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ABSTRACT

This document contains the results of qualitative case studies conducted on state and local implementation of the Carl D. Perkins Vocational Education Act of 1984. The case studies were conducted in three communities in each of nine states. The first of the report's six chapters gives an overview of vocational education and the role of the federal government. The purposes of the study are also described in this chapter. Chapter 2 gives a more detailed description of vocational education, focusing on the role of the state and of local urban, rural, and suburban communities. Chapter 3 describes state initiatives, access of institutions to Perkins funds, funds for special populations and program improvement, state action on specialized provisions, intergovernmental relations, and the influence of state policy on local practice. Chapter 4 addresses the funding of vocational education for special populations in both secondary and postsecondary education. Among the topics covered is factors that affect access of special populations to institutions offering vocational education. Chapter 5 describes program improvement and change in vocational education. Chapter 6 offers conclusions and implications regarding the legislation and special populations, program improvement, special Perkins issues, and the state role in the administration of the Perkins Act. An appendix contains methodological information regarding the study, including information on sampling, respondents, data collection, and data analysis procedures. (CWL)

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STATE AND LOCAL RESPONSE TO
THE CARL D. PERKINS ACT

CASE STUDY ANALYSIS

Final Report

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January 31, 1989

Prepared for:

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PREFACE

The study of state and local response to the Carl D. Perkins Act is one of several major studies commissioned by the National Assessment of Vocational Education (NAVE) of the U.S. Department of Education at the request of Congress. As such, the study results can be used by NAVE as it prepares its report to Congress, and the study reports will also be provided to Congress as it deliberates the reauthorization of the Perkins Act. The Abt Associates Inc. (AAI) study includes the only national survey of local vocational education practices, as well as the largest set of qualitative case studies of state and local practices in the mandated assessment.

AAI's report is organized in two volumes. This volume contains the results of the case studies conducted in nine states and 27 communities, three in each state. Separate chapters address each of the following questions:

- What is the capacity and willingness of states to provide leadership in vocational education? What guidance do the states provide regarding the implementation of the Perkins Act?
- What is the nature of activities funded under Perkins Title IIA for special populations? What is the relative importance of the Perkins Act in assuring the special population groups have access to high quality programs?
- What is the nature of program improvement activities in vocational education? To what extent has the Perkins Act contributed to program improvement initiatives?

The final chapter brings together the overall conclusions on the implementation of the Perkins Act and its relative importance to the vocational education enterprise and discusses possible options for federal action.

The second volume presents the survey findings of a national sample of 1,500 secondary districts and 500 postsecondary institutions offering vocational education programs.* The first of its kind in almost a decade, the survey focuses on the distribution and uses of Perkins funds in comprehensive

*Swartz, Janet P., 1989. State and Local Response to the Carl D. Perkins Act: Survey Analysis. Cambridge, MA: Abt Associates Inc.

school districts, area vocational schools offering secondary vocational programs, and postsecondary institutions. It also analyzes changes in vocational education enrollments and programs over the last five years, as well as the relationship between vocational education and JTPA.

ACKNOWLEDGEMENTS

I would first like to thank the state directors of vocational education, district vocational education directors, high school principals, directors of area vocational technical institutions, and presidents of community colleges and their respective staffs as well as other state officials, vocational education faculty, and employers who spent countless hours with the field teams discussing what they do. Hundreds of people were interviewed in the nine states and 27 communities that were visited in the spring of 1988.

I especially want to acknowledge the work of Christine Wood, Camille Marder, Joann Jastrzab, and Janet Swartz. Dr. Wood was responsible for the design, analysis and writing of the chapter exploring vocational education for special populations. She was joined in the analysis and writing by Dr. Marder. Ms. Jastrzab was similarly responsible for exploring program improvement initiatives in vocational education and authored that chapter in this report. Dr. Swartz worked with me in designing the surveys of vocational education. She then analyzed the survey data, and authored the separate volume on survey results. I greatly appreciate their keen analytic minds and spirit of camaraderie.

Special thanks go to the field teams who collected and analyzed data, wrote case reports, and worked with us to explore themes and trends across the communities and states. The members of our field teams were: Christine Wood, Camille Marder, and Sanda Spiegel of RMC Research Corporation; Nancy Brigham of North Kingstown, RI; Sheila Rosenblum of Philadelphia, PA; and Joann Jastrzab, Marc Moss and Judy Holdaway of Abt Associates.

Dr. Matthew Miles and Dr. Stuart Rosenfeld played key roles in this study. Dr. Miles served as senior consultant on the design of case studies and data displays around his and Michael Huberman's approach for qualitative data analysis. Dr. Rosenfeld served as senior consultant on issues in vocational education at the two-day training of field teams, and three day analytic meeting with the field teams. He also attended the Advisory Panel meeting and critiqued the final report.

A special thanks goes to the project's Advisory Panel who helped with the initial planning, reviewed preliminary findings and also critiqued

this report. The Panel's members were: Dr. Patricia Flynn, Professor of Economics at Bentley College; Ms. Phyllis McClure of the NAACP Legal Defense and Educational Fund; Dr. Marvin Lazarson, Dean of the Graduate School of Education at the University of Pennsylvania; Dr. Robert Sorensen, Executive Officer and State Director of the Wisconsin Board of Vocational, Technical and Adult Education; Mr. Carrol Burchinal, Executive Officer and Director of Vocational Education in North Dakota; and the late Dr. Gordon Ascher, Assistant Commissioner of Education in the Division of Vocational Education for the State of New Jersey.

I would also like to thank the NAVE project officer, Dr. Lana Muraskin, for her substantive insights into and insatiable curiosity about vocational education issues, her efforts to help the management of the study run smoothly, and for her insightful comments on our work. Thanks as well to Dr. John Wirt, Director of the NAVE study team, and to the other NAVE study team members for their comments and critique of our reports.

Mary Ann Millsap
Principal Investigator

CHAPTER 1

OVERVIEW OF THE VOCATIONAL EDUCATION ENTERPRISE AND THE FEDERAL ROLE

THE FEDERAL ROLE IN VOCATIONAL EDUCATION

Since the turn of the century, vocational education has been a staple of American high school curricula. In fact, the first federal funding for public secondary schools was for vocational education and predated other federal involvement in public elementary and secondary education by almost 50 years. Vocational education is of continuing interest, in part because it enrolls large numbers of students at both the secondary and postsecondary levels. It is particularly important to explore the vocational education enterprise at this time to see how it has responded to the education reform movement with its emphasis on academic skills.

The Carl D. Perkins Vocational Education Act (PL 98-524) changed and clarified its predecessor, the Vocational Education Act of 1963. The Perkins Act contained an increased emphasis on opportunities for special population groups and on services to economically depressed areas; earmarked non-targeted federal dollars to improve and expand on vocational education; and required spending federal dollars to modernize the vocational education system. See Exhibit 1.1 for a comparison of the Perkins Act with its predecessor.

Title IIA, the Vocational Education Opportunities Program, continued the set-asides for handicapped and disadvantaged students. Added were set-asides for adults needing training or retraining, for women and men in nontraditional programs, for single parents and displaced homemakers, and for the incarcerated. In a shift from the earlier act, the Perkins Act required that a larger proportion of state funds be distributed to economically depressed areas and/or areas of high unemployment.

Title IIB, the Vocational Education Improvement, Innovation and Expansion Program, made up the remainder of the basic state grant under Perkins. In a major departure from tradition, federal funds could no longer be used to operate existing programs but must support improvements, expansions, or new programs, including the application of new technology. Each state was instructed to set priorities for program improvement, and teacher training was also required.

Exhibit 1.1

COMPARISON OF MAJOR TARGETING PROVISIONS UNDER THE VOCATIONAL EDUCATION ACT (1976) AND THE CARL PERKINS ACT (1984)

Targeting Provision	VEA (1976)	CPA (1984)	Maximum Federal Share
Economically Depressed Areas	"give priority to:	more than 50%	--
Improvement, Innovation, and Expansion	20% of Basic State Grant encouraged throughout	43% of Basic Grant ²	50%
<u>Set Asides</u>			
handicapped	10%	10%	50%
disadvantaged (incl. LEP)	20%	22%	50%
postsecondary vocational education	15%	0	
adult training and retraining	0	12%	50%
single parents and homemakers	0	8.5%	100%
sex equity programs	0	3.5%	100%
incarcerated	0	1.0%	100%
TOTAL	45%	57%	

¹The chart is a rough comparison since the organization of programs under the two laws are not strictly comparable. Subpart 4 of Part 2 (VEA) for example supported 100% of the costs of special programs for the disadvantaged. Also under the VEA Basic State Grant, funds were mandated for displaced homemakers but no minimum budget was specified. The Perkins Act also includes a separate program in adult retraining, but it has yet to be funded.

²After administration costs have been taken off the top of the basic State Grant, 57% go toward the Vocational Education Opportunities Program while 43% go for the Vocational Educational Improvement, Innovation and Expansion Program.

The Perkins Act also included an assessment of its implementation and effectiveness. The National Assessment of Vocational Education (NAVE) has been charged with providing the Congress with information on the act's provisions.

STUDY QUESTIONS AND METHODOLOGY

In the summer of 1987, one year after the Perkins Act went into effect, NAVE commissioned this study to address three questions:

- What is the capacity and willingness of states to provide leadership in vocational education? What guidance do the states provide regarding the implementation of the Perkins Act?
- What is the nature of activities funded under Perkins Title IIA for special populations? What is the relative importance of the Perkins Act in assuring the special population groups have access to high quality programs?
- What is the nature of program improvement activities in vocational education? What is the nature of activities funded under Title IIB for program improvement? To what extent has the Perkins Title IIB contributed to program improvement initiatives?

The Carl D. Perkins Act was designed to assist states in the conduct of their own vocational education programs, giving them wide latitude in the content and range of programs and supplemental services. The law also permitted the state to use 20 percent of Title II funds for statewide initiatives. At the same time, the law prescribed such funds allocation procedures as earmarking funds for special population groups and program improvement, requiring an intrastate formula for distributing Handicapped and Disadvantaged funds, and establishing matching and excess costs provisions, where applicable. The study sought to explore how the state incorporated the Perkins Act into its own initiatives, how state decisions were made about which local providers received Perkins funds and what activities were allowed or encouraged under the Act, and what actions local providers took in response to state guidance. Through extensive on-site interviews and document review, we could examine state activities in detail and assess both the intended and unintended consequences of the act.

To understand the implementation of Perkins funds at the local level, it was necessary to examine how decisions were made about how to expend Perkins funds, what specific activities were undertaken, and how those activities fit with the larger vocational education enterprise in the community, as well as with the intentions of the act itself. Only then could the relative importance of the Perkins Act be assessed and possible changes in the law be proposed.

The overall task then was to determine the direct effects of the Perkins Act on state and local administration and implementation of vocational education, and to identify the overall capacity of state and local vocational education systems to address the priorities identified in the act.

The study design needed to address these questions posed several intriguing issues. We anticipated that descriptive information about formal interactions within and among state and local agencies and about the amount and use of Perkins funds would be readily available. In addition, by interviewing both state and local providers about state guidance, we could be reasonably confident about the state role with the Perkins Act. Assessing the relative importance of the Perkins Act was far more challenging. Questioning respondents about what changes, if any, had taken place since the Perkins Act was first implemented was one approach. Asking multiple respondents what their own opinions were was another. Cataloging all relevant vocational services and comparing Perkins-supported activities against the whole was a third, but very time consuming, approach. As detailed below, we used all three methods, including documenting relevant vocational services to the extent possible.

Nine state offices and three communities in each state were visited. The nine states were chosen from among 18 states included in the national survey [see the survey report for the results of the national survey]. The design and selection of the 18 states was based upon stratification on several key variables and the use of probability-proportional-to-size sampling. The key variables were: census region, number of units of change from 1980 to 1985 in state requirements for core courses, percent of students in postsecondary or adult vocational education from FY

1979, and per pupil total expenditures for 1984-85. Total vocational education enrollment was used in the probability-proportional-to-size sampling. The nine states were selected in a similar fashion.

Three communities were selected in each of the nine states to allow diversity in urbanicity, general economic condition (growing or stable economies versus declining economies), and geographic spread within the state. One community in each state was selected because the state agency had recommended it as having innovative programs.

While no generalizations can be made to the nation as a whole from our sample of states and districts, the factors influencing state administration, access of special populations to services, and program improvement initiatives probably operate in the same fashion in states and communities with similar characteristics.

Site field work ran from February through May of 1988. At the state level, interviews were held with a number of officials within the state agencies responsible for secondary and postsecondary vocational education, other education agency personnel, key legislative aides, education advisors to the governor, executive directors of state advisory councils on vocational education, and the directors of the Job Training Partnership (JTPA) program. Among the questions asked were those about the organizational structure of the office administering Perkins and its relationship with other offices and programs, state administrative decisions on allocating Perkins funds and carrying out specific Perkins provisions, the reasons behind those state decisions, statewide initiatives in vocational education, and the role of the vocational education office vis-a-vis state initiatives in economic development and academic reform.

In communities, interviews were held with school district officials, directors of secondary vocational education, principals of comprehensive and vocational high schools, vocational education faculty, directors of postsecondary area vocational schools, community college presidents and administrative staff, community JTPA directors, employers, and community persons knowledgeable about the local economy. Detailed questions were asked about Perkins expenditures and services in each funding category, decisions about allocating Perkins funds, the relationship between Perkins-funded activities and other activities for special populations or program

improvement, relationships with other programs (such as JTPA) and with the state office administering Perkins, and descriptive information about the community, schools, and students. About 100 institutions were visited across the 27 communities. In most communities, field teams went to the school district office, one comprehensive high school, one vocational high school (or area vocational school), two postsecondary institutions and several employers.

Documents were solicited from the states and communities in advance; others were obtained on site. Documents included the state plan, state forms and guidance sent to local providers, state-prepared reports on vocational education, local plans, and other local documents on student and community demographics. A representative from each district and postsecondary institution was also requested to complete the survey in advance of the visit. Twenty person days were spent in each state, including 16 days in communities. Correspondingly more time was spent in urban than in rural communities. (Sampling and data collection and analysis methods are detailed in the Appendix.)

The study is characterized by its breadth and range of topics on Perkins administration rather than by in-depth analysis of a single facet of administration or practice. It focuses first on Perkins expenditures and then on the relative importance of Perkins within the larger context of the state and local vocational education enterprise. It should not, therefore, be viewed as a comprehensive review or analysis of all vocational education practices. In addition, as most Perkins funds are spent by secondary and prebaccalaureate institutions, the report concentrates on these institutions rather than, for example, on private or proprietary schools or four-year institutions. Employment and training programs are included only insofar as they are coordinated with vocational education offerings. Lastly, the study did not focus on compliance issues; we were not conducting an audit of Perkins expenditures or accounting procedures.

CONCLUSIONS AND IMPLICATIONS

State Administration of Perkins

At the state level, the Perkins Act is implemented within a context of multiple actors and agencies overseeing the provision of vocational education. Secondary vocational education in school districts was overseen by the office administering the Perkins Act, as were secondary and postsecondary area vocational schools in most states visited. In only one state, however, did authority over all vocational education in the state reside in the office administering the Perkins grant.

Central to the implementation of the Perkins Act is how states allocate Perkins funds across multiple agencies. Prior to allocating Perkins funds, eight of the nine states visited either established a proportion of funds for secondary and postsecondary sectors or limited eligibility to some Perkins set-asides by type of institution. The prespecified percent splits were described as long standing practice; and in at least four of the nine states visited, institutions that came under the purview of the Perkins office were likely to receive more funds than they would have been allocated purely on a vocational enrollment basis.

The Perkins categories where states restricted institutional eligibility to one type of institution were the Adult funds (four states), Program Improvement (three states), Single Parent/Homemaker funds (two states), and Sex Equity funds (one state).

More states restricted the access of institutions to Perkins funds than provided substantive direction about how Perkins funds were to be spent.

States seldom directed the content of activities undertaken with Perkins Title IIA Special Populations funds. Even when RFPs were used, states rarely set specific priorities or concentrated resources in a few statewide centers. Nor did states define eligible populations for handicapped and disadvantaged funds, past the definitions included in federal law and regulation. Communities then used definitions that may not have been consistent within or among states. Only one state influenced the federal

intradistrict allocation formula of Handicapped and Disadvantaged funds, saying that all Perkins funds had to support aides for students in regular vocational classes.

States were more likely to provide substantive direction on Title IIB Program Improvement funds than on Title IIA Special Population funds. Curriculum development initiatives dominated statewide activities, although all states used Title IIB funds for staff training and occupational information systems as well.

Most states visited also provided direction on equipment purchases under the Perkins Act. In fact, the primary influence on the use of Title IIB funds for other than equipment purchases appeared to be state-imposed limits or prohibitions on equipment purchases. Four states either prohibited or limited the extent to which funds could be used for equipment, another required that at least half the grant be used for equipment, and one created a separate category solely for equipment purchases.

State funding mechanisms for Title IIB funds appeared to make a difference in the quality of projects funded. When competitions were used, the projects funded seemed of higher quality than those funded through formula, most likely because the competition for funding encouraged more careful planning and design of activities. Some states facilitated innovativeness by providing guidance or information about programs operating in other parts of the state or country.

Perkins funds played a key role in statewide initiatives in vocational education, and it is unlikely much activity would have been supported in their absence. Curriculum development, usually in competency based vocational education, was a widely discussed, important and visible state activity. Consequently, it may be worthwhile to study state efforts more systematically, including the content and cost-effectiveness of consortia efforts.

All states also supported staff training and occupational information systems. Additional activities were scattered across states. Through requests for proposals, some states sponsored the implementation of

pilot or model programs, such as Principles of Technology, in a few districts. Statewide programmatic initiatives such as vocational education for the disadvantaged were rare.

The office administering the Perkins grant was rarely involved in state level efforts that extended across state offices or agencies. For example, the vocational education office was, for the most part, excluded from academic reform initiatives and participated in state economic development efforts only when the institutions targeted as training providers came under the purview of the Perkins office.

Relations among most states and secondary providers was cited as helpful and cordial, with well-established and stable working relationships. Five of the nine states provided guidance almost exclusively on fiscal and compliance matters, while three were seen as strong on technical assistance in curriculum and program improvement, and one was seen as strong in both areas. The two most regulatory states had strained relations with their communities.

The State office administering Perkins operated through another set of state actors to reach postsecondary providers. Substantive guidance was limited almost entirely to compliance and fiscal matters. Where other agencies received sizable Perkins funds (five of the nine states), funds were usually passed through with little restriction.

States are not likely to play a more forceful substantive role regarding Perkins funds without federal directives. Congress could facilitate improvement in state administration by encouraging more targeted use of funds through competitive procurements; and promoting more state guidance or sharing of information on possible uses of funds, especially for Title IIB program improvement.

Because of the deeply entrenched funds allocation patterns among institutions, any shifts in state allocation of funds shall require explicit federal directives.

Title IIA Special Populations

The quality and comparability of data used in the intrastate formula to allocate Perkins Handicapped and Disadvantaged funds are suspect. In the communities visited, vocational administrators seldom knew the number of

disadvantaged or handicapped students enrolled in vocational education, the number needing special services in order to succeed, or the number participating in Perkins-funded activities. It is unclear what numbers are used in the intrastate allocation formulae. In addition, without this information, communities could not develop comprehensive strategies for providing services, making programmatic decisions, or selecting among students on the basis of need.

At the secondary level, Perkins Handicapped funds supported assessment activities, followed by instruction in vocational classes. At the postsecondary level, funds were most likely to support a variety of support services, especially disability-related services such as notetaking and interpreting.

Perkins Disadvantaged funds seldom provided services directly linked with vocational instruction. At the secondary level, Perkins funds were most often used for assessment and counseling, followed by instruction in nonvocational classes. The pattern was reversed at the postsecondary level, with basic skills centers or learning labs most frequently funded. The paucity of services generally available for disadvantaged students, regardless of funding source, appeared particularly acute.

About half of the providers visited combined at least a portion of their Handicapped and Disadvantaged funds, and used them for such common services as assessment, counseling and remedial instruction. While combining funds may be a cost-effective way to use scarce resources, there was some indication that handicapped students were likely to receive more services than the proportional share of resources warranted.

Perkins Adult funds at the secondary level often were used for general adult education activities, so the impact of funds was indirect at best. At the postsecondary level, the funds were often targeted to specific training programs (e.g., cashier, hotel/motel management, Licensed Practical Nurse), so had a more concentrated effect.

Single Parent/Homemaker funds were typically used for increasing access to vocational education in general, through child care, tuition assistance and counseling. Funds were less frequently used to support operating programs. The one state that earmarked all its funds for operating

programs, supported programs in such traditionally female occupations as word processing, bookkeeping and child care; although about one quarter of the projects were in such nontraditional fields as computer application and computer maintenance/technology. Across all communities, median grants at the secondary level were about \$12,000; while slightly more than twice that at the postsecondary level. State sex equity coordinators strongly urged large concentrations of grants arguing that until individual grants reached \$20,000 to \$30,000 no staff could be hired to devote substantial attention to the issues.

