011	-0.003
Employed within 12 months prior to random assignment	-0.014	-0.008	0.003
Arrested since age 16	0.049	0.054	0.029
Convicted since age 16	-0.070	-0.049	-0.075
Number of observations	2311	1709	1401
Number of experimentals	1163	863	714
Number of controls	1148	846	687
Degrees of freedom for error	2279	1677	1369
Error mean square	0.251	0.251	0.251
R square	0.008	0.013	0.018
Mean of dependent variable	0.503	0.505	0.510
F statistic	0.599	0.700	0.798
P-value of F statistic	0.961	0.891	0.778

SOURCE: MDRC calculations from the JOBSTART Enrollment Forms.

NOTES: The dependent variable in each regression equation was unity for each experimental and zero for each control. Each characteristic on the right hand side of each equation was measured as a deviation from its mean.

A two-tailed t-test was applied to each coefficient estimate. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

The p-value of the F statistic is the probability of obtaining these coefficient estimates if the true chance of becoming an experimental did not vary with the characteristics. Thus, the closer the p-value is to unity, the more successful was random assignment in equating average characteristics of experimentals and controls.

calculate all the impacts reported in this chapter takes these slight differences in characteristics into account, and estimates the impact that would have occurred had these slight differences not existed.

2. Enrollment Period Effect

Are those sample members randomly assigned through March 1987 -- the cutoff for inclusion of twelve-month survey data in the analysis -- representative of the entire JOBSTART sample, including those assigned from April through November 1987? If not, then later sample members cannot be excluded from calculations without affecting the magnitudes of measured impacts; true impacts would be confounded with biases due to enrollment period.

Table 3.1 shows the buildup of the JOBSTART sample over twenty-eight months from August 1985 through November 1987. By the end of March 1987, a total of 1,709 sample members had been assigned and filled out enrollment forms. This number was 74.0 percent of the eventual total of 2,311 enrollment forms. Table B.3 presents, one at a time, average characteristics for those assigned through March, for those assigned April or later, and for the full sample. There is a strong pattern of systematic differences in characteristics by enrollment period. To provide rigorous evidence of these systematic differences, column one of Table B.4 presents linear regression results measuring the extent to which average characteristics of the early group of 1,709 assigned by March 1987 differ from average characteristics at random assignment for the later sample. There is strong evidence that the early group -- which included many youths at Connelley in Pittsburgh and SER/Corpus Christi, the first two sites to enroll people in JOBSTART -- is systematically different from the later group. The early group is significantly less likely to be male, to be female custodial parents, and to have been assigned at one of the other, later-starting sites, particularly sequential and Job Corps sites (Connelley and CET/San Jose were both concurrent programs). The early group is significantly more likely to be Hispanic, to have language difficulties, and to have been over the age of nineteen.

Until all twelve-month survey responses have been processed, it is impossible to present in-program impacts for the full JOBSTART sample. Impacts for the early sample may differ because of unmeasured differences between samples as well as the measured differences in the characteristics just described. Because of the multiplicity of differences between the early and later samples, it is not possible to say for sure whether full sample impacts would be more favorable or less favorable than those available now.

3. Nonresponse Bias

Are those early sample members who responded to the twelve-month survey representa-

---

[2](...continued)
p-values, there were no systematic overall differences, early experimentals and early experimental responders were slightly less likely to be male, slightly more likely to live in a household with someone else who received AFDC, and slightly less likely to be receiving Medicaid than their control counterparts.

Table B.3

Selected Characteristics at Time of Random Assignment
for the Full Research Sample, by Period of Random Assignment

Characteristic	August 1985 - March 1987	April 1987 - November 1987	August 1985- November 1987
Site (%)			
Allentown (Buffalo)	5.8	8.0	6.4*
Atlanta Job Corps	2.1	7.3	3.5***
BSA (New York City)	3.5	15.1	6.5***
CET/San Jose	8.0	10.6	8.7*
Chicago Commons	4.3	3.2	4.0
Connelley (Pittsburgh)	12.8	0.0	9.5***
CREC (Hartford)	3.4	8.5	4.7***
East Los Angeles Skills Center	7.4	0.0	5.4***
EGOS (Denver)	11.3	7.3	10.3***
El Centro (Dallas)	10.1	4.5	8.7***
Los Angeles Job Corps	6.5	30.8	12.8***
Phoenix Job Corps	7.3	4.8	6.6**
SER/Corpus Christi	17.6	0.0	13.0***
Age in years (%)			
17	28.4	34.7	30.1***
18	24.3	26.7	24.9
19	19.3	19.4	19.3
20	16.0	11.0	14.7***
21	11.9	8.1	10.9**
Average age (years)	18.6	18.3	18.5***
Sex (%)			
Male	49.0	48.5	48.9
Female	51.0	51.5	51.1
Ethnicity (%)			
White	8.4	9.0	8.5
Black	41.6	54.2	44.9***
Hispanic	47.1	32.7	43.4***
Other	2.9	4.2	3.2
School grade at dropout (%)			
3-8	7.7	3.9	6.7***
9	21.3	16.6	20.1**
10	33.1	31.6	32.7
11	30.6	36.7	32.2***
12	7.4	11.2	8.4***
Average school grade at dropout	10.1	10.3	10.1***
Average time between dropout and random assignment (months)	24.2	20.5	23.2***
Limited English (%)	4.5	4.3	4.4
Reading grade level (%)[a]			
1-4	7.4	14.3	8.6
5	21.9	18.5	21.3
6	23.0	17.9	22.0
7	22.6	25.6	23.1
8	14.1	11.3	13.6
9-12	11.1	12.5	11.3

