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ABSTRACT

A rapid feedback evaluation of state- and local-level implementation of the Career Education Incentive Act (PL 95-207) was conducted. (This act established K-12 and postsecondary career exploration as national priorities.) Site visits were made in nine states (Massachusetts, New Jersey, Pennsylvania, Georgia, Ohio, Louisiana, Missouri, Montana, and Oregon) and thirty-one intermediate and local education agencies. The states represented nine out of ten United States Department of Education regions: large, medium and minimum amounts of PL 95-207 funding during 1979; and high, medium, and low levels of 1974-75 state support for career education. Site evaluations revealed that PL 95-207 funds are serving their intended purpose. State and local education agencies are maintaining and increasing their investments. State leadership is being exercised at an accelerating rate, and in most districts schools seem well advanced towards complete career education involvment with resources being provided by other state and federal programs and the private sector. Areas needing fuller attention include the following: coordinated state and local evaluation plans, more preservice training, active involvement of organized labor, and active involvement of groups representing the handicapped and other special needs populations. (Descriptions of six model programs receiving PL 95-207 funding are appended.) (MN)

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IMPLEMENTATION OF THE CAREER EDUCATION INCENTIVE ACT

Interim Report on the Rapid Feedback Evaluation

Submitted to:

The Division of Program Assessment
Office of Management Evaluation

and

The Office of Career Education
U.S. Department of Education

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SUMMARY

As part of a rapid feedback evaluation of state and local-level implementation of the Career Education Incentive Act (PL95-207), site visits were made to nine states and 31 intermediate and local education agencies. The states visited represented: nine out of ten U.S. Department of Education (ED) regions; large, medium, and minimum amounts of PL95-207 funding during Fiscal Year 1979; and high, medium, and low levels of 1974-75 state support for career education. Results of state-level and intermediate/local-level interviews are presented separately, focusing on the degree to which the federal funds received under PL95-207 were serving as an incentive to career education implementation.

State-Level Results

Support for career education was strong in the majority of the nine states visited: Chief State School Officers in six states had actively promoted its implementation; five state legislatures had passed laws of endorsement; four state boards of education had adopted formal resolutions of approval; and seven states had appropriated funds in FY79 to support implementation (in amounts ranging from $25,000 to $2.4 million, an increase from three states prior to FY79). Six states reported the use of funds from other state sources (such as vocational education and state basic skills improvement programs) to support career education activities, and seven reported the use of funds from other federal programs (e.g., non PL95-207 programs such as ESEA Title IV C, ESAA, CETA and Vocational Education Act). Only two of the nine states visited were using PL95-207 as the sole source of career education support. Three states reported that their overall level of support for career education implementation had increased since receipt of PL95-207 funds, an especially encouraging finding in view of the fact that no non-federal matching was required in FY79, the first year of funding under the Act.

All states visited were using the Act's allowable state setaside funds (10%) for leadership purposes, with 43 separate activities being reported. Most were being conducted by state education agency (SEA) personnel or with their significant involvement. In two states, however, all leadership activities were contracted out. Two-thirds of the activities were in

the areas of (1) inservice training for LEA personnel or (2) local coordinators, and (3) collecting, evaluating, and disseminating career education materials. About half of the states were devoting some leadership funds to (4) promoting collaborative relationships with business, labor, industry, professional, government, civic, or community groups and (5) conducting statewide leadership conferences. Relatively little effort was being devoted to (6) conducting needs assessment or evaluation studies or (7) working with institutions of higher education to include career education in preservice teacher training curricula. Slightly over half of the 43 state leadership activities were new; and with the exception of the collection and dissemination of materials, few of the activities had been carried out prior to the receipt of PL95-207 funds. Thus, the Act appears to have resulted in a substantial increase in state-level leadership designed to enhance career education implementation.

Considerable business, labor, industry, professional, civic, and community (BLIP/CC) group participation at the state level was in evidence, although much of this participation originated prior to the receipt of Incentive Act funds. Five of the states visited had formed state career education advisory councils, with an average of 27 members per state. In seven states, BLIP/CC groups had conducted or assisted in the conduct of workshops or other implementation support activities, and in six states such groups had prepared or disseminated instructional materials for use in career education.

On the average, about 18% of the local education agencies (LEAs) in the nine states visited had applied for PL95-207 grants, and about half of all applicants were successful, with an average of 18 awards per state. Almost half of the awards went to LEAs that had not previously been involved in career education implementation. Most local-level projects had multiple goals, commonly including activities in the areas of inservice staff development, guidance and counseling, and material development and distribution. Each of the 13 local-level activites permitted by PL95-207 was being conducted in at least three states. In all states, some form of local "buy-in" or participation was reported, but data on the dollar value of this participation were difficult to obtain at the state level. In the four states where estimates of local funding could be obtained, the estimates ranged from $53,000 to $653,939, with an average

of over $260,000. Five of the nine states reported an appreciable increase in local-level career education implementation as a result of the availability of PL95-207 funds.

Only two of the nine states visited had any plans to conduct formal controlled studies of career education impact in the state, and these were states with large state-funded programs. Thus, while each state visited planned to provide some evaluative evidence regarding its use of PL95-207 funds, the highly idiosyncratic nature of this evidence will severely limit its utility in any national effort to assess the impact of PL95-207.

In general, all state-level respondents reported that PL95-207 was responsible for increased levels of career education implementation. The magnitude of the impact appeared to be greatest in those states where federal funds were not dwarfed by state career education programs, yet were part of an identifiable state career education thrust. Projections for the proportions of LEAs that would be implementing career education to some degree by 1984 ranged from 25 to 100 percent, assuming no drastic reductions in current levels of federal or state funding. Most respondents also pointed out the importance of including career education in state curriculum or school accreditation standards as a way of ensuring longer term implementation.

Local-Level Results

All of the seven IEAs and 24 LEAs visited had obtained FY79 PL95-207 grants. At each site, interviews were conducted with project directors, local coordinators, and other staff to collect indicators of PL95-207 program performance at the local level.

In general, grants averaging about $36,000 to regional educational service centers allowed these IEAs to provide inservice training and other forms of technical assistance to LEAs in their jurisdictions. Since they were generally dependent upon outside funding for all of their operations, the IEAs contributed few nonfederal resources to these activities. Moreover, PL95-207 career education grants generally constituted only a small proportion of IEA budgets.

Incentive Act grants to the 24 LEAs visited ranged from $1,000 to $216,925, with an average awared of $33,000 for a 12 month period. On the average, PL95-207 funds constituted 38% of the total career education

budgets at these sites. Other sources included: local education funds, 37%; state funds, 10%; federal programs such as vocational education and ESEA Title IV, 7%; and other non-governmental funds, 8%.

Most of the LEAs visited had some previous career education implementation efforts underway prior to the receipt of PL95-207 funds. Similarly, the local project staff (which averaged 4.5 FTE professionals and 1.2 FTE support personnel) tended to have had considerable previous career education experience. One-third of these staff members were paid through PL95-207 funds.

All of the superintendents and three-fourths of the school boards in the visited districts had formally endorsed career education as a component of their educational program. Projects generally encompassed many different types of activites, including: formal staff and materials development efforts aimed at infusing career education into the K-12 curriculum; encouraging participation by business and community groups; promoting non-stereotyped career guidance and career awareness; and helping students to develop employability skills through simulated and actual work experience. All but five of the LEAs visited had made systematic efforts to reduce bias and stereotyping in students' career planning, and three of those five indicated this was a project objective that would be addressed in the future.

Roughly 58% of the teachers in these districts (62% at K-6, 53% at 7-12) were estimated to be using a "careers emphasis" regularly in their teaching--up from about 30% during the 1978-79 school year. An even higher proportion of counselors was reported to be actively supporting career education implementation (62% at the elementary level, 78% at the secondary level). Almost 85% of the local respondents indicated that the availability of PL95-207 funds had contributed to these significant increases.

In keeping with this picture of high activity levels, 65% of the funded districts reported the existence of a local career education action council, with an average of 16 members representing primarily business and professional organizations; representatives of labor, community, and handicapped or special needs organizations were less often represented. The most common activities of these councils were to stimulate community involvement and participation in the schools and to formally endorse the

career education program. All but two of the LEAs visited reported some business/community participation in their career education efforts.

Continued growth of career education within these distircts was seen as dependent upon: (1) the contined availability of supplemental funds, either state or federal, to maintain local (district-level) career education coordinators and to permit continued inservice training; (2) continued support and pressure from local school administrators and state-level staff (including state curriculum standards and/or accreditation requirements); and (3) continued local community support.

Conclusions

While the results of this brief evaluation cannot be generalized to the country as a whole, it is apparent that PL95-207 funds are serving the purposes envisioned by Congress when it passed the Incentive Act. States and local education agencies are maintaining and increasing their investments. Even given rather meager state-level career education staffing, state leadership is being exercised at an accelerating rate in the majority of states visited. In line with the collaborative nature of career education, considerable resources are being provided by other state and federal education programs and by the private sector--business, labor, industry, professional, government, civic and community organizations. In most districts where PL95-207 grants have been received, the schools seem well advanced toward complete career education involvement--involvement that contains most of the career education elements prescribed by the Office of Career Education. (Appendix A to this report contains descriptions of six such local districts.)

Notable by their general absence at this early stage of implementation (approximately one year into the planned five year funding of the Act) are the following: (1) coordinated state or local level plans for evaluating and reporting on the impact of career education; (2) investments in preservice training designed to prepare new education personnel for using career education concepts; (3) active involvement of organized labor, especially NEA and AFT state and local affiliates; and (4) active involvement of organizations representing the handicapped and other special needs populations. These areas could fruitfully receive more attention in the future.

INTRODUCTION

The Career Education Incentive Program

Career education did not emerge as a federal education program until the late 1970s. Prior to that time the federal role had been limited primarily to funding local demonstration projects under Parts C and D of the Vocational Education Amendments of 1968 (PL90-576) and, subsequently, under Section 406 of PL93-380. In 1977, however, Congress overwhelmingly passed the Career Education Incentive Act (PL95-207) that established both K-12 and postsecondary career education implementation as national priorities. The expressed purposes of the Act directly reflected the goals and assumptions that had evolved during the years prior to its passage. They stated that:

> In recognition of the prime importance of work in our society and in recognition of the role that the schools play in the lives of all Americans, it is the purpose of this Act to assist States and local educational agencies and institutions of postsecondary education, including collaborative arrangements with the appropriate agencies and organizations, in making education as preparation for work, and as a means of relating work values to other life roles and choices (such as family life), a major goal of all who teach and all who learn by increasing the emphasis they place on career awareness, exploration, decision-making, and planning, and to do so in a manner which will promote equal opportunity in making career choices through the elimination of bias and stereotyping in such activities, including bias and stereotyping on account of race, sex, age, economic status, or handicap. (Public Law 95-207)

The Incentive Act makes a relatively small amount of funds available to states over a five-year period to assist them in implementing career education ($18.7 million were released the first year, $14.0 million the second). The use of the word "incentive" in the title is revealing, indicating that Congress was not mandating career education programs but, rather, was providing support for states and local school systems to test the concept and decide for themselves whether or not to implement it on a continuing basis with state and local funding. The Incentive Act thus

represents not only a potential means of facilitating the implementation of career education but also a potential model for federal legislation relating to other educational programs.

The Incentive Act also made provision for "a national evaluation of the effectiveness of programs assisted under this Act in carrying out the purposes of this Act . . ." (Section 5(a) (2) (C)). This document is the second interim report of a contract awarded by the U.S. Department of Education (formerly the U.S. Office of Education) to provide the foundation for such a national evaluation.

The Current Study

The current study recognizes that (1) all aspects of career education may not be amenable to equally rigorous forms of evaluation and (2) even if it were possible, a national evaluation of career education might be excessively costly in comparison to the value of the information it could provide. In order to avoid the pitfalls common to conventional program impact assessments, the study utilizes the techniques of "evaluability assessment" and "rapid feedback evaluation" (Wholey, 1979; Schmidt, Scanlon, & Bell, 1979) to clarify the objectives of the program and to structure subsequent studies of the program's accomplishments.

The Evaluability Assessment, Phase I of this project, involved determining the extent to which the Incentive Act Program was ready for and amenable to evaluation. Project activities included clarifying and estimating the plausibility of program objectives through the creation of graphic program logic and function models, documenting what was intended by the law and what is actually being done at the national, state, and local levels to attain that intent. The major actor groups listed in the law are the Office of Career Education, the National Advisory Council for Career Education, State Education Agencies, and Intermediate and Local Education Agencies. The primary roles and objectives identified for each of these groups under the Incentive Act Program are depicted in Figure 1. Further information regarding the Phase I Evaluability Assessment can be

NATIONAL ADVISORY COUNCIL FOR CAREER EDUCATION

1. Reports and recommendations will be prepared regarding the accomplishments of CE implementation under PL95-207.
2. Advice regarding needs for improved administration of PL 95-207 will be provided to the Director of OCE and the Secretary of Education.

OFFICE OF CAREER EDUCATION

1. There will be a significant increase in all states' capability to implement career education (CE).
2. The career education concept will be widely understood by key actors at the national, state, and local levels (key actors include business, labor, industry, professional, civic and community groups as well as educators).
3. The program of incentive grants to states will be administered on a timely and efficient basis.
4. The discretionary programs of (1) model and demonstration project development and dissemination and (2) occupational information dissemination authorized by PL 95-207 Sections 10 and 12 will be administered in a timely and efficient manner.

STATE EDUCATION AGENCIES

1. SEAs will appoint functional state CE coordinators, apply for and use PL 95-207 funds, and initiate or increase state investments in CE implementation.
2. Awareness of and commitment to CE among key actors at the state and local level (key actors include business, labor, industry, professional, civic and community groups as well as educators) will be developed or increased.
3. Increased state funding will be made available to IEAs/LEAs for CE implementation (in accordance with the provisions of PL 95-207, Section 8(a)(3), 8(b), and 8(c)).
4. Improved evaluations of CE implementation at the state and local level will be conducted, reported, and used.
5. There will be a significant increase in the number of CE projects applying for and obtaining state validation and adoption support funding through ESEA Title IV C.