Perkins Sex Equity funds were designed to overcome sex bias and sex stereotyping that have long characterized vocational education and to support students pursuing nontraditional careers. Seldom did the vocational educators interviewed appear informed or concerned about this issue, and nontraditional enrollments in vocational education were rare. Funds usually supported access activities -- brochures, workshops and recruitment, but rarely supported operating programs, ongoing support services, or job placement. Perkins grants usually appeared too diluted to have much effect. As with the Single Parent/Homemaker grants, concentrated grants of \$20,000 to \$30,000 each were urged by the state sex equity coordinators in order to hire staff who could devote substantial attention to the issue.

Services for special populations were seldom incorporated into program improvement initiatives. Title IIB funds were rarely used for special population groups, but instead focused on the "typical" vocational education students that administrators often felt were being short-changed under the Perkins Act. For program initiatives to focus more on special populations, Perkins Title IIB funds would either need to be redirected or some portion of Title IIA funds would need to be targeted for special initiatives.

In general, the role of Perkins Title IIA funds in the vocational education enterprise is a small one, and the amount of funds was not viewed as substantial enough for it alone to provide an impetus for new services/programs or new initiatives to serve special populations. Where the Perkins goals were closely aligned with those of local providers, on the other hand, funds were well-targeted and apparently well spent. Without targeting funds or linking Perkins services more directly with vocational instruction, the act is not accomplishing as much as it could.

Title IIB Program Improvement Funds

The extent to which program improvement was generally taking place in vocational education varied among the communities visited. Characteristics of the more innovative institutions included: a culture supportive of innovation, especially among key administrators; a strategy for growth that included the active recruitment of new student populations; ongoing program-level assessment; and active collaboration across educational institutions and programs, especially in funding efforts.

New programs were relatively rare. Secondary institutions typically upgraded current programs with new equipment or provided supplemental support or remedial services. At the postsecondary level, customized training for prospective or current industry employees was the largest growth area. Many communities were working on articulation agreements, although most were either general agreements to work together or were college credit for a single or a few programs. A number of institutions were engaged in curriculum and staff development activities, particularly where the state strongly encouraged such efforts.

The broad message that Perkins Title IIB funds were to be used for a variety of program improvement and expansion efforts has not been effectively heard at the community level. Unless states limited or prohibited the use of funds for equipment purchases, institutions saw the Perkins Title IIB funds primarily as "federal equipment money."

When the equipment purchases were part of a larger program improvement strategy, they appeared to have a catalytic effect. But when equipment purchases were dispersed more broadly, they appeared to have no effect beyond the equipment itself. The muted effect of Title IIB funds was further limited because the state or local match was seldom used in direct support of the Title IIB allocation. The federal funds could have a more visible and concentrated impact if the federal and required matching funds were combined at the local level to support the same activities. Meeting the requisite match was not found to be problematic in the communities visited.

One possible approach to strengthen the use of federal funds for program improvement would be to use targeted program improvement competitions to capitalize on the more innovative institutions providing vocational

education, especially those in economically depressed areas. Such competitions could include demonstrations that could be observed and more widely disseminated.

Another strategy may be to use federal funds to help strengthen the conditions found in the more innovative institutions. One example would be to encourage jointly funded linkage projects. Here some Perkins funds and other state or federal funds would be combined at the state level and released through requests for proposals. To obtain funding, vocational providers would have to demonstrate they had established working relationships with the corresponding other local agencies. One state has already begun such an initiative.

Finally, an additional approach to strengthen the uses of Title IIB funds would be to strengthen the role of the state in program improvement, especially because it appeared that those projects funded through requests for proposals appeared to be of higher quality than those funded through formula allocations.

Coordination with JTPA

Although coordination between JTPA and vocational education providers was mandated in the legislation, actual cooperation was more influenced by such pragmatic concerns as the availability of substantial JTPA resources and declining vocational enrollments. JTPA grants were typically two or three times the size of Title IIB grants.

JTPA programs operated in both secondary (usually summer youth programs) and postsecondary institutions (as "slot-ins" in regular programs or for support of industry-specific training). In some cases, Perkins Title IIA and JTPA funds were combined to fund JTPA clients in particular programs, including very short-term customized training. Although combining Perkins and JTPA funds to serve the same population groups is a productive use of funds, some clarification may be needed to ensure that Perkins funds designed for longer term education programs do not support the very short-term customized training.

ORGANIZATION OF THE REPORT

Following the overview provided in Chapter 1, Chapter 2 describes the vocational education enterprise in the states and communities visited. Chapter 3 analyzes state administration of vocational education and of the Perkins Act. Chapter 4 examines the access of special populations to vocational education, describes services provided, and explores the role of the Perkins Act in these activities. Chapter 5 describes program improvement initiatives in vocational education, coordination among vocational education and the programs under the Job Training Partnership Act (JTPA), and the relative influence of the Perkins Act in these endeavors. The final chapter brings together the overall conclusions on the implementation of the Perkins Act and its relative importance to the vocational education enterprise and discusses possible options for federal action. An appendix presents a methodological note on sample selection and data collection and analysis.

Chapters 3, 4, and 5 provide rich descriptive detail on vocational practices in each state and community visited for readers interested in site-specific information. For those readers interested more in an overview of policies and practices, a listing of key findings is presented at the start of each of those chapters.

CHAPTER 2

THE VOCATIONAL EDUCATION ENTERPRISE

To understand the implementation of the Perkins Act, it is important to understand how vocational education is organized within states--what institutions provide offerings and what policies govern the operation of those institutions. The first section of this chapter briefly describes vocational education in each of the nine states visited. States are referred to by number (e.g., State 1, State 2) in order to protect confidentiality. The second section of this chapter examines the vocational education enterprise within the 27 communities visited in the nine states. Because program offerings vary by type of community and level of institution, communities are organized by type (urban, suburban, and rural/small town). Within each category, secondary and postsecondary programs are described separately.

ORGANIZATION OF VOCATIONAL EDUCATION WITHIN STATES

When federal vocational funds are transmitted to states, they enter an extant "system" of public vocational education that contains multiple providers and multiple oversight agencies. The "system" may vary from state to state, and consists of school districts, secondary and/or postsecondary area vocational schools, technical institutes and/or community colleges. Public and private four year institutions and proprietary schools may provide vocational education as well.

Before beginning the discussion, it may be useful to clarify how institutions are defined in this report. Comprehensive high schools offer a full range of academic programs, and at least some vocational education offerings. Vocational high schools are either full-time or part-time high schools that come under the jurisdiction of a single school district. Secondary area vocational schools may also be either full-time or part-time high schools, but draw their students from multiple school districts and are administratively separate from a single school district. They serve as their own fiscal agent. Postsecondary area vocational schools offer one-year (and sometimes more short-term) certificates in vocational program areas, while community colleges and technical institutes offer both certificates and two-year associate degrees. Secondary area vocational schools may enroll some

postsecondary students, as may postsecondary area vocational schools enroll some secondary students. In each case, however, they will have a primary identification as either secondary or postsecondary institutions.

All states visited offered vocational education in school districts, secondary area vocational schools and in community colleges. Five of the nine states also offered postsecondary vocational education in certificate-granting area vocational schools. The range in the number of districts and institutions is shown in Exhibit 2.1.

The nine states visited present a range and diversity in how vocational education is organized. No two states were exactly alike in how vocational education is administered and operated.

Secondary vocational education is usually administered by the state department of education, the agency with governance authority over elementary and secondary education in the state. In two states, however, other state agencies had authority at the secondary level. In state 1, a separate agency oversaw vocational education and in state 3, administration for all vocational education was handled through a single independent agency.

In just over half the states visited, separate agencies oversaw secondary and postsecondary vocational education. In five states (states 1, 2, 5, 7 and 9), two agencies were responsible for secondary and postsecondary vocational education. In the remaining four states (states 3, 4, 6, and 8), a single agency was responsible for governance.

Not all postsecondary vocational education was administered within the same agency. For those five states with postsecondary area vocational schools, three (states 1, 4, and 7) administered community colleges separately, and included postsecondary area vocational schools under the aegis of the secondary agency. The other two states (states 6 and 9) included governance of both types within the same state agency.

States continue to explore viable governance arrangements for vocational education. Three of the nine states visited (states 1, 5, and 9) had changed agency governance within the decade, and a fourth (state 6) was considering change.

Perkins funds was always administered by the agency that oversaw secondary vocational education. For those four states where at least some

Exhibit 2.1

INSTITUTIONS OFFERING VOCATIONAL EDUCATION

Vocational Education Providers ¹	Range in Number of Providers in States Visited
School districts	less than 70 to over 700
Secondary area vocational schools	less than 10 to just over 40
Postsecondary area vocational schools ²	less than 10 to just over 30
Community colleges	10 to over 100

¹One state also supported four technical institutes. These were two-year associate degree granting institutions.

²Five of the nine states visited offered vocational programs in certificate granting postsecondary area vocational schools.

postsecondary vocational education was separately administered, transfers of funds between agencies were arranged or some postsecondary institutions received no Perkins funding. A complete discussion of the administration of the Perkins Act is presented in Chapter 3.

The following sketches on each state briefly describe the organization of vocational education at the state level and the role of the state in academic reform and economic development.

State 1

State 1 is a poor, rural state, slowly converting from an agricultural to a manufacturing base. Heavily dependent upon the gas and oil economy, it has yet to recover from that industry's slump. Of the state's two million residents, two-thirds live in the five county area surrounding the state capitol.

Since the early 1980s, vocational education has been governed by a separate state agency, with a separate state board that on alternate months serves as the state board of education. That agency oversees the vocational education offered in high schools, 17 secondary vocational centers, and 24 postsecondary area vocational schools. Vocational education offered in the 20 community colleges and four-year institutions is reviewed by the state agency, while the institutions themselves are administered through the Board of Regents. They receive no Perkins funds.

Vocational education is a powerful force at the state level. As one of its critics noted: "It has its own building, its own Board, its own schools, and its own legislative committee." The state director wrote the language in the education reform bill that strengthened vocational education, and is seen by the governor's office and legislative staff as a key player in economic development initiatives.

Vocational education at the high school level is booming. The state education reform act mandated that to be accredited each high school must offer access to at least three vocational programs, and the new minimum education foundation aid law provides a .4 to .6 additional increment per student in vocational programs. Over the last four years the amount of state funds going into secondary vocational education has doubled, to almost \$25

million a year. One consequence has been the growth of secondary vocational centers at the state-run postsecondary area vocational schools. The secondary centers offer two-hour blocks of vocational education in two-year sequenced programs.

The primary providers of postsecondary vocational education are the 24 state-funded postsecondary area vocational schools, offering one-year certificate programs. The total annual budget for the system is over \$40 million, or about \$5,000 per full-time student. Administered directly by the state vocational education agency, the directors are state employees, supervised by the state office. Construction of the schools, each with its own 40 acre site, began in the early 1960s; schools were subsequently added in outlying rural counties through the efforts of politically powerful legislators. Because the postsecondary area vocational schools are so numerous and receive so much state funding, critics argue that these schools have stymied the growth of the community college system in the state.

State 2

State 2 is a populous and fast-growing state, with a highly diverse economic base and population. Of the more than one million students enrolled in high school, almost half belong to racial or ethnic minority groups.

The state department of education oversees secondary vocational education offered in school districts and area vocational centers. Vocational education in districts is administered in an office separate from the one for area vocational centers. Because the area centers receive over \$200 million in state funds annually, they receive no Perkins funds directly. The area centers may be housed in separate facilities or within high schools and typically offer half-day vocational programs to juniors and seniors bused in from several communities.

The state has traditionally played a strong role in elementary and secondary education, and placed strong emphasis on educational reform, more rigorous graduation requirements, and testing for accountability. It has also undertaken numerous economic development initiatives. Vocational education has not been a topic of the reform movement; it is organizationally isolated within the state department, and staff report that the state superintendent "would just as soon vocational education disappeared." Neither the governor.

the legislature, nor the department appear to consider using vocational education as part of economic development initiatives.

Vocational education in the state's 71 community colleges is administered through the Chancellor's office for community colleges. Up until 20 years ago, the community colleges were administered within the state department of education and operated much like school districts with local governing boards. Because they retain local governing boards, the state is not directive. It has been soundly criticized in management studies for lacking "a cohesive and agreed upon statement of purpose and role of vocational education in the community colleges." Staff overseeing postsecondary vocational education is one-third the size of those overseeing secondary vocational education, has one-seventh the resources to spend on curriculum development, and passes through much of the Perkins funds directly to community colleges.

The state does not operate postsecondary area vocational schools.

State 3

Primarily a rural state with a single population center, state 3 was a booming in-migration state until the mid 1980s when it was badly hurt by the collapse in oil and gas prices and by the fall in agricultural prices for corn and wheat. Increased numbers of minority and less academically successful students, as well as growth in dislocated workers has led the state to target resources on the special population groups defined in the Perkins legislation.

All vocational education in this state, including that in community colleges, is administered through a separate state agency. Vocational education is offered in 161 secondary districts, 11 state-system community colleges, 4 local district junior colleges, and 7 secondary area vocational schools.

Academic reform has not been a major topic at the state level because the state is precluded in its state constitution from establishing curriculum standards. The state university system, however, raised its entrance course requirements mid-decade that prompted districts to raise graduation requirements. Enrollments in vocational education may have suffered as a consequence.

In part because of the depressed economy, the state has been active in economic development initiatives and the current governor was elected on an economic development platform. To carry out training initiatives, the state relies strongly on the 11 state-governed community colleges that come under the aegis of the state vocational education agency. The recently passed Customized Training Act, for example, is a joint effort between the community college system and the department of local affairs to provide customized training programs for new or expanding industries in the state.

There are no postsecondary area vocational schools in this state.

State 4

One of the fastest growing states in the nation, state 4 is financially stable, with an economy dependent on tourism, service occupations and high tech businesses. Its burgeoning in-migration, however, brings with it an increasing number of limited-English-proficient and low achieving students.

Vocational education in the state is the responsibility of two divisions within the state department of education. One has jurisdiction over all secondary programs as well as the postsecondary vocational education offered in area vocational schools. The state's school districts are organized on a county system, with the county district responsible for secondary vocational education and postsecondary area vocational schools, if any, within its borders. The 33 postsecondary area vocational schools were designed primarily as one-year certificate schools for high school graduates, but they occasionally enroll secondary students.

Another division in the state department is responsible for the state's 28 community colleges, and researchers report significant turf issues and little coordination between the two divisions. Perkins funds are distributed primarily on a formula basis, with districts and community colleges submitting proposals on how they expect to spend the funds.

Although the state was involved with the academic reform movement and has begun dropout prevention initiatives statewide, vocational education has not played an active role. New graduation requirements include a half credit in vocational education, but observers felt that may have been a sop to

the vocational division. The vocational education office was isolated from the rest of the state department until a new director was hired last year, and legislative aides reported that under the former director the image of vocational education was "not real positive."

The vocational division is not actively engaged in economic development initiatives. A staff of 3 oversees the \$1.1 million industry training program, but the effort is small compared to state-level efforts in that area.

State 5

State 5 is a large manufacturing state. Strongly affected by the decline in smokestack industries and automotive manufacturing, it undertook in the mid-1980s a five year, multi-billion dollar program to rebuild the state. This state funded effort focused on nurturing small business, developing new high growth firms, reviving the tourist industry, and creating incentives to attract new business and industry.

Secondary vocational education is under the control of the state department of education. Prior to 1976, it was an independent entity. In the early 1980s, the legislature enacted a law to restructure the delivery of vocational education on a regional basis. Since then, the state has been actively involved in creating 61 regional systems, incorporating the 638 separate providers of vocational education, with signed cooperative agreements. Perkins funds are distributed to the regional systems, not to individual districts. Included within the regional system are secondary area vocational schools offering half-day vocational programs to high school juniors and seniors.

The community colleges are administered by a separate state community college board. Perkins funds flow through the state board of education to the community college board for distribution to community colleges. Under strong state pressure, the 39 community colleges and two technical institutes are developing articulation agreements with secondary providers in their regions. The state goal is for each region to develop regional vocational plans cutting across the secondary and postsecondary levels.

The state has traditionally taken a strong education reform role and increased student graduation and teacher certification requirements. The vocational education office was not involved in those efforts, nor was it involved in economic development, other than a \$1 million program of industry-specific training.

There are no postsecondary area vocational schools in this state.

State 6

State 6 is a small, primarily rural, politically conservative state. In recent years, the state's economy, based primarily on agriculture, oil and gas, and the aircraft industry, has been declining. The state's current number one priority is economic development.

Within the state department of education, the vocational education office oversees secondary vocational education and the 16 area vocational schools. A separate and co-equal community college office in the state department oversees the 19 community colleges. There is a separate board of higher education for the state's four-year colleges and universities.

The new governor ran on a platform that included reorganization of the governance of higher education--primarily the area vocational school and community college systems. Until reorganization issues are resolved, the traditional rivalry between the two systems will no doubt continue. In the meantime, the state legislature imposed a moratorium on building additional area vocational schools or community colleges.

After a short-lived and unsuccessful effort to disperse Perkins funds on a regional basis, the state now uses Requests for Proposals (RFPs) for all but handicapped and disadvantaged funds. All providers compete equally, but community colleges are now submitting many more proposals than the area vocational schools in a move to get more of the funds.

The vocational education office was not involved in the academic reform efforts in the state that raised graduation requirements, but works jointly with the department of commerce on a new and expanding industries program. A legislative task force created early in the 1980s to look at economic development options boxed out both community colleges and vocational education by concentrating on the four-year state colleges and universities.

Until new legislation is forthcoming, the joint department of commerce and vocational education effort is the primary economic development initiative.

State 7

A midsize industrial state, state 7 has become an economically booming state, especially in the high technology and service sectors. State legislators see a widening gap between the education levels of workers and economy's need for a well-educated, highly skilled work force, but have only begun to develop education and economic development initiatives.

Secondary vocational education and postsecondary vocational education offered in area vocational schools are administered through an office within the state department of education. As with other offices in the state, the vocational education office is not directive on curriculum or instruction issues, but takes an active role in regulatory compliance. It is highly prescriptive in designating allowable expenditures for both state and federally funded activities.

Vocational education was not actively involved in the academic reform efforts in the state, and it appears that the economic development system is for the most part orthogonal to the state's vocational education system. Community colleges appear more responsive to the needs of economic development, in part because area vocational schools in this state are also comprehensive high schools.

Unlike schools in the other states in the study, the secondary area vocational schools in this state were diploma-granting, full-time high schools (grades 9 through 12), governed by regional boards made up of representatives from the sending districts. These schools operate as independent actors within state politics, and recently successfully lobbied the state legislature to appropriate \$15 million for equipment purchases at the secondary level. Locally, they also largely operate independently. For example, state policy restricts what districts can provide in vocational education if the same offering is available in its regional school, and districts receive federal vocational funds for their vocational program only if the program is overenrolled or not offered in the regional school. Several, though not all, schools offer some postsecondary vocational education certificates as well.

The primary providers of postsecondary vocational education are the state's community colleges. Postsecondary vocational education in community colleges is overseen by the separate Board of Higher Education, although some joint monitoring of programs is now conducted through regional offices. Perkins funds are transferred from the State Board of Education to the Board of Higher Education.

State 8

State 8 is one of the most populous and geographically largest states, with a varied and currently stable economy. The governor is seen as a strong education governor and the legislature has been receptive to education initiatives in recent years. The state has traditionally taken an active role in education and is a mover in the academic reform movement. Education expenditures have increased, including \$6 million in industry specific training and \$3 million in vocational education equipment. It is also one of the most regulatory of states.

Both secondary and postsecondary vocational education are administered through the same state agency, although through different offices within that agency. The office overseeing secondary vocational education sets program direction and oversees discretionary spending under the Perkins Act.

Efforts to reform vocational education predated the academic reform movement in the state, and districts are now implementing a statewide technology curriculum to replace industrial arts. The state agency has been actively involved in economic development initiatives. It sells itself to the state legislature as the vocational trainer for the state. It developed regional economic development centers that were later expanded with state funding, set up linkage arrangements with other state agencies to conduct training for their clients, and is now working on how to implement the education benefits contained in union contracts.

Within the vocational education enterprise, there is tension at the state level between vocational funding for the state's five largest cities and the area vocational schools. The former have stable or slightly increasing vocational enrollments, while the latter have been experiencing long-term enrollment declines.

Area vocational schools offer two-hour blocks of laboratory or shop instruction mostly in a two-year sequence for high school juniors and seniors. The schools are part of a state-managed regional service center system that offers school districts a variety of services, including special education for nonmainstreamed handicapped students. Although the area vocational schools are state-administered, sending districts play an active role in curriculum change. Area vocational schools can offer a new program only if at least two sending school districts agree.

Postsecondary vocational education is provided by community colleges. The state does not operate postsecondary area vocational schools.

State 9

This mid-sized state has been the site of much economic and technological development, most recently by significant private industry investment made possible in part through generous state subsidies.

Secondary vocational education is administered through the state department of education. Programs are offered in high schools and area vocational schools, that are housed in separate facilities or as adjuncts to high schools. The vocational education office has not been involved in the academic reform efforts in the state, nor in economic development initiatives. In fact, the previous gubernatorial administration, which changed last year, was reportedly anti-vocational education and favored its reduction and/or dismantlement at the secondary level.

Postsecondary vocational education is offered in 26 postsecondary area vocational schools, 4 technical institutes and 10 community colleges and is administered by the Board of Regents. A third agency governs the state university system. Some economic development activities are underway at the postsecondary level, including coordination with JTPA.