(continued)

Table B.3 (continued)

Characteristic	August 1985 - March 1987	April 1987 - November 1987	August 1985- November 1987
Average reading grade level[a]	6.9	6.8	6.9
Never married (%)	89.0	95.3	90.7***
Parenting status (%)			
Not a parent	67.3	69.8	68.0
Female parent	26.1	26.2	26.1
Male parent	6.6	4.0	5.9**
Not living with own child	72.6	73.5	72.8
Female living with own child	24.9	24.9	24.9
Male living with own child	2.6	1.7	2.3
Benefits received (%)[b]			
None	41.9	42.1	42.0
Own AFDC case	19.0	19.6	19.2
Household AFDC case	17.8	18.7	18.0
Other public assistance	21.3	19.6	20.8
Employed within 12 months prior to random assignment (%)	55.5	41.5	51.9***
Received occupational training within 12 months prior to random assignment (%)	18.3	12.6	16.8***
Arrested since age 16 (%)	16.5	13.6	15.8
Convicted since age 16 (%)	6.7	5.5	6.4
Participated in JOBSTART within 9 months of random assignment(%)[c]	92.4	75.3	88.0***
Number of experimentals and controls	1709	603	2312

SOURCE: MDRC calculations from the JOBSTART Enrollment Forms, TABE reading scores, and Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and November 1987. Since March 1987 is the latest random assignment month for which fielding of the twelve-month survey is complete, this table shows differences in demographic characteristics for the cohort for which fielding is complete versus the cohort for which fielding is not complete.

For selected characteristics other than reading levels, sample sizes may vary up to 88 sample points due to missing data.

Distributions may not add to 100.0 percent because of rounding.

A two-tailed t-test or chi-square test was applied to differences between the two random assignment periods for each characteristic. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

[a]Only the 866 experimentals who were administered the TABE at random assignment are included in this measure. Tests of statistical significance were not examined for this measure.

[b]"Other public assistance" indicates receipt of benefits by either the participant or another member of the participant's household.

[c]Participation is defined as attending a JOBSTART activity for at least one hour. Activities may include education, training, or other activities. Only experimentals may participate. A nine-month participation measure is used in this table because of the availability of only nine months of follow-up for the entire sample.

Table B.4

Estimated Regression Coefficients for Probability of Early Random Assignment and Unit Survey Response

Regressor or Statistic	Sample and Dependent Variable	
	Full Sample Early Assignment Dummy	Early Sample Unit Survey Response
Constant	0.740***	0.820***
Experimental Status	0.001	0.014
Site		
Allentown (Buffalo)	-0.298***	0.148***
Atlanta Job Corps	-0.515***	0.186***
BSA (New York City)	-0.579***	-0.032
CET/San Jose	-0.332***	0.110***
Chicago Commons	-0.193***	0.077
Connelley (Pittsburgh)	0.013	0.119***
CREC (Hartford)	-0.457***	0.165***
East Los Angeles Skills Center	-0.010	0.060
EGOS (Denver)	-0.172***	0.125***
El Centro (Dallas)	-0.091**	0.168***
Los Angeles Job Corps	-0.613***	0.011
Phoenix Job Corps	-0.151***	0.185***
SER/Corpus Christi	--	--
Age 20 or 21	0.054***	0.013
Male	-0.052**	-0.025
Ethnicity		
White	-0.027	0.010
Black	--	--
Hispanic	0.042*	0.019
Other	0.071	-0.072
Quit school during grade 11 or 12	-0.002	0.029
Limited English	0.084**	-0.048
No phone number on enrollment form	-0.045	-0.017
Never married	-0.037	0.017
Male parent	0.002	-0.014
Female parent living with child	-0.079***	0.055*
Lived with two parents at age 14	-0.009	0.027
Own AFDC case at random assignment	0.041	-0.009
Household AFDC case at random assignment	0.008	0.029
Received Medicaid at random assignment	0.014	0.025
Received food stamps at random assignment	0.014	-0.039
Employed within 12 months prior to random assignment	0.019	0.025

(continued)

Table B.4 (continued)

Regressor or Statistic	Sample and Dependent Variable	
	Full Sample Early Assignment Dummy	Early Sample Unit Survey Response
Arrested since age 16	0.032	-0.071**
Convicted since age 16	-0.016	0.007
Number of observations	2311	1709
Number of experimentals	1163	863
Number of controls	1148	846
Degrees of freedom for error	2278	1676
Error mean square	0.140	0.143
R square	0.281	0.054
Mean of dependent variable	0.740	0.820
F statistic	27.868	2.994
P-value of F statistic	0.000	0.000

SOURCE: MDRC calculations from JOBSTART Enrollment Form, Monthly Participation Report, and twelve-month survey data.