INTERMEDIATE/LOCAL EDUCATION AGENCIES

1. IEAs/LEAs will appoint functional local CE coordinators, apply for and use PL 95-207 funds, and initiate or increase local investments in CE implementation.
2. Awareness of and commitment to CE among key actors at the local level (key actors include BLIP/CC groups as well as educators) will be developed or increased.

Figure I. Major Actors and Roles in Implementing PL95-207 Program.

found in Implementation of the Career Education Incentive Act--First Interim Report on the Evaluability Assessment (Jung, Steel, Claudy, & Kingi, 1980) and in Exploratory Evaluation of the Career Education Incentive Act Program-Phase I Technical Report (American Institutes for Research, 1980).

In Phase II of this project, the Rapid Feedback Evaluation, initial program performance is being assessed based on readily available or obtainable information concerning the efficiency, effectiveness, and responsiveness of the program. Sources of information for the rapid feedback evaluation include interviews with representatives of the major groups of actors, observations of ongoing activities, and analyses of existing documents or data sets.

Purpose of this Report

This report presents the initial findings from visits to nine states participating in the Career Education Incentive Act Program. These visits were carried out in May and June of 1980 as part of the Phase II Rapid Feedback Evaluation of career education implementation, and focused on the State Education Agency (SEA) and Intermediate/Local Education Agency (IEA/LEA) objectives outlined in Figure 1. Chapter II of the report discusses the results from the state-level interviews, and Chapter III presents findings from the intermediate-and local-level interviews.

The final product of Phase II will be a Technical Report currently scheduled for release in March of 1981. The final report will combine the findings summarized here with the findings of (1) a survey of national business, industry, and labor participation in career education implementation and (2) an analysis of the FY80 Annual Reports to be submitted in December 1980 by all states participating in the PL95-207 program. In addition, options for further program performance monitoring and evaluation will be discussed.

CAREER EDUCATION IMPLEMENTATION AT THE STATE LEVEL

The purpose of the state-level visits was to provide a preliminary assessment of the implementation of career education under the Career Education Incentive Act and the accomplishment of program objectives at the state level. Special attention was directed to obtaining data to answer the following questions.

1. To what extent, and how, have the states initiated or expanded their investment in/support of career education under the Career Education Incentive Act?

2. How are the states using their funds to increase awareness of and commitment to career education at the state and local levels (e.g., what leadership efforts have been undertaken)?

3. What has been the response among business, labor, industry, professional, and community groups, at the state and local levels, to the state career education leadership efforts?

4. How are states allocating flow-through funds to increase or facilitate career education implementation at the local level, and with what results?

5. What are the nature and extent of the states' plans for evaluating career education implementation at the state and local levels?

6. To what extent and how has the Incentive Act already served as a stimulus for enhancing career education implementation?

7. What are the states' expectations for further career education implementation under the Incentive Act, and to what extent do they have plans for maintaining the program after the Incentive Act expires?

In addition to providing rapid feedback regarding the above questions, these visits also provided an opportunity to determine how easily and how reliably various measures of program performance could be obtained from state sources. These findings will be of value in determining the utility and possible objectives for a more formal, longer-term evaluation of the Incentive Act Program.

Methods

In order to provide a balanced picture of program performance, the sample of nine states to be visited was selected so as to reflect the major geographic regions in the country and to include states that had high, medium, and low levels of previous support for career education. The latter variable was included as a primary stratification variable because the uses and resulting impact of the Incentive Act funds might vary, depending on the extent to which the state had previously supported the development of a career education program. Indeed, McLaughlin (1976) found level of state support to be a key determinant of career education activity at both the state and local levels. Because data on current levels of state support for career education were not available when the sample was selected, data on state-level support for career education from AIR's 1974-75 survey of the status of career education (McLaughlin, 1976) were used to identify states with high, medium, and low levels of state support. Three states were selected from each of those categories; together, the states selected represent nine of the ten ED geographic regions. The states included in the sample are shown in Table 1.

State Career Education Coordinators in each of the selected states were contacted by AIR project staff, who requested their participation. All coordinators agreed, and visits were subsequently made to each state by two-person teams of trained and experienced AIR staff members. During these two- to three-day visits, the team members interviewed the State Coordinator of Career Education, other SEA staff involved in career education programs, members of the State Career Education Advisory Council (as well as the directors and staff of intermediate and/or local career education projects, as described in the following chapter). Structured interview and data recording forms were used to obtain information regarding state-level career education activities and accomplishments.

The results of these interviews and meetings are described below. Because of the small and nonrandom nature of the sample, these results should not be viewed as a definitive picture of the status of career

Table 1

States Selected for Site Visits

ED Region	State	Rationale
Region I	Massachusets	Largest state in region, high ($750,000) state CE funding reported in 1974 (Vermont visited in Phase I) [a]
Region II	New Jersey	Second largest state in region, high ($2million +) state CE funding reported in 1974 (New York visited in Phase I)
Region III	Pennsylvania	Largest state in region, no state CE funding reported in 1974 (Maryland visited in Phase I)
Region IV	Georgia	Second largest state in region, medium ($276,450) state CE funding reported in 1974 (Florida visited in Phase I)
Region V	Ohio	Largest state in region, high ($2.5 million) state CE funding reported in 1974 (Michigan visited in Phase I)
Region VI	Louisiana	Second largest state in region, no state CE funding reported in 1974, but $6 million in combined CE and Voc. Ed. funding (Texas visited in Phase I)
Region VII	Missouri	Largest state in region, medium ($350,000) state CE funding reported in 1974 (selected for Phase I visit but not visited)
Region VIII	Montana	A minimum funding state, no state CE funding reported in 1974 (Colorado visited in Phase I)
Region IX	No State Selected	California and Arizona visited in Phase I, Nevada returning PL95-207 funds, insufficient funds to visit Hawaii
Region X	Oregon	Second largest state in region, significant IHE involvement, modest ($25,000) state CE funding reported in 1974 (Idaho visited in Phase I)

[a] The results of Phase I site visits were reported in AIR's first interim report (Jung et al., 1980).

education under the Indentive Act, but rather as suggestive of how and how well the Incentive Act funds are being used.

Findings

1. To what extent, and how, have the states initiated or expanded their investment in/support of Career Education?

Support for career education appears to be strong at the state level, as revealed by the results presented in Table 2. Career education is actively supported by the Chief State School Officer in two-thirds of the states. Five of the nine states visited had passed laws endorsing career education, and three had adopted requirements for high school graduation or accreditation that included career education. State Boards of Education in four of the states had adopted resolutions in support of career education. In sum, all but two showed some evidence of a real determination to incorporate career education into the educational program.

As required under the Incentive Act, each state has a designated Coordinator or Director of Career Education. In every case, career education is the major responsibility of this individual, with the average proportion of time devoted to this program being 82%; in four of the states the State Coordinators devote 100% of their time to career education. The State Coordinator is generally a moderately senior person within the State Education Agency (SEA) hierarchy, located from one to three administrative levels below the Chief State School Officer. In all but two of the states, additional professional staff, as well as support staff, work with the State Coordinator on the state's career education program. The average size of the career education staff, excluding the Career Education Coordinator, is 1.6 FTE professional staff and .65 FTE support staff.

In a few states, formal collaborative relationships have been established with other divisions of the SEA. In Oregon, for example, there is an Interagency Steering Committee comprised of representatives of each division within the SEA (e.g., Basic Education, Compensatory Education,

Table 2

State Investments in Support of Career Education under PL 95-207 (N=9)

Support for the Program	
Number of states where Chief State School Officer has been actively supportive of the program	6
Number of states passing resolutions or laws in support of career education	5
Number of states with stated requirements for high school graduation that include career education	3
Number of State Boards of Education formally endorsing career education	4
Number of states with at least one form of state-level financial support	7
Allocation of Personnel	
Number of states with a formal Coordinator or Director of Career Education	9
Average percent of time State Coordinator of Career Education (SCEC) spends on career education program	82%
Average number of administrative levels between SCEC and Chief State School Officer (and range)	2 (1 to 3)
Number of states with professional career education staff in addition to SCEC	7
Average professional FTE on career education staff besides SCEC	1.6
Number of states with career education support staff	9
Average FTE career education support staff	0.65
Number of states where staff in other SEA departments actively collaborate with SCEC on career education implementation	3
Provision of State Funds	
Number of states appropriating state funds for career education, by name, prior to FY79	3
Average total state funds appropriated/state prior to FY79 (N=3)	$10.2M
Number of states appropriating FY79 funds for career education, by name	7
Amount of FY79 funds spent on career education, range	$25K to $2.4M
Number of states using other state funds for career education	6
Amount of other state funds spent on career education in FY79, range	$25K to $600K
Number of states reporting increased state financial support for career education under PL 95-207	3
Allocation of Other Federal Funds	
Number of states using other federal funds for career education in FY 79	7
Average amount of other federal funds spent on career education in FY79 (and range)	$600K ($100K to $1.5M)

Special Education, etc.). This group, to whom the State Coordinator reports, is responsible for determining general policy directions for the state's career education program. Several other states, while not having such formal relationships between career education and other state programs, maintain informal interagency contact on an as-needed basis.

All but two of the states visited have used state and/or other federal funds to support career education, in addition to their Incentive Act funds, although several did not have available information on the amounts of funding from these other sources. Estimates of the amount and value of in-kind support within the SEA were especially difficult to obtain. But three of the nine states have had specific "career education" state appropriations over the past four-to-seven years, averaging a total of $10.2 million per state during this time; and seven states, including these three, had appropriated FY79 funds specifically for "career education," with the appropriations ranging from $25,000 to $2.4 million. Six states reported that funds from other state programs (e.g., basic skills, vocational education) were also being used to support career education; the amount of these other state program funds in FY79 ranged from $25,000 to $600,000. Federal funds from programs allowing state discretion in allocation (e.g., ESEA Title IV C) represent a third source of financial support for career education. Seven states availed themselves of such opportunities in FY79, spending an average of $600,000 of such funds on career education activities.

While support for career education was clearly very strong in the majority of states visited, it was difficult to determine the extent to which states have expanded their support of career education since passage of the Incentive Act. Most states had maintained career education efforts for some years and all had received funding under PL93-380. Thus, the resolutions endorsing career education had in all cases been adopted prior to the Incentive Act, and all but one of the State Coordinators had been appointed prior to receiving Incentive Act funds. Three states reported that state funding for career education had increased in FY79, though in one case the increase was only enough to cover inflation. One state mentioned a significant increase in support (both monetary and in-kind) from

other SEA divisions as a direct result of increased intra-agency collaboration fostered by the PL95-207 planning requirements. Given that state participation (fund matching) was not required in FY79, this evidence of increased investment is probably worthy of note. On the other hand, one state reported that Incentive Act funds were picking up some costs (i.e., for support staff) that had previously been covered by the state, although there was no reduction in overall state funding. Presumably, state funds were being used for other career education activities in this state.

2. How are the states using their funds to increase awareness of and commitment to career education at the state and local levels (i.e., what leadership efforts have been undertaken)?

A total of 43 career education leadership efforts, spanning the seven allowable areas listed in the Incentive Act, were supported in whole or in part with Incentive Act funds during the past year in the nine states visited. Each state conducted (or, in the case of two states, contracted for) at least two different leadership activities, with some states conducting as many as nine separate efforts. A summary of the kinds of leadership activities conducted and how they were supported is presented in Table 3.

As can be seen, most of the Incentive Act supported state-level leadership effort was directed at providing inservice training to LEA staff and/or local coordinators and to collecting, evaluating, and disseminating career education materials. Together, these two areas accounted for 67% of the leadership activities. For each of these areas, all but one of the states visited had conducted at least one activity. Somewhat less effort was given to promoting collaborative relationships with business or community groups (although two-thirds of the states had established formal career education advisory panels) and to conducting statewide leadership conferences. Only five and four of the nine states, respectively, were using their Incentive Act funds to support activities in these areas. Relatively few of the states were using this resource to conduct needs assessment or evaluation studies or to work with institutions of higher education to incorporate career education into preservice programs.

Table 1

Characteristics of State Career Education Leadership Activities in Nine States Visited

	LEADERSHIP ACTIVITY						
	Inservice Training[a]	Materials	Needs Assessment/ Evaluation	Leadership Conferences	Collaborative Relationships	Preservice Training	Total (Average)
Number of activities conducted	20	10	3	4	4	2	43
Number of states conducting activity	8	8	2	4	4	2	9
% representing new efforts	47%	13%	67%	67%	100%	50%	(53%)
% where career education is primary focus	82%	75%	n.a.	n.a.	n.a.	n.a.	(79%)
% where elimination of bias/ stereotyping is addressed	88%	63%	67%	100%	100%	100%	(86%)
Average total cost (range)	$14,000 ($500-$55,000)	$41,000 ($5,000-$180,000)	$30,000 ($15,000-$45,000)	$15,500 ($8,000-$30,000)	$74,400 ($12-$206,000)	$2,750 ($1,500-$4,000)	($29,600) ($1,500-$206,000)
Average % cost supported by PL95-207							
Administrative	22%	0%	0%	0%	33%	?	(11%)
Leadership	55%	41%	67%	50%	34%	?	(49%)
LEA	4%	17%	0%	50%	0%	?	(14%)
Total	81%	58%	67%	100%	67%	?	(74%)
Other sources of support (number of states citing each)							
Federal Voc Ed Funds	5	1	--	--	--	--	6
Other Federal Funds	1	--	--	--	--	--	1
State Career Ed Funds	--	--	--	--	--	--	--
State Voc Ed Funds	--	1	--	--	--	--	1
Other State Funds	2	2	--	--	--	--	4
ESEA Title V	--	--	1	--	--	--	1
CETA	--	--	--	--	1	--	1
% activities receiving in-kind support from BLM or CC organizations	59%	38%	0%	100%	100%	50%	(58%)
Average value of support received	$29,000	$41,000	--	$15,500	$6,000	$10,000	($20,000)

[a]Includes training both for LEA staff and local coordinators

Slightly over half of these leadership activities were viewed as "new" efforts by the states. And, with the exception of the collection and dissemination of materials, most of these activities had not previously been carried out prior to receiving the Incentive Act funds. These activities had as their primary focus facilitating the implementation of career education within the state. In addition, most also included at least some effort to promote equal educational opportunity by combatting bias and stereotyping in career choice.