The relationship between the state department of education and the Board of Regents is particularly sticky. Until 1984, postsecondary area vocational schools were administered in the same office as secondary vocational education. At that time, jurisdiction for the schools moved to the Board of Regents, where governance of community colleges and technical institutes already resided. Officials in the state department of education

were angered by the move. Although skeptical of the move at first, post-secondary area vocational schools now see themselves as having fared well, including receiving more resources. Perkins funds, particularly Title IIB program improvement funds, have dropped off markedly at the postsecondary level, but have been replaced with state funds. Perkins funds continue to be administered through the state department of education.

THE LOCAL VOCATIONAL EDUCATION ENTERPRISE

This section describes vocational education as it was found in the 27 communities visited around the country. Most vocational education providers visited were recipients of some Perkins funds. Because they were not Perkins funded, private and proprietary schools were not visited, although they may have numbered 30 to 40 schools in the largest cities. Almost all or all providers of vocational education were visited in suburban and rural areas, although only major vocational education providers were visited in urban areas.

Program offerings varied by size of community and by type and level of institution offering vocational education. Urban areas, as one would expect, offered a larger range and more specialization within vocational programs than did less populated areas. Smaller areas were more likely to offer core programs within traditional vocational fields, although specialized programs designed for the local area were found, especially in rural community colleges.

Geographic access to institutions was not an issue in urban or suburban areas, provided students had access to public transportation or a car. In rural areas, on the other hand, vocational programs often drew students from nine to 15 other communities. All but two communities offered some postsecondary vocational education within the county, and the two remaining communities were located an hour's drive from postsecondary institutions in an adjacent county.

Type and level of institution also affected vocational offerings. At the secondary level, comprehensive high schools were apt to offer a more limited range of vocational offerings than vocational high schools, when both were located in the same community (whether administered by the same school district or separately). Comprehensive high schools were more likely to offer

introductory Trade and Industry (T&I) programs, home economics, and business. Vocational high schools supported sequenced courses in T&I, technical and health-related programs.

At the postsecondary level, postsecondary area vocational schools offered traditional T&I programs, with some additional offerings in health fields, business or data processing; while community colleges were likely to offer more technical programs and less T&I programs. This was in part a function of the degree granting status of the institution--with community colleges awarding both associate and certificate degrees while postsecondary area vocational technical schools offered certificate degrees only.

Distinctions in course offerings between secondary and postsecondary area vocational schools appeared somewhat blurred, especially when they were located on the same campus. Students of one group were "slotted in" to programs designed primarily for the other. Whether students were enrolled in the same or separate classes usually depended upon the number of students interested in the same program.

In the communities visited, little overlap appeared between secondary and postsecondary offerings. Each level of institution appeared well informed about what other institutions were offering, with the possible exception of business programs. Institutions also reported that they would not initiate a new program if they knew it was available elsewhere. For example, one postsecondary director said that he decided not to offer cosmetology because it was offered at the vocational high school. If no program was offered in an area with emerging demand, institutions would compete to see who would be the first to offer the program; but once a program was in place, other institutions usually did not duplicate it. One state was instituting a formal process, called "leveling," to avoid duplication of programs. The state is setting guidelines and reviewing program proposals for new offerings in high schools, postsecondary vocational centers, and community colleges. The system is to be in place by the summer of 1989.

In the following sections, vocational education offerings are described by type of community--urban, suburban, and rural/small town. Within each section, secondary and postsecondary offerings are described separately.

VOCATIONAL EDUCATION IN URBAN COMMUNITIES

The nine urban communities visited ranged in size from 180,000 to five million, although seven had populations between 500,000 to 600,000 within the city proper and up to several million when counting adjacent areas. Like large urban areas in general, the cities had a diverse economic base and represented a range of stable, growing and declining economies.

Four cities were state capitols, five housed major universities, and four contained major medical facilities. Unemployment rates in the cities range from under three percent to a high of ten percent. The lowest unemployment rates were found in those cities with high tech electronics and skilled professional occupations. The highest unemployment rates were found in the three cities heavily dependent upon manufacturing and/or on the depressed gas/oil economy and in the city that served as the urban hub to a large agricultural region.

Although the general population in the cities is about 30 percent minority, the proportions reverse among children attending urban public schools. In all but one of the school districts, at least 60 percent of the school district's children belonged to minority groups.

In the cities for which school dropout rates were obtained, the rates ranged from an estimated 20 percent to 50 percent, with an average between 35 percent to 40 percent, not uncommon among the nation's larger cities.

Secondary Vocational Education

At the secondary level, the most common organizational arrangement for vocational education was a single vocational high school and multiple comprehensive high schools, all under school district jurisdiction. Introductory and exploratory courses were most likely to be found in the comprehensive high schools, while occupationally specific programs were the cornerstone of the vocational high school. Six districts had this pattern. The seventh district, the largest district in our sample, also had a combination of comprehensive and vocational high schools, but the comprehensive high schools offered a wider range of vocational programs than found in other districts. One district offered vocational education only

through its 11 comprehensive high schools. The ninth district also offered vocational education through its comprehensive high schools, although some students attended a postsecondary area vocational school that was also under school district jurisdiction.

Structural differences affect the ways vocational education is offered in comprehensive and vocational high schools. In comprehensive high schools, vocational classes are generally one period long, meshing into the traditional period structure rather than in the two- or three-hour blocks common to vocational high schools. Although students in some instances can pursue concentrations in vocational programs, respondents were more likely to talk about vocational classes in comprehensive high schools as electives. Some comprehensive high schools had moved from two- to one-hour classes as a consequence of increased academic requirements for graduation, and some vocational laboratory or shop classes had moved from three- to two-hour blocks for the same reason.

Vocational high schools varied in grade levels served and in whether they were full-day or half-day schools. In one city, it was a full-time four-year high school; a second city was moving to full-time, with 9th and 10th graders already full-time students. In one city, the vocational high school was full-time for half its students and half-time for the remainder who were bused from home high schools. In two other cities, the vocational high schools were half-day for 11th and 12th graders, while in the sixth district, the vocational school was full-time for 12th graders only. In the largest city visited, the vocational high schools were also full-day four-year high schools.

In the six districts with several comprehensive high schools and one vocational high school, comprehensive high schools offered business, consumer and homemaking education and almost all offered industrial arts or technology. One city also provided drafting, while another offered agriculture and some health classes. Two cities provided work experience for disadvantaged vocational students in comprehensive high schools. For the most part, the comprehensive high schools were not seen as offering the full range of vocational education, and respondents referred to their course offerings as "introductory," "exploratory," and "less career oriented." In two cities, for example, the vocational courses offered in comprehensive high schools were not eligible for state reimbursements in vocational education.

For the most part, all comprehensive high schools in the same district offered identical or nearly identical vocational classes, a consequence of desegregation guidelines according to school officials. There were occasional exceptions. In one district, cosmetology was offered at a single high school but with open enrollment across the district. Another city created a business magnet school, designed in part to encourage nonminority students to enroll in an almost all minority school considered to be the worst, or nearly the worst, high school in the district. The program was stocked with a large number of personal computers, data entry machines and audio-visual equipment; and stood in sharp contrast with the remaining comprehensive high schools that have little computer equipment. A program comparable to the magnet is offered at the vocational high school.

Vocational high schools across the districts visited organized and named their offerings differently, but for the most part they offered a range of traditional trades and industry (T&I) programs, including auto mechanics, electronics, machine shop, construction, and cosmetology. Graphics/media programs were almost universally found, as were an array of business programs. Most cities offered programs in health occupations, some linked with child care programs. A few cities were offering programs in criminal justice or police science, and two offered programs in aviation. Only one vocational high school in these six districts offered agricultural programs; this one was in horticulture. Programs were usually seen as half-time over two years, although some exploratory work may be done in the ninth and tenth grades.

Little overlap appeared between courses offered in comprehensive and vocational high schools in districts visited. Business education was seen as more extensive in vocational than in comprehensive high schools in five of the six cities; in the sixth district, no business education was offered at the vocational high school. In two districts, no occupational home economics was offered in comprehensive high schools, while in another two, it was only offered in comprehensive high schools. Where there was overlap in program area, the more specialized programs (e.g., food and restaurant, fashion/interior design, and child development) were offered in the vocational rather than in the comprehensive high schools. Industrial arts was not offered at the vocational high schools, although the four-year vocational schools often had a built-in exploratory program.

A hybrid of combining and separating vocational education programs was found in the largest district in the sample, which offered vocational education in both vocational and comprehensive high schools. Most vocational high schools were located in traditionally working class neighborhoods where support for vocational programs was longstanding. Across the city, 55 comprehensive high schools and 10 vocational high schools offered a combination of vocational programs. Among comprehensive high schools, the most commonly found programs were in business education, food management, occupational home economics, drafting, graphics arts, wood construction and automotive mechanics. Almost every high school had business education while the other programs were found in one-third to one-half of the comprehensive high schools. Comprehensive high schools were unlikely to offer programs in trades and industries, although agricultural programs were more likely to be found in comprehensive than vocational high schools.

Among vocational high schools, the most commonly found programs were auto mechanics, word processing, graphic arts (along with drafting and commercial art), computer applications, cosmetology, and a number of the more traditional T&I programs such as machine trades, electricity and electronics, auto body, wood construction, carpentry, sheet metal, and welding. Health occupations were found in just one school in the district, a vocational high school.

Two large cities in the sample did not have a specialized vocational high school within its district. In one district, school officials rejected the idea of creating a vocational high school, but rather offered a range of vocational programs across its 11 comprehensive high schools. When state funds became available for the construction of vocational facilities in the early 1970s, they were combined with those under the desegregation order to renovate or construct new high schools, not to create a separate vocational facility. The number of vocational programs per high school ranged from nine to 20, with most having 13 to 15 programs. Following the pattern of comprehensive high schools in other districts, all high schools offered industrial arts/technology, consumer and homemaking education, and vocational office education. In addition, virtually all offered auto mechanics, cosmetology, graphic arts, and industrial cooperative education, a work study program for disadvantaged students. Other programs were dispersed across high

schools, with no concentration in a given school. Agriculture, health, and traditional trades and industries programs were usually offered in one or two high schools. These included air conditioning, aircraft mechanics, diesel mechanics, electronics, building trades, cabinet making, recording occupations and welding. Where programs were located appeared to be a function of school size, availability of equipment, and student demand. Although vocational education enrollments have declined in the face of increased graduation requirements and a stronger academic focus, vocational educators in the city felt the decision to concentrate on comprehensive high schools rather than separate vocational schools has "saved" vocational education in the city.

In the ninth district which encompassed a county, vocational education was provided through six of the county's 10 comprehensive high schools, with some students on an "experimental basis" attending half day a postsecondary vocational center also administered by the school district. Programs offered in the comprehensive high schools were business and distributive/marketing education, home economics, and industrial arts as well as some programs in auto mechanics and agriculture. The postsecondary vocational center offered more of the traditional trades and industries programs. A high school student may transfer from one high school to another if a vocational program was not offered in their home school, but it was reported to be a rare practice. Vocational education was not seen as a major part of the secondary curriculum in this fast growing area, noted for its tourism and high technology electronics.

The Role of Desegregation in Secondary Urban Vocational Education:

An issue unique to the large cities visited was the role played by desegregation in the organization of the vocational education enterprise. Desegregation guidelines were usually cited as the major reason for the presence of near identical vocational offerings in each city's comprehensive high schools. In addition, in three cities, the use of a vocational high school as a magnet school was seen as both a desegregation and vocational education success, aided in part by the availability of federal magnet schools funds. In the fourth city, the new and well-equipped vocational high school was characterized by the city's leading newspaper as a disaster, "shunned by students and parents of all races."

In one district, one high school was named a vocational education and performing arts magnet school, with \$2.5 million in federal magnet schools funds used to update the equipment to current industry standards. Since its opening three years ago, the enrollments have consistently been racially balanced and enrollment has increased by 50 percent.

In another district, the vocational high school has been a magnet school since 1983, joining the other schools with an open enrollment policy. Forty-seven percent of its students belong to minority groups, compared to a district wide average of 66 percent. Prior to that time, it had been an exam school, mostly serving white males. Although all schools in the district are underenrolled, the vocational high school has had less of an enrollment drop than the comprehensive high schools.

In the third successful district, a middle school was converted into a vocational magnet high school for 11th and 12th graders three years ago, using magnet school dollars to remodel and equip the facility. Increased enrollments have been attributed to having a central facility for vocational education. In earlier years, vocational education had been moved frequently from school to school.

In a fourth district, the vocational high school was also designed as a part-day magnet school for all of the city's high schools, but unlike the three districts above, it has not been a success story. Since opening in 1980, vocational high school enrollment has consistently been less than half its capacity, and its enrollment continues to decline at a rate faster than the district as a whole. Declining enrollments have plagued the city as a whole, and one quarter of the teaching faculty were let go a few years ago. The demographics of the student body has also undergone significant change. Significant white flight coupled with an influx of low income minority families has resulted in a low income minority student body, many with limited English proficiency. The dropout rate is close to 50 percent.

A number of factors appear related to the failure in the fourth city that may not be present in the other three cities visited. Fragmented power and byzantine political arrangements characterize school district politics, leaving little coherent leadership. Unlike the schools in the other cities, the vocational school is located in the center of the city's low income minority ghetto, the center for drug trafficking and high crime rates. The

comprehensive high school to which it is attached is historically one of the lowest performing in the district, with average achievement around the 26th percentile. Finally, the conditions of the desegregation order also appear more restrictive; program enrollments as well as total student enrollment are to reflect the racial balance for the district as a whole. In each program, black students may not enroll unless white enrollments are sufficiently high.

Postsecondary Vocational Education

Across the nine cities, postsecondary vocational education was provided by a range of public institutions. In four communities, community colleges were the exclusive provider of publicly supported postsecondary vocational education; in three other communities, community colleges were joined by postsecondary area vocational schools. One community was served by a technical institute and a postsecondary area vocational school, while one was served almost exclusively by a postsecondary area vocational school.

Community colleges offered both associate degrees and certificates, as did the one technical institute visited. Associate degrees usually required the equivalent of two years of full-time study (and occasionally three years), while certificate programs required the equivalent of up to one year of full-time study. The postsecondary area vocational schools provided certificates for up to one year of full-time study. Where community colleges and area vocational schools operated in the same cities, some had developed articulation agreements on a program-by-program basis, so that programs taken at the area vocational school would serve as credit toward an associate degree. The articulation agreements were found in electronics, building trades, automotive, heating/refrigeration and graphic arts.

Community college enrollments ranged from a low of 2,500 students (head count) to a high of 20,000. The single largest community college had 11,500 FTE. The largest city had eight community colleges within its boundaries, offering 215 degree or certificate programs. Community college personnel did not report the proportion of enrollments in vocational or technical programs, although estimates ranged from 50 to 70 percent of the matriculated student body. The one technical institute visited, which also awarded both associate degrees and certificates enrolled almost 2,500 FTE students.

Postsecondary area vocational schools were generally smaller than community colleges. Enrollments ranged from a headcount of 600 to 7,000 students, all pursuing vocational certificate programs.

Community colleges were less likely to have traditional trades and industries programs, and more likely to have technical programs, or at least to label associate degree programs as technology-related programs, according to a review of course catalogs. The major associate degrees offered were in business and secretarial, a variety of health fields, media/graphics, electronics, computer programming (or other computer related fields), and criminal justice programs. Less frequently, community colleges offered associate degree programs in child development, fire and safety, food service, hotel and restaurant management, and real estate. In these institutions, students enrolled in certificate programs would attend some of the same classes as associate degree students, but would get certificates in narrower fields (e.g., word processing rather than business, health technician rather than nursing, day care rather than child development).

Exhibit 2.2 describes the associate degree and certificate programs at one fairly typical urban community college. Community colleges were more likely to offer a wider range of associate degree programs than certificate programs. When similar titles appeared, the associate degree programs usually contained more advanced courses in the specialty area, as well as 15 to 18 credits in liberal arts courses. For example, the 27 credits (nine courses) required for the certificate program, "Clerk Typist," were also found for the associate degree program "Office Technology-Word Processing." The associate degree program also required more advanced courses in typing, secretarial accounting, secretarial procedures, advanced word processing, and computer applications in business as well as shorthand theory. Likewise, the differences between the associate degree program in "Construction Technology-Architectural Technology" and the certificate program in "Architectural Drafting" are more required courses in codes and standards, contracts and specification, and structural design as well as electives in math, science and communication.

Postsecondary area vocational schools offered one-year certificate programs most frequently in business, health, electronics, food service and a range of trade and industry programs. Business, health and electronics

Exhibit 2.2

AN EXAMPLE OF ASSOCIATE AND CERTIFICATE PROGRAMS
AT AN URBAN COMMUNITY COLLEGE

Associate Degree Programs	Certificate Programs
BUSINESS & PUBLIC SERVICE Business Administration Business--Banking, Insurance & Real Estate Business--Fashion Buying & Merchandising Business--Business Admin., International Business Business--Purchasing & Materials Management Business--Retail Business Management Child Care Criminal Justice--Police Data Processing Fire Protection Technology Food Service Administration Hotel Technology Hotel Tech.--Culinary Arts Labor Studies Office Technology Office Technology--Word Processing Paralegal Recreation Leadership	BUSINESS RELATED Banking, Insurance, Real Estate Clerk Typist Small Business Management
ENGINEERING TECHNOLOGY Automotive Technology Building Management & Maintenance Chemical Technology Chemical Technology--Environmental Science Civil Engineering Technology Communications Equipment Technology Computer Repair Technology Computer Systems Technology Construction Technology Construction Technology--Architectural Technology Drafting--Mechanical Electrical Construction & Maintenance Electrical Engineering Technology	TECHNOLOGY RELATED Architectural Drafting Basic Engineering Sciences Building, Estimating & Constructing Building Rehabilitation Electrical Power Foundry Practice Heating & Air Conditioning Industrial Instrumentation Management Practices Manufacturing Planning Materials Requirement Planning Metallurgy Structural Design Telephony Tool Design

Exhibit 2.2
(continued)

AN EXAMPLE OF ASSOCIATE AND CERTIFICATE PROGRAMS
AT AN URBAN COMMUNITY COLLEGE

Associate Degree Programs	Certificate Programs
ENGINEERING TECHNOLOGY (cont'd) Industrial Technology Industrial Technology--Management Engineering Technology Manufacturing Technology Robotics/Automation Materials Science Technology Mechanical Engineering Technology Science Laboratory Technology Visual Communications Technology-- Graphic Arts & Printing	TECHNOLOGY RELATED (cont'd)
ALLIED HEALTH Community Mental Health Assistant Alcohol Counseling Dental Hygiene Dental Laboratory Technology Dietetic Technology Medical Office Assistant Medical Laboratory Technology Nursing Occupational Therapy Assistant Ophthalmic Dispensing Radiological Technology--Radiotherapy Technology Respiratory Care	HEALTH RELATED Emergency Medical Technology Medical Office Practice Rescue Services

programs were often heavily enrolled. Individual trade and industry programs (e.g., air conditioning/refrigeration, automotive, building trades) had small enrollments but combined often accounted for a large number of program offerings. Less frequently, certificates were offered in such areas as aircraft repair, cosmetology, real estate, insurance, hotel and motel management, and transportation. Exhibit 2.3 presents the array of certificate programs available at one large urban postsecondary area vocational school.

In the four communities where both area vocational schools and either community colleges or technical institutes were located, community colleges appeared to offer more in the health and technical areas and less in traditional trades and industries than the area vocational schools.

VOCATIONAL EDUCATION IN SUBURBAN AREAS

The seven suburban communities in our sample can all be characterized as "largely middle or upper class," "comparatively affluent," or "in the top quartile in median income in the state." Poverty rates were low. Only one had more than ten percent of its students on free or reduced lunch, and most had no one eligible. School dropout rates were also low, averaging around three percent. Minority populations varied from a high of 26 percent to a low of two percent. Only one suburb was experiencing the effects of a major economic downturn; its urban hub was hit by the bottom dropping out of the oil and gas market.

Secondary Vocational Education

In three of the seven suburban communities, vocational education was provided only through comprehensive high schools. Each of these communities was about an hour's drive from an area vocational school, so had declined to participate in a regional program. In the remaining four communities, two were the sites for area vocational schools (that also served nine to 14 other districts), one had its own career education park, and the last had access to regional occupational programs provided by its urban hub.

In those three communities where comprehensive high schools provided all of the vocational education, two offered business and consumer and home-making programs as well as a scaled-down trades and industries program. The trades and industries program was limited to electronics, building trades, and

Exhibit 2.3

AN EXAMPLE OF CERTIFICATE PROGRAMS AT AN
URBAN VOCATIONAL TECHNICAL CENTER

CERTIFICATE PROGRAMS

BUSINESS RELATED

Business Education--Accounting
Business Education--Clerical
Business Education--Secretarial
Data Processing I
Data Processing II
Hotel/Motel Management

TRADE AND INDUSTRY/TECHNOLOGY RELATED

Air Conditioning and Refrigeration
Automotive Technology
Aviation Maintenance--Airframe
Aviation Maintenance--Powerplant
Commercial Construction
Diesel Mechanics
Drafting
Electronics/Avionics
Electronics Technology--Computer Maintenance*
Electronics Technology--Electromechanical*
Electronics Technology--Industrial Instrumentation*
Industrial Maintenance Mechanics
Machine Shop
Small Engine Mechanics
Tool and Die Technology
Welding

HEALTH RELATED

Dental Assisting
Practical Nursing
Respiratory Technician

*Graduates of these six-quarter programs may earn an Associate Degree by successfully completing 15 credit hours in select liberal arts courses at a nearby community college.

horticulture. In the third community, distributive education and a small building trades program, new this year, were the two offerings. Vocational education was not seen as a very important part of the secondary curriculum in these communities, in part because most graduates were expected to go on to college.