NOTES: The dependent variable in each regression equation was unity for early assignment or survey completion and zero otherwise. Each characteristic on the right hand side of each equation was measured as a deviation from its mean.

A two-tailed t-test was applied to each coefficient estimate. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent. A key result in both regressions was that the coefficient of experimental status was not significantly different from zero.

The p-value of the F statistic in column one is the probability of obtaining these coefficient estimates if the true chance of being assigned early did not vary with the characteristics. Thus, the closer the p-value is to zero, the more important are differences in characteristics between early and late assignees.

The p-value of the F statistic in column two is the probability of obtaining these coefficient estimates if the true chance of completing the survey did not vary with the characteristics. Thus, the closer the p-value is to zero, the more important are differences in characteristics between survey completers and noncompleters.

tive of the early JOBSTART sample assigned through March 1987, including nonrepondents? A high degree of mobility among disadvantaged young dropouts makes it difficult for survey interviewers to locate all of them a year or two after they have been enrolled into a research sample. Some 1,401 of the 1,709 early sample members furnished twelve-month survey data, for an overall response rate of 82.0 percent (82.7 percent for experimentals and 81.2 percent for controls).[3] Table B.5 presents, one at a time, average characteristics for those early sample members who completed the survey, for those who did not respond, and for the full early sample. There is a strong pattern of systematic differences in characteristics by survey response.

The right-hand column of Table B.4 presents linear regression results measuring the extent to which average characteristics for the 1,401 survey responders differ from average characteristics at random assignment for the 308 nonresponders. Since the final entry, the p-value of the F statistic, is zero to three decimal places, there is strong evidence of systematic differences between responders and nonresponders. Responders were significantly more likely to have been female custodial parents, and significantly less likely ever to have been arrested by the time of random assignment. There were also significant site differences, with better response at Connelley, CET/San Jose, EGOS, El Centro, Allentown, CREC, Phoenix Job Corps, and Atlanta Job Corps, even after taking differences in individual characteristics into account. However, the proportion of experimentals was not significantly different between responders and nonresponders.

These findings are somewhat troublesome, although not as unsettling as a finding of differential nonresponse for experimentals and controls would have been. When nonresponse is randomly distributed among members of both treatment and control groups, it is troublesome only because it reduces the sample size and thus the statistical power to find impacts of a given size. Randomly distributed nonresponse does not alter the expected values of adjusted mean outcomes, and thus does not bias impacts.[4] However, when nonresponse is greater among one research group (such as controls) or among members of either research group with certain characteristics (such as not receiving AFDC), impacts may be biased slightly unless corrected for nonresponse. The most flexible correction for nonresponse is incorporation of an additional equation for survey response into a two-equation system with the impact equation.[5] Should response bias persist when all survey results have been processed, such a correction may be appropriate, although the success of attempts to implement such corrections is data-dependent.

4. Impact of Participation Versus Impact of Assignment

Because the target population for the JOBSTART Demonstration consisted of young people who had histories of dropping out of education programs, it was difficult to get those

[3]There are two types of nonresponse. Unit nonresponse is the failure to ascertain answers to any of the questionnaire items. Item nonresponse is the failure to obtain some answers, though other questions were answered. All the response rates mentioned here are unit response rates.

[4]See Little, 1982.

[5]See Heckman, 1976.

Table B.5

Selected Characteristics at Time of Random Assignment for Fielded Experimentals and Controls, by Completion of Survey

Characteristic	Did Not Complete Survey	Completed Survey	Total
Research group			
Experimentals	48.4	51.0	50.5
Controls	51.6	49.0	49.5
Site (%)			
Allentown (Buffalo)	3.9	6.2	5.8
Atlanta Job Corps	1.0	2.4	2.1
BSA (New York City)	6.2	2.9	3.5***
CET/San Jose	7.8	8.0	8.0
Chicago Commons	4.9	4.2	4.3
Connelley (Pittsburgh)	11.4	13.1	12.8
CREC (Hartford)	1.9	3.7	3.4
East Los Angeles Skills Center	8.8	7.1	7.4
EGOS (Denver)	8.4	11.9	11.3*
El Centro (Dallas)	5.8	11.1	10.1***
Los Angeles Job Corps	10.1	5.7	6.5***
Phoenix Job Corps	3.2	8.1	7.3***
SER/Corpus Christi	26.6	15.6	17.6***
Age in years (%)			
17	27.3	28.7	28.4
18	25.0	24.1	24.3
19	21.1	18.9	19.3
20	14.6	16.3	16.0
21	12.0	11.9	11.9
Average age (years)	18.6	18.6	18.6
Sex (%)			
Male	58.4	46.9	49.0***
Female	41.6	53.1	51.0***
Ethnicity (%)			
White	7.5	8.6	8.4
Black	37.0	41.6	41.6*
Hispanic	50.6	46.3	47.1
Other	4.9	2.5	2.9
School grade at dropout (%)			
3-8	11.8	6.8	7.7***
9	25.6	20.3	21.3*
10	29.8	33.8	33.1
11	25.2	31.8	30.6**
12	7.5	7.3	7.4
Average school grade at dropout	9.9	10.1	10.1***
Average time between dropout and random assignment (months)	25.5	23.9	24.2
Limited English (%)	6.5	4.0	4.5*
Reading grade level (%)[a]			
1-4	8.9	7.1	7.4
5	23.4	21.6	21.9
6	22.6	23.0	23.0
7	23.4	22.4	22.6
8	11.3	14.1	14.1
9-12	10.5	11.2	11.1