The average costs of these activities ranged from $2,750, for activities aimed at incorporating career education concepts and methods into preservice teacher training, to $41,000 for activities involving the collection, evaluation, and dissemination of career education materials and resources. Approximately 74% of the costs of these activities was supported by the Incentive Act funds, mostly with funds set aside for state leadership activities. Other sources of support for these leadership efforts included federal and state vocational education funds, other federal and state funds, ESEA Title IV monies, and CETA funds. In addition, slightly over half of these leadership activities also received in-kind or non-cash support from state or local business, labor, industry, profession, or community groups. Such support could take the form of materials, staff time, space, or equipment; the estimated value of this support ranged from an average of $6,000 for activities aimed at promoting collaboration with other organizations to $41,000 for materials collection, evaluation, and dissemination activities.

The Incentive Act does appear, then, to have resulted in an substantial increase in state-level leadership activities designed to foster the implementation of career education programs, although the states did not rely solely on Incentive Act funds to carry out these activities. More detailed information about the nature of the state-level leadership activities conducted in each of these areas is provided below.

Inservice Training

As shown in Table 4, eight of the states had engaged in a total of 20 inservice training activities as part of their career education leadership effort. Most (80%) of these activities involved multiple workshops or institutes. At the time the interviews were conducted, 95 separate institutes or workshops had been held, and 37 more were planned. Each such workshop or institute lasted one-to-two days, and as many as 16 were planned or conducted as part of a single training activity (the average number of workshops per training activity was 6). The numbers of LEA staff participating in these training activities varied widely, from 12, for a single workshop addressed specifically to local career education coordinators, to over 500 for a series of workshops attended by teachers and local coordinators. On the average, however, approximately 150 people participated in a particular training activity (i.e., workshop or series of workshops). Of those trained during the past year, nearly half (43%) were teachers and a quarter (26%) were local coordinators. The remainder included administrators (9%), counselors (13%), and other district staff (9%).

Most of these training activities involved multiple trainers, including state career education staff, other SEA personnel, representatives of business or community groups, and LEA staff (representatives of the target group for the training). LEA staff also assisted in planning the training activity in 70% of the cases. Training conditions generally appeared to be very favorable. In over 80% of the cases participants were given release time or some other form of subsidy to make it easier for them to attend, and in 65% of the cases, a prior written notice of commitment to or support for the training was required of the LEA. Typically, training activities were conducted in settings that were quiet and free from interruption, such as local hotels or conference facilities. Participants were in most cases given materials or resources which they could take back to their schools to use following the training. In addition, about three-fourths of the training efforts required participants to prepare an implementation plan for applying what they had learned, and in nearly half the cases participants were encouraged to work with or train other staff when

Table 4

Characteristics of Inservice Training Activities Conducted by States Under PL95-207 (N=9)

Number of states conducting inservice training activities	8
Total number of training activities conducted	20
Number for local coordinators only	7
Number for other LEA personnel	13
Percent of training activities involving multiple workshops	85%
Average number of workshops per training effort (range)	6 (1-16)
Total number of workshops conducted	95
Total number of additional workshops planned	37
Average duration of workshops (range)	1.79 days (1 hour to 5 days)
Average number of participants per training activity	148
% teachers	43%
% local coordinators	26%
% administrators	9%
% counselors	13%
% other LEA staff	9%
Percent training activities involving, as trainers	
State career education staff	76%
Other state education agency staff	59%
Representatives of the target group (i.e., LEA staff)	82%
Percent training activities where--	
a. representatives of target group assist in planning	90%
b. prior written administrative commitment is required of LEA	65%
c. training recipients are granted release time or are otherwise subsidized	82%
d. training is conducted in quiet, separate location	94%
e. participants are given materials for use following training	94%
f. participants prepare an implementation plan	71%
g. participants are encouraged to train other staff	49%
h. participants' reactions and suggestions for improvement are obtained	47%
i. participants are followed up after training	47%

they returned to their schools. Almost all the training activities had some provision for obtaining feedback from participants following the training, and nearly half planned some form of longer term follow-up or progress assessment.

Collection, Evaluation, and Dissemination of Materials

All but one of the states visited had as part of their leadership efforts the collection, evaluation, and/or dissemination of career education materials. The characteristics of these various activities are summarized in Table 5. In half of the states this materials dissemination effort was accomplished through the establishment and operation of career education resource centers; typically these centers were located within the State Career Education Coordinator's office, although in some cases the state contracted with other groups (e.g., an IEA) to run the centers. Through the resource centers career education materials were collected, evaluated, and made available to LEA staff for review or, in some cases, for use in their schools. Other states, rather than setting up resource centers, prepared materials/resource guides for use by LEA staff or conducted materials review and dissemination on an informal basis. One state also selected, adapted, and distributed a career information/guidance program for use at the elementary level. Three-fourths of all the materials collection/evaluation/ dissemination activities were directed by full-time professional staff. In only one case, however, was there also an advisory board to provide input regarding the needs and expectations of the intended users.

In half of these activities, staff utilized such national centers or clearinghouses for career education resources as the ERIC Clearinghouse on Career Education and the National Center for Career Education to obtain materials. In over half, staff had established or maintained contact with business, professional, and/or community groups within the state in order to obtain low-cost or free educational materials; in one state a bibliography of resources available from over 500 such organizations was published and distributed. In many of these activities there was some provision for

Table 5

Characteristics of Materials Collection/Evaluation/Dissemination Activities Conducted by States Under PL95-207 (N=9)

Number of states conducting materials collection/dissemination activities	8
Number of activities conducted	10
Percent activities conducted by a permanent center or staff	50%
Percent of centers located in State Career Education Coordinator's office	50%
Percent activities involving--	
materials collection or acquisition	63%
materials evaluation or assessment	50%
materials circulation or dissemination	100%
Percent directed by full-time professional staff	75%
Percent receiving input from advisory council	13%
Percent utilizing national career education resource centers	50%
Percent seeking BLIP/CC materials or resources	63%
Percent screening materials for bias/stereotyping	63%
Percent active outreach function	63%
Percent provision for obtaining regular feedback	37%
Percent with provision for monitoring usage	13%

the screening of all materials collected or distributed to ensure they did not exhibit bias or stereotyping.

Several of the states maintained an active outreach function to ensure that intended users of the materials were aware of the existence of the center or resource materials and procedures for accessing them. Outreach strategies included mentioning the center or resource in inservice training workshops or state newsletters and setting up a display booth at state conferences. Few of the states, however, had any provision for obtaining regular feedback from users regarding the center's materials or operations. Further, while some could provide general estimates of numbers of visits or mailings or phone requests per month, only one had any regular procedure for monitoring use of the materials. It was thus not possible to determine reliably the extent to which the intended audiences were in fact using the centers.

State Needs Assessment and Evaluation Studies

Only two states used any of their Incentive Act funds to support statewide needs assessment and evaluation studies, although several states were conducting such studies with other (usually state) funds. Of the three activities reported, one involved the development of a student assessment device, another involved annual assessments of career education activity in the state as mandated by state law, and the third involved a one-time, summative evaluation of the state's efforts. The first two activities are being carried out by state education agency staff that have ongoing responsibility for evaluation and assessment efforts; the latter study is being planned by the state career education staff but will be carried out through a third party evaluation contract.

The first two activities involve assessing attainment of student outcomes, based on state-developed statements of desired student outcomes; among the outcomes examined is the degree to which students feel they have equal opportunity in career choice. Standardized paper-and-pencil tests are used, containing locally-produced test items and (in one case) also

commercial test items; evidence regarding the reliability and validity of these test has been compiled. In both cases state level norms have been developed for use in making comparative judgments about the magnitude of obtained scores. The summative evaluation plan includes provision for obtaining data from teachers, administrators, parents, and members of the community as well as students.

Statewide Career Education Leadership Conferences

Four of the nine states visited had conducted statewide leadership conferences as part of their leadership effort. Typically more than one conference is being held, although only one state reported plans to conduct them on a regular (e.g., annual) basis. The conferences generally last two days and may have 100-300 participants. Most of the participants tend to be LEA staff, although state education agency staff, business/labor/professional organization representatives, advisory council members, and higher education representatives may also be included. While state career education staff are generally responsible for organizing and conducting these conferences, sponsorship is often shared with other organizations (e.g., the state's career education association). Representatives of the participant groups are also typically given an opportunity to suggest possible topics or speakers.

The conferences conducted in the states visited all included introductions to the career education concept and current issues in career education, all provided opportunities for participants to view career education materials and resources, and all addressed the problem of combatting bias and stereotyping in career education. In addition, several of the conferences included formal training sessions or workshops for participants and provided some opportunity for participants to share and discuss their experiences and problems they encountered. All the states also had some provision for obtaining feedback from participants. States varied markedly in the extent to which they subsidized the costs for participants of attending the conferences. One state paid all the costs for all partici-

pants, while another reported that attendees covered most of their own costs.

Promoting Collaborative Relationships with Other Agencies and Organizations

Four of the nine states visited were using a portion of their Incentive Act funds to promote collaborative relationships with other agencies. (Note: this does not include efforts to promote such collaboration through State Career Education Advisory Panels or Interagency Steering Committees.) The types of activities carried out in this area included meeting with a local community group (Women's American ORT), preparing handbooks or manuals for use by teachers, counselors, or local coordinators, and collaborating with State CETA officials on a grants program aimed at improving career guidance and counseling for disadvantaged youth. Half of these activities were characterized as one-time only efforts; only one, the CETA grants program, was viewed as an ongoing activity. Two of the activities (the meeting and the grants program) represented efforts to promote collaboration with a specific group, while the others addressed a wide range of agencies and organizations, including other state education agency offices, other state level agencies, individual businesses, labor associations, and civic organizations, professional associations, and postsecondary institutions. All the activities provided some form of orientation or training for the participants. For the most part these activities did not involve forming or using an advisory panel or maintaining liaison with the state legislature or its education committees. Some of the activities, however, did involve establishing ties to the State Occupational Information Coordinating Committee, the State Economic Development Council, the State Employment Service, the State CETA Program Planning Council, and/or the State Advisory Council on Vocational Education. Some of the activities had also made provision for disseminating information about their efforts, such as by issuing announcements (as with the CETA grants program) or notices of the availability of materials.

Promoting the Adaptation of Preservice Teacher Training Curricula to Include Career Education Concepts

Only two of the states were using any of their Incentive Act leadership funds to promote the inclusion of career education concepts in preservice teacher training programs. In one case this represented an extension of previous efforts: a model for infusing career education into higher education institutions had previously been developed and it is now being implemented in all of the teacher-training programs in the state. The model is designed to be flexible enough for faculty members in different institutions to adapt it to their own needs. In addition, ties have been established with the State Teacher Licensing Board, professional associations charged with accrediting teacher-training programs, and associations of faculty of teacher training programs in the state; an advisory council has also been established. In the other case there had been no prior effort in the state in this area. The state is now working with one university to develop a preservice training model, but no other universities or associations have yet been involved.

In both states this activity is directed by staff experienced in techniques of curriculum development and promoting institutional change. Both states' models are very comprehensive, providing for infusing career education concepts into subject matter, teaching methods, and student teaching courses, at both the elementary and secondary levels. The model that is being implemented also provides (informally) opportunities for trainees to observe exemplary career education efforts in person. However, there is no provision for assessing the subsequent performance of students in order to determine the effectiveness of the program.

3. What has been the response among business, labor, industry, professional, and community organizations, at the state and local levels, to the states' career education leadership efforts?

As the figures presented in Table 6 reveal, business and community groups are actively supporting and participating in these states' career education efforts, both through their involvement on state-level career

Table 6

Support for Career Education from Business, Labor, Industry, and Professional (BLIP) and Civic-Community (CC) Organizations*

Number of states having state-level career education advisory panels	5
Average number of years panels have been in existence (range)	3.4 (2-4)
Average size of advisory panels (range)	27 (21-36)
Average composition of panels	
% representatives business, industry, professional organizations	18%
% labor representatives	9%
% representatives of civic/community organizations	11%
% representatives of groups with special needs	9%
% educators	38%
% SEA, government agencies	9%
% parents, students	5%
% other	1%
Number of states (N=5) where advisory council has:	
issued statement endorsing career education	2
assisted in review/revision of state plan	4
assisted in review of IEA/LEA proposals	0
developed guidelines for local BLIP/CC groups	1
acted to stimulate BLIP/CC involvement in career education	3
Number of states where BLIP/CC groups have provided funds to support career education at state level	2
Average amount of funds provided	$18,000-$20,000
Number of states (N=2) where this was a "new" activity	1
Number of states where BLIP/CC groups have provided people or facilities to support career education	4
Number of states (N=4) where this was a "new" activity	0
Number of states where BLIP/CC groups have conducted or assisted in workshops or other career education activities	7
Number of states (N=7) where this was a "new" activity	1
Number of states where BLIP/CC groups prepared or disseminated materials relating to or for use in career education	6
Number of states (N=6) where this was a "new" activity	0
Number of states where BLIP/CC groups have lobbied or otherwise encouraged state legislature to support career education	2
Number of states (N=2) where this was a "new" activity	0

*N=9 unless otherwise noted

education advisory panels and their direct support of activities at the state and/or local levels. Five of the nine states had formally established career education advisory panels at the state level; these panels had been in existance, on the average, for somewhat over three years. A sixth state had selected a panel but was unable to convene it because state laws precluded the expenditure of funds for support or reimbursement of non-state employees. In another state a panel already established for ESEA, Title IV Parts B and C, also provided advice and assistance to the state career education staff.