In the four communities with area vocational schools, the comprehensive high schools provided primarily introductory programs in industrial arts and drafting, business, and home economics; while the area vocational schools provided in-depth vocational instruction. Three of the area vocational schools were half-time two-year programs for 11th and 12th graders, while the fourth was a full-time area vocational high school. Unlike the comprehensive high schools where programs were provided in regular classroom periods, the area vocational schools provided either two-hour or half-day blocks of vocational instruction.

Although these regional programs did not appear to offer the range of vocational programs found in urban areas, their offerings appeared comprehensive, covering each major vocational category.

Two communities--one with its own career education park and the other the site of an area vocational school--placed high value on vocational education, and offered particularly comprehensive programs. One offered programs in printing, business, auto body and mechanics, modular home construction, electronics, food service, horticulture and drafting. The modular home construction program and zeroscape (low water use) horticulture were considered exemplary programs. Programs that are offered at both the career education park and the in-town community college were fully articulated, so that secondary students received 30 hours credit at the community college towards completion of the program there. The other community was an active participant in the area vocational school, and advertised as a package the offerings at the comprehensive high school, area vocational school and community college. The high school offered primarily introductory courses, while the area vocational school had two year programs in 21 areas spread across agriculture, business, health, home economics and industrial-technical.

Postsecondary Vocational Education

All seven communities had access to community colleges for postsecondary vocational education, and two also had access to postsecondary area vocational schools. Five had postsecondary institutions within their community, while the other two had access to those in the urban hub.

Vocational programs varied somewhat among the five suburban community colleges. All offered both certificate and associate degrees. One offered extensive programs in agri-business and horticulture, while the others may offer one program in horticulture. Two offered a variety of programs in health fields, such as nursing, nursing assistant, respiratory therapy, radiological technology, occupational therapy assistant. Two offered limited offerings in the more traditional trades and industries fields, while one offered a variety of the more technological T&I programs (e.g., programmable controls, computer assisted drafting, auto technology, architectural and contractual drafting). While vocational offerings in the suburban community colleges were not as extensive as those offered in the urban areas, they nevertheless appeared to offer a relatively comprehensive set of core programs.

Two communities also had access to one-year certificate programs in postsecondary area vocational schools, one located in the community and the other located in the urban hub. The community-based facility was primarily a full-time vocational high school but did offer postsecondary programs in auto body, masonry, and carpentry as well as customized training. Its course offerings were much less extensive than those found in urban postsecondary area vocational schools.

VOCATIONAL EDUCATION IN RURAL AREAS

The 11 communities classified as rural or small town were located in sparsely populated counties (populations around 25,000) or in isolated towns (populations no more than 10,000 to 15,000). Residents worked in these communities and did not commute to larger urban areas. Eight of the 11 had high poverty rates, ranging from 25 percent to 90 percent. Six had correspondingly high school dropout rates, ranging from 25 to 40 percent.

Six communities were primarily agricultural; another, now in decline, had been the rail head for an agricultural area until the railroad pulled out. Of the remaining four, one was an economically depressed company town that had yet to recover from the company relocating elsewhere, another was a small town known for making such nondurable goods as leather gloves and toys, and the third was a growing small town with a paper mill and small manufacturing.

Of the 11 communities, six had declining economies, two had what local respondents called "stagnant" economies, and three had either growing or stable economies. The rural communities in our sample were much more likely than other rural areas to have access to vocational education because the communities were often chosen because they housed regional vocational facilities. We were primarily concerned with the question of what vocational education programs were offered rather than in how generally accessible programs were. Access was clearly an issue in rural areas because regional institutions - at both the secondary and postsecondary levels - often drew students from nine to 15 other communities.

Secondary Vocational Education

Six of the 11 communities sent students to area vocational schools, and five offered vocational education through comprehensive high schools. Not unexpectedly, rural vocational offerings were more limited than those found in larger communities, with little specialization among the major program groups.

All area vocational schools offered auto mechanics/auto body, and all but one offered building trades/construction. Four of the six schools offered cosmetology and welding, three offered some health-related programs and electronics or electricity. Two schools offered agriculture, business, and commercial foods.

When area schools were available, the comprehensive high schools usually offered business, home economics, and less frequently industrial arts. Rarely did the high school offer another program, although one economically depressed small town had just invested \$100,000 in equipment for a two-semester course in computer technology.

In the five communities where vocational education was provided through the comprehensive high schools, two offered a major, but no specializations, in agriculture, home economics, and business. The third offered a major in distributive education and courses in agriculture, home economics and business. In the last two communities, vocational education was offered through a vocational center within the comprehensive high school. In these cases, the vocational centers offered other programs, in addition to agriculture, home economics and business. These included auto mechanics, building trades, and drafting.

Postsecondary Vocational Education

Among the 11 communities, five had community colleges within the county, four had postsecondary area vocational schools (three independently run and one operated by the school district), and two communities were located within an hour's drive to postsecondary institutions in adjacent counties. Unlike larger communities, rural areas and isolated small towns often had a single institution providing postsecondary vocational programs.

The community colleges offered both associate degree and certificate programs. The number of separate programs offered ranged from ten to slightly more than 20. All offered several business programs and all but one offered programs in agriculture (usually management) and health (e.g., nursing, emergency medical technician, home health aide). The community colleges usually offered programs tailored to their region (e.g., hotel/motel management, textile and leather technology, liquid petroleum gas technology).

The postsecondary area vocational schools offered certificate programs, usually one year in length. Between five and ten programs were available in each institution. All four offered business programs, and three offered auto body or auto mechanics. Other offerings, found in each of two communities were: truck/diesel mechanics, air conditioning, electronics, welding, truck driving, cosmetology, food service, and Licensed Practical Nursing.

CHAPTER 3

STATE ADMINISTRATION OF VOCATIONAL EDUCATION

The Carl D. Perkins Vocational Education Act was designed to assist states in the conduct of their own vocational education programs, giving states wide latitude in the content and range of programs and supplemental services.* Although Perkins funds account only for about ten percent of the total expenditures in vocational education, states can exercise considerable leadership in how the funds are distributed and used, so that within the framework of the law, Perkins funds may serve as discretionary funds for states. The funds were not insubstantial. Within the nine states visited, the total Perkins allocation ranged from a low of just over two million dollars to a high of over \$70 million. The law also encouraged a state role in promoting economic growth and required coordination with other state agencies administering federal programs to avoid duplication.

The law's proscriptiveness hinged on the allocation of federal funds, with funds earmarked for special population groups, and for program improvement, innovation and expansion. The law set up select matching and excess costs provisions, and required that funds be targeted to areas of greatest economic need. Nevertheless, the law provided leeway to states in defining eligible recipients and allocating funds. In short, the Perkins law proposed that states serve leadership roles in vocational education, both vis-a-vis other state agencies and in relation to local providers of vocational education.

To administer the law, states were required to develop a state plan; create and coordinate a state occupational information system; establish a state council on vocational education to provide guidance, evaluate the effectiveness of the overall program, and assess coordination; and create technical committees to develop model curricula. Furthermore each state was to carry out its legal and fiscal responsibilities to assure that local providers expended funds appropriately and provided full access to vocational

*Unlike other federal education laws that require the operation of programatically distinct education services, the Perkins Act and its predecessors require only an identifiable audit trail.

offerings. Funds were established within the law for state administration. Under Title II--the Basic State Grant, the focus of this study, states could use up to seven percent for administration. Among the states visited, federal funds available ran from a low of \$125 thousand to a high of over \$3.5 million. For each state, \$60,000 of the state administration budget was to be used to support a full-time sex equity coordinator. Exhibit 3.1 describes the range in total Perkins allocations and estimated state administration budgets.

This study is concerned with the programmatic guidance states provided in the use of Perkins Title II funds, rather than with how states carried out their legal and fiscal mandates. Four aspects of state administration are examined: one relating to general state level initiatives, and three dealing with the administration of the Perkins law. More specifically, they are:

- Involvement in state level initiatives that affect local vocational education. In addition to statewide vocational education activities, the role of the state in economic development and academic reform is also explored.
- Restrictions on institutional access to Perkins funds. Included here is whether the state channels funds to particular institutions or limits eligibility on categories of Perkins funds.
- Substantive guidance or restrictions on how Perkins Title IIA Special Populations funds are to be spent.
- Substantive guidance or restrictions on how Perkins Title IIB Program Improvement funds are to be spent.

Key findings from the nine states visited include the following:

The "Sole State Agency" and the Office Administering Perkins

Within each state visited, an office within the "sole state agency" administered Perkins funds and was headed by the state vocational education director. That office always had direct administrative authority over secondary vocational education provided in school districts. In only one state did the office administering the act have administrative authority over all secondary and postsecondary providers of vocational education.

Exhibit 3.1

TOTAL PERKINS ALLOCATION AND ESTIMATED
STATE ADMINISTRATION BUDGET FOR THE PERKINS ACT

Total Perkins Allocation	Estimated Administration Budget from Perkins Funding
Two states over \$50 million	Over \$3.5 million
Two states in \$30 million range	Over \$2 million
Two states near \$20 million	Over \$1 million
Two states near \$10 million	Over \$50 thousand
One state just over \$2 million	Just over \$125 thousand

Note: Approximate figures are given in order to maintain the confidentiality of states.

The administration of postsecondary vocational education was shared by multiple offices at the state level. Postsecondary area vocational schools and community colleges operated in five states; in only two states were they administered by the same office.

Vocational Education in Economic Development and Academic Reform

All nine states were engaged in economic development initiatives. Whether vocational education, and specifically the office administering Perkins funds, was involved in economic development (as found in four states) appeared to be linked to the level of education associated with economic development initiatives, and whether the agency administering the Perkins Act had governing authority over postsecondary institutions. The magnitude of the involvement also seemed to hinge on the existence of good working relationships with the state's department of commerce and JTPA. The states included all those strongly hit by economic depression (three states). Where the office administering Perkins oversaw only secondary vocational education, it was seldom seen as an important actor by the state education agency, governor's office, or legislature.

The office overseeing Perkins funds was seldom involved with academic reform efforts, although all had responsibilities for secondary vocational education. Only offices in two states played an active role, and both had been active in economic development as well. Because of their visible presence in state policymaking, it appears they were also able to take part in academic reform initiatives.

Statewide Initiatives in Vocational Education

Statewide initiatives in vocational education centered on curriculum development and were often synonymous with competency-based vocational education activities. All but two states were involved with such activities, using such resources as universities, consultants, and local providers. All states belonged to at least one interstate consortium on curriculum development.

States appeared to invest in curriculum development for three interrelated reasons: to upgrade vocational programs in the state; to alter the content of vocational offerings, usually to integrate basic skills more completely into vocational offerings; and to highlight the value of vocational education.

Perkins funding played a key role in statewide initiatives in vocational education. States may retain up to 20 percent of the Title II grant for state use. It is unclear how large a proportion was retained in the states visited, but it appeared that one state used at least 40 percent of its funds on state projects, while another spent less than 10 percent. Perkins Title IIB funds heavily underwrote the activities undertaken, and it is unlikely much activity would have been supported in their absence. Curriculum development, however, was not new with the Perkins Act, and several states had invested in large scale efforts since the mid 1970s using Vocational Education Act funds.

Some states also played a major role in supporting the implementation of pilot or model programs, developed either by consortia or local providers. Usually programs were supported in two or three districts, but occasionally more. The most popular program cited was Principles of Technology.

Statewide programmatic initiatives in vocational education were rare. Three states supported longstanding state-funded vocational education programs for actual or potential dropouts, other disadvantaged students, and handicapped students.

It is difficult to assess the impact of curriculum development and other statewide initiatives. All states spoke a similar language about competency-based curricula and skills lists, but we did not review curricular materials to note comparability or the extent to which guidelines contained statements of objectives, skills, or proficiencies. Nor do we know the extent to which these curricula have been implemented. Because curriculum development was such an important and visible state activity, it may be worthwhile to study state efforts more systematically.

Institutional Access to Perkins Funds

The state office administering Perkins funds restricted the access of institutions to Perkins funds. Prior to allocating Perkins funds, eight of the nine states visited either established a proportion of funds for secondary and postsecondary sectors or limited eligibility for some Perkins set-asides by type of institution.

The existence of a prespecified split was longstanding practice in the five states where it was used.

In at least four states of the nine visited, funding restrictions appeared associated with governance issues. The offices administering Perkins were more likely to limit access to institutions that did not come under their administrative control at the state level. For example, one state provided far more funds than would otherwise have been allocated to its state-funded and state-administered postsecondary area vocational schools and excluded separately-administered community colleges entirely. Another state favored its politically powerful area vocational schools over comprehensive high schools and virtually closed out community colleges. A third state, where Perkins funds were administered through a community college board, invested more funds and individually larger concentrations of funds in community colleges than in other institutions.

The most frequent Perkins categories with restricted eligibility were the Adult set-aside (four states), Program Improvement (three states), Single Parent/Homemaker funds (two states), and Sex Equity (one state).

State Guidance on Title IIA - Special Populations

States were far less likely to direct or restrict the content of activities undertaken with Perkins funds for special populations than to restrict institutional access to funds. Although most states used requests for proposals or a mix of allocation methods, states seldom defined specific priorities, nor did they often concentrate resources in a few statewide centers. Four states had a substantial influence on both Single Parent/Homemaker and Sex Equity grants. Three states (and two of the four above) directed how Handicapped and Disadvantaged funds were to be used, while another three states provided substantive direction for Adult grants.

State Guidance on Title IIB - Program Improvement

States were more likely to provide direction on Perkins Title IIB Program Improvement funds than on Title IIA Special Populations funds. All states used Title IIB funds for curriculum development, staff training, and guidance and counseling; although two states appeared to leave the content of those activities up to local providers and retained few funds at the state level. Curriculum development dominated discussions with state officials.

Six of the nine states also provided direction on equipment purchases. Four states either prohibited or limited the extent to which Perkins Title IIB funds could be used for equipment, another state required that at least half the grant be used for equipment, and one created a separate category solely for equipment purchases.

State Guidance on Special Perkins Provisions

Re matching: five of the nine states primarily used a local match on a recipient by recipient basis to meet Perkins matching requirements. The remaining four states relied on a match aggregated at the state level, with each providing some state categorical funding to meet part of the match.

Re evaluation: all states conducted an on-site team review of at least 20 percent of the programs per year, and all programs within five years. Most states visited also conducted student and employer surveys as part of their evaluation activities. As with other Perkins-related activities, responsibility for secondary and postsecondary evaluation activities mirrored state organization for institutional oversight, so evaluations were conducted separately without sharing results.

Re section 204: Where information was available, states usually instructed local educational agencies to inform handicapped and disadvantaged students of opportunities in vocational education, and that such notification was required at least by the 9th grade. States appeared to provide no additional information on the other provisions of section 204. Two states devoted considerable energy to section 204. Both states had state categorical funding for handicapped vocational students, and one state had state-funded programs for disadvantaged vocational students as well.

Intergovernmental Relations

Relations between the nine states and the federal OAVI office ranged from "minimal contact" to "excellent." Staff were perceived as helpful, especially regarding Perkins regulations. States sought guidance on fiscal matters, allowable costs and the state plan. None of the states indicated that they consulted OAVE on programmatic matters, nor were they likely to contact them on audits.

A majority of states (five of the nine) provided substantive guidance to secondary providers almost exclusively on fiscal, allowable funding and compliance

matters. Three states were cited by their communities as strong on technical assistance in curriculum and in program improvement areas, while one state was cited as strongly supportive on both fiscal and programmatic issues.

Relations among most states and secondary providers was cited as helpful and cordial, with stable and well-established working relationships. The two states with the strongest regulatory and compliance focus had strained relationships with their communities. One state had recently reshuffled its state staff and had a history of underspending funds; communities in the other state believed that excessive rules and regulations hindered program operations and that the state was biased against them in distributing funds.

Among postsecondary providers, the relationship between the state and local operations often involved another set of state actors. Where that was the case, substantive guidance was limited almost entirely to compliance and fiscal issues. In two states, the office overseeing Perkins was the governing body for the funded postsecondary institutions. In another two states, community colleges received scant funds so administrative oversight was largely moot. In the remaining five states, funds were passed through with little restriction (three states) or joint competitions were held (two states).

The factors distinguishing strong state administrations at the secondary level were: a visible vocational education office at the state level, a shared vision about vocational education by state policymakers, strong state directors with tenure in the position, strong state staff, and either a traditionally strong role toward school districts or direct administrative authority over some local facilities.

By contrast, less directive states had neither visible nor independent vocational offices, state policymakers' views about the value of vocational education were either conflicted or negative, the state director was either seen as a weak leader or was a newcomer to the position, and the state agency traditionally had a weak relationship with districts.

To examine Perkins Act implementation, we must first take a closer look at what institutions come under the purview of the office administering the Perkins grant. Under the Perkins Act, as under earlier federal vocational education laws, each state was to designate a "sole state agency" for

vocational education. The sole state agency is a contracting agency, usually the state department of education. A state vocational education director, identified by the state, usually heads an office for vocational (and often adult and continuing) education within it. Much of our analysis of state administration focuses on the office headed by the state director and the institutions that come under the purview of that office, rather than on the sole state agency. The agency designation often disguised the fact that local providers of vocational education came under the purview of different offices within an agency and masked some intraorganizational competition and rivalry between those offices.

For the nine states visited, Exhibit 3.2 describes the extent of authority the office administering Perkins funds had over public providers of vocational education in its state. While all offices administering the Perkins Act had direct administrative authority over secondary vocational education provided in school districts, in only one state (State 9) did the unit administering Perkins have administrative authority over all secondary and postsecondary providers of vocational education.

In seven of the nine states, the office had administrative authority over secondary vocational education provided in area vocational schools. In State 4, where districts are organized on a county system, the county district served as fiscal agent for Perkins funds for the area vocational schools within its boundaries. In State 2, a separate state office oversaw area vocational schools and distributed state funding to those institutions. The schools were not directly eligible for Perkins funding but could receive Perkins funding through sending school districts.

At the postsecondary level, in three of the five states with area vocational schools, the office administering Perkins oversaw these institutions. One exception was again State 4, where the county school district oversaw budgets for the area vocational schools. The other exception was State 9, where all postsecondary vocational education was administered by a separate board for community colleges.

Lastly, only in State 3 was vocational education in community colleges directly overseen by the office administering the Perkins Act. Although all states supported community colleges, the community colleges were

Exhibit 3.2

INSTITUTIONS UNDER THE DIRECT AUTHORITY OF THE
STATE OFFICE ADMINISTERING THE PERKINS ACT

Areas of State Authority	Number of States (n = 9)
School districts	9
<u>and</u>	
Secondary area vocational schools	7
<u>and</u>	
Postsecondary area vocational schools ¹	4
<u>and</u>	
Community colleges	1

¹Five of the nine states offered vocational programs in certificate-granting postsecondary area vocational technical schools.

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either administered by a separate board of community colleges or higher education (four states) or by a separate (and co-equal) office within the state department of education (four states).

The following sections of the chapter are organized around the four administrative topics outlined above. Additional sections explore specific provisions of the Perkins Act, intergovernmental relations, and factors that appear associated with state leadership. The final section summarizes the chapter and discusses implications.

STATE LEVEL INITIATIVES

The extent to which the state vocational education agency is involved with economic development, academic reform, or statewide initiatives in vocational education itself may indicate the capacity of state vocational agencies to exercise leadership either in conjunction with other important state actors or on its own. They reflect two different types of leadership. Involvement in economic development or academic reform requires the vocational education agency be a visible presence in state politics, working with state legislators, the governor's office and other state agencies. Statewide initiatives in vocational education, on the other hand, require the agency to exert a strong role with the varied local providers of vocational education.

During the 1980s, states undertook a number of education-related initiatives. State legislatures increased secondary graduation requirements overall and in specific curriculum course areas. In some instances, these changes were accompanied by additional state funds for school improvement or other education reforms. In addition, the state university system in selected states increased freshmen admissions requirements. States also paid increased attention to economic development initiatives, either to assist current industry, attract new investments, or retrain dislocated workers.

Whether vocational education at the state level is tied into these initiatives or stands isolated from them is important for understanding current vocational education practice as well as the prospects of success for new initiatives. It will also help inform whether states have the ability to implement the provisions of the Perkins Act as fully as Congress intended.

Among the primary purposes of the Perkins Act were ones to "improve the academic foundations of vocational students" (Sec 2(4)) and to "assist States...to improve productivity and promote economic growth" (Sec. 2(1)).

State leadership in vocational education is also reflected in the extent to which states designed and undertook new activities in vocational education. Of particular interest in the context of the Perkins Act is the involvement of the state vocational education agency in the development of model curricula that meet the labor market needs of the state (sec. 111a(3)(d)).

Economic Development

Because the Perkins Act makes specific reference to the role of states in improving vocational education to promote economic growth, state respondents were queried about economic development activities underway in the state and the role, if any, of the state agency administering the Perkins Act. We concentrated on education and training initiatives because these were ones where vocational education could most likely play a role. Most economic development initiatives came under the purview of other state agencies, usually the states' departments of commerce.