(continued)

Table B.5 (continued)

Characteristic	Did Not Complete Survey	Completed Survey	Total
Average reading grade level[a]	6.8	6.9	6.9
Never married (%)	88.2	89.2	89.0
Parenting status (%)			
Not a parent	74.4	65.8	67.3***
Female parent	17.9	27.9	26.1***
Male parent	7.8	6.3	6.6
Not living with own child	80.5	70.8	72.6***
Female living with own child	16.6	26.7	24.9***
Male living with own child	2.9	2.5	2.6
Benefits received (%)[b]			
None	42.1	41.2	41.9
Own AFDC case	16.6	19.6	19.0
Household AFDC Case	16.6	18.1	17.8
Other public assistance	21.8	21.2	21.3
Employed within 12 months prior to random assignment (%)	52.5	56.2	55.5
Received occupational training within 12 months prior to random assignment (%)	21.8	17.6	18.3
Arrested since age 16 (%)	23.5	15.0	16.5***
Convicted since age 16 (%)	9.4	6.1	6.
Participated in JOBSTART within 12 months of random assignment (%)[c]	87.9	93.3	92.4**
Number of survey completers	308	1401	1709

SOURCE: MDRC calculations from the JOBSTART Enrollment Forms, TABE reading scores, and Monthly Participation Reports.

NOTES: This table includes data for all youths randomly assigned between August 1985 and March 1987, the last month for which fielding of the twelve-month survey is complete.

For selected characteristics other than reading levels, sample sizes may vary up to 68 sample points because of missing data.

Distributions may not add to 100.0 percent because of rounding.

A two-tailed t-test or chi-square test was applied to differences between survey completers and noncompleters for each characteristic. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

[a]Only the 866 experimentals who were administered the TABE at random assignment are included in this measure. Tests of statistical significance were not examined for this measure.

[b]"Other public assistance" indicates receipt of benefits by either the participant or another member of the participant's household.

[c]Participation is defined as attending a JOBSTART activity for at least one hour. Activities may include education, training, or other activities. Only experimentals may participate. A nine-month participation measure is used in this table because of the availability of only nine months of follow-up for the entire sample.

s. ected for the program to attend, and to retain attendees for substantial periods of time. However, everyone assigned to experimental status was included when calculating average impacts of JOBSTART. Therefore, impacts do not measure the impacts of participation in JOBSTART, but rather of assignment to the group eligible to receive JOBSTART services.[6] Thus, impact estimates average net outcomes for all experimentals, including nonparticipants. Nonparticipation "waters down" the program effect the experiment seeks to detect. Fortunately, only 48 of the 714 experimentals in the early group of survey completers never participated in the program. Such low nonparticipation may be due in part to successful negotiation with sites to place the point of random assignment after initial assessment but immediately before program services started.

When substantial nonparticipation occurs during experimental program evaluation, techniques are available for calculating impacts of participation as well as impacts of assignment. When the proportion of assignees to the program who are not counted as participants is an unbiased measure of the proportion of controls who would not have participated, when the program has no effect on nonparticipants, and when the sample is large enough, it is approximately valid to use the formula[7]

$$\text{Impact of participation} = \frac{\text{Impact of assignment}}{\text{Fraction participating}}.$$

Using this formula necessitates validating all of the assumptions underlying it, and thus makes impact analysis more complicated than a simple comparison of average outcomes for those assigned to treatment and those assigned to control. The assumption of zero effects on nonparticipants is troublesome, because the process of recruiting experimentals, screening them, and contacting them when they do not appear may alter their behavior. Thus in this report impacts of assignment are reported instead of impacts of participation.

As outlined above, impacts of assignment to the treatment were calculated by comparing average outcomes for all those assigned to the experimental group with average outcomes for all those assigned to the control group. In order to increase the statistical precision of the impact estimate, a variant of simple group averaging known as one-way linear analysis of covariance was used for Tables 9.2 through 9.7.[8] As shown for the full sample of 1,401 responders in Table B.6, in a multiple regression of outcome on covariates measured at the

---

[6]Some might suggest that nonparticipants be excluded from impact analyses. However, such exclusions would expose impacts to possible selection biases, undermining the control group's validity in measuring what would have happened without the program. When nonparticipants are excluded from the experimental group, average measured and unmeasured characteristics of experimentals may no longer be the same as average control group characteristics. See Cave, 1988.