These advisory panels ranged in size from 21 to 36 members; on the average, nearly half of the membership was comprised of representatives from business, industry, or professional associations (18%), labor groups (9%), civic/community organizations (11%), and representatives of groups with special needs, e.g., handicapped, women's groups (9%). The remainder of the panels consisted primarily of educators (38%), SEA and other government officials (9%), and, occasionally, parents or students (5%).

Panels typically met several times a year, although in two of the states meetings had not been held within the 12 months preceding our visit. Although all of the panels characterized their roles as advisors to the state career education staff, panel operations and activities varied considerably: some functioned essentially as review boards while others were actively involved in planning and implementation activities. Four of the five panels had participated in the review or revision of the state plan for career education, and two had adopted formal resolutions endorsing career education in the state (two others had provided letters of support for career education to state and/or federal officials). Although none of these panels had been involved in actually reviewing LEA proposals for PL95-207 funds, at least two panels had been instrumental in determining how the funds would be allocated. In one state the advisory panel established the criteria for evaluation of the LEA proposals, including a requirement that they address the need for collaboration with business/community groups; in another the decisions to fund only demonstration projects and consortia were based on the advisory panel's recommendation. Three of the panels had worked directly to stimulate involvement of

other business or community groups within the state and/or prepared guidelines for such business/community/school collaboration. Other activities and accomplishments reported for the state advisory panels included assisting in the planning for state conferences, assessing the state's progress in implementing its plans, and generally providing visibility aud advocacy for the program.

All but one of the states also reported at least some direct support for career education from business and community groups in the state. The most common forms of such support were (1) for representatives of various organizations to conduct or assist in workshops, conferences, or other career education activities, or (2) for organizations to prepare or disseminate materials relating to or for use in career education. Two states reported that business and community groups had funded as well as participated in career education workshops. In one state a major newspaper sponsored a workshop on job placement for counselors in the local area; in another the National Alliance for Business conducted a series of similar meetings at the regional level. In yet another state a major business firm sponsored a series of workshops whereby its staff and teachers in the state worked together to implement a "steps to employment" program. Businesses in several of the states had prepared materials or other resources for schools to use in their career education programs; these ranged from brochures describing a career or the kinds of work performed by employees in a specific company to complete career guidance programs. As mentioned previously, one state compiled a bibliography that listed materials and resources available from over 500 firms in the state.

Four of the states indicated that business or community groups had provided people or facilities to aid in implementing career education. Examples of this kind of support include providing (or renting) space for state or regional conferences, printing, distributing, and tallying results of surveys, providing staff to serve as adjunct instructors for career-related units in the classroom, and providing on-site work exploration or experience opportunities for students.

Only 2 of the 21 instances of business/community support reported by these states were described as definitely not having occurred prior to the Incentive Act. However, several of the state coordinators commented that the support by and involvement of business and community groups had increased as the states undertook more systematic efforts to implement career education under the Incentive Act. Further, interviews with state advisory council members and representatives of business or community groups revealed a growing recognition that career education can benefit employers as well as students, by improving the "quality" of graduates that will be applying for jobs. For this reason they anticipated business and community involvement to increase as career education develops a "track record" of success.

While the data obtained and summarized above demonstrate that business and community groups are indeed supporting the states' career education efforts, and illustrate some of the forms that support takes, it was not possible to obtain a comprehensive picture of the extent of such support in these states. None of the states had maintained records of all the various kinds of support they had received, or from whom. On occasion, state advisory council members provided examples of support of which the state coordinators were not aware, and vice-versa. In addition, it was not possible to attribute this support specifically to the state leadership activities stimulated by the Incentive Act, although there was anecdotal evidence that the breadth and magnitude of support was influenced by the states' efforts in this area.

4. How are states allocating flow-through funds to increase or facilitate career education implementation at the local level, and with what results?

All of the states visited solicited proposals from local educational agencies (LEAs) and, where appropriate, intermediate educational agencies (IEAs) for using PL95-207 funds to implement career education at the local level. Data relating to the allocation procedures and results for FY79 funds are presented in Table 7. Only one state formally restricted the number of IEAs and LEAs who could apply for these funds. However, two

Table 7

Disbursement of PL95-207 Funds to IEAs/LEAs in Nine States Visited

Mechanisms for Disbursing Funds	
Number of states restricting eligibility to apply for funds	1
Number of states identifying special funding priorities in RFP	7
Number of states giving special priority to:	
providing guidance/counseling services	4
activities to combat bias or stereotyping	3
inclusion of career education into basic skills curricula	1
linkages with CETA activities	1
Number of states giving special priority to projects benefiting:	
handicapped individuals	3
students in areas of high unemployment	3
students in sparsely-populated areas	1
students with limited English-speaking ability	1
minority or low-income students	3
FY79 Allocations	
Average % of IEAs applying for funds (range)	46.5% (6%-100%)
Average % of LEAs applying for funds (range)	17.6% (5%-30%)
Average % of IEA applicants awarded funds (range)	50.5% (0%-100%)
Average % of LEA applicants awarded funds (range)	46.9% (8%-86%)
Percent funded IEAs/LEAs that had not previously been involved in implementing career education (range)	45.3% (0%-100%)
Average number of awards made (range)	18 (5-28)
Average size of award (range)	$44,000 ($1,522-$159,850)
Number states funding projects addressing the following areas:	
incorporating career education concepts and approaches into the instructional program	9
developing and implementing comprehensive career guidance and counseling services	9
developing and implementing collaborative relationships with BLIP/CC groups	6
providing on-site work experiences for youth	5
employing a local career education coordinator	5
training local career education coordinators	7
providing inservice training for local educational personnel	9
purchasing supplies and materials	9

(continued)

Table 7

(continued)

FY79 Allocations--continued	
conducting institutes for community leaders and parents regarding nature and goals of career education	3
establishing and operating community career education councils	5
establishing and operating career education resource centers	8
adopting, reviewing, and revising local plans for career education	7
conducting needs assessments and evaluations	7
preparing JDRP submissions	1
Number of states in which funded projects represent mostly "new" activities for the IEAs/LEAs	7
Local Support for Career Education	
Number of states where local funds have been allocated for career education this year	9
Average amount of local funds allocated (range) (N=4)	$261,900 ($53,500-$653,939)
Number of states where this represents an increase over previous years	5
Number of states requiring some local matching on PL95-207 awards for FY79	2
Number of states indicating some local "in-kind" support for career education	7

states encouraged applications from either large districts or consortia of smaller districts, and/or from districts that had had some prior involvement with career education. (A third state was also considering limiting its FY80 flow-through funds to districts that had had prior involvement in career education because state staff felt that more was being accomplished with the Incentive Act funds where there was some base to build on.)

Most states had funded a wide range of activities, reflecting the flexibility inherent in the legislation. However, several of the states gave special priority to projects concerned with providing guidance and counseling services or with combatting bias and stereotyping. With regard to guidance and counseling, some states set aside a portion of their funds (at least 15% in all cases) to be allocated for projects focusing primarily on this area, while other states required all projects to include a component in this area. One state also gave special weighting to projects involving infusion of career education into basic skills areas and to projects establishing linkages with CETA activities.

Several of the states also gave priority or additional proposal evaluation points to projects targeted to or benefitting students with special needs. Projects aimed at or involving handicapped individuals, students in high-unemployment areas, or minority or low-income students were each given special consideration in at least three of the states visited. One state also emphasized projects aimed at students with limited English speaking ability and another stressed projects from districts in sparsely populated areas that presumably lacked the resources to implement career education on their own.

Applications were received from an average of 46.5% (range 6-100%) of the IEAs in these states and from an average of 17.6% (range 5-30%) of the LEAs. On the average nearly half of these applicants (50.5% of the IEAs and 46.9% of the LEAs) were subsequently funded; however, the proportions of LEAs being funded varied widely among the states, with a low of 8% in one state that awarded a few large grants to a high of 84% in another state. Nearly half of those funded (45.3%) had not previously been involved in implementing career education.

The states differed widely in their approaches to funding regional or local projects. One state, which had a large state-funded program, concentrated PL95-207 funds in selected areas, awarding only five grants ranging in size from $82,550 to $159,850. At the other extreme, another state used the funds very much as seed money, awarding grants to 23 individual districts plus five consortia including a total of 42 districts; these grants ranged in size from $4,000 to $119,900, with an average of $25,703. In general, the average of 18 grants of approximately $44,000 each is reflective of most states visited.

Each of the local-level activities specified in the authorizing legislation was being carried out in projects in at least three of the states visited, with four activities (infusion of career education concepts into the curriculum, implementation of guidance and counseling services, provision of inservice training for LEA personnel, and acquisition of supplies and materials) being funded in all nine states. Only one state reported funding a LEA project that intended to seek JDRP approval. Seven of the nine states reported that the projects funded represented "mostly new" activities for these IEAs/LEAs. Although only two of the states had required LEA matching in order to receive Incentive Act funds, all of the states visited reported that local funds were also being allocated for career education (at least in those LEAs receiving PL95-207 funds). However, except where matching had been required, states found it very difficult to estimate the amount of such local support. For the four states where figures were provided, the estimated levels of LEA support ranged from $52,500 to $653,900, with an average of $261,900. Seven of the states also reported that LEAs were providing in-kind support for career education activities, although they could not estimate how much. Five of the nine states reported that the levels of LEA support for career education in the past year had increased appreciably relative to previous years.

5. What are the nature and extent of the states' plans for evaluating career education implementation at the state and local levels?

With regard to plans for assessing the implementation of career education as a result of the PL95-207 program, there was considerable variation among the states, in terms of both the nature and the extent of their evaluation plans. One state planned to rely almost exclusively on information supplied in LEA project final reports, while another state was implementing a comprehensive evaluation effort aimed at obtaining JDRP approval of the whole state program. Between these extremes, the state coordinators identified several criteria that they planned to use to assess the implementation of career education. These criteria, grouped into four categories, are shown in Table 8.

All of the states had required IEAs and LEAs that received PL95-207 funds to include plans for evaluating their activities as part of their proposals. As can be seen, several states planned to use these reports as a (usually partial) basis for assessing each of the four aspects of implementation of career education. Eight of the nine states had plans to assess the level of statewide implementation; the numbers of LEAs applying for or receiving funds for career education activities was a frequently-mentioned criterion in this area. Two states also expected ongoing state program audits (i.e., for school improvement or state accreditation efforts) to include career education implementation.

With regard to more specific aspects of career education, six of the nine states planned to examine the extent of infusion of career education into the school's curricula, and three states planned to monitor the extent of business/community collaboration in LEA's career education efforts. Seven of the states planned some form of assessment of learner impact above and beyond data provided in the LEA reports. State assessment programs that included career development components, state program audits that included student data, and student needs assessments were some of the strategies mentioned. Two states indicated that controlled evaluation studies were to be carried out to assess the impact of career education on the students.

Table 8

Criteria for Assessing Implementation of Career Education To Be Used by States Visited

Criteria for Assessing Statewide Implementation (N=8)	No. of States Planning to Use
Number of LEAs applying for or receiving PL 95-207 funds	3
Number of LEAs receiving other federal funds for career education activities	1
Number and kind of materials distributed	1
Number of participants in workshops and meetings	1
State needs assessment results	1
State program audits (e.g., for school improvement programs, others)	2
Narrative statements from participants regarding inservice training	1
LEAs' stated intent to maintain efforts with local support	1
LEA evaluation reports	3
Data from the Chief State School Officers' Career Education Implementation Questionnaire	1
Criteria for Assessing Infusion into Curriculum (N=6)	
Number of classes where career education is being infused into curriculum	1
Number of students in classes where career education is being infused	1
Examples of activities or infusion strategies being used	2
Curriculum objectives and achievement rates	1
LEA evaluation reports (not further differentiated)	4
Criteria for Assessing Collaboration with Business/Community Groups (N=5)	
Number of representatives on local career education action councils	2
Minutes of meeting of local action councils	1
Number and presentations made or statements issued	1
Local evaluation reports by business/community groups	2
Criteria for Assessing Learner Impact (N=7)	
State assessment program, career development component	1
Other state program audits or assessments (e.g., SIP, accreditation)	2
State (student) needs assessment	2
Formal controlled evaluation study	2
LEA evaluation reports (not further differentiated)	3

All of the states visited had some plans to use evaluation data as they are obtained in order to modify and improve existing programs, and some states indicated changes had already been made or were planned in their requirements for FY80 LEA projects based on results observed for the FY79 projects. Two states also indicated an intent to use these results to identify effective projects or strategies that could be disseminated to other IEAs or LEAs in the state.

The highly idiosyncratic nature of the various states' evaluation plans and activities, however, severely limits their potential utility in a cross-state assessment of career education implementation. It is likely that existing data collection procedures would need to be considerably modified in order to produce any data capable of being compared across the various states.

6. To what extent, and how, has the Incentive Act already served as a stimulus for enhancing career education implementation?

All of the states visited reported that career education implementation had increased in their states over the past year (since the state PL95-207 efforts got underway). As evidence of such an increase, several states mentioned the greater number of career education projects being carried out as a result of the availability of federal funds. These projects were seen as resulting in more inservice training for staff, more infusion of career education into academic curricula, more services being available to students, and more students being reached. A second major indicator of progress in implementing career education was the increase in interest in career education in the states during the past year, as revealed by more calls and requests for technical assistance relating to career education and more support and offers of help from business and community groups. A third reported indicator was the increase in the focus and articulation of the states' career education programs, resulting in more systematic efforts to implement career education.