Whether the state agency administering the Perkins Act was involved in economic development depended on whether it was responsible for the institutions where such activity was targeted. Targeting education level(s) for economic development initiatives was a major issue in states visited. Some states were concerned with upgrading the skills of its workers to be proficient at assembly-line occupations and focused on the state's postsecondary certificate granting institutions. Some emphasized the associate-degree granting technical institutes and community colleges in new initiatives. Others sought to attract new business by developing economic centers or high technology programs through the state's university campuses. Debates within states about the appropriate mix of strategies and education providers continued during our field work.

All nine states were engaged in economic development initiatives. Six states were building upon stable or growing economies, while three states (States 1, 3 and 6) were trying to regroup from the economic depression created by drops in the oil and gas markets.

The state education agency administering the Perkins Act was involved in economic development initiatives in four of the nine states visited--the three states hit by the economic depression and State 8, one of the most populous states. In all four states, the major activity was customized training for new or expanding industries for current or prospective employees.

In States 1 and 6, both primarily rural states, customized training was provided through postsecondary area vocational schools. Both states were concerned with upgrading the skills of workers to be proficient at assembly-line occupations. The state vocational education agency administering Perkins funds had governing authority over the postsecondary schools, and state funds were used to support the presence of an industry coordinator in each postsecondary area school. Company funds supported the training, supplemented in one state by Perkins IIA Adult funds. In neither state were efforts coordinated at the state level with the Job Training Partnership Act (JTPA).

In State 1, the vocational education agency appeared to have cornered the training market in economic development. As long as the area vocational schools are seen as the major training providers, the agency responsible for administering Perkins funds will play the major role. In State 5, the role of the vocational education agency was more in doubt because of disputes over which levels of education should be emphasized. The recently elected governor ran on a platform that included reorganization of higher education, specifically the area vocational schools and community colleges; and the state legislature appointed a task force on economic development that concentrated only on the state's universities.

In State 3, characterized by a mixed rural and urban economy, community colleges served as the providers for customized training for new or expanded industries under a new state law. Perkins funds were administered through the state agency responsible for community colleges, so again there was a close tie between vocational education and economic development. Sources of funding for the customized training included the companies and JTPA. Community colleges were also sites for small business development centers under the federal Small Business Administration. This state had not developed postsecondary area vocational centers.

In State 8, one of the three most populous in the study, customized training was provided by a range of institutions--secondary districts, secondary area vocational schools, and community colleges--all of whom came under the purview of a single state agency. The education agency and state vocational education director shared strong economic development perspectives, and the director and his staff were visible and well-connected with the state legislature. Regional economic development centers were started several years ago with one million dollars of federal vocational education funds, and are continued with a ten million dollar annual budget (60 percent state funds, 30 percent JTPA funds, and 10 percent federal funds). The regional economic development centers were not affiliated with any institution but served as brokers between industry (and union) and vocational providers to assist employed workers with upgrading their skills. Where the centers were most effective, they reduced competition among providers and coordinated large retraining efforts among several providers when demand exceeded the capacity of a single institution.

In all four states, the involvement of the state vocational agency in statewide policy decisions on economic development brought additional public and private funds to institutions under its jurisdiction.

In the remaining five states, the vocational education agency administering Perkins funds played little, if any, role in economic development initiatives. In these states, the vocational agency oversaw only secondary vocational education, and was seldom seen as an important actor either by the state education agencies, governor, or legislature. Education and training were carried out by community colleges, technical institutes, or other institutions that came under another agency's or unit's purview. The agency was also little involved with the state's department of commerce or JTPA, who were usually working together with other institutions on development initiatives.

In only one of these five states (State 5) was the vocational office overseeing Perkins funds involved in job specific training for industry. State 5 operated a million dollar job-specific training program with community colleges, secondary area vocational schools, and comprehensive high schools. However, that effort was greatly overshadowed by the magnitude of a multi-billion dollar state-funded initiative in the department of commerce,

supplemented by JTPA funds. During our field work, the vocational education agency was also actively involved in an ambitious regional reorganization of vocational education. Once that is complete, it is likely that vocational education will be more involved in economic development initiatives.

Whether vocational education, and specifically the office administering Perkins funds, was involved in economic development appeared to be linked to the level of education associated with the economic development initiatives, and whether the agency administering the Perkins Act had governing authority over postsecondary institutions. The magnitude of the involvement also seemed to hinge on the existence of good working relationships with the state's department of commerce and JTPA.

Academic Reform

Because the academic reform movement has been a major state initiative affecting vocational education, we sought to explore the extent of academic reform activity underway in the states visited and the role, if any, of the state agency administering the Perkins Act. We were concerned about such questions as whether the state agency was involved in changes in graduation or core course requirements, and in shifts in educational finance mechanisms. We also sought to explore whether the state played any mitigating role in the effect of increased academic requirements on vocational education enrollments. Although the language of the Perkins Act does not directly address issues in the academic reform movement, a primary purpose of the Act was to "improve the academic foundations of vocational students" (Sec. 2(4)).

All states have taken action on academic reform initiatives. All states visited had passed legislation in the late 1970s or early 1980s that either involved long-term pilot testing, mandated local involvement in assessment, or required student testing. Three of the nine states visited required passage of a minimum competency test for high school graduation.

In the early 1980s, eight of the nine states visited increased the number of core academic courses required for high school graduation. For three states, the increased graduation requirements also meant that the state had assumed a responsibility that formerly had rested with local school boards. The ninth state, prohibited by its state constitution from mandating

curriculum, could not mandate graduation requirements; but its state university increased admission requirements for freshmen and thereby created much the same effect in school districts.

As states increased graduation requirements, a number also concomitantly revised their education financing laws, usually as a result of court cases brought by poor districts challenging the disparity in state financing arrangements between affluent and less affluent districts. Shifts in funding arrangements or additional state resources in education overall were not uncommon in the states visited, although we have incomplete information on specific changes.

The vocational education office administering Perkins funds was seldom involved with academic reform efforts, although all had responsibilities for secondary vocational education. In only two of the eight states with reform initiatives (States 1 and 8) did we find evidence that the state vocational education agency played an active role. Both states had also been active in economic development initiatives. Because of their visible presence in state policymaking generally, they were able to take part in academic reform as well.

State 1 passed major education legislation in 1983, stimulated in part by The Nation at Risk report and, according to the key education aide, "by the feeling that people knew they had so very far to go [in education]." Two years previously, vocational education had been revamped at the state level to spur economic development initiatives in this poor, rural state. A separate, highly visible agency was created, with its own state board. Its director not only had access to economic development initiatives, but also to all discussions of educational reform. The new education reform legislation contained significant vocational education language, drafted by the state director. For every high school to be accredited, it had to provide access to six units of vocational education (one each in typing, home economics, industrial arts or career exploration, and in three different occupational programs). A year later, prompted by a court case, the state minimum foundation aid shifted from a 50 percent reimbursement of teacher salaries to a formula tied to student enrollments. Each student enrolled in vocational

education received a percent increment over the minimum foundation grant, varying from .4 to .6 of the grant depending upon the program. Over the past four years, state funding of secondary vocational education has doubled.

The second state, State 8 and one of the most populous in the sample, also included vocational educators in its education reform measures, although not in such a visible way. State reforms in vocational education predated academic reform efforts, and significant efforts are underway statewide to incorporate more academic instruction into vocational education. Industrial arts is currently being replaced statewide with a one year technology program. As additional graduation requirements were debated, vocational educators were able to include a provision waiving vocational students, at least temporarily, from a two-year foreign language requirement.

In the remaining six states initiating academic reforms, the vocational education agency was isolated, uninvolved in the deliberations or framing of educational reforms. In most cases, the agency was seen as an irrelevant actor; although in one case, respondents claimed that those involved with reform held an anti-vocational bias, and linked their strong economic development initiatives with an increased emphasis on basic academic skills.

In two of the six states, consideration of vocational education appeared in new legislative language but apparently not as a result of participation by state vocational personnel. In State 2, new legislation allowed for alternative ways to complete academic core courses to meet graduation requirements. State vocational education personnel, however, have not been able to make any headway with the Chief State School Officer in gaining approval that vocational education curricula satisfy the requirements. In State 4, a half-credit of vocational education was added as a graduation requirement, not because of a commitment to vocational education, but apparently as a concession to the vocational agency to counteract anticipated declines in vocational enrollments brought about by the new requirements.

With its emphasis on basic skills and academic course requirements, the education reform movement of the early 1980s bypassed most of the state vocational education offices in our study. Only the two agencies active in state policymaking generally were able to play a pivotal role.

Statewide Initiatives in Vocational Education

Statewide initiatives in vocational education centered on curriculum development, supplemented with staff development, implementation of model programs, and the operation of statewide projects. At the state level, curriculum development was often synonymous with competency-based vocational education. All but two states discussed how they were engaged in developing curricular models, guides, task lists, and student competencies. Curriculum development is not new with the Perkins Act, and several states have invested in large scale efforts since at least the mid 1970s, often through the Vocational Education Act, the predecessor to the Perkins Act. Currently Title IIB Program Improvement funds heavily underwrite the activities undertaken, and it is unlikely that much activity would have been supported in their absence.

States appeared to invest in curriculum development for one of three interrelated reasons:

- to upgrade vocational programs in the state;
- to alter the content of vocational offerings in the state, usually to integrate basic skills more completely into the vocational offerings; and
- to highlight the value of vocational education to students, employers and the broader education community.

A number of state directors spoke of wanting to upgrade vocational programs in the state, so that students and employers would know that all graduates of any program in the state met specified qualifications. The need for upgrading came not only from knowledge of low quality programs but also from changing definitions of labor markets. Shifts from local to regional or state labor markets for employment opportunities meant that students from throughout the state could be competing for some of the same jobs. Several states mentioned that automotive projects were to qualify for National Automotive Technicians Education Foundation (NATEF) certification. Others praised the state licensing requirements in such areas as licensed practical nursing, respiratory therapist, and cosmetology. One state director had already instituted some state-certified baseline competencies for secondary

and postsecondary teachers. All new hires and all current instructors seeking promotions in the state-run postsecondary area vocational schools must pass competency tests.

State directors often spoke of the need to integrate basic skills more completely into vocational curriculum, either to ensure that vocational students received needed academic and transferable skills (e.g., managing resources, understanding the nature of work) or to ensure that vocational courses received sufficient academic credits so that vocational enrollments would not be adversely affected by changes in high school graduation requirements. As one state director reported:

We've cut job specific skills at the secondary level, and some [local vocational] people are mad at us about that. While other states would have 5 to 8 units in job specific skills, it's more like 2 to 3 units here. This gives students time for academics. If you exempt students out of academics, then you are making vocational education students second class citizens.

Although less explicitly stated, states appeared to be active in curriculum development to highlight the value of vocational education. By demonstrating in concrete behavioral terms what graduates of given programs have learned, some vocational educators felt that the standing and image of vocational education would improve. This rationale for curriculum development was confirmed in the community case studies. Some vocational instructors shared competency lists they had developed with students, parents, and prospective employers to illustrate what students would get out of the program. They reported that parents and employers often commented: "I had no idea that students in this program would learn so much."

Numerous actors were involved in curriculum development supported with Perkins funding. They include interstate consortia, university consultants working with practitioners, state vocational personnel in conjunction with large committees of local teachers who meet regularly, state-organized technical committees, pairs of local schools, and individual vocational programs. We do not have information on how much curriculum development was conducted in-house or contracted out to universities, consultants, area vocational schools, or others.

All states visited belong to at least one interstate consortium on curriculum development, a number of which are regionally based. All but two states visited had completed or were developing curriculum guides, computerized test item banks, or catalogs for the Vocational-Technical Education Consortium of States (V-TECS). Earlier V-TECS guides were in such traditional vocational fields as masonry, homemaker, and auto body repair; while recent additions include emergency medical technician, computerized numerical control, and bank clerk. Membership in V-TECS allows those who are developing curriculum materials to receive those developed by other states at greatly reduced costs.

Other consortia that have gained popularity in states are those involved in the testing of applied technology curricula developed elsewhere, such as the Center for Occupational Research and Development in Waco, Texas, and the Agency for Instructional Technology in Bloomington, Indiana. The curricula include applied physics, math and communication. Consortia are pending in applied biology and chemistry, as well as in industrial technology.

Each state has established technical committees of employers, representatives of trade or professional organization and organized labor to advise on the development of model curricula to address state labor market needs. Such committees were required under section 11a(3)(d) of the Perkins Act. States vary in how they use these technical committees. Technical committees in one state prepared curriculum guides in automotive technology and electromechanical technology; while committees in another state developed 35 task lists to accompany competencies associated with specific occupations.

All three of the most populous states in the study appeared to be engaged in major curriculum initiatives. State 8 started in 1978 with a series of "futuring" activities to update vocational curricula, with an emphasis on basic academic skills and transferable employment rather than job-specific skills at the secondary level. Although the state appeared to be able to be more directive with local providers than other states, large committees of local vocational educators were involved in all revision efforts. Districts have begun implementing statewide a one-year technology program replacing industrial arts.

State 5 had just completed defining the competencies associated with 130 different occupations. Under its regional reorganization, each region was modifying the lists to match specific regional labor markets and developing lists of specific skills to be taught. Some 600 "master teachers" have been identified to serve as program advisors to verify the task lists with local business and industry. The curriculum development was a Perkins-funded effort, averaging over four million dollars a year. In addition, three million dollars of state funds were invested annually in reorganization, coupled with an identical amount of Perkins funds.

On a smaller scale, State 7 over the last five years funded its full-time area vocational schools on an RFP basis to develop competency-based vocational curricula. Based upon curricula in place, pairs of full-time area vocational schools, using both academic and vocational teachers, each devised "precisely stated occupationally verified competencies or tasks with learning objectives for each task." Each reviewed the other's work and jointly developed a single guide. Some 25 guides have been developed, each filling a large three-ring binder. Among the areas included were auto mechanics, computer technology, and ornamental horticulture. The state has currently funded an external contractor to assess implementation of these curricula statewide.

States play a major role in supporting the implementation of pilot or model programs developed either through consortia arrangements or by local districts. States typically released a Request for Proposals for districts to develop and/or implement a program. In contrast to curriculum development efforts, implementing model programs was a small scale effort that involved as few as one or two districts. At present, the Principles of Technology is probably the most popular program.

Statewide programmatic initiatives in vocational education were rare. Three states supported longstanding programs for actual or potential dropouts, other disadvantaged students, and handicapped students. Base support for these programs came from state funds, supplemented with either local or Perkins funding. A fourth state supported ten electronic centers for excellence that it hoped to replicate in other districts when anticipated state funding was appropriated.

How states sought to implement curriculum development locally varied among states, but was always heavily influenced by the strong "local control" tradition that characterizes state education agency and school district interactions even in the most regulatory of states. One state involved hundreds of teachers in design and field testing of materials and created both required and optional modules, in an effort to have local providers assume ownership of the curriculum. It is now implementing its technology curriculum statewide. Another regulatory state prohibits Title IIB funds for automotive projects unless the schools district has initiated the process to qualify for National Automotive Technicians Education Foundation (NATEF) certification. A third state included in its on-site monitoring checklist, an assessment of the extent to which local providers have implemented the state's curriculum framework. The state, however, has little monitoring capability or clout. Another traditionally compliance-oriented state informed districts that funds would be withheld if student "prescriptives" were not met. In the ten year that the prescriptives have been in effect, no one interviewed knew of any instance where funds had been withheld.

The two states not involved with statewide initiatives in vocational education, had no history of providing program improvement information to local providers. One state office was reported to be very understaffed, ranking near the bottom of states in number of administrative staff per number served. The state agency has traditionally held a weak political position relative to its area vocational schools. When it first sought to develop competency based curricula last year, for example, funds were simply distributed to the regional schools. The state office was interested in a more coordinated development of competency based curricula, but such activities were still in a planning phase. The second state with little involvement in state-wide initiatives had traditionally defined its role toward providers as a "policeman" and check-writing agency, including distributing Perkins funds by formula. A new state director, only recently in the position, hoped to turn the agency around.

The existence of statewide initiatives appears closely linked with the state size or, perhaps more accurately, with the magnitude of resources available at the state level. The three most populous states in the study (States 2, 5 and 8) each sponsored a variety of activities, and State 8 also played a major role in economic development and academic reform.

In addition to the creation of regional economic development centers and "futuring" efforts in curriculum reform, including revamping of industrial arts curriculum described above, State 8 sought to entice local vocational providers to work with other local agencies to provide vocational services to an expanded population. Under competitive requests for proposals, the state linked vocational funding with other funding sources to provide services for AFDC mothers, older adults, handicapped students, and adults. State offices involved include the department of social services, state employment office, and office of vocational rehabilitation. To win contracts, bidders had to demonstrate that they had established working relationships with the local counterparts of the other agencies. At the time of the field work, the state was also working on ways to involve vocational educators in implementing the education and training benefits packages increasingly found in union contracts.

Through its extensive regionalization program for vocational education, State 5 undertook the curriculum reform described above as well as other activities to match vocational education with regional labor market needs and better coordinate vocational education across institutions and population groups. More than two-thirds of the 60 regional offices had executed articulation agreements between secondary vocational education and community colleges, and coordinated services were being arranged for special education students. It was also involved in a longstanding statewide initiative for at risk students and oversaw a state-funded job-specific training program for employed workers.

State 2's vocational education agency was engaged in neither economic development nor academic reform, but supported a large state and locally funded program to provide preemployment and employment training services for handicapped youth. With Perkins funding, it invested about five million dollars a year in curriculum development, including the support of 30 consultants around the state. The state has developed model curricula that

are then made available to districts. Districts can pick and choose, within certain guidelines, what they want to use. Most technical assistance from the state and regional staff is in curricula issues. As with State 5, it too encouraged articulation agreements. This year almost one half million dollars was invested in its articulation project, linking secondary vocational education with community colleges.

It is difficult to assess the impact of the statewide initiatives undertaken by state vocational education agencies. With the exception of the most populous states, the most common activity undertaken by state agencies was curriculum development. All states spoke a similar language about competency-based curricula and skills lists, but we did not review curricular materials to note comparability or the extent to which guidelines contained statements of objectives, skills, or proficiencies. Nor do we know the extent to which these curricula have been implemented. Proficiency tests for students were under consideration in some states, but none have been pilot tested. Because curriculum development is such an important and visible state activity, it may be worthwhile to study state efforts more systematically.

The next three sections of the chapter deal with state administration of the Perkins Act. To facilitate the discussion, Exhibit 3.3 presents a state-by-state overview of state actions on funds distribution, state programmatic initiatives using Perkins funds, and state restrictions on funding use. The overview illustrates at a glance each state's overall approach to the administration of the Perkins Act, while the text explores similarities and differences across each of the states visited.

ACCESS OF INSTITUTIONS TO PERKINS FUNDS

Prior to allocating Perkins funds, eight of the nine states in our sample either established a proportion of funds for secondary and postsecondary sectors or limited eligibility for some Perkins set-asides by type of institution. Four states both prespecified allocations and restricted eligibility, three limited eligibility only, and one set only prespecified allocations.

Among the five states with prespecified allocation percentages, four states preset the percent of funds that secondary and postsecondary institutions would receive across all Perkins categories, while State 5 set a

Exhibit 3.3

STATE BY STATE DESCRIPTION OF PERKINS ADMINISTRATION

STATE 1 is a poor rural state, slowly converting from an agrarian to a manufacturing economy. Its Perkins allocation is about \$10 million.

Access to Institutions	State Initiatives in Perkins	Restrictions on Perkins Activities
<p>Funding pools for H and D set-asides provide more funds to state-run postsecondary AVSs. Adult, single parent, and incarcerated funds go only in postsec AVS. No Perkins funds go to community colleges; they are governed through separate Board of Higher Ed.</p>	<p>At least 40% of Title IIB funds go for curriculum and staff development. Figure is probably much higher. State very committed to upgrading programs and staff. Wants to provide state-driven vocational program.</p> <p>Three-fourths of sex equity funds support one innovative model child care program.</p> <p>Single parent centers at 10 postsec AVS funded through single parent funds.</p>	<p>Does not restrict funds as much as it does not publicize availability. Funding apparently depends upon whom you know in "old boy network." Several local directors were hired explicitly because they knew of state funding sources.</p> <p>Prohibits any equipment purchase under Title IIB. Says it should be a responsibility of schools and employers they serve.</p>

Exhibit 3.3
(continued)

STATE BY STATE DESCRIPTION OF PERKINS ADMINISTRATION

STATE 2 is a populous, fast growing state with a highly diverse economic base and population. Its Perkins allocation is over \$50 million.