[7]See Cave, 1988; Auspos, Cave, and Long, 1988, Appendix E; Bloom, 1984; and Farkas et al., 1984, p. 85. If such an adjustment factor were appropriate here, its value would be approximately the reciprocal of the rate of participation in JOBSTART or 1 / (1 - 48/714) = 1.072.

[8]See Cave, 1987, and Ostle, 1975.

Table B.6

Estimated Regression Coefficients for Selected Outcomes

Regressor or Statistic	Dependent Variable			
	Received GED or High School Diploma by Month 12 (%)	Total Earnings in Months 1-12 ($)	Received any Education or Training in Months 1-12 (%)	Ever Employed or in Education or Training, Months 1-12 (%)
Constant	9.874***	2490.25***	29.276***	73.914***
	(1.413)	(106.89)	(1.328)	(1.191)
Experimental status	17.601***	-717.47***	65.244***	23.314***
	(1.988)	(150.38)	(1.868)	(1.676)
Site				
Allentown (Buffalo)	-13.211**	-263.17	16.684***	5.637
	(5.406)	(408.94)	(5.079)	(4.558)
Atlanta Job Corps	-18.584**	1962.17***	-2.794	0.567
	(7.446)	(563.23)	(6.996)	(6.278)
BSA (New York City)	-10.048	2574.34***	7.379	2.556
	(6.654)	(503.33)	(6.252)	(5.610)
CET/San Jose	-4.735	1315.70***	-12.097***	-3.307
	(4.589)	(347.09)	(4.311)	(3.869)
Chicago Commons	-27.742***	444.25	1.470	-2.918
	(6.001)	(453.95)	(5.638)	(5.060)
Connelley (Pittsburgh)	-1.177	-612.75*	7.661*	0.609
	(4.747)	(359.04)	(4.459)	(4.002)
CREC (Hartford)	-17.972***	3784.16***	1.191	5.622
	(6.012)	(454.76)	(5.648)	(5.069)
East Los Angeles Skills Center	-25.886***	851.70**	2.977	4.512
	(4.654)	(352.06)	(4.373)	(3.924)
EGOS (Denver)	-18.461***	485.12	-1.172	1.871
	(3.974)	(300.59)	(3.733)	(3.350)
El Centro (Dallas)	-9.480**	-843.41**	-10.190**	-24.570***
	(4.428)	(344.94)	(4.160)	(3.733)
Los Angeles Job Corps	-20.795***	509.73	-0.470	-0.778
	(5.239)	(396.31)	(4.922)	(4.417)
Phoenix Job Corps	-9.492***	730.69**	-3.620	2.508
	(4.518)	(341.72)	(4.244)	(3.809)
SER/Corpus Christi	--	--	--	--
Age 20 or 21	1.993	-160.69	-1.147	-1.951
	(2.388)	(180.67)	(2.244)	(2.014)

(continued)

Table B.6 (continued)

Regressor or Statistic	Dependent Variable			
	Received GED or High School Diploma by Month 12 (%)	Total Earnings in Months 1-12 ($)	Received any Education or Training in Months 1-12 (%)	Ever Employed or in Education or Training, Months 1-12 (%)
Male	-1.361 (2.607)	1105.29*** (197.17)	-2.360 (2.449)	5.573** (2.198)
Ethnicity				
White	7.493* (4.052)	1255.77*** (306.53)	-5.451 (3.807)	-4.024 (3.417)
Black	--	--	--	---
Hispanic	-1.974 (3.044)	356.79 (230.27)	0.574 (2.860)	2.135 (2.567)
Other	-8.172 (7.143)	105.18 (540.32)	-8.039 (6.711)	-6.624 (6.023)
Quit school during grade 11 or 12	3.544 (2.160)	590.64*** (163.36)	-1.553 (2.029)	0.493 (1.821)
Limited English	12.086** (5.453)	-152.39 (419.27)	-0.625 (5.208)	10.097** (4.674)
No phone number on enrollment form	-4.356 (5.015)	-440.25 (379.30)	-6.264 (4.711)	-8.653** (4.228)
Never married	-2.815 (3.534)	-383.68 (267.30)	-1.767 (3.320)	-0.979 (2.979)
Male parent	-6.698 (4.414)	352.72 (333.89)	-1.384 (4.147)	0.712 (3.722)
Female parent living with child	-0.320 (3.297)	-0.98 (249.42)	-4.433 (3.098)	-5.707** (2.780)
Lived with two parents at age 14	-1.986 (2.964)	-67.41 (224.19)	1.390 (2.784)	0.088 (2.499)
AFDC case at random assignment	-3.686 (3.401)	-219.14 (257.25)	-3.534 (3.195)	-5.355* (2.867)
Household AFDC at random assignment	-1.676 (3.101)	-428.87* (234.57)	3.344 (2.913)	-2.569 (2.615)
Received Medicaid at random assignment	1.758 (2.964)	-455.23** (224.19)	1.773 (2.784)	-0.853 (2.499)
Received food stamps at random assignment	2.015 (2.846)	36.36 (215.30)	3.272 (3.674)	2.771 (2.400)