The Incentive Act was given much of the credit for these observed gains, although in two states adoption of state education standards that included career development or career education also contributed significantly. In addition to providing funds, the Incentive Act was seen as providing a needed push for many of the states to pull together their career education efforts at the state and local levels into coordinated programs. The flexibility inherent in the Act was appreciated, in that states felt they were able under this Act to structure the kind of program and activities that would best meet their needs. The Incentive Act program also had considerable "PR" value for the states, enhancing the perceived legitimacy of their efforts by providing federal backing and enhancing public awareness of the program, which resulted in increased participation and support. Business and community organization commitments to provide resources and people were also cited as helpful factors in increasing career education implementation.

7. What are the states' expectations for further career education implementation under the Incentive Act, and to what extent do they have plans for maintaining the program after the Incentive Act expires?

All of the states visited anticipate further increases in career education implementation over the next few years, assuming no drastic reductions in current levels of federal or state support. Projections for the proportion of school districts that would be implementing career education to at least some degree by the expiration of the Incentive Act (1984) ranged from 25 to 100 percent, with nearly half of the states estimating that most, if not all, the LEAs would be involved by that time. Several states had incorporated implementation schedules (e.g., 30 new districts involved each year) into their state plans, in order to ensure that they reach these goals.

There was less agreement among the states regarding what would happen after the Incentive Act expired. A few expected that implementation efforts would continue with state and local support and that programs would be strengthened in LEAs that had already become involved. Other

states, where state support has not been high, expressed some doubts about the extent to which career education implementation efforts would continue. State support, either through providing funds directly or through inclusion of career education in state graduation or accreditation standards, was viewed as essential to maintaining a high level of career education implementation. In general, though, the states were more concerned about the remaining four years of their current five-year plans than about what would follow. One state indicated that it would be preparing a second five-year plan in 1983 and would deal with the issue then.

CAREER EDUCATION IMPLEMENTATION AT THE INTERMEDIATE AND LOCAL LEVELS

In addition to the state-level interviews reported in the previous chapter, project staff also visited in each state three to five intermediate and/or local educational agencies that were receiving Incentive Act funds. Seven intermediate education agencies (IEAs) and 24 local education agencies (LEAs) were visited. The purpose of these visits was similar to that of the state-level visits: to determine how PL95-207 funds were being used to facilitate career education implementation at the intermediate and local levels. In particular, staff sought to obtain answers to the following questions.

1. To what extent, and how, are intermediate education agencies involved in career education implementation under PL95-207?
2. What kinds of activities are being carried out by these IEAs to foster career education implementation, and with what results?
3. To what extent do the local education agencies receiving PL95-207 funds appear to be committed to implementing career education?
4. What kinds of activities are being carried out by these LEAs to foster career education implementation, and with what results?
5. To what extent are business and community organizations collaborating in or supporting career education at the local level?

In addition, project staff also sought to determine how readily measures of career education implementation at the intermediate and local levels could be obtained.

Methods

In selecting the intermediate and local education agencies to be visited, no attempt was made to obtain a representative sample. The small number of projects that could be visited with the resources available precluded the possibility that the results obtained could be generalized

to the population of IEAs or LEAs in the states participating in the Incentive Act program. Rather, our intent was to observe intermediate and local level projects in action to determine the range of activities that were being carried out and needs that were being addressed. State coordinators were therefore asked to nominate several IEAs and/or LEAs in their respective states that had received FY79 PL95-207 funds to implement career education and whose projects were already underway. Within the states, the state coordinators typically suggested projects that illustrated the various types of projects they were supporting (e.g., establishment of resource centers, development of staff training programs) and the various local contexts in which career education was being implemented (e.g., small rural districts, suburban districts, urban/inner-city districts). A list of the seven IEAs and 24 LEAs selected to be visited is provided in Table 9.

At the IEA level, interviews were conducted with the director or person in the agency responsible for career education. At the local level, project staff interviewed the local career education coordinator and/or project director. In addition, at most of the LEAs project staff also met with teachers or counselors participating in the project and/or a member of the local career education action council. Both IEA and LEA interviews were unstructured in nature, with the interviewers attempting to determine how the various agencies were involved in career education implementation and to collect pertinent indicators of intermediate and local-level program performance.

The remainder of this chapter presents a summary of the findings from these interviews. Abstracts for six especially noteworthy local career education projects are presented in Appendix A of this report. These abstracts illustrate some of the ways that PL95-207 funds are stimulating career education implementation in a variety of settings around the country.

Table 9

LEA/IEA Sites Visited

Region	State	LEAs	IEAs
I	Massachusetts	Merrimac	Northeast Regional Education Center Worcester CE Consortium, Inc.
II	New Jersey	Hamiltown Township Milburn School for the Hearing Impaired Jersey City Wayne Township	Educational Improvement Center/Northeast Educational Improvement Center/Central
III	Pennsylvania	Altoona West Shore District Philadelphia	Bucks County Intermediate Unit Delaware County Intermediate Unit Central Susquehanna Intermediate Unit
IV	Georgia	Rome City Muscogee County	
V	Ohio	Scioto County East Cleveland	
VI	Louisiana	St. Tammany Parish Ascension Parish Jefferson Parish	
VII	Missouri	Mid-Buchanan R-V University City St. Louis Kansas City	
VIII	Montana	Missoula Helena Stevensville	
X	Oregon	Salem Medford	

Findings

1. To What Extent, and How, are Intermediate Education Agencies Involved in Career Education Under PL95-207?

Intermediate education agencies (IEAs) were activly involved in career education implementation under PL95-207 in three of the nine states visited (the other states either did not have such intermediate-level education agencies, or had not allocated any of their Incentive Act funds to them.). Information relating to the nature of their involvement is shown in Table 10.

Most (six of the seven) IEAs visited were agencies that had existed prior to PL95-207 and that had responsibilities in areas other than career education. On the average, they had been involved in career education for approximately four and one-half years. Five were regional education service centers whose staff provided training and other forms of assistance to LEAs in the region; the sixth was a community education-work council whose function was to promote collaboration among various community groups regarding a number of education and training programs. The remaining IEA, on the other hand, was actually a consortium of LEAs that had banded together in 1979 to apply for PL95-207 funds. The "IEA" function was to coordinate the career education activities of the LEAs in the consortium. (In this instance, all of the funds received were funneled through to the LEAs.)

The average IEA grant was $36,250. The PL95-207 grants typically represented about half of these IEAs' career education budgets, although in three cases all of the IEA's career education funds came from PL95-207. Where other career education funds were received, they tended to come mostly from other federal sources (e.g., DOL education-work council and CETA funds, ESEA Title IV B and C funds, and vocational education funds).

Typically, there were one to three FTE professional staff involved in career education implementation within the IEA, approximately one-third of whom were supported by the PL95-207 funds. There were also up to three

Table 10

IEA Involvement in Career Education (N=7)

Number of IEAs that existed prior to PL95-207	6
Number of IEAs with responsibilities other than career education implementation	6
Average number of years involved in career education (range)	4.5 (1-8)
Average amount of PL95-207 support[a] (range)	$36,250 ($0-$98,300)
Average percent of total IEA career education budget (range)	53% (15-100%)
Average percent of IEA career education funds from:	
other federal sources	35%
state career education funds	0%
other state funds	10%
other	4%
Size of career education staff:	
average number of FTE professionals (range)	1.9 (1-3.5)
number supported by PL95-207 funds	0.6
average number of FTE support staff (range)	1.0 (.2-3)
number supported by PL95-207 funds	0.1
average percent of total IEA staff	9%

[a] One of the IEAs reported receiving $88,000, all of which was funneled directly to LEAs.

FTE support staff for career education, somewhat over one-tenth of whom were supported by PL95-207. In general, the career education staff within these IEAs comprised only 9% of the total staff, indicating that career education was rarely a major thrust for these agencies.

2. What kinds of activities are being carried out by these IEAs to foster career education implementation, and with what results?

The major function of these IEAs is to help train LEA staff in career education concepts and methodologies; information on their training and other activities during the past year is presented in Table 11. All of the IEAs visited had been involved in training teachers and other building level personnel (e.g., principals, counselors), and most reported also providing training for local career education coordinators. Other groups receiving training from these IEAs included a regional counselors association and students. On the average, each IEA reported conducting approximately fourteen workshops, each having approximately 18 participants. (It should be noted, however, that the IEAs appeared to define a workshop differently, with at least one counting multiple sessions as separate workshops while another viewed them as parts of a single effort.) The topics covered in these workshops frequently included career education infusion strategies, development or use of career education curriculum guides and materials, and combatting sex and race bias or stereotyping. Other topics addressed were evaluation procedures, exemplary career education programs, and (for students) job getting and keeping skills. Most of the IEAs were amassing data relating to the impact of this training on trainees' knowledge and attitudes. Very few had attempted to ascertain the extent of impact on trainees' subsequent practice.

Other career education implementation activities that these IEAs engaged in included developing and/or disseminating career education materials and promoting collaborative relationships with business and community organizations. A few were also involved in needs assessment, program planning, and/or evaluation activities. Several of these agencies were attempting to assess the impact of these activities, on the level of

Table 11

Activities and Accomplishments of IEAs under PL95-207 (N=7)

Number of IEAs providing inservice training for:	
teachers	7
local career education coordinators	5
other educational personnel	7
other	3
Average number of workshops conducted by IEAs	14
(range)	(3-36)
average number of participants	18
Number of IEAs reporting evidence of impact of training on:	
trainees' knowledge/attitudes	6
trainees' practice	3
Number of IEAs engaging in:	
promoting collaborative relationships	7
developing career education materials	6
disseminating career education materials	7
needs assessments or program planning	3
evaluation	1
other	3
Number of IEAs having evidence of impact of activities on:	
level of career education implementation	5
learner outcomes	3
Number of IEAs reporting career education implementation in region has increased in past year	7
Average percent of schools in region estimated to be implementing career education currently	56%
Average percent of schools in region expected to be implementing career education when Incentive Act expires	80%

career education implementation in the region (a few were also trying to get data relating to effects on student outcomes). All of these IEAs reported that career education implementation had increased substantially in their region during the past year, due to the availability of PL95-207 funds for LEAs as well as to their own efforts. They estimated that, on the average, 56% of the schools in the region were currently implementing career education to at least some extent. This figure was expected to increase by over 20% over the next few years if federal, state, and local support remained constant.

3. To what extent do the Local Education Agencies receiving PL95-207 funds appear to be committed to implementing career education?

Based on the data presented in Table 12, career education appears to be an integral part of these LEAs' programs. Of the 24 LEAs visited, the average number of years of involvement in career education activities was 6, with the dates of initial involvement ranging from as early as 1966 to as late as 1980. Almost all of the LEAs indicated an increase in career education activities since PL95-207 funds became available.

All the sites visited had, of course, received grants under PL95-207. These grants ranged from $1,000 to $216,925, with an average of $33,000; all were to cover approximately 12 months. These funds comprised, on the average, only about 38% of the total funding for career education at these sites. Other funds used to support career education efforts at the local level included: other federal funds, e.g., Vocational Education, ESEA Title IV B and C, CETA, and ESAA (7%), state career education funds (3%); other state funds, e.g., general funds, resource center, special grants, trade and industry, world of work, and law enforcement programs (7%); local education funds (37%); and other non-government funds, e.g., business, industry, and/or community organizations (6%). It is worth noting that nearly as much support is coming from local funds as from PL95-207, even though local matching was not formally required in FY79.

Table 12

Local-Level Support for Career Education (N=24)

Background	
Average number of years LEAs have been involved in implementing career education	6 yrs.
Percent LEAs where level of involvement reportedly increased since PL95-207 funds became available	95%
Funding of Local Career Education Program	
Average size of PL95-207 grant	$33,107
Average percent of total local career education effort supported by PL95-207 funds	38%
Average percent of total local career education effort supported by other funds:	
other federal funds (e.g., Vocational Education; ESEA Title IVB,C; CETA; and ESAA)	7%
state career education funds	3%
other state funds (e.g., general funds, resource center, special grants, trade and industry, world of work, and law enforcement programs)	7%
local funds	37%
other (e.g., business, industry, community groups)	8%
Local Career Education Staff	
Average number of local coordinators/district (range)	2.5 (1-6)
Average number of schools served by each local coordinator (range)	22.0 (1-130+)
Average number of years local coordinators have held that position (range)	3.0 (6 mos.-7 yrs.)
Average number of years local coordinators/project directors have been involved in career education (range)	5.2 (6 mos.-12 yrs.)
Percent local coordinators/project directors receiving special training regarding career education implementation	83%

(continued)

Table 12

(continued)

Percent coordinators/project directors who are:	
guidance counselors	21%
principals	8%
district superintendents	4%
other administrators/officials (e.g., Assistant Superintendent, Director of Instruction, Director of Pupil Personnel Services)	67%
Percent local coordinators/project directors who report to:	
school principals	25%
district superintendents	17%
other administrative officials	58%
Average size of LEAs' career education staff:	
number of FTE professional staff	4.5
percent supported by PL95-207 funds	33%
number of FTE support staff	1.2
percent supported by PL95-207 funds	34%
Average number FTE professional staff reporting to local coordinator/project director	5.1
Average number FTE support staff reporting to local coordinator/project director	1.4

District-Level Support

Percent LEAs where superintendent has formally endorsed career education	100%
Percent LEAs where superintendent has been actively involved in career education program	100%
Percent LEA school boards formally endorsing career education	73%
Percent LEAs where career education is a formal component of educational program or curriculum	98%
Percent of LEAs whose career education programs include:	
infusion of career emphasis in K-12 curriculum	100%
collaboration between business, community, ans schools	100%
promoting bias-free career planning	95%
enhancing students' awareness of careers	100%
enabling students to develop employability skills	100%

(continued)

Table 12

(continued)

Percent LEAs conducting formal training for staff in career education concepts.	95%
Average percent teachers participating in training	77%
Average percent counselors participating in training	84%
Average percent administrators participating in training	79%
Average percent paraprofessionals participating in training	92%
Percent LEAs using PL95-207 funds to support training	80%
Percent LEAs formally endorsing the development of collaborative relationships with business and/or community (BLIP/CC) groups	65%
Percent of endorsements providing for BLIP/CC involvement in:	
planning curriculum offerings	60%
providing career exploration opportunities	93%
providing work experience opportunities	73%
providing educational materials or resources	67%
Percent LEAs using PL95-207 funds to support BLIP/CC involvement	64%
Percent LEAs that have developed formal career education implementation plan	74%
Percent plans endorsed by:	
school board	76%
school superintendent	82%
local career education action council	76%
other business/community groups	41%
organizations of school personnel	47%
Percent LEAs using PL95-207 funds to support development or revision of local implementation plan	31%

There were, on the average, 2-3 local career education coordinators in these LEAs, although several of the larger districts had as many as 5 or 6. Typically each coordinator was responsible for approximately 22 schools, although again this varied with the size of the district. Most of the local coordinators interviewed had been involved in career education for several years before being appointed career education coordinator, although nine indicated that their involvement began when they assumed that position. Only four indicated that their initial involvement had come within the past year, when the LEA applied for and received PL95-207 funds.