Access to Institutions	State Initiatives in Perkins	Restrictions on Perkins Activities
<p>Overall a 55-45 split between secondary and community colleges. Split based on ratio of enrollment in 1968 when community college system split off from SDE. Within Perkins, 50-50 split on Title IIA, 55-45 for Title IIB, and 75-25 percent on administration. Funds are passed through to a separate community college agency, where more funds go out by formula than at the secondary level. Area vocational schools receive no Perkins funds directly, because they are felt to receive sufficient support compared to vocational comprehensive high schools.</p>	<p>Except for D&H, mostly RFPs at secondary level, and mostly formula at postsecondary level for Title IIA. Originally formula for individual community colleges done to keep budgets for operating projects undisturbed. Every community college received same amount for single parents. Sex equity coordinator changed that so that formulas based on percent of female head of households.</p> <p>RFPs for innovative programs, guidance and counseling focused on placement, projects in heavily minority districts (state is about half minority students).</p> <p>Set up MIS system to help districts define possible matches for D&H funds.</p>	<p>Minimum grants for adult, single parent, and sex equity to concentrate resources for an educationally meaningful program and to make grants worth the trouble of the federal strings. To receive single parent funds, must accept sex equity funds, so that one "works before the fact, not after the fact." No equipment purchases allowed under sex equity funds, again to concentrate on service provision.</p> <p>No IIB funds may be used to buy equipment. Rather 75 % on instruction, 10 % on staff development, 7% on state supplied TA, 4% on curriculum development, about 2% each on research/evaluation and vocational student organizations.</p> <p>In each area, 6% required for counseling and guidance to maintain past level of effort.</p>

Exhibit 3.3
(continued)

STATE BY STATE DESCRIPTION OF PERKINS ADMINISTRATION

STATE 3 is a mountainous state with a single population center, recouping from the drop in oil and agricultural prices. Its Perkins allocation is near \$10 million.

Access to Institutions	State Initiatives in Perkins	Restrictions on Perkins Activities
<p>One agency oversees all vocational education at all levels, including governing authority over community colleges. No overall match, but prespecified 50-50 split on H, 45-45-10 split on D (the 10% being CBCc). Adult and single parent funds are both community college only, as is 80% of sponsored equipment under Title IIB. Also minimums on Title IIB sponsored equipment set at \$50,000 for each community college and \$550 for each sec district. Largest city received \$4000.</p>	<p>State very concerned about influx of minority and disadvantaged students, and dislocated workers from economic depression. Combined IIA Adult funds with IIB Program Improvement funds for guidance counseling for adults. All Sex Equity funds went for RFPs to expand opportunities for women in high technology. RFPs for high school single parents focused on instruction and support services for those at risk of dropping out of school. RFPs for community colleges on support services to increase access.</p>	<p>No floors on H&D funds, but minimums set on sex equity and single parents funds, when evaluation found smaller grants had little effect.</p> <p>About 40% of IIB funds set-aside for sponsored equipment, 20% statewide initiatives (e.g., econ development initiatives, statewide conference, public info campaign, research, electronic communication system), and about 10% each on regional planning, regional TA, curriculum development, and student voc orgs. In keeping with state commitments, RFPs under Title IIB stressed program improvement for special population groups.</p>

Exhibit 3.3
(continued)

STATE BY STATE DESCRIPTION OF PERKINS ADMINISTRATION

STATE 4 is one of the fastest growing states in the nation, with an economy dependent on tourism, service occupations and high technology. It has a history of underspending its \$30 million Perkins allocation.

Access to Institutions	State Initiatives in Perkins	Restrictions on Perkins Activities
<p>Office administering Perkins oversees county district system that administers districts and postsec AVS. Community colleges overseen by separate office in SDE. No prespecified split, but overall less than 20 percent goes to postsec.</p>	<p>Little state guidance on content although very strong compliance state. Saw itself as "policeman" until new director last year. With rare exceptions, virtually all funds go out by formula with recipients writing grants re spending. Large though unknown amount of unspent funds. Next year moving to RFPs in sex equity and single parents because so much unspent funds; locals did not write proposals to spend the money.</p> <p>About 25% of sex equity and single parent money for state provided TA in this area. Other funds by formula.</p> <p>Interest by state person in incarcerated resulted in \$400K from adult funds also in this category.</p>	<p>Few restrictions. Discourages use of D funds at secondary level for basic skills remediation because of state compensatory education program.</p> <p>13% of IIB retained at state level for regional TA, state occ info system. Another 40% goes for curr dev consortia fees, staff dev, dissem center, high tech jobs info center. Rest out by formula with recipients who then write grants justifying expenses. Although not Perkins-specific, 70% of graduates in each vocational program must be placed in a job in area of training. If goal not met three years in a row, it could lose state funding. No known cases.</p>

Exhibit 3.3
(continued)

STATE BY STATE DESCRIPTION OF PERKINS ADMINISTRATION

STATE 5, a large manufacturing state in the "rust belt", has undertaken a large scale regional reorganization of vocational education. Its Perkins allocation is around \$30 million.

Access to Institutions	State Initiatives in Perkins	Restrictions on Perkins Activities
<p>Perkins office oversees districts and sec AVS, while separate agency oversees community colleges. Large scale regional system being developed, with state emphasis on articulation between sec and comm colleges. There is no prespecified split, but 60-40 split due to proportion of FTE credit hour enrollments. No Adult funds to secondary level. Large state voc ed investment helps locals make match; match waived if locals cannot match.</p>	<p>To assist their core activity--the regional reorg of voc ed, 25% of Title IIB funds are matched with \$3M in state funds. Also 35% goes for cur dev in the new regions, and to cur dev consortia, and info clearinghouse. Another 8% goes to reg. units for staff dev.</p> <p>Adult funds are matched at the state level and used for inplant training and retraining for employees. This is a statewide project.</p> <p>RFPs for Sex Equity and Single Parents funds. Used for exemplary projects, regional centers, regional TA, and a resource center. Shifting next year to concentrated formula in an attempt to encourage more local involvement in these areas.</p>	<p>No II A adult funds for secondary. To ease accounting, state funds are used at that level, and Perkins at postsec.</p> <p>State encourages combining of H&D funds. H&D funds cannot be used for remedial math, English or reading; or for special or adapted equipment. Perkins to be used for new ideas (e.g., tutors), not for activities that can be funded elsewhere. (State funds a variety of categorical programs.) Also no Perkins can be spent on guidance, counseling or career dev because difficult to reliably audit.</p> <p>For the most part, no equipment under title IIB because a state inventory of equipment for audit purposes would be too cumbersome to maintain. Also state funds are available for equipment.</p>

Exhibit 3.3
(continued)

STATE BY STATE DESCRIPTION OF PERKINS ADMINISTRATION

STATE 6 is a very small rural state with a declining economy and a limited state presence in vocational education. Its Perkins allocation is just over \$2 million.

Access to Institutions	State Initiatives in Perkins	Restrictions on Perkins Activities
<p>Office overseeing sec and AVTS administer Perkins, with com col overseen by separate and co-equal office in SDE. AVTS traditionally received more funds, though com col now writing many proposals for funding.</p>	<p>Very weak state role, in part because of few state staff. Except for customized training (below), there are no state initiatives. Until this year, curr dev funds just went to AVS for their use. Funds go by RFP to all comers.</p>	<p>State does not restrict activities allowable under Perkins. Not known what percent of IIB retained at state level, but well below the 20% allowed.</p>
<p>No IIA Adult funds at secondary level.</p>	<p>State officials were glad IIB funds limited to program improvement; hope it can provide leverage so that they can develop a state role in cur dev by developing standard profile of competencies and tasks.</p>	
<p>For two years state distributed Perkins funds to regions by formula based on population size to distribute funds equitably and to encourage regional planning. Sparsely populated regions in revolt, saying "a lathe costs the same here as in the capitol city." System abandoned last year, replaced with RFPs.</p>	<p>Perkins Adult funds combined in state department of commerce funds and employer funds to provide customized training, so far one of few economic dev activities in the state.</p>	

Exhibit 3.3
(continued)

STATE BY STATE DESCRIPTION OF PERKINS ADMINISTRATION

STATE 7 is a midsize industrial state with a booming economy in high technology and service. Its Perkins allocation is over \$20 million.

Access to Institutions	State Initiatives in Perkins	Restrictions on Perkins Activities
<p>Office administering Perkins housed in SDE and oversees districts and fulltime area vocational schools. Community colleges under governance of Board of Higher Education. No prespecified percent distribution, but access is limited for community colleges. Until this year, no H funds to community colleges. Community colleges do not receive Adult, Sex Equity or Program Improvement funds. Adult funds limited to area vocational schools, and Single Parent funds to community colleges.</p>	<p>State very committed to civil rights access. Every project, for example, must enroll at least one nontraditional student.</p> <p>Also used RFPs in sex equity for exploratory programs (e.g., "shadowing" employees in nontraditional jobs and peer support groups in nontraditional programs). State's sex equity coordinator consulted all projects and six regional consultants provided TA and workshops.</p> <p>Single Parent funds supported operating programs, such as computer technology, because other funds went toward support services.</p> <p>State supported competency based cur dev by pairs of area voc schools; also belongs to consortia, and is strong advocate of <u>Principles of Technology</u>.</p>	<p>Very regulatory state, with rules both for compliance and program improvement. Annual on-site monitoring. Extensive evaluation activities.</p> <p>To maintain level of effort in guidance and counseling, at least 20 percent of all H&D funds must go for counseling. LEP funds must be spent before D funds may be accessed.</p> <p>Under IIB, equipment limited to 10% or \$50K, whatever is higher.</p> <p>Three year limit on all Perkins funded activities, not just Title IIB.</p> <p>Disallows instructional salaries as a match for Title IIB funds.</p>

Exhibit 3.3
(continued)

STATE BY STATE DESCRIPTION OF PERKINS ADMINISTRATION

STATE 8 is one of the most populous and geographically largest states, with a varied and stable economy. Its Perkins allocation is near \$50 million.

Access to Institutions	State Initiatives in Perkins	Restrictions on Perkins Activities
<p>Overall a prespecified 72-28% split between secondary and community colleges. Both administered in same agency though in different offices. The secondary office is the key decisionmaker. Community colleges share of Perkins is increasing slowly. Restricts all remaining funds to "major providers" who offer at least five voc programs and to community colleges. Combined, they enroll 90% of the students. Because "major providers" had received all VEA funds, the Perkins formula under H&D created a major "hold harmless" problem.</p>	<p>Leader in curr dev with large scale efforts underway in all content areas. Started 10 years ago. Statewide technology program now replacing industrial arts. Also leader in econ development (e.g., \$10M in regional centers). Using Perkins funds to leverage other funds for joint projects (e.g., linking Perkins with funds from other state agencies such as H with OVR).</p> <p>55% Title IIB by RFP, rest by formula.</p> <p>All Single Parent, most Adult, and secondary Jex Equity funds all go out by formula in part to have locals buy into cur dev and to "hold harmless" losses from VEA to Perkins.</p>	<p>Minimum H&D grants of \$1,000 to concentrate funds and minimize loss of funds from VEA to Perkins.</p> <p>Discourages but doesn't restrict equipment purchases under IIB. State equipment funds available.</p>

Exhibit 3.3
(continued)

STATE BY STATE DESCRIPTION OF PERKINS ADMINISTRATION

STATE 9 is a mid-sized state that has recently been the site of much economic and technological development. Its Perkins allocation is near \$20 million.

Access to Institutions	State Initiatives in Perkins	Restrictions on Perkins Activities
Perkins administered in an office in SDE. When postsec AVS transferred out of SDE to separate board for community college and tech institutes the Title IIB \$2 million allocation reduced to \$500K. No prespecified split on sec/postsec, but overall postsecondary allocation is very small.	Sex Equity and Single Parent funds distributed by RFP, but with little guidance. Several state officials felt there was no need for these funds. Adult and IIB funds distributed by formula.	State requires that Perkins H funds be spent on an aide in each vocational class with more than 5 H students. At least 50% of Title IIB must go for equipment, because state is "starved" for equipment. Minimum set-asides made by state on supplies and materials by subject matter area. Only 13% of allowable 20% of Title IIB funds retained for state initiatives.

proportion in advance only for handicapped and disadvantaged students. That slightly more than half of the states in the sample would preset allocations between secondary and postsecondary institutions is consistent with the national picture. Fifty-four percent of all states set a percent distribution for Perkins disadvantaged funds in advance, resulting in a higher percentage of disadvantaged funds going to postsecondary than to secondary vocational education (33 percent versus 24 percent) (State Policies in Vocational Education, 1988, 2-12).

A sixth state (State 6) had earlier preset the percent of funds that geographic regions of the state could receive, once funds for handicapped and disadvantaged students had been awarded. They had hoped to foster regional planning and to distribute funds more proportionately to population size. The system proved untenable and was dropped after rural area vocational schools complained that equipment costs were the same in urban and rural areas.

State 8 preset overall allocations and allocations for each set-aside. It also required that recipients qualify for a minimum of \$1,000 to receive handicapped and disadvantaged funds. Without a preset floor, funds for handicapped and disadvantaged students would have been dispersed over a large number of very small school districts. It also restricted all other Perkins funds to institutions that provided a range of vocational offerings. The state strongly encouraged concentrating Perkins funds in general, and sought to minimize the shifts in funding allocations between the Vocational Education Act and the Perkins Act.

The most frequent Perkins category with restricted eligibility was the Adult set-aside, followed by Single Parent/Homemaker and Program Improvement. States 1, 3 and 5 limited the Adult competition to postsecondary institutions only, while State 7 limited funds to secondary area vocational schools. States 1 and 5 also restricted Single Parent funds to the postsecondary level. Three states limited access to Perkins Title IIB program improvement funds. State 7 excluded postsecondary institutions entirely, State 9 restricted postsecondary institutions to less than 10 percent of the funds, and State 3 earmarked 80 percent of sponsored equipment funds for community colleges. Lastly, State 7 also reserved Perkins sex equity funds to the secondary level and until this year restricted funds for handicapped students to the secondary level as well.

It was not always clear why states restricted the access of particular institutions to funding categories or set eligibility pools in advance. Although the percent split between secondary and postsecondary institutions varied somewhat from year to year in some states, the existence of a prespecified split was longstanding practice, and responses such as "It's been that way as long as I've been here" were not uncommon. The strength of historical precedent was evident in State 2, where community colleges (the only postsecondary institutions receiving vocational funds) sought to increase their share of 45 percent. The 55-45 split between secondary and postsecondary vocational education reflected the actual difference between the elementary/secondary allocation and the allocation for grades 13-14 as it existed in 1968 when the community college system was split off administratively from the state department of education. Three years ago, the community colleges sought to increase the postsecondary share by two percent. The controversy over this and other issues led the community colleges to withdraw from the state's joint advisory policy council for vocational education and the council was dissolved. It was only reestablished this year. Although the struggle over the split continues, the relative shares remain the same.

In at least four states, funding restrictions appeared associated with governance issues. Through exclusions and eligibility pools, State 1 provided far more funds than would otherwise have been allocated to its state-funded and state-administered postsecondary area vocational schools. It also excluded from all Perkins funding the community colleges administered through another state agency. State 7 favored its politically powerful area vocational schools over comprehensive high schools and virtually closed out the separately-administered community colleges. Community colleges were eligible for Perkins funds only for disadvantaged students, sex equity and single parents/homemakers programs. In an apparent quid pro quo, State 9 earmarked more funds to secondary vocational education when its administration of postsecondary area vocational schools was transferred to the state agency overseeing technical institutes and community colleges. Once out of its jurisdiction, postsecondary vocational education -- a hotbed of activity in this state -- lost all but \$500,000 of its earlier two million dollars in Perkins program improvement funds. Lastly, in State 3, where Perkins funds were administered through a community college board, more funds and

individually larger concentrations of funds were invested in community colleges. Handicapped funds, for example, were distributed on a 50-50 split, although more handicapped students were enrolled in secondary than postsecondary vocational education. In addition, community colleges were entitled to 80 percent of equipment funds available under Perkins program improvement. Each community college was assured \$50,000 in Perkins funds for sponsored equipment, while secondary districts were guaranteed only \$500. The community colleges visited received about \$90,000 in sponsored equipment, while the state's largest school district received just over \$4,000.

State 5 sought to distribute Perkins funds in the same ratio as the number of course hours taught in vocational education at the secondary and postsecondary level. This resulted in a 60-40 split between secondary and postsecondary programs. It also restricted eligibility in one category because state funds were already available for those institutions.

Once disadvantaged and handicapped funds were allocated, State 8 limited access to all remaining Perkins funds to institutions offering a wide range of vocational education options. This arrangement was designed to ensure that funds could be concentrated in institutions offering full-service programs, including adult vocational education; and it helped to "hold harmless" the changes in allocations brought about when the Perkins Act required that disadvantaged and handicapped funds be distributed on a population basis.

State 2 did not distribute Perkins funds to state-supported area vocational centers, reportedly because these programs were felt to receive sufficient state support (over \$200 million a year), unlike comprehensive high schools in the state. Although these institutions received no Perkins funds directly, districts were allowed to transfer funds to them if district students enrolled in their programs. The area centers were not administered through the state vocational unit overseeing Perkins funds, but through another unit within the state education department.

State 4 did not place eligibility restrictions on any Perkins funds, nor did it use a preestablished split between secondary and postsecondary vocational education. The state has historically played a weak role in vocational education, serving primarily as a check-writing agency, allocating Perkins funds by formula in each category. Leadership potential in the state

appears limited, although a new state director hoped to provide more direction. School districts are organized on a county system, with the district administering all secondary vocational education as well as any certificate-granting postsecondary vocational centers within their boundaries. At least 80 percent of Perkins funding goes to schools districts, who decide the distribution of funds within the county between secondary and postsecondary vocational education. Community colleges receive their Perkins allocation directly from the state from funds transferred from the unit overseeing the county vocational education system.

States restrict the access of institutions to Perkins funds, and are more likely to limit access to institutions that do not come under their administrative control at the state level. The only state not to limit funds has traditionally played a weak role vis-a-vis local providers of vocational education. The extent to which the state directs the content of Perkins-funded activities are described in the following sections.

PERKINS TITLE IIA FUNDS FOR SPECIAL POPULATIONS

Under the Perkins Act, Title IIA set funds aside for each of six target groups. They are as follows:

GROUP	PERCENT OF TITLE IIA FUNDS
Handicapped	10%
Disadvantaged	22%
Adults	12%
Single Parents/Homemakers	8.5%
Sex Equity	3.5%
Incarcerated	1%

The federal funds are to be matched dollar for dollar on the first three categories, and funds for handicapped and disadvantaged students must only be used for the costs of instruction in excess of those provided other vocational students.

Although states often restricted access of institutions to Perkins funds, states were less likely to direct or restrict the content of activities undertaken with Perkins funds for special populations. Although most states visited either used requests for proposals (RFPs) or a mix of allocation methods to distribute funds, states seldom defined specific priorities, nor did they often concentrate resources in a few statewide centers. Three states directed how Handicapped, Disadvantaged and Adult funds were to be used, while four states had a substantial influence on what Single Parent/Homemaker and Sex Equity funds provided.

Handicapped and Disadvantaged Students

States seldom defined how funds for the handicapped and disadvantaged were to be used. The Perkins Act specified that all funds were to be distributed to local providers according to a federally-defined intrastate formula.* States were not allowed to withhold funds at the state level for

*Difficulties that have arisen in the use of the intrastate formula are described in Chapter 4.

state-wide initiatives, nor could they use such distribution mechanisms as requests for proposals that would allow them to target recipients. The approximate allocations for handicapped and disadvantaged students are described in Exhibit 3.4.

Six of the nine states visited placed no additional restrictions on activities supported by Handicapped and Disadvantaged funds. State 7 required that 20 percent of Handicapped and Disadvantaged funds be spent on guidance and counseling activities to maintain its level of effort. It also required that other disadvantaged funds could not be spent until Limited English Proficient (LEP) funds were expended. Because the state prescribed no floor on LEP funds, some recipients were faced with what they saw as the nuisance of spending as little as \$20 of LEP funds before they could spend other Disadvantaged funds.

State 5 prohibited Handicapped and Disadvantaged funds from being spent on remedial math, English or reading; for special or adapted equipment; or for guidance. The state agency felt that other state categorical programs were available for remedial programs and specialized equipment, and disallowed funds for guidance because they felt it was difficult to audit reliably.

State 9 required that all Handicapped and Disadvantaged funds be used to support an aide for every five students.

Adults

The 12 percent set-aside for adults needing training and retraining was new with the Perkins Act. The approximate allocations for the nine states visited are shown in Exhibit 3.5. The allocations ranged from a low of \$250 thousand to a high of about \$7.5 million. There was some concern expressed about how states would allocate these funds, including whether they would simply fold them into other educational funding for adults. Although the states visited did not fold their funds into general funding for adults, they generally provided little direction on how funds should be spent.

States were more likely to distribute Perkins Adult funds by formula than by other mechanisms and, in so doing, did not attach a state perspective to project activities. Even among the two states that distributed funds by competition, the state did not provide much guidance on spending. Within the

Exhibit 3.4

APPROXIMATE ALLOCATIONS FOR HANDICAPPED AND
DISADVANTAGED STUDENTS UNDER THE PERKINS ACT

Perkins Handicapped Allocation	Perkins Disadvantaged Allocation
Two states between \$4.5 and \$6.5 million	\$10 and \$14 million
Two states about \$3 million	Over \$6.5 million
Two states about \$1.5 million	Over \$3.5 million
Two states about \$750 thousand	Over \$1.6 million
One state about \$200 thousand	Less than \$500 thousand

Exhibit 3.5

**APPROXIMATE ALLOCATIONS FOR ADULTS
UNDER THE PERKINS ACT**

Perkins Adult Allocation

Two states between \$5.5 and \$7.5 million

Two states about \$3.7 million

Two states about \$2 million

Two states about \$1 million

One state \$250 thousand

five states that allocated Perkins Adult funds at the secondary level, three used primarily a formula distribution, while one used discretionary mechanisms and another used competition. At the postsecondary level, two rural states allocated funds either by competition or by discretionary means. The other seven states distributed Adult funds primarily by formula, although each reported that they used some competition or discretionary mechanisms for some funds.