(continued)

Table B.6 (continued)

Regressor or Statistic	Dependent Variable: Received GED or High School Diploma by Month 12 (%)	Total Earnings in Months 1-12 ($)	Received any Education or Training in Months 1-12 (%)	Ever Employed or in Education or Training, Months 1-12 (%)
Employed within 12 months prior to random assignment	0.212 (2.160)	866.96*** (163.40)	-1.121 (2.030)	4.928*** (1.821)
Arrested since age 16	-4.816 (3.567)	-1.33 (269.81)	-2.459 (3.351)	-4.095 (3.007)
Convicted since 16	1.784 (5.249)	854.28** (397.06)	-7.361 (4.932)	-0.611 (4.426)
Number of observations	1401	1401	1401	1401
Number of experimentals	714	714	714	714
Number of controls	687	687	687	687
Degrees of freedom for error	1368	1368	1368	1368
Error mean square	1359.300	7777190.736	1199.761	966.248
R square	0.132	0.247	0.500	0.226
Mean of dependent variable	18.844	2124.60	62.527	85.796
F statistic	6.51	14.03	42.75	12.47
P-value of F statistic	0.000	0.000	0.000	0.000

SOURCE: MDRC calculations from JOBSTART Enrollment Form, Monthly Participation Report, and twelve-month survey data.

NOTES: Ordinary least squares regression coefficients in this table correspond to impact estimates presented in Tables 9.2, 9.3, and 9.4. A one-way linear analysis of covariance procedure was used to control for 31 kinds of differences in characteristics before random assignment. See Ostle (1975, p. 461) and Cave (1987). The standard error of each coefficient estimate is enclosed in parentheses.

Each characteristic on the righthand side of each equation was measured as a deviation from its mean.

A two-tailed t-test was applied to each coefficient estimate. Statistical significance levels are indicated as * = 1 percent; ** = 5 percent; *** = 10 percent.

time of enrollment and on a dummy variable for research status, the coefficient of the dummy variable is the impact. This coefficient may be interpreted as the difference between the adjusted mean outcome for those assigned to treatment and th adjusted mean outcome for those assigned to control. Adjustment removes the effect of slight differences at the time of enrollment in characteristics related to the outcome, and yields a purer measure of the effect of research status alone.

Table B.7 summarizes the results of applying the same procedure to subsamples of the 1,401 responders. The results in Table 9.8 are based on slightly more complex regression equations which include terms for interactions between experimental status and subgroup characteristics. Such "two-way ANCOVA" impacts may differ to some extent from "split file" impacts estimated by eliminating other subgroups from "one-way ANCOVA" analyses for Table B.7. However, calculating two-way ANCOVA impacts permits determining the statistical significance of impact differences, and is less burdensome computationally.

Table B.7

"Split-File" Estimates of Preliminary Impacts on Educational Attainment at Twelve Months, by Selected Baseline Characteristics

Characteristic and Subgroups	Sample Size	Received GED or High School Diploma by End of Month 12 (%)			
		Experimentals	Controls	Subgroup Impact	p
Sex					
Female	744	30.1	8.9	21.2***	0.000
Male	657	24.5	10.8	13.7***	0.000
Age					
19 and under	1005	26.2	9.4	16.8***	0.000
20 or 21	396	30.8	10.9	20.0***	0.000
School grade at dropout					
Grade 10 or under	851	27.8	8.1	19.8***	0.000
Grade 11 or 12	550	26.4	13.5	12.9***	0.000
Received occupational training within 12 months prior to random assignment					
No	1155	26.1	10.4	15.7***	0.000
Yes	246	33.0	8.6	24.4***	0.000
Employed within 12 months prior to random assignment					
Some	813	29.1	10.8	18.3***	0.000
None	588	25.2	8.5	16.6***	0.000
Received own AFDC, general assistance, or home relief at random assignment					
No	1028	26.9	10.8	16.2***	0.000
Yes (own case)	373	30.4	6.5	23.8***	0.000
Marital status					
Never married	1250	26.0	10.0	16.0***	0.000
Other	151	39.4	7.8	31.5***	0.000
Parenting status					
No children	920	26.1	11.3	14.8***	0.000
Has one or more children	481	30.5	6.8	23.8***	0.000
Lives with own children					
No, or no children	991	25.2	11.3	13.9***	0.000
Yes	410	33.4	6.0	27.4***	0.000

(continued)

Table B.7 (continued)

Characteristics and Subgroups	Sample Size	Received GED or High School Diploma by End of Month 12 (%)			
		Experimentals	Controls	Subgroup Impact	p
Ethnicity					
Hispanic	649	25.2	7.8	17.4***	0.000
Black	597	28.8	10.6	18.2***	0.000
White	120	40.3	15.9	24.3***	0.006
Other	35	1.6	15.1	-13.5	0.496

SOURCE: MDRC calculations from JOBSTART Enrollment Form and twelve-month survey data.