The average size of the career education staff in these LEAs was 4.5 professional FTE. Approximately one-third of this professional staff was supported by PL95-207 funds. Support staff averaged 1.2 FTE, a third of which was supported by PL95-207 funds.

Career education appears to be a district-level (as compared to building-level) effort in the 24 LEAs visited. Several of the local coordinators/project directors interviewed had been (or were also) building-level guidance counselors or principals. Most, however, were district-level administrative personnel, including at least one Superintendent of Schools. Three-fourths of these coordinators/project directors reported to District Superintendents or other district-level officials. All of the superintendents of these LEAs have formally endorsed career education and are actively involved in the career education programs. Almost three-fourths of the LEA school boards have also formally endorsed career education. This support was viewed by many local coordinators/project directors as very important for developing enthusiasm for and commitment to career education at the building level.

All but one of the LEAs visited have included career education as a formal component of their educational program including: infusion of a career emphasis in the K-12 curriculum; collaboration between business, community, and schools; enhancing students' awareness of careers, and enabling students to develop employability skills. All but one of the LEAs also emphasized promoting bias-free career planning in their program. Nearly all the LEAs visited had conducted formal training for their staff

in career education concepts, with the majority of their staff participating in this training. The average proportions of staff involved in this training were: 77% of the teachers in the LEAs, 84% of the counselors, 79% of the administrators, and 92% of the paraprofessionals. Other training efforts included separate workshops for librarians, superintendents, curriculum specialists, PTAs, and local school advisory committees. All but four of these LEAs are using PL95-207 funds to support this training.

About two-thirds of the LEAs had formally endorsed the development of collaborative relationships with business and/or community (BLIP/CC) groups. Specific areas of collaboration that were encouraged included: planning curriculum offerings (60%), providing career exploration opportunities (93%), providing work experience opportunities (73%), and providing educational materials and resources (67%). About two-thirds of the LEAs had used PL95-207 funds to support or stimulate such BLIP/CC involvement. These funds were used to support costs of career exploration activities for students, travel for field trips, developing career awareness for CETA prime sponsors, and an advisory council career day, among others.

About three-fourths of the LEAs developed formal career education implementation plans. In three-fourths, or more, of these LEAs, the plans have been fully endorsed by the school board (76%), school superintendent (82%), and/or local career education action council (76%). Other business, community groups and/or organizations of school personnel had endorsed the implementation plans of nearly half the LEAs. About one-third of these LEAs had used PL95-207 funds to support development or revision of local implementation plans.

4. What kinds of activities are being carried out by these LEAs to foster career education implementation and with what results?

The activities and accomplishments for the 1979-1980 school year of the 24 local career education projects visited are summarized in Table 13. As can be seen, nearly all of these projects were using a portion of

Table 13

Activities and Accomplishments of Local Career Education Projects Supported with FY79 PL95-207 Funds (N=24)

Percent funded LEAs using PL95-207 funds to support (and evaluate) the following activities:	
incorporating CE concepts and approaches into the instructional program	87% (55%)
developing and implementing comprehensive career guidance and counseling services	61% (50%)
developing and implementing collaborative relationships with BLIP/CC groups	61% (36%)
providing on-site work experiences for youth	35% (23%)
employing a local CE coordinator	57% (27%)
training local CE coordinators	26% (14%)
providing inservice training on CE for local educational personnel	96% (73%)
purchasing CE supplies and materials	91% (59%)
conducting institutes for community leaders and parents regarding nature and goals of CE	43% (18%)
establishing and operating community CE councils	39% (23%)
establishing and operating CE resource centers	70% (32%)
adopting, reviewing, and revising local plans for CE	48% (18%)
conducting CE needs assessments and evaluations	73% (32%)
Percent LEAs attempting to reduce bias and stereotyping in career choice by:	
screening materials used for possible bias/stereotyping	52%
training teachers in techniques for combatting bias/stereotyping	65%
modification of the instructional program to include avoidance of bias/stereotyping	61%
other (e.g., field trips to observe nontraditional role models, student workshops)	35%

(continued)

Table 13

(continued)

Average percent of teachers in districts using a careers emphasis in their instruction, by grade level:	
grades K-3	62%
grades 4-6	61%
grades 7-9	54%
grades 10-12	53%
Percent LEAs for which these figures represent an increase relative to 1978-79 school year	84%
Average percent increase in teacher involvement relative to 1978-79 school year	24%
Average percent counselors in districts that are assisting in implementing career education, by level:	
elementary	62%
intermediate	82%
secondary	78%
Percent LEAs for which these figures represent an increase relative to 1978-79 school year	75%
Percent LEAs reporting increased career education implementation over past year	67%
Average percent schools within funded districts with some level of career education implementation currently ongoing	89%
Average percent schools within funded districts projected to have some level of implementation by expiration of Incentive Act	95%

their PL95-207 funds to support inservice training, materials acquisition/evaluation/dissemination activities, and activities aimed at incorporating career education into the instructional program. Between one-half and three-fourths of the LEAs visited also reported activities aimed at establishing and operating career resource centers, conducting career education needs assessments or evaluation studies, developing and implementing comprehensive guidance and counseling services, developing collaborative relationships with business and community organizations, and/or employing a local career education coordinator. The local career education coordinators/project directors had plans to evaluate between one- and two-thirds of the activities undertaken this year. However, as these evaluations had not been completed at the time of the visits, no data were available regarding the activities' accomplishments.

All but five of the LEAs had made at least some systematic effort to reduce bias and stereotyping in students' career planning or career choice, and three of those five indicated that this was an objective, but one that had not yet been addressed. Teacher training and modification of the instructional programs were the most frequently-reported means of combatting bias and stereotyping, but screening of materials for possible bias was also mentioned often. Other strategies employed emphasized exposure to nontraditional career models through student field trips or workshops.

In the districts visited, between 53% and 62% of the teachers, on the average, were reported to be using a "careers emphasis" in their instruction. Over three-fourths of the LEAs reported this to be an increase relative to the 1978-79 school year, with the percentage increase averaging 24%. Even larger proportions of the counselors in these LEAs were reported to be assisting in the implementation of career education--from 62% to 82%. Again, for most LEAs this represented an increase relative to the previous year, although the local coordinators/project directors were not able to estimate the percent of increase as they could for teachers. These increases were for the most part attributed to the inservice training, materials acquisition, and/or local coordinator efforts supported by the PL95-207 grants. Other contributing factors mentioned were strong

support from local administrators (e.g., principals, superintendents, school boards) and local business and community groups and the flexibility that allowed teachers to participate in local program planning and to select their own materials.

An average of 89% of the schools in the twenty-four districts visited were implementing career education to at least some extent during the 1979-1980 school year; in two-thirds of the LEAs this represented an increase (sometimes dramatic) relative to the 1978-1979 school year. Nearly all the LEAs projected even more widespread implementation over the next few years, with an average of 95% of the schools expected ultimately to be implementing career education. Again, the Incentive Act funds and the activities they supported were given most of the credit for the accelerating levels of implementation. Continued growth of career education within these districts was seen as subject to the availability of additional federal or state funds, continued emphasis on staff training (particularly preservice training) to maintain motivation and to compensate for staff turnover, the commitment of local administrators and state-level officials (including state graduation or accreditation requirements), and support and pressure from the local community for programs to improve the quality of high school graduates. Possible obstacles seen to further implementation included downturns in the local economic climate and the advent of programs that would compete for scarce staff time and district resources (e.g., the "back to basics" movement, PL94-142).

5. To what extent are business and community organizations collaborating in or supporting career education at the local level?

Information regarding the nature and extent of collaboration with local business and community organizations for these LEAs is presented in Table 14. About two-thirds of the LEAs visited have established active career education action councils. The average number of business or community organizations represented on these councils is 16, broken down (on the average) as follows: 65% business, industry, or professional organizations; 7% labor organizations; 6% civic or community groups; 3%

Table 14

Support for Career Education Programs from Local Business and Community Groups (N=24)

Local Career Education Action Councils

Percent LEAs with active local career education action councils	65%
Average number of business/community organizations represented on councils (range)	16 (5-54)
Average composition of local action councils	
percent representatives of local business, industry, or professional organizations	65%
percent representatives of local labor organizations	7%
percent representatives local civic/community groups	6%
percent representatives of groups for individuals with special needs	3%
percent other (e.g., private schools, students, parents, senior citizens, PTA members, and educators)	19%
Average number of years local action councils have been in operation (range)	4 yrs. (½-15)
Percent local action councils that have:	
formally endorsed local career education programs and policies	62%
aided in reviewing/revising local career education implementation plans	38%
developed or endorsed LEA proposals for PL95-207 funds	46%
developed guidelines for collaboration between local business/community organizations and the schools	31%
acted to stimulate involvement of local business/community groups in career education program	69%
Percent local action councils that regularly cooperate with other local advisory councils (e.g., local CETA planning councils)	71%

Support from Local Business/Community Organizations

Percent LEAs where business/community organizations have provided funds to support career education activities	36%
Average level of funds provided (range)	$8,266 ($2,800-$14,000)
Percent LEAs where business/community organizations have provided people or facilities to support career education activities	96%

(continued)

Table 14

(continued)

Percent LEAs where business/community organizations have conducted or assisted in career education workshops	57%
Percent LEAs where business/community organizations have prepared or disseminated materials for use in career education	43%
Percent LEAs where business/community organizations have lobbied or otherwise encouraged the state legislature to support career education	38%
Percent where business/community organizations have lobbied or otherwise encouraged local school boards to support career education	45%
Percent LEAs expecting further or continued involvement of local business/community organizations in career education efforts	100%

groups representing individuals with special needs; and 19% other (e.g., private schools, students, parents, senior citizens, PTA members, and educators).

These councils have been in operation for an average of four years, and have engaged in a variety of activities. Two-thirds have formally endorsed local career education programs and policies and acted to stimulate involvement of local business or community groups in career education programs, and about one-third have aided in reviewing or revising local career education implementation plans and/or developed guidelines for collaboration between local business or community organizations and the schools. Nearly half were also involved in developing or endorsing the LEAs' PL95-207 proposals. In addition, nearly three-fourths of these local councils regularly collaborate with other local advisory councils (e.g., local CETA planning councils).

Local business and community organizations have also been supportive in other ways. About a third of the LEAs visited had received funds from business or community organizations to support career education activities. The average level of funds provided was about $8,000, with the actual amounts ranging from $2,800 to $14,000. All but one of the LEAs indicated that business and community organizations had provided people or facilities to the LEAs to support career education activities, and over half indicated that business and community organizations had conducted or assisted a career education workshop. Finally, almost half of these LEAs reported that business and community organizations had prepared or disseminated materials for use in career education and/or had lobbied or otherwise encouraged local school boards to support career education. And over one-third of the LEAs indicated that business or community organizations "lobbied" or otherwise encouraged the state legislature to support career education.

These activities do not appear to be "new" in the sense of occurring prior to PL95-207; rather, the local coordinators/project directors indicated this kind of support had been received in previous years. However, all expected this support to increase, or at least to continue in the next few years.

REFERENCES

American Institutes for Research. Exploratory evaluation of career education incentive act program: Phase I technical report. Palo Alto, CA: AIR, August 1980.

Jung, S. M., Steel, L., Claudy, C. B., & Kingi, M. First interim report on the evaluability assessment. Palo Alto, CA: American Institutes for Research, March 1980. (ERIC No. ED 186 679)

McLaughlin, D. H. Career education in the public schools, 1974-75: A national survey. Palo Alto, CA: American Institutes for Research, 1976.

Schmidt, R. E., Scanlon, J. W., & Bell, J. B. Evaluability assessment: Making public programs work better (Human Service Monograph Series #14, DHEW Publication No. OS-76-130). Project Share, Office of Planning and Evaluation, Rockville, MD, 1979.

Wholey, J. S. Evaluation: Promise and performance. Washington, DC: The Urban Institute, 1979.

APPENDIX A

Local-Level Activity Descriptions: Some Notable Examples

Note: The following activity descriptions are based on materials collected during rapid feedback assessment site visits to 27 local education agencies in nine states. They are included to provide readers of this report with a more realistic picture of the types of local-level activities that are currently underway using PL95-207 funding.