State 1 distributed its Perkins Adult money through competition and unsolicited proposals submitted by its state-run postsecondary area vocational schools. Two competitions were identified: one to train cashier-checkers in conjunction with the retail grocers association, and another to provide supervised on-the-job training to students who were first time entrants into the labor force. Except for these projects, it appeared that most funds went for unsolicited proposals from its postsecondary area schools. Although no project-specific budgets were available, we were told that virtually all unsolicited proposals were funded.

State 6 combined its Perkins Adult funds with state and industry funds to create a funding pool for RFPs for postsecondary institutions to provide in-plant training and retraining activities.

For the seven states that relied primarily on formula allocations, states distributed funds without specifying the nature of activities to be undertaken. But states often supported one or two small state initiatives under competitions or discretionary awards.

State 8 that had initiated linkage projects with other state agencies combined some Perkins Adult funds with JTPA funds for older adults and with federal Adult Education Act funds for ten adult career counseling centers around the state.

State 2 distributed its Adult funds to community colleges by formula, but secondary funds were distributed by requests for proposals, with half the funds targeted on placement services for adults. The remaining funds were equally divided between requests for proposals on innovative programs, modernization of equipment, and programs with a verified labor market need.

State 3 combined Perkins Adult funds with Perkins Program Improvement funds to support guidance counseling and placement services for students that focused on several concerns, including eliminating sex, race, and ethnic bias.

State 4 used its Adult funds at the postsecondary level to support ten centers for excellence in electronics at its county area vocational schools and computerized remedial laboratories in both county area vocational schools and community colleges. The state was optimistic that they would expand the electronics programs through state funding.

Sex Equity

Also new with the Perkins Act was the inclusion of a 3.5 percent set-aside for programs, activities and services to promote sex equity and overcome sex stereotyping and bias in vocational education. While similar language had been included in the 1976 Amendments to the Vocational Education Act, very few funds had been expended on this activity. Partly as a result, the Perkins Act targeted funds specifically in this area. The approximate allocation among the nine states visited is contained in Exhibit 3.6. Allocations ranged from a low of \$75 thousand to a high of \$2.3 million.

Because the set-aside was relatively small and because states had traditionally paid little attention to this area, concerns had been expressed about how states would distribute funds and whether the set-aside would encourage the support of specific activities.

A major Congressional concern was whether states concentrated funds or dispersed them so thinly that they could have little effect. Only two states among the nine visited set minimum allocations (between \$1,200 and \$1,500 for secondary programs, and \$2,000 for postsecondary in one state and \$30,000 for postsecondary in the other). Because of state direction, funds were somewhat concentrated in another three states. In the remaining four states, no minimum allocation for Sex Equity funds was set, and grants in the one state where information was available were as small as \$800. Such minimal allocations usually resulted in sex equity funds expended on brochures c other outreach documents.

Exhibit 3.6

**APPROXIMATE ALLOCATIONS FOR SEX EQUITY
UNDER THE PERKINS ACT**

Perkins Sex Equity Allocation
Two states between \$1.7 and \$2.3 million
Two states about \$1 million
Two states about \$600 thousand
Two states about \$275 thousand
One state \$75 thousand

Although most states used competitive allocation methods, only four states appeared to provide substantive direction to the content of sex equity projects. Respondents in State 9 felt there was no need for these projects in their state.

State 3, with less than \$300,000 in Perkins Sex Equity funds, focused all its funds on requests for proposals to expand opportunities for women in high technology occupations. Up to \$20,000 in grant aid was available to run such programs at both the secondary and postsecondary level. At the postsecondary level, 15 percent of the funds could be used for child care. Maximum grants of just over \$5,000 were also available for exemplary secondary programs in that area. The state had moved to concentrating its Sex Equity funds when it found that funds had previously been spread too thinly to have much effect. This was the same state that combined Program Improvement funds with Adult funds in the previous section.

State 7, with its strong state presence in civil rights access, used its half million dollars in Sex Equity funds on 14 secondary projects, most of which were geared toward materials development and exhibits, although exploratory programs were also funded, including having students observe employees at work in nontraditional jobs. Nontraditional peer support groups were supported in one project, and another project created a task force on sexual harassment. It is not clear how much the state directed the content of the projects, although the state's sex equity coordinator visited and consulted with each project over the course of the year, and technical assistance consultants (one for each of six regions) provided workshops and other assistance to schools.

State 1 also was very directive in how funds were to be spent. It awarded a grant that appeared more appropriate for Single Parent funds than for a setaside designed to overcome sex bias and sex stereotyping. It used almost all its Sex Equity funds for a model child care program for 100 children of secondary students. The remaining ten percent of the Sex Equity funds went for scholarships for tuition aid to students at the state-run postsecondary area vocational schools.

Among the three most populous states, one exercised considerable direction while the other two relied on formula allocations. State 5 funded a state resource center on sex equity, sex equity consultants in six regions.

and a number of minigrants. State 8 distributed most of its Sex Equity money by formula to "hold harmless" differences in providers' budgets between the Perkins Act and its predecessor. It did hold out a small percent of Sex Equity funds to support women entrepreneurs. State 2 also distributed most of the Sex Equity funds by a formula that required that six percent of the funds be spent on guidance and counseling and prohibited recipients from buying equipment with Sex Equity funds.

Distribution mechanisms have been problematic in some states. State 5 was moving away from state-wide projects to a formula allocation in order to encourage more district participation; while State 4 was moving toward competition through requests for proposals because large amounts of funds went unspent through its formula allocation system. Currently at the secondary level, six of the nine states used requests for proposals, one used discretionary mechanisms in conjunction with others, and two relied primarily on formula allocations. The pattern was similar at the postsecondary level: five states relied on requests for proposals and three used formula allocations, usually in conjunction with other methods.

Single Parents/Homemakers

The set-aside for single parents and homemakers was also new with the Perkins Act. The 1976 Amendments to the Vocational Education Act had mandated activities for displaced homemakers but had not targeted funds specifically for that group. Even with the mandate, states invested few federal funds in services to facilitate the reentry of these individuals into the labor market. The approximate allocation of Single Parent funds among the nine states visited is included in Exhibit 3.7. Allocations ranged from a low of \$175 thousand to a high of \$5.5 million.

As with Sex Equity grants, four states appeared to provide some direction on how Single Parent funds should be spent, the same states that provided direction on Sex Equity funding.

State 3, the same state that had targeted its Sex Equity funds on promoting women into high technology fields, also specified through three requests for proposals how Single Parent funds were to be used. The state directed that all secondary projects focus on instruction and support services for teen parents at risk of dropping out of school. Postsecondary projects

Exhibit 3.7

APPROXIMATE ALLOCATION FOR SINGLE PARENTS/
HOMEMAKERS UNDER THE PERKINS ACT

Perkins Single Parent/Homemaker Allocation

Two states between \$4 and \$5.5 million

Two states about \$2.6 million

Two states about \$1.5 million

Two states about \$700 thousand

One state \$175 thousand

were to focus on support services to increase the access of vocational education to single parents/homemakers. About five percent of Perkins funds supported exemplary projects. In all instances, up to 15 percent of the grant could support child care.

Because already established centers for displaced homemakers provided a variety of support services for clients, including recruitment and counseling, Perkins Single Parent funds in State 7 were used in community colleges for skills training programs, the only instance in our sample where all Perkins Single Parent funds were used for operating programs. Programs were offered in over 20 occupational areas, but more than three-fourths were in traditionally female occupations (e.g., clerical, health, accounting, child care, and hospitality). Just under one quarter of the programs were in such fields as computer applications, computer maintenance/technology, electronics assembly, painting and decorating.

State 1, the rural state that operated its own postsecondary vocational centers, used 80 percent of its funds to operate ten single parent centers at those centers. The remaining funds were used for child care and transportation to those facilities.

State 5 is currently operating 12 displaced homemaker centers and over 30 exemplary projects. Project budgets typically range from \$35,000 to \$90,000. Next year it is moving toward a formula allocation in targeted geographic areas, selected for their concentrations of welfare recipients and single parents. The two other most populous states distributed most funds by formula. State 8 placed no restrictions on formula funds, while State 2 required recipients of Perkins Single Parent funds also to receive Perkins Sex Equity funds. This state used discretionary mechanisms to award a large portion of its secondary funds, with one third targeted to districts with large numbers of minority students. Another third of the funds went for curriculum development and media materials, with ten percent focused on research and evaluation activities.

As with Perkins Sex Equity grants, states were continuing to grapple with funding mechanisms. State 4 was moving from formula allocations to requests for proposals because providers were not spending funds. Another is moving from competitive procurements to concentration grants. Currently eight of the nine states visited used the same allocation procedures for Perkins

Single Parents/Homemakers funds as they did for Perkins Sex Equity funds. States were more likely to use competition than other mechanisms. At the secondary level, three states used competition, one used discretionary means, and two states relied primarily on formula allocations. At the postsecondary level, five states used competition primarily and four used formula allocations. Competitive and discretionary methods enable the state to provide substantive direction on how Perkins funds are spent. Although slightly more than half of the states visited used such methods, just less than half (four of the nine states) provided substantive direction.

Incarcerated

New with the Perkins Act was the one percent set-aside for vocational education programs for criminal offenders in correctional institutions. Among the nine states visited, allocations for the incarcerated ranged from \$20,000 to \$650,000. Because the program was new and not substantially funded, questions arose about whether the state vocational agency would administer the funds or transfer them to another agency, such as the one responsible for corrections. Six states administered the funds in their entirety, while three states transferred at least half of their funds to a department of corrections for youthful offenders. Two states contracted with community based organizations (CBOs) to provide literacy and pre-employment skills, usually to inmates nearing the end of their incarceration. The two rural states with strong postsecondary area vocational schools (States 1 and 6) designated these centers as service providers. State 1 used its funds for equipment, while State 6 provided program support. Its day school-night prison program operating in its largest city was cited as a model program by respondents. Lastly, State 4 supplemented its one percent set-aside of \$250,000 with over \$300,000 of Perkins Adult funds, because the state vocational education office was strongly committed to a program for the incarcerated.

PERKINS TITLE IIB FUNDS FOR PROGRAM IMPROVEMENT

By requiring that all funds under Title IIB of the Perkins Act, the remaining 43 percent of the basic state grant, be targeted on improvement or expansion, Congress precluded the use of federal funds for ongoing maintenance

of vocational programs that had been allowed in earlier federal legislation. Although states had already used federal funds for such improvement activities as curriculum development, staff development, and research; there was some concern that states may have difficulty with targeting all funds on improvement initiatives. Among the states visited, Title IIB has generally been praised for its focus on innovation, including the feeling among the least directive states that this Title may help them be more directive with their largely autonomous local providers. The approximate allocations among the nine states visited are shown in Exhibit 3.8. Funds ranged from a low of less than one million dollars to a high of about \$28 million.

States were more likely to provide direction on Title IIB funds than on Title IIA funds. All states used Title IIB funds for curriculum development, staff training, and guidance and counseling; although two states appeared to leave the content of those activities up to local discretion. As discussed earlier in this chapter, curriculum development dominated discussions with state officials. Six states also provided some direction on equipment purchases.

In seven of the nine states, the single largest budget item under the Perkins IIB set-aside was a grants announcement or entitlement formula allocation to local providers for program improvement. In the eighth state, the largest category was a formula allocation for equipment, while State 1 provided no budget figures on Program Improvement funds. States often reiterated the general uses of funds allowed in the federal law, and usually did not comment on the use of funds, with one exception -- equipment. Six states specifically mentioned how and whether equipment could be purchased with Title IIB funds. Four states limited the extent to which Perkins Title IIB funds could be used for equipment, another required that at least half the grant be used for equipment, and one created a separate category solely for equipment purchases.

Two states prohibited the purchase of equipment under Perkins Title IIB. State 2 specified that funds were to be used to purchase instructional or related support materials in vocational content areas or to reinforce basic academic skills and occupational competencies in vocational courses. State 1 focused Perkins Title IIB funds primarily on curriculum and staff development. For the secondary level, State 5 urged that funds be spent on

Exhibit 3.8

APPROXIMATE ALLOCATIONS FOR IIB PROGRAM IMPROVEMENT
UNDER THE PERKINS ACT

Perkins IIB Program Improvement Allocation

Two states between \$25 and \$28 million

Two states about \$14 million

Two states about \$7 million

Two states about \$3 million

One state \$900 thousand

curriculum renewal and staff development, although it allowed that providers could address equipment modernization. The single largest district in the state invested none of its \$500,000 grant on equipment. At the postsecondary level, on the other hand, all Perkins Title IIB funds were to be used for equipment purchase. State 7 limited the purchase of equipment to 10 percent of the Title IIB budget or \$50,000 whichever was higher. The smaller sites visited in this state tended to spend IIB funds on equipment, while the largest district was limited by the \$50,000 cap. All four states had alternative state sources for equipment purchases either through a line item budget or a state lottery.

Two states encouraged equipment purchases. In State 9, at least 50 percent of the Perkins Title IIB funds were to be spent on equipment, because respondents declared the programs were "starved" for equipment. State 3 created a separate entitlement category for sponsored equipment under Perkins Title IIB that accounted for almost 40 percent of the program improvement budget. Eighty percent of the sponsored equipment funds were directed to postsecondary institutions (i.e., community colleges), with 20 percent for secondary vocational education programs. The postsecondary equipment funds were increased more than half again as much by the addition of over \$500,000 in Perkins IIA Adult funds. Although this state invested considerable resources in equipment, it had also designed a number of projects aimed toward increasing the access and participation of special population groups. Each community visited in that state supported special populations through Title IIB funding.

The remaining three states did not direct local providers in equipment purchases, but in the communities visited in these states, Perkins Title IIB funds were likely to be spent on equipment. When states were silent or encouraged equipment purchase, both secondary and postsecondary providers tended to view Perkins Title IIB funds as "federal equipment money," and targeted them accordingly.

All states used Perkins Title IIB Program Improvement funds for curriculum development, professional staff development, and guidance and counseling activities that included the state's occupational information system. As described earlier, the mechanisms for curriculum development varied from state to state. States worked with universities or consultants,

belonged to regional consortia, and sometimes supported state resource centers for distribution and dissemination of materials. States may retain up to 20 percent of their total Title II allocation for state use. It is unclear how large a proportion was used because of contracts to universities for staff development. It appeared that one state used at least 40 percent of its funds on state projects, while another spent less than 10 percent.

Professional staff development activities followed a similar pattern, with the least directive states distributing funds among local providers for locally-defined needs. Some states funded universities to provide staff development in prearranged areas, and also provided funds to local providers. Two states used Program Improvement funds to support state-provided regional technical assistance that may also be termed staff development. One state also supported preservice and inservice education for vocational educators, while the other state did not.

In addition, most states also used Perkins Title IIB funds to support vocational student organizations and some research and evaluation activities. The evaluation activities were often those required under the Perkins law, so that 20 percent of the providers were assessed annually. One state contracted with a private research organization to conduct student and employer follow-up interviews; another devoted a small portion of Perkins funds to start setting up an accountability system within the state. State 3 sponsored a \$150,000 grants competition among secondary providers to study enrollment change in their schools or districts. The state was concerned about the reasons behind the sharp declines in area vocational school enrollment and the growth in vocational enrollment in large cities.

Half the states targeted a portion of Perkins Title IIB program improvement funds on regional development, whether in regional coordinating councils or in more general regional planning. State 5, where the provision of vocational education has become a regional system, was the most active state in this area. Three million dollars of Perkins Title IIB funds, matched with three million dollars of state funds annually went into regional planning.

As was found with Perkins Title IIA funds, the most populous states -- and hence those with larger federal vocational education allocations -- undertook a more varied set of activities with Perkins Title IIB funds than

did smaller states. All three most populous states (States 2, 5 and 8) invested Perkins Title IIB funds in industry/education partnerships and in articulation agreements. In both instances they were joined by a fourth state that was active in statewide initiatives. Encouraging articulation agreements was also a popular topic in other states.

Four states -- two of the most populous and two others -- invested Perkins Title IIB funds in special populations, sometimes in conjunction with Perkins Title IIA funds. The amounts were small relative to the total Title IIB budget, so that it appeared that states made clear distinctions between Title IIA and Title IIB population groups. State 8 created linkage arrangements with other agencies on such requests for proposals as welfare recipients and those in need of vocational rehabilitation. State 3, as previously described, was concerned about the significant growth in special populations in the state, and had written RFPs for guidance and counseling combining Title IIB funds with Title IIA Adult funding. State 5 used Perkins Title IIB funds to support a longstanding state program for at risk students and to support a bilingual vocational resource center. Lastly, State 7, with its strong civil rights advocacy background, used a small portion of Perkins Title IIB funds to support community-based organizations.

STATE ACTION ON SPECIALIZED PERKINS PROVISIONS

Among provisions of the Perkins Act requiring state direction, three are especially important:

- matching of Perkins funds,
- evaluation of Perkins-funded programs, and
- section 204.

Each is described in turn below.

Matching

Perkins Handicapped, Disadvantaged, Adult and Program Improvement funds are to be matched dollar for dollar at the state level. States may use state funds, local funds aggregated to the state level, local funds matched on a recipient by recipient basis, or some combination of the above to meet the match.

With some minor variations, just over half (five of the nine states) reported that they primarily used a local match on a recipient by recipient basis to meet required matching requirements. The variations were minor: one had a state match for Perkins Adult funds; another had state matching on select, small RFPs; another used a local match at the secondary level, but contributed significant state categorical funding at the community college level; and one state had the match made at the regional cooperative level across participating rural districts. When asked what the state policy was for recipients who could not meet the match, two states said that funds would have to be returned and then reallocated, while the others either provided no information or said that the issue had not come up.

The remaining four states relied on a match aggregated at the state level. All provided some state categorical funding to meet part of the match. One state had significant categorical funds, including two-thirds of the match for Perkins Title IIB funds. Another state used its state vocational funding to aid smaller districts unable to meet a match, but the state required larger districts and community colleges to match dollar for dollar. Two others used aggregate state matches, either because "a local match would be a bookkeeping nightmare," or because a local match "wouldn't work here."

The availability of state funds appeared essential for states to use a match aggregated at the state level. Without some supplemental funding sources, states transferred the matching responsibility to individual recipients.

Evaluation

The Perkins Act stipulated that each state shall evaluate the effectiveness of not less than 20 percent of the eligible recipients assisted within the state each fiscal year. (P.L. 98-524, Section 113 (b)9(A)-9(C))

All states conduct an on-site team review for at least 20 percent of the programs per year, and all programs within five years. On-site visits may be done by teams or by agency program specialists only, may be contracted out, or may be conducted by the state agency. Team members may include vocational instructors and administrators from other programs, support personnel, students, and advisory committee members. On-site visits included interviews with a variety of personnel as well as examination of student records, program

documents, facilities and equipment. Topics covered such topics as philosophy, organization and administration, school and community relations, curriculum and instruction, student organizations, and career development.

At the conclusion of the on-site visits, teams typically prepared a written summary, noting problems and conveying recommendations for improvement. State regional or central office staff return the following year to see what changes have been made.

There appeared to be two variations in this process. In the most regulatory state (state 7), because state legislation mandated monitoring and evaluation of state-reimbursed vocational programs, on-site visits were conducted annually, followed by a return visit to see whether necessary changes have been made. At the other extreme, state 6 offered technical assistance to remedy shortcomings, but did not follow up to see if corrections were made because of an extreme shortage of resources at the state level.

Where postsecondary vocational education was administered by a separate office, staff in that office usually conducted their own on-site reviews, without the involvement of the office overseeing the Perkins grant. One state just began a joint review of postsecondary vocational education with staff from the Board of Higher Education; two other states expressed intentions to move toward regional or area reviews, where all providers in a given area were included in the same review. One state office did not conduct on-site reviews of vocational education in community colleges, although the review of programs at that level is "coming." In that state, vocational education is overseen by a separate community college office within the State Department of Education.

Most states visited also conducted student and employer surveys as part of their evaluation activities. Typically they were funded out of the state's share of Perkins Title IIB, Program Improvement funds. These surveys usually probe for the skills and attitudes of vocational graduates and employers' level of satisfaction with graduate's performance. States may also conduct surveys of vocational programs to determine the placement of graduates from these programs. Data are collected by individual school and aggregated to the state level. In some cases, those occupations with poor placement rates are analyzed to determine specific causes. Occasionally, states may undertake a specialized evaluation of an element of vocational

education. One state recently awarded a contract to assess the extent of local implementation of competency-based vocational education curricula developed in the state with Perkins Title IIB funds.

One state referred to the entirety of the evaluation process as checking each program's "vital signs" with general indicators of health including placement, enrollment, employer satisfaction, student performance, cost containment and labor market justification. Vital signs are measured by analyzing existing information, surveying employers and current and former students, and testing employability skills. The process also includes more in-depth analysis designed to identify problems. Evaluation system is designed to concentrate on those programs which have the greatest need.

In summary, all states conducted on-site reviews of vocational programs according to the specified Perkins time schedule. Whether states conducted other evaluation activities appeared to depend upon the evaluation expertise and resources at the state level, as well as on the commitment of state staff to incorporate evaluation results into program planning. As with other Perkins-related activities, responsibility for secondary and postsecondary evaluation activities mirrored state organization for institutional oversight, so evaluations were conducted separately, without sharing of results.