NOTES: The sample for these calculations consisted of all 1401 survey completers assigned between August 1985 and March 1987, including those with values of zero for outcomes and those who were assigned to JOBSTART but did not participate. Each line of this table reports the result of a separate "split file" linear analysis of covariance procedure for a sample subgroup of the size indicated. Within-subgroup average experimental and control group outcomes reported here are adjusted means from these procedures, which controlled for up to 31 kinds of differences in characteristics before random assignment. See Ostle (1975, p. 461), Cave (1987), and Appendix Table B.6. There may be slight discrepancies in reported sums and differences of these adjusted means because of rounding.

Two-tailed t-tests were applied to within-subgroup differences between average experimental and control outcomes. The column labeled "p" is the statistical significance level of the difference in average outcomes. That is, the probability that average outcomes are different only because of random error is p. Statistical significance levels are indicated as * = 10 percent; ** = 5 percent; *** = 1 percent.

REFERENCES

American Council on Education, General Educational Development Testing Service. 1988. The 1987 GED Statistical Report, Washington, DC: American Council on Education.

Auspos, Patricia; George Cave; and David Long. 1988. Maine: Final Report on the Training Opportunities in the Private Sector Program. New York: Manpower Demonstration Research Corporation.

Auspos, Patricia, with Marilyn Price. January 1987. Launching JOBSTART: A Demonstration for Dropouts in the JTPA System. New York: Manpower Demonstration Research Corporation.

Bane, Mary Jo, and David T. Ellwood. 1983. The Dynamics of Dependence: The Routes to Self-Sufficiency. Cambridge, MA: Urban Systems Research and Engineering.

Berlin, Gordon, and Andrew Sum. 1988. Toward a More Perfect Union: Basic Skills, Poor Families, and Our Economic Future. New York: Ford Foundation.

Betsey, Charles L., et al., eds. 1985. Youth Employment and Training Programs: The YEDPA Years. Washington, DC: National Research Council, National Academy Press.

Bloom, Howard. 1984. "Accounting for No-Shows in Experimental Evaluation Designs." Evaluation Review 8 (April):225-46.

Cave, George. 1985. "Youth Joblessness and Race: Evidence from the 1980 Census." In Charles L. Betsey et al., Youth Employment and Training Programs: The YEDPA Years. Washington, DC: National Research Council, National Academy Press.

_____. 1987. "Sample Sizes for Social Experiments." Proceedings of the Section on Survey Research Methods of the American Statistical Association.

_____. 1988. Noncompliance Bias in Evaluation Research: Assignment, Participation, and Impacts. New York: Manpower Demonstration Research Corporation.

Clark, Kim B., and Lawrence H. Summers. 1982. "The Dynamics of Youth Unemployment." In Richard B. Freeman and David A. Wise, eds., The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago: University of Chicago Press.

Cook, R. Dennis, and Sanford Weisberg. 1982. Residuals and Influence in Regression. New York: Chapman and Hall.

Cook, Robert F., et al. 1985. Implementation of the Job Training Partnership Act: Final Report. Rockville, MD: Westat.

Cygnet Associates. 1987. JTPA Recruiting That Really Works. Annapolis: Cygnet Associates.

Ekstrom, Ruth B., et al. 1986. "Who Drops Out of High School and Why? Findings from a National Study." Teachers College Record 87 (Spring):356-73.

Ellwood, David T. 1982 "Teenage Unemployment: Permanent Scars or Temporary Blemishes?" In Richard B. Freeman and David A. Wise, eds., The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago: University of Chicago Press.

Farkas, George, et al. June 1984. Post-Program Impacts of the Youth Incentive Entitlement Pilot Projects. New York: Manpower Demonstration Research Corporation.

Federal Register. December 16, 1987. "Announcement of Proposed Performance Standards." Washington, DC: U.S. Government Printing Office.

_____. March 13, 1989. Washington, DC: U.S. Government Printing Office.

Fullerton, Howard, N., Jr. 1987. "Labor Force Projections: 1986 to 2000." Monthly Labor Review (September):19-26.

Grinker Associates. July 1986. An Independent Sector Assessment of the Job Training Partnership Act. Final Report: Program Year 1985. New York: Grinker Associates.

Hahn, Andrew, and Robert Lerman. 1985. What Works in Youth Employment Policy? Washington, DC: National Planning Association.

Heckman, James J. 1976. "The Common Structure of Statistical Models of Truncation, Sample Selection, and Limited Dependent Variables, and a Simple Estimator for Such Models." Annals of Economic and Social Measurement 5 (Fall):475-92.

Job Training Partnership Act Advisory Panel. 1989. Working Capital: JTPA Investments for the '90s. Washington, DC: U.S. Department of Labor.

Johnson, William, and Arnold Packer. 1987. Workforce 2000: American Work and Workers in the 21st Century. Indianapolis: Hudson Institute.