Readers should not infer that the activities chosen for inclusion have been evaluated by or are otherwise endorsed by AIR or the Office of Career Education. They are intended to be illustrative only.

Local Activity Description:
Rome City, Georgia,
Career Education Program

The career education program in the schools of Rome City, Georgia, has accomplished a great deal with minimal outside funding. The local Career Education Coordinator (CEC), Mrs. Helen Smith, has led the way through her success in arranging and maintaining high levels of school/community involvement.

The Rome City School District is a small district of 5,000 students in northern Georgia. The area is semi-rural in character with approximately equal numbers of black and white students.

From 1973-74 to 1978-79, the program operated using only local funds. Even so, activities were extensive. They included:

(1) An in-service session held several times a year, called "Counselors and Teachers in Industry," in which local industries industry opens their doors to give educators a taste of other kinds of work.

(2) A junior high school course lasting one week called, "Taking a Look at Jobs in Floyd County."

(3) A Sophomore Career week.

(4) A Career Guidance Center, a large part of whose contents has been provided or donated by local business and industry.

(5) An Individual Planning System, in which a teacher, student, and parent work together each year throughout the student's high school years to plan the student's career goals and educational program.

(6) Career education units infused at the elementary level; units on transportation, manufacturing, agribusiness' and communications are taught at the first, third, and fifth grade levels; units on construction, service, sales, and clerical careers are taught in the second, fourth, and sixth grades; units on self awareness are also taught at all grade levels.

(7) A Business/Industry/Education Project in cooperation with the Chamber of Commerce.

All these programs are still underway. Even with so much activity going on, however, full implementation of career education

was in 1978-79 still a goal, not an accomplished fact. The unmet needs still to be addressed were principally three: in-service staff development had not yet reached all district teachers; parents had not been sufficiently involved in the program; and career education materials were not in sufficient supply. So the Georgia State Department of Education awarded the Rome City Schools an implementation grant of $20,000 in PL95-207 funds for 1979-80.

With these additional resources, the local Career Education Coordinator (CEC) planned a wide range of activities. These included in-service sessions for all teachers, counselors, administrators, and support staff in the district; use of "Teacher Career Representatives," volunteer teachers in each elementary building who serve as program liaisons; use of counselors to serve a parallel function in the junior high and high schools, with more emphasis on direct activities for students; conferences and evening programs for parents; and purchase of new materials.

All these activities have been carried out <u>without</u> the addition of extra staff members or, indeed, any funds for staff salaries, other than released time for teacher training. About two-thirds of the project's $20,000 grant have been spent for materials, and almost all the rest has gone for released time. The success of this approach has depended in part on the existing level of activity in Rome City and especially on the position and commitment of the CEC.

Mrs. Smith has been the Director of Pupil Personnel Services in the district since 1973. Her commitment to career education is a personal one, arising primarily out of her own experiences as a counselor. Her efforts in the district have focused on imparting her enthusiasm for career education to the district's teachers, counselors, and administrators and on developing community involvement in the schools. A partial list of involved community groups includes:

Chamber of Commerce
Civic Clubs - Vocational Guidance Committee of Rotary Club
Advisory Committee on Career Education
School Resource Persons File
Post Secondary Institutions
Tri-County Regional Library
Career Internship Program
Committee for Sophomore Career Week

Public and Private Health Agencies
Georgia Department of Labor
High School Newspapers
Rome Transit Department
Interagency Council
Junior Achievement
Georgia Educational Television Network
Northwest CESA - "Bread and Butterflies"
Adult General Learning Resource Services
YMCA/Civil Air Patrol

The depth and continuity of her involvement and her leadership position in the district's administration have been key elements in the steady growth of career education. The eight counselors who work under her are natural emissaries of career education in the secondary schools. At the elementary level, the designation of the eight Teacher Career Representatives, all committed and enthusiastic, has made the Rome City Program a truly comprehensive one.

Commitment to evaluation is another of the project's key elements. Georgia's Criterion Referenced Tests, which all students take each year, include a section on Career Development; these results are examined by the project and district staff each year at the fourth and eighth grade levels to identify particular areas of weakness that may need increased emphasis. Staff development needs of all teachers are regularly measured through pre- and post-administration of the Staff Development Survey: Comprehensive Career Guidance. In addition, each teacher makes regular reports concerning the number of career education units developed, number taught, resource people or materials used, and field trips taken. These reports are regularly monitored by the CEC. Librarians also monitor usage of career education materials in the schools. In fact, the commitment of Rome's school librarians represents another key element of the program: librarians regularly team with the Teacher Career Representatives to identify useful career education resources and materials and then provide the encouragement and support necessary to promote widespread utilization.

The program has also coordinated its efforts with other sources of funds and materials, including the county library, YEDPA, and YETP. For example, the development of a video-taped series on local workers entitled, "What Will You Be?" was a joint effort of the library and project staffs. This mutual support network, plus the support of the

district, will help continue the program even after PL95-207 funds are depleted. The local system superintendent commented, "PL95-207 funds have enabled us to improve the program in ways we have wanted to but couldn't afford. Every year there are fewer teachers and administrators who don't support career education. I believe we have now reached a critical mass. I expect career education to be a vital part of our program from now on."

Local Activity Description:
The Mid-Buchanan, Missouri, R-V Comprehensive
Career Education Project

The Mid-Buchanan R-V School District encompasses a small rural area in northwest Missouri. There are three schools in the district (one elementary, one junior high, and one senior high), serving approximately 750 students. The district staff includes three principals (one per school), 46 teachers, and one counselor, in addition to the Superintendant. There are no large businesses within the district, and few small ones; most of the residents are employed in farming or farm-related work or commute to St. Joseph or Kansas City. As a result, students have few opportunities within the local community to observe and learn about careers and employment. Recognizing the consequent importance of career education for the children in the district, the School Board in 1979 directed that a comprehensive career education program be instituted "as soon as fiscally possible."

The district had previously recognized the need for career education and had initiated and supported some activities in this area. Early in 1979, the Platte Valley Special Education Cooperative (of which Mid-Buchanan R-V is a member) obtained support through PL 94-142 discretionary funds for the development of a Vocational Basic Skills program aimed at secondary level handicapped students. This program was implemented in the 1979-80 school year. Also in 1979 the district conducted a survey of needs as perceived by students, teachers, and the community. There was strong endorsement within all groups of the need to better relate school experiences to the world of work and everyday living. As a means of responding to these expressed needs, the district elected to participate in a career education in-service training program offered by the University of Missouri. Under this program a cadre of nine teachers, counselors, and administrators (representing all three schools in the district) were trained in career education content and concepts. However, the district did not have the resources to acquire the materials and conduct the staff training necessary to implement a comprehensive career education program on its own. This year, the availability of $25,000 through PL 95-207 Career Education Incentive Act program (along with

$4,500 in district funds) is allowing the district to carry out these necessary start-up activities and thus implement career education throughout its educational program.

The Mid-Buchannan R-V project is primarily concerned with infusing career education into the curriculum via the establishment of resource centers, in-service training and the compilation of a catalog of locally developed resources. The objectives specifed for the project are as follows:

(1) Installing and incorporating career education concepts and approaches into the instructional program, grades K-12.

(2) Provide in-service training for educational personnel to include teachers, counselors, administrators, board members and parents that will enable them to develop an understanding of career education and to develop the competencies necessary to successfully implement and carry out a comprehensive career education program.

(3) Provide training which will acquaint school personnel with the changing work patterns of men and women, ways of overcoming sex stereotyping in career choice and ways of helping all students broaden their career horizons.

(4) Purchasing career education instructional materials in order to meet program objectives.

(5) Establishing and operating career education resource centers to serve both students and the general public.

(6) Developing, adapting, reviewing and revising local plans for coordinating the implementation of a comprehensive career education program.

(7) Conducting needs assessments and evaluations.

The program is based on the Brookins Life-Centered Career Education Model, which was introduced to the district through the University of Missouri training workshops. This K-12 program focuses on three skill areas: daily living skills, personal social skills, and occupational guidance/preparation skills. In the elementary grades the focus is on the first two skill areas, with somewhat less attention given to orientation to clusters of occupations. The intent is for students to develop an awareness of and appreciation for the various kinds of work people do. At the junior and senior high levels, increased attention is given to in-depth exploration of specific occupations and to relating occupations to students' own skills and interests.

Approximately two-thirds of the project funds are being devoted to acquiring career education materials for use by students and/or teachers; the materials are to be housed in, and available from, resource areas established in the libraries in the district's three schools. Building-level orientation meetings are being held to acquaint teachers with the materials available in their school's resource center and with procedures for using the centers.

In-service training is a central component of the project, although it utilizes a relatively small proportion of the funds. An extensive (36 hours) series of workshops was offered in the Spring to instruct teachers in career education concepts and strategies and to consider needs and appropriate objectives for each grade level. These workshops were offered as a two-unit graduate credit course through the University of Missouri, with the state providing half the tuition. Project funds were used to provide stipends for the instructors and participants. All teachers were invited to attend, and all but five (of 46) did so. A one-day follow-up workshop focusing on the development of infusion strategies (classroom activities or lesson plans addressing particular competencies and objectives) is scheduled for August 1980. A total of 200 infusion aids are to be produced during and immediately following the workshops. These aids will be field-tested and revised during the next year (after the current grant has ended). The revised materials will then be packaged, catalogued, and distributed to teachers.

The local Career Education Project Director views the implementation of career education as necessarily a cooperative effort, in which

teachers, counselors, and principals participate fully in all stages of the implementation process: determining the needs, developing the plans, and selecting or preparing the materials, as well as conducting career education activities in the classroom or counselor's office. His intent is for career education in the district to develop from the bottom up, rather than have it handed down from above, in order to enhance teachers involvement in and commitment to the effort. To this end, while the district is attempting to identify and collect existing materials for teachers and students to use, they are also putting some effort into developing their own infusion aids. While this may seem like recreating the wheel, this investment of district and individual resources is expected to create a sense of program ownership among the staff responsible for its implementation, which in turn should enhance the degree of career education implementation in the district. At this time over 90% of the teachers are actively involved in implementing career education, suggesting that this grassroots approach has been highly successful.

The Incentive Act Funds have clearly given this district an opportunity to develop and implement a program that it might not otherwise have had (or at least, not this soon). Because of the small size of the district, it has been able to involve nearly all the teachers and counselors in all the schools from the start. The district is committed to continuing the program after the current grant expires, and will provide the funds necessary for maintaining the resource centers, distributing the infusion aids, and providing training to keep the staff abreast of new materials. The major potential obstacles to continuation of the program are the extent to which it makes additional demands on teachers already limited time and the possibility of new federal programs and requirements (such as those associated with PL 94-142) that place an increased burden on the teachers.

Local Activity Description:
Wayne Township, New Jersey,
Career Education Program

The Wayne Township Career Education Program is among the oldest in the U.S. It began in 1966 with a sixth grade course called "Introduction to Occupations." In 1976, the district began implementing a full K-12 program district wide. Today the program has developed to include a characteristic that may be unique among career education projects: the Career Education Department includes Vocational Education administration within it. The usual situation at all levels (local, state & federal) is of course the reverse.

Wayne Township is a suburban area of primarily middle class residents. The Wayne Township district includes nine elementary schools, two middle schools, and two high schools. These serve a population of 8,500 students with a staff of about 550.

The Career Education Program is staffed by six professional staff persons, including the Director, and a support staff of four. The professional staff members have different areas of responsibility. The Director oversees the entire career education program, including management of newly operating components for handicapped and gifted students and potential dropouts. The functions of the other five staff members are:

(1) The Work Study/CETA/Shadowing Cordinator has the day-to-day responsibility of increasing student involvement in the community. In addition, he/she works to increase the number of employer sites available for student experiences.

(2) The Media Specialist is responsible for collection of career education resources and development of new materials. For example, the district received a grant from USOE in 1975 to develop guides to community involvement for various groups. These will be described later in the paper. The Media Specialist also oversees operations of the district's five career resource centers.

(3) The Elementary/Middle School Program Coordinator has primary responsibility for the in-service training of teachers at the K-8 level.

(4) The Secondary School/Program Coordinator conducts or coordinates all in-service training for teachers at the 9-12 level.

(5) The Job Placement Counselor is responsible for obtaining information on area career possibilities.

The goals of the program are based on state career education goals developed through statewide participation of over 1,700 parents, students, teachers. The goals of Wayne Township's program are to help students:

(1) gain a knowledge of and respect for self;

(2) acquire an understanding of the world of work;

(3) explore career possibilities;

(4) investigate careers through curricular offerings and through field experiences;

(5) develop a personal set of work values;

(6) understand the information and master the skills necessary to achieve self-fulfillment in work and in leisure;

(7) test their interests and talents in actual career situations;

(8) prepare for post high school employment or education; and

(9) redirect career pursuits as often as necessary without the stigma of failure, but rather in a spirit of exhilirating self-definition.

Career education is infused into classroom activities at all grade levels in all disciplines. The district requires the use of at least four activities for each student each year. In addition, about 1/3 of the teachers at every grade level use a career emphasis in all their instruction. The teachers' collective bargaining organization is very supportive of CE, and in 1979 gave the project its official support.

Counselors, too, are actively involved: all counselors at the intermediate level and about 1/3 of those at the secondary level assist in the implementation of career education. Teacher and counselor involvement has increased each year since district-wide K-12 implementation began in 1976. The plan for involving more and more teachers and counselors each year is primarily responsible for this increase.

Inservice training has been a central concern of the project staff. Virtually all of the teachers, counselors, administrators, and paraprofessionals in the district have received some training in career education concepts. Several specialized workshops have been held this year, utilizing PL 95-207 funds; these have included one on development of a CE program for the gifted, one on teacher roles in making student job shadowing experiences effective, and one on media production.

A second major concern of the project staff has been career education resources. Each of the two high schools and three of the middle schools have career resource centers that serve students and teachers.

Materials have also been developed locally (with USOE funding under PL 93-380) that spell out the ways in which all segments of the community can help students explore career options. Titles in the series are:

A Student's Guide: Career Interests
A Student's Guide: Alternatives After High School
A Parent's Guide: Career Development
A Teacher's Guide: Taking Field Trips
A Teacher's Guide: Using Community Speakers
The Host's Guide: School Field Trips
Community Speaker's Guide: Classroom Talks

These materials are comprehensive and attractive. Though they were developed for local use, they would make a good model for any district wishing to develop these kinds of guidelines.

A third program focus is community involvement. The local Career Education Action Council members have reviewed career plans and proposals and made presentations to other organizations to recruit work experience sites and speakers. The Chamber of Commerce has formally endorsed career education in Wayne and has provided both publicity and in-kind support for career education activities. Community support has grown every year, with more and more businesses, industries, and organizations providing exploration opportunities for students.

Wayne's program is large: $300,000 in state and local funds were devoted to career education in 1979-80. Its PL 95-207 grant was $30,000, most of which went for in-service training and materials acquisition. But the Director of Career Education believes that federal support for CE has

played a large part in stimulating the allotment of state funds in New Jersey. He feels that current state and federal grants of $100,000 in vocational education funds to the Wayne Township program were awarded in part because of the program's success in obtaining the PL 95-207 grant.

Local Activity Description:
The East Cleveland, Ohio,
Career Development Program

The Career Development Program in the East Cleveland School system is a relatively new effort. Its initial planning was conducted during school year 1978-79, using a grant from the State of Ohio Career Education Program. In 1979-80 it was funded for its first year of implementation using $95,000 from PL 95-207 and $37,750 from the Ohio program.

East Cleveland is a small enclave on the outskirts of Cleveland with a school enrollment of 8,500, 99% of whom are black. Though beset with many of the problems of other cities with large minority populations (high unemployment, low student achievement), East Cleveland is a pleasant community with a proud and involved citizenry. The career education effort there has garnered a great deal of support in a short time. Before 1978-79, career education classes of one week in length were offered as an elective at the middle school level. This was the only formal career education activity in the district. During the planning grant year the Program Coordinator worked extensively with the neighboring Willoughby-Eastlake District, which was operating a very active program.

The East Cleveland Career Education Program has three components: motivation (grades K-6), orientation (grades 7-8), and exploration (grades 9-10). The 11-12 grade levels are given over to career preparation; while some activities are carried out for students at this level, the program's main thrust is at grades K-10. (This approach follows Ohio's statewide model.)

At grades K-6, the career education emphasis is on motivating students toward positive attitudes about doing daily tasks, in addition to providing an awareness of various kinds of jobs. Orientation to many careers is carried out at the 7-8 grade level where emphasis is placed on various kinds of jobs through the 15 USOE career clusters, while exploration of fields that particularly interest students is the focus at the 9-10 grade level.

The objectives of the project for 1979-80 were as follows:

(1) Hold in-service orientation for all teachers, administrators, and counselors within the system.

(2) Enable at least 30% of the teachers at each grade level (K-10) to use career development concepts within their classroom in at least one activity.

(3) Develop a Career Resource Center will be developed at Shaw High School (used by all students).

(4) Involve all tenth grade students in at least one career development exploration field study trip.

(5) Hold in-service sessions for selected teachers on career development concepts, Ohio's seven developmental areas, the 15 USOE career clusters, use of the resource centers, career classes, and sex equity in career choice

(6) Select team leaders for grades (K-6), and hold in-service sessions to allow them to learn and implement this role.

(7) Contact community organizations, parents, business, and industry for field trips and speakers and develop a system-wide Resource Booklet.

(8) Develop an Advisory Committee.

(9) Conduct an evaluation of all in-service sessions, activities, and curriculum development processes.

The program has a number of key elements that have contributed to its apparent success. For example, the first step in staff development at each school has been an in-service workshop on CE concepts and benefits for administrators. Only after administrative support has been gained were sessions scheduled for the rest of the staff. Inservice included all district supervisors, and curricuum specialists.

In addition, each PTA, all the major churches, and almost all the major employers in the area also received presentations on career education. Those invited to attend but unable to do so were followed up with letters and phone calls. The degree of community support for this project is a direct consequence of the enthusiasm and persistence of the staff.

These qualities have affected the performance of the teachers and other educators as well. At the elementary level, the two team leaders at each school met weekly to discuss progress. The team leaders provided a copy of suggested activity to every teacher in the building once a week.

At the junior and senior high schools, teachers were encouraged to have their students use the career resource centers. At Shaw High School, all tenth grade students were scheduled into the Career Resource Center in their English class activities. Teachers also received in-service training on activities in all career clusters, with special sessions scheduled for particular subject areas.

The result of these efforts was a dramatic increase in career education implementation: the average number of teachers using a careers emphasis in their teaching at each grade level jumped from 20% to over 60%, and the average number of counselors assisting in implementation of career education increased from 10% to over 90%.

Special activities in the past year have included:

- Holding in-service sessions for all secondary teachers on sex-role stereotyping; also, a more detailed sex equity program was piloted in the Home Economics Program.

- Implementation of the McKnight/A.E.L. decision making materials for all ninth and tenth grade students in the Alternative Education School; students in this section of Shaw High School are those with low motivation, learning disabilities, truancy, and other learning problems.

- Implementing a shadowing experience for 96 Shaw High School students through sponsorship of Kappa Alpha Psi, a professional fraternity dedicated to helping black students who are pursuing professional careers.

- Implementing a Career Resource Information Network System at Shaw High School's Career Resource Center, which will be expanded for community use through the East Cleveland Public Libraries.

- Developing (for the first time) a strong relationship with the General Electric Lamp Division, East Cleveland's largest employer. The junior high/high school coordinator worked closely with GE to help its staff develop and implement a special motivational training program for its women employees. As a result, GE is cooperatively planning a broad job shadowing program for ninth and tenth grade students in 1980-81.

- Involving more than 50 local industries and businesses in the provision of on-site work experiences, classroom presentations, materials, and other direct service to students. In addition, five major area employers have formally and publicly endorsed career education.

Although Congressman Louis Stokes, in whose district the program is located. has expressed his formal support of the East Cleveland Program, its strongest supporters are the people directly involved. One team leader expressed her feelings about her extra duties this way: "If you really believe in the career education concept, it isn't work, it's fun!"

Local Activity Description:
Medford, Oregon, Public Schools Career Education Project

The 1979-80 infusion of career education concepts into the regular academic program of Medford School District 549C epitomizes Congress' intentions in passing PL95-207, the Career Education Incentive Act. This District competed for, and was awarded, $4,800 of the Oregon allotment under the Act. That small amount was in every sense an incentive.

It enabled the District to provide the "glue" to piece together key resources that hitherto had been relatively fragmented. Moreover, it allowed the district's career education staff to produce training and curriculum materials that expedited the infusion progress. Perhaps most important, it gave the career education staff outside legitimacy.

Medford is a medium-sized city in southwest Oregon. Its predominantly Caucasian population depends heavily on lumber and agricultural industries for employment. School District 549C is staffed with about 540 professionals serving approximately 10,000 students in 14 elementary schools, two junior high schools grades 7 and 8, 1 mid-high school grades 9 and 10, and 1 senior high school. The District has been involved in career education activities for at least six years, using only local funds from the district and cash contributions from the community. These funds have been used to support and staff the Community Business Education Center (CBEC), a coordinating center for use of community career resources in schools. The district is rightfully proud of this center, which has at least two unusual characteristics: (1) it is truly a local, community-based effort in concept and support, and has never received state or federal money; and (2) it is independently incorporated, with its own Board, the members of which come half from district personnel and half from the community. Even funding is split 50-50. As an example of collaboration in which power is truly shared, Medford's CBEC may be unique in the United States. Until this year, classroom-centered career education activities were the weakest link in Medford's program, and it was to strengthen this link that PL95-207 monies were sought. The grant has been used to do two things. First, Career Awareness Exploration Curriculum Kits developed by the Oregon Department of Education were

modified, condensed, and reprinted for every teacher and school in the district. Each of the five guides presents career education goals and activities at different levels: grades K-3, 4-6, 7-8, 9-10, and 11-12.

Second, for each level the district career education staff developed a matrix based on the local curriculum. Each matrix shows Medford's specific career education program goals, course goals, and possible performance indicators. At the K-3 and 4-6 levels, each chart also shows the activities in the revised Curriculum Kits that can help students to achieve the goals and suggests the subject matter areas into which the activities might fit. At the 7-12 level, teachers can use their Kits to select the activities they prefer. Each matrix is printed on a wall-size chart, and the appropriate charts have been furnished to every district teacher.

As an example of chart contents, the following program goals have been established at the 4-6 level:

(1) Students will identify and develop attitudes about the world of work.

(2) Students will acquire knowledge about the world of work.

(3) Students will identify their individuality and continue to develop a relationship with occupational roles.

(4) Students will develop skills in decision-making, communicating, and creating as related to the world of work.

(5) Students will develop physical and mental skills related to occupational roles.

For each of the above, course goals then describe more specifically what each student will be able to do. For example, for the fourth program goal above, this course goal is specified:

The student will be able to identify and participate in a decision-making process.

Performance indicators are added for each course goal so that its attainment can be measured. The indicators for the above example goal are as follows:

(1) Given a project to complete, or a problem to solve, [the student] will be able to select the appropriate materials for completion of the project or problem.

(2) Given the steps in the decision-making process, [the student] will be able to apply the process to the selection of a career area for the purposes of exploration.

(3) Given the appropriate materials and knowledge, [the student] will be able to select a career area and identify the appropriate steps to complete the education and/or training necessary for entry level employment in the career area of his/her choice.

These materials can be used independently by teachers. They also form the basis for inservice training in career education conducted by the career education staff.

It would be hard to dispute that Medford School District 549C has lived up to the intent of the Career Education Incentive Act and has used its federal grant in a cost-efficient manner. The district's coordinated program of classroom materials and community activities is a strong one, and has been achieved with one of the smaller PL95-207 LEA grants made in any state.

Local Activity Description:

Altoona, Pennsylvania,

Area School District Career Education Program

Career education began in the Altoona School District in the early 1970's. In 1976-77, the district staff wrote a guide to a career education delivery system for the district. In 1978-79, they did a local survey of vocational placement opportunities and used the results in prioritizing the district's educational goals. But not until the provision of PL 95-207 monies was the district able to implement a comprehensive and systematic career education effort.

The district, in the heart of agricultural Pennsylvania Dutch country, serves just over 10,000 students in 18 schools: 14 elementary, three junior high, and one high school. Its staff consists of 509 teachers, 15 counselors, and various administrative and support personnel. The Altoona District has long had considerable involvement of the community in school activities. Thus, even though this program was in its first year in 1979-80, its activities included substantial implementation in addition to planning.

The Career Education Coordinator (CEC) was appointed in October 1979, and is the only paid career education staff person. She reports to the assistant superintendents for elementary education and secondary education. The CEC's role is primarily the training of teachers and the development, acquisition, and dissemination of career education materials.

Perhaps more important than the project's official structure, however, are the experience and enthusiasm of the CEC. Dr. Sally Sutter taught in the Altoona schools for 18 years before her appointment to the CEC position. She has served in many civic and educational groups and has personal relationships with most of the community's important figures. Partly as a result of these connections and partly due to her commitment to career education. She has generated enthusiastic support for project activities. The Mayor of Altoona, the Director of the Chamber of Commerce, and leaders at the Altoona campus of Pennsylvania State University are all involved in the project. The assistant superintendent for secondary education is also a committed supporter who has worked with Dr. Hoyt. The School Board also strongly supports the project.

In 1978-79, the district staff prepared a five-year plan for implementation of career education. Unlike many career education plans, Altoona's plan targets specific grade levels (in the K-6 grades) and subject matter areas (in grades 7-12) for in-service training during each of the plan's five years and requires that all teachers at those levels receive in-service training.

During 1979-80, in-service training was held for all third grade teachers, all social studies teachers at the secondary level, and all counselors (elementary and secondary). Two half-day in-service sessions were held for each group, fully funded by PL 95-207 money. The most significant aspect of the training was that it allowed the teachers themselves to select the methods and materials they wished to use to implement career education.

The long-term goal of the project is the design, implementation, evaluation, and appropriate modification of a comprehensive career education program for K-adult students.

The Advisory Council members, 21 representatives of local businesses and civic organizations, are very active both as a body and as individuals. They meet bimonthly to advise the CEC on project activities and to give feedback on the performance of district graduates as employees.

The creation of Career Resource Centers has been one of the project's most visible successes. All the junior high schools and the high school have a Center in the library, while all elementary schools have access to a Center in either a school library or media center or the district's Elementary Curriculum Center. As one of her first steps after appointment, the CEC made a survey of all CE materials in the district. This allowed her to use her PL 95-207 funds to buy supplementary materials without duplication.

The CEC has sought coordination with other educational programs and programs for youth, including the CETA Youth Counseling staff and the Adult and Community Education staff. She has also involved the business community heavily in career education activities. One of the highlights of the year was a Career Day held for students at the high school. The business community provided speakers addressing 59 careers in 14 of the 15 USOE career clusters. More than half of the students able to attend this event went to one or more presentations. Local businesses have also

provided job shadowing experiences for many high school students, and the CEC expects that they will provide more in the future.

Altoona's program is of course not fully operational, since it has just completed its first year of organized activity. But it has accomplished a lot with a modest grant ($37,253 of PL95-207 funds and no other direct financial support). The funds have not only allowed more extensive career educational activities, but have given the program visibility, coherence, and credibility. As a result, the CEC feels that 100% teacher involvement can be expected at each targeted grade level as each phase of the five-year plan is completed. Given the network of community support that the project has developed in such a short time, her predictions may well be realized.