Section 204

Section 204 required, among other features, that the state was to provide assurances that equal access would be provided to handicapped and disadvantaged individuals in recruitment, enrollment and placement in vocational education and that such individuals would be provided equal access to the full range of vocational programs available to other students. The section further stipulated that local education agencies were to inform all handicapped and disadvantaged students and their parents of opportunities in vocational education at least one year before vocational education generally becomes available and that each handicapped and disadvantaged student who enrolls in vocational education is to receive an assessment, special services, and guidance and counseling.

The federal regulations interpreting the Perkins Act did not expand on the legislative language, that could be interpreted as creating an entitlement program for handicapped and disadvantaged students at the secondary level. It was widely assumed that the section pertained only at the secondary and not the postsecondary level.

Where information on states was available, states usually instructed local educational agencies to inform handicapped and disadvantaged students of opportunities in vocational education, and that such notification was required in all 9th grades, if it had not been done earlier. States appeared to provide no additional information on the other provisions of section 204.

Two states devoted considerable energy to section 204. Both states had state categorical funding for handicapped vocational students, and one state had state-funded programs for disadvantaged vocational students as well. State 5 distributed a booklet with guidelines for each district. Each district was then required to describe how they will satisfy section 204, as part of their local plan. The state required districts to notify 8th graders prior to registration for high school. The notice in the form of a brochure or letter must be sent to parents, rather than distributed to children. In state 1, all students were reported to get a vocational assessment at least by grade 9, and much of the Perkins Handicapped and Disadvantaged funds go for assessment. In the state's largest city, the decision to place vocational counselors in every junior high school was prompted in part by section 204. Section 204 was also cited as a factor in the decision to use Perkins funding for mobile assessment vans in rural areas.

INTERGOVERNMENTAL RELATIONS AND THE INFLUENCE OF STATE POLICY ON LOCAL PRACTICE

The Federal Office and the State Agencies

The nine state directors interviewed reported that the quality of their relationship with the Office of Adult and Vocational Education (OAVE) ranged from "minimal contact" to "good," or "excellent." Relationships were mature and well-established, with OAVE staff perceived as helpful, particularly in the interpretation of the Perkins regulations.

A creative tension exists between federal leadership and state autonomy in implementing the Perkins Act. The tension, found in the implementation of any federal law, is recognized by state directors as a given. State directors talked about it as a double edged sword. On the one hand, it would be helpful to have more leadership from the federal office on technical matters. On the other hand, when that leadership is forthcoming, it can result in the reduction of some of the state's options. The tension was most visible among the most populous states who characterized their relationship with the Office of Adult and Vocational Education (OAVE) as one of "peaceful coexistence."

States have dealt with the tension by carefully circumscribing the areas about which they seek guidance. States reported that they sought advice from OAVE on fiscal matters, on what are and are not allowable costs under matching and excess costs, and on the content of the state plan. One state praised the efforts OAVE had undertaken in helping them set up funding pools, to prespecify the amount of Perkins funds for handicapped and disadvantaged students before applying the federal intrastate formula. None of the nine states indicated that they consulted OAVE on programmatic matters.

Nor were states likely to contact OAVE about audit issues, saying that they were not strong on that issue. One state had been burned when it had gone to OAVE about an audit issue; it found that the federal office was not legally responsible if it gave out the wrong information. For audit issues, the state now relies on its own attorneys in Washington, D.C.

States did not comment that there had been a change in federal-state relations as a consequence of the Perkins Act, but rather that they saw changes initiated with the arrival of the Reagan Administration in 1981. Prior to the Reagan Administration, states reported that the OAVE issued policy memoranda on a regular basis, and on occasion would respond to a query by a state and send that response to all states. States reported that OAVE now seldom puts its views in writing, and said they are more likely to receive what one state referred to as "loose answers." State staff continue to attend federal conferences and briefings, but now much of the interaction, aside from formal briefings, is informal on the phone or during on-site program reviews.

Complications may arise in federal-state communications based upon where the administration of the Perkins Act is housed. Under the sole-state agency concept, the State Director for Vocational Education and his/her designated staff interact with federal officials. Because the Perkins office in all states visited oversaw secondary vocational education, issues concerning secondary vocational education have a direct link between the state and federal offices. Issues specific to postsecondary vocational education, and particularly postsecondary vocational education in community colleges, do not have such a direct link. In only one state visited was vocational education in community colleges under the purview of the office administering the Perkins Act. As a consequence, concerns about what are allowable practices may take longer to resolve or may be left unaddressed. In one state, for example, the State Director had assured the Dean of Vocational Education for community colleges that the use of state work welfare dollars as a match for Title IIA Disadvantaged funds would not result in an audit exception. The Dean told field researchers that he was reluctant to allow the practice without a ruling from the federal office, yet he felt he could not contact them directly and was uncomfortable asking the State Director to do it.

The State Agency and Secondary Vocational Education Providers

In each state visited, the office administering Perkins funds had direct oversight responsibility over secondary vocational education in the state. Five states could be said to be a strong influence on secondary vocational education. States 5 and 8, two of the largest states in the sample, served either a strong or moderately strong leadership role, as did a midsize state (state 3) and one rural state (state 1). State 7 could also be said to exert a strong influence on local providers, less because of its substantive direction than for its restrictiveness on spending and its attention to civil rights issues.

State policy and its effects on local practice are summarized below on a state-by-state basis. A majority of states provided substantive guidance to secondary providers almost exclusively on fiscal, allowable funding and compliance matters. Three other states were cited by their communities as strong on technical assistance in curriculum and in program improvement areas, while one state was cited as strongly supportive on both fiscal and

programmatic issues. Relations among most states and secondary providers was cited as helpful and cordial, with stable and well-established working relationships. The two states with the strongest regulatory and compliance focus, however, had strained relationships with their communities.

State 1: Although more active at the postsecondary level through its state-run area vocational schools, the state vocational education agency was also influential at the secondary level. Its role in revising state education law resulted in increased vocational education enrollments and a doubling of state funds at the secondary level. To be accredited, any high school in the state had to offer access to at least three vocational education programs in addition to one course each in industrial arts, consumer and homemaking education.

On Perkins issues, the office influenced local practice by not publicizing its availability. Only Perkins IIA Handicapped and Disadvantaged funds were tagged as Perkins funds. The state provided assistance to school districts on compliance and funding issues and gave workshops in writing proposal applications. Few applications were turned down, but district officials were often not aware of how to obtain discretionary funds. State influence was apparent in how funds were spent. In all three sites visited, Handicapped and Disadvantaged funds were combined and directed toward assessment (and counseling in the urban district), with reference made to the requirements of section 204. In other categories, Perkins funding was often confused with state money or allocations were so small that Perkins funding had little known effect at the district level. Title IIB Program Improvement funds were unknown at the secondary level, evidence that the State Director had been successful, at least in the three communities visited, with incorporating those funds into his efforts for a statewide curriculum reform.

State 2: The state education agency has taken an active role in education reform, including curriculum reform, that was also found in vocational education. The state role was most strongly felt in the program improvement area. State work on curriculum was made available to districts who then could pick and choose, within certain guidelines on what they wanted to do. Both the urban and suburban districts spoke highly of the quality of the state's work on the model curriculum. Technical assistance at the regional level, the first point of contact for districts, was mostly on

curriculum issues; and district staff attended inservice workshops to learn more about its details. Perkins Title IIB Program Improvement funds were used primarily for instruction and staff development, and districts visited were using all Title IIB funds for this purpose. The state prohibited the use of Title IIB funds for equipment. In keeping with its traditionally strong role toward districts, the state distributed Title IIA funds, other than Handicapped and Disadvantaged funds, through RFPs, often specifying the direction of work to be undertaken. At the district level, compliance and monitoring issues did not appear to be major topics requiring contact with the state, and the state is setting up an MIS system to help districts define possible matches for Title IIA Handicapped and Disadvantaged funds.

State 3: The state's interest in economic development and targeted services for special population groups was reflected in its policies for local providers. In keeping with the state's commitments, RFPs under Title IIB stressed program improvement for special population groups, a rarity among the states visited. It also set minimums on Title IIA Single Parent/Homemaker and Sex Equity funds, after an evaluation of funded projects revealed that small grants had little effect. All Sex Equity funds were targeted to expand opportunities for women in high technology. Much of its efforts were directed toward community colleges over which it has governing authority, at times to the consternation of secondary vocational educators. It restricted, for example, 80 percent of the sponsored equipment funds under the Perkins Title IIB funds for community colleges. Nevertheless, state staff were reported by districts to be extremely helpful. Noted were the provision of technical assistance and information about state-issued RFPs, quarterly meetings on curricular issues, and state efforts to identify curriculum resources for districts.

State 4: Up until this year, the state had been very compliance oriented, seeing itself as the "policeman" in the state, and was known for its inflexibility and resistance to change. Guidance to districts was provided almost exclusively on compliance issues. With a new director and shifts in

staff positions at the state this year, communities characterized the relationship as confusing. One district administrator said that when he called the state about a Perkins question, one of three things would happen:

- he is told to look it up himself in the federal regulations,
- he is referred to another person in the division who also doesn't know the answer, or
- the state person says that he/she will get back to them but then does not call back.

The state also had a history of underspending Perkins funds, and districts were concerned about the slow funding process. Funds would arrive in the spring too late to be spent, and districts would then worry that failure to spend funds would be used the following year to reduce their formula allocations. The severe underspending of Perkins Title IIA Single Parent/Homemaker and Sex Equity funds led to the state decision to shift to an RFP process in the coming year. Coupled with confusion in the state office on questions related to Perkins, the delays in allocating funds marred the effects of the Perkins Act at the local level.

A specific state policy toward the use of Perkins funds was implemented in each district visited. The state discouraged districts from spending Title IIA Disadvantaged funds for basic skills instruction because the state supported a compensatory education program, and encouraged districts to transfer funds to the postsecondary institutions. Two of the three districts in the sample transferred funds, while the third used Disadvantaged funds for a work experience program.

State 5: One of the most populous states, state 5 was currently engaged in the sixth year of a massive reorganization of the vocational education delivery system. It appeared to play a relatively strong leadership role toward districts, in part because of the sizable amount of state categorical funding that was invested in vocational education. The state put restrictions on how Title IIA Handicapped and Disadvantaged funds may be spent so as not to duplicate services provided through state funds. It likewise restricted Title II Adult funds to the postsecondary level, because other funds could be used at the secondary level. It also diverted Title IIB Program Improvement funds away from equipment and into its reorganization

initiative in part because of a state funding source for equipment. It provided a larger state categorical match toward Perkins than any other state visited.

The thrust of the technical assistance was not on compliance with regulation, but instead focused on assistance in curriculum development (e.g., competencies and task analysis), workshops for teachers, and helping institutions formulate articulation agreement. In general, technical assistance was to help implement the new regional delivery system for vocational education, including providing the super-regions with consultants in special education and sex equity to help implement appropriate programs at the regional level. District reaction to the regional planning was mixed, with one district reporting that the development of regional competencies and task analysis resulted in unnecessary paperwork and redundancy across districts.

What has remained an unresolved issue at the state level regarding Perkins spending was how to allocate effectively the Single Parent and Sex Equity funds. In an effort to initiate projects in areas of highest economic need, the state next year will use concentration grants rather than its current RFP process. Those responding to the RFP have not always been those communities with greatest need.

State 6: The smallest state in the study also had the lowest ratio of state staff to total vocational education enrollments. It had a weak role vis-a-vis schools districts and its predominantly postsecondary area vocational schools. At the secondary level, for example, it set neither the minimum instructional hours of instruction nor the minimum course sequence in vocational education. It also did not examine vocational course content.

Regarding Perkins funds, it did not restrict allowable activities or promote state initiatives, other than combining Perkins IIA Adult funds with state and industry funds for an RFP for customized training. Guidance given to districts was almost entirely on compliance or fiscal issues; technical assistance in program improvement areas was rare. Until this year, curriculum development funds were distributed to area vocational schools for their own use, not as part of a state-designed or coordinated effort. This year the state hoped to be somewhat more directive. It saw Perkins Title IIB funds as a way to strengthen the state role, although that is hardly likely given the

independence of the directors of the area vocational schools. Directors in the communities visited refused to answer basic questions about the activities and students served with Perkins funds.

State 7: An exceptionally strong regulatory state, with rules for compliance and program improvement, State 7 had strained relations with the communities visited. The assistance it provided was primarily in the form of information on preparing funds applications and other compliance issues. It did not provide technical assistance on program improvement.

Districts abided by the rules set forth by the state, but not without ill will. The urban community visited, for example, believed that the state systematically displayed its bias against the district [in favor of full-time secondary area vocational schools] by funds that were disproportionately small considering how many students are enrolled. It also contended that "rules are applied and regulations formulated that hinder the operation of the program." The rural community visited said that the state office was extremely political, and that the community had no clout and was not favored by the state as the cities are. As a consequence, state and communities appeared to have infrequent and formal interactions on allocation amounts available, the local application package, and compliance memos.

The strong state policy of access by all students to education spilled over into vocational education, so that, for example, each vocational project must have at least one nontraditional student. Funds were also concentrated under both Title IIA Single Parents/Homemakers and Sex Equity so that operating programs were funded, a rarity among states visited. Funds were not diluted through a series of small grants.

By requiring districts to write no more than three-year grants for each funded project, including those for Handicapped and Disadvantaged funds, the state attempted to earmark Title IIA funds for program improvement. Because few funding sources are available, including no state categorical funding, districts found that grant writing was a frustrating exercise. The grant writing process, however, may have led to stronger and more well-designed proposals than would have occurred in the absence of such a design.

State 8: The state played a strong leadership role in both compliance and program improvement in vocational education, in part because the state education agency historically was a strong partner in state-district interactions. The state also had some categorical funding, as well as enrollment-weighted funds, for vocational education. In addition, a supportive legislature and government increased categorical funds in recent years thus providing support for projects pilot-tested through federal funds. All communities visited characterized their relationship with the state as cordial and friendly, although rural communities had very little direct contact because they usually transferred any funds received to an area vocational school. Districts were accustomed to having state personnel look at equipment purchases and to talk directly with state staff about programmatic ideas. The state-run area vocational schools and vocational directors of the large city systems were often in frequent (and somewhat competitive) contact with the state. The vocational director for the urban community reportedly talked to state officials every couple of weeks on program improvement issues. The director was willing to and often did pilot test anything coming from the state office. There was no mention of monitors and compliance, although the state conducted a formal review in the city once a year.

Curriculum development has been a top priority for well over a decade. Hundreds of local providers and others have been involved in large scale curriculum design and field testing. A one-year technology program was being implemented throughout the state.

Another Title IIB Program Improvement initiative was regional economic development centers. Created under the Vocational Education Act and continued with Perkins, state and JTPA funds, the centers were highly regarded in the communities visited because they informed communities of the availability of discretionary grants, and helped minimize regional competition for funds.

The state played a limited role with special populations. Because of state commitment to curriculum and shifts in funding brought about by the federal intrastate formula for Title II Handicapped and Disadvantaged funds, almost all of the new funding categories in the Perkins Act were dispersed by formula to restrict demands on larger districts and to "hold harmless" the

losses of the larger districts from the Vocational Education Act to the Perkins Act. Although minimums were set for Single Parent/Homemaker and Sex Equity funds, grant sizes at the communities visited were often so small that committed staff were unable to move past brochures, scattered recruitment efforts, and occasional workshops.

State involvement with special populations occurred on a small scale with linkage projects. The state agency combined Perkins funds and funds from other sources (e.g., welfare, OVR, older adults) to create linkage programs, requiring local vocational providers to establish working relationships with the other agencies in order to win service grants for the target population. The more enterprising districts have picked up on these grants, including the urban community visited.

State 9: The state did not play a particularly active role toward schools districts, although it developed state curriculum guides for districts to use and supported inservice activities on the guides. The inactivity stemmed in part from the "anti-vocational" bias that state vocational personnel associated with the governor's office and legislature, and from a traditionally weak role toward local providers. The state, for example, did not set the minimum instructional hours of instruction nor the minimum course sequence in vocational education. In addition, on-site monitoring reviews of Perkins funded activities, conducted by the state university system, contained recommendations for action, but the state did not have the monitoring capacity or clout to conduct follow-up visits the following year to see whether they had been implemented. State 9 was interestingly enough, the only state where state policy affected the intradistrict distribution of Perkins IIA Handicapped and Disadvantaged funds. By requiring an aide in a vocational class for every five students, the state effectively dispersed Perkins funds to all high schools. By contrast, half the districts in our sample concentrated Handicapped and Disadvantaged funds in vocational or area high schools.

Some categorical funds were available at the state level for vocational education equipment, which in other states was a sign for states to prohibit the use of Title IIB Program Improvement funds for that purpose. State 9, on the other hand, mandated that districts spend at least half of

their Title IIB Program Improvement funds on equipment, saying that they are "starved" for equipment. The three districts visited spent all of their Title IIB funds on equipment.

Districts reported that state contacts usually involved discussions of allowable funds, state curriculum guides, and inservice activities for the guides. There was little state guidance on program improvement.

The State Agency and Postsecondary Vocational Education Providers

Unlike the direct relationship between the state and secondary vocational education providers, where the office administering the Perkins grant oversaw secondary programs; the relationship between the Perkins office and providers of postsecondary vocational education often involved another set of actors.

The questions that were most important here are:

- what substantive guidance does the state vocational education office provide postsecondary institutions?
- what administrative authority does the state vocational education office exert? For example, is approval required for Perkins-funded projects or are funds passed through to the governing body with f. v strings attached?

Substantive guidance was limited almost entirely to compliance and fiscal issues. For the most part there was no mention of program content or curriculum at the postsecondary level, although a state office may hear of an innovative project operating at a community college and then visit it. The most remarkable exception was in state 1, where the state vocational education agency ran the area vocational schools system. At the monthly area directors meetings, decisions were made to expand or initiate programs at individual schools, based on the group's perception of needs and duplication. In addition, decisions that affected programs at all institutions were made at those meetings (e.g., all auto mechanics programs were to meet ASE national standards). The directors appeared to be a tightly linked system of state employees dedicated to the present system of state-supported and state-directed vocational institutions.

In two states (states 1 and 3), the office overseeing Perkins funds was also the governing body for postsecondary institutions. State 1 ran the postsecondary area vocational schools (and denied funding to community colleges), while State 3 was the governing body for community college. The remaining seven states either worked through a separate office within the State Department of Education or through a separate board for community colleges or higher education.

In another two states, administrative oversight was a marginal issue because community colleges were eligible for limited Perkins funds. Until this year, community colleges in State 7, for example, were only eligible for Disadvantaged and Single Parent/Homemaker funds. Competitions were run by the office overseeing Perkins, but until this year the office was prohibited from conducting on-site reviews. One community college visited, the largest in the state, complained about the inaccessibility of the state office and the dearth of timely information on state program initiatives. In State 9, where postsecondary institutions received less than 20 percent of the Perkins funds, most funds were distributed by formula or RFPs with little guidance.

In the remaining five states, funds were either passed through with apparently little restriction (three states) or joint competitions were held (two states). In state 2, only 25 percent of the state administration funds under Perkins were allocated to the community college level, and most funds were dispersed by formula. In state 4, Perkins funds were also distributed by formula to community colleges, although proposals indicating how funds would be used were submitted to the office administering Perkins. That office, however, had yet to conduct on-site reviews of community college programs. In state 5, it appeared that the office overseeing Perkins paid little substantive attention to Perkins-funded efforts in community colleges; the extent to which they exert fiscal oversight was unclear.

In the two states running joint competitions, one state (state 6) approved all proposals for funding, although it did not have the authority to approve the content of vocational offerings in community colleges, a source of friction at the state level. In state 8, proposals were reviewed by a separate office that had its own pre-set budget in each Perkins category. The separate office also conducted all on-site monitoring visits of community colleges, although staff in the office overseeing Perkins also visited

institutions. Community college staff reported that relationships were helpful, cooperative and well-established. State monitoring staff were long-term employees, well-acquainted with their operating programs.

Factors Affecting the Influence of State Policy on Local Practice

In reviewing the cases above, a number of factors distinguish the stronger state administrations, especially at the secondary level. The vocational education agency was a visible or independent organization at the state level. State policymakers usually shared a vision about the value of vocational education that had resulted in increased state funding and the promise of continued support. The state director was usually seen as a strong leader and one who has an established history in that position. State directors in the stronger states had usually held the position for at least five years. The experience and expertise of state staff, especially staff with strong program improvement and technical assistance backgrounds, were also cited as significant. In addition, the stronger state administrations usually either administered a local facility or had a traditionally strong state role toward school districts. The more directive states, for example, were more likely than less directive states to set the minimum number of instructional hours and minimum course sequences in secondary vocational education.

Whether states provided substantive direction to school districts did not appear to be a function of population size. The most populous states in our sample were more likely than smaller states to offer a variety of competitions in such Perkins categories as program improvement, but leadership capacity appeared more linked with other factors: the vision of vocational education at the state level (and with it the access to additional funds or client groups), the leadership of the state director, the historic role of the state agency vis-a-vis school districts, whether the state administers its own institutions, and perceptions of staff expertise.

Among the less directive states that were visited, the vocational education agency was neither visible nor independent. State policymakers held either conflicted or muted views on the value of vocational education. In one state, the leadership