Kelly, Jodie Sue. April 1987. JTPA Recruitment Made (Much) Easier. Washington, DC: National Association of Counties.

Kirsch, Irwin S., and Ann Jungeblut. 1986. Literacy: Profiles of America's Young Adults. Princeton, NJ: National Assessment of Educational Progress, Educational Testing Service.

Little, Roderick. 1982. "Models for Nonresponse in Sample Surveys." Journal of the American Statistical Association 77 (June):237-50.

Mallar, Charles, et al. September 1982. Evaluation of the Economic Impact of the Job Corps Program: Third Follow-Up Report. Princeton, NJ: Mathematica Policy Research.

Malnic, Eric. 1988. "Job Corps Program in Downtown YWCA Named as Best in U.S." Los Angeles Times, November 16, p. 1.

Manpower Demonstration Research Corporation. April 1985. "Guidelines for JOBSTART's Occupational Skills Training Component." New York: Manpower Demonstration Research Corporation.

_____. May 1988. "Report on the Conference on Youth Employment Initiatives, October 25-27, 1987." New York: Manpower Demonstration Research Corporation.

Mathematica Policy Research. October 1985. Job Corps Process Analysis: Final Report. Princeton, NJ: Mathematica Policy Research.

_____. 1988. The Minority Female Single Parent Demonstration: Process Analysis of Program Operations. Princeton, NJ: Mathematica Policy Research.

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

MDC. Fall 1985. The States' Excellence in Education Commissions: Who's Looking Out for At-Risk Youth? Chapel Hill, NC: MDC.

National Academy of Science, National Academy of Engineering, Institute of Medicine. 1984. High School and the Changing Workplace: The Employers' View. Report of the Panel on Secondary School Education for the Changing Workplace. Washington, DC: National Academy Press.

National Association of Manufacturers. April 1982. America's Human Resources. Washington, DC: Perspectives on National Issues.

National Commission for Employment Policy. September 1988. Evaluation of the Effects of JTPA Performance Standards on Clients, Services, and Costs: Final Report. Washington, DC: NCEP.

Ostle, Bernard. 1975. Statistics in Research, 3rd ed. Ames: Iowa State University Press.

Public/Private Ventures. May 1983. Longer Term Impacts of Pre-Employment Services on the Employment and Earnings of Disadvantaged Youth. Philadelphia: PPV.

_____. 1987. Youth and the Workplace: Second Chance Programs and the Hard-to-Employ. Philadelphia: PPV.

_____. Summer 1988. Youth Motivation: At-Risk Youth Talk to Program Planners. Philadelphia: PPV.

Quint, Janet C. and Cynthia A. Guy. 1989. New Chance: Lessons from the Pilot Phase. New York: Manpower Demonstration Research Corporation.

Rees, Albert. 1986 "An Essay on Youth Joblessness." Journal of Economic Literature 24 (June):613-28.

Richardson, Phillip, and John Burghardt. October 1985. Job Corps Process Analysis: Final Report. Washington, DC: U.S. Department of Labor, Employment and Training Administration, Office of Strategic Planning and Policy Development.

70001 Training and Employment Institute. 1988. Final Report of the Disconnected Youth Demonstration Project. Washington, DC: 70001 Training and Employment Institute.

Sticht, Thomas. 1987. Cast Off Youth: Policy and Training Methods from the Military Experience. Westport, CT: Praeger.

U.S. Congress, Congressional Budget Office. 1982. Improving Youth Employment Prospects: Issues and Options. Washington, DC: U.S. Government Printing Office.

U.S. Department of Education, National Assessment of Vocational Education. September 1988. Second Interim Report of the National Assessment of Vocational Education. Washington, DC: U.S. Government Printing Office.

U.S. Department of Labor. Various years. Summary of the JTQS Data for JTPA Title IIA and III Enrollments and Terminations. Washington, DC: U.S. Department of Labor.

_____, Bureau of Labor Statistics. January 1989. Employment and Earnings. Washington, DC: U.S. Government Printing Office.

U.S. Department of Labor, Division of Performance Management and Evaluation. June 1988. JTPA Title IIA Participants Who Were School Dropouts at Program Application: Program Year 1986. Job Training Quarterly Survey Special Paper no. 6. Washington, DC: U.S. Government Printing Office.

U.S. Department of Labor, Employment and Training Administration. 1987. Job Corps in Brief: Program Year 1986. Washington, DC: U.S. Government Printing Office.

U.S. General Accounting Office. September 29, 1988. "Job Training Partnership Act: Participants, Services, and Outcomes." Testimony given before the Committee on Education and Labor, U.S. House of Representatives.

Walker, Gary; Hilary Feldstein; and Katherine Solow. January 1985. An Independent Sector Assessment of the Job Training Partnership Act. Phase II: Initial Implementation. New York: Grinker, Walker & Associates.

Manpower Demonstration Research Corporation

Three Park Avenue
New York, New York 10016
(212) 532-3200

1669 Bush Street
San Francisco, California 94109
(415) 441-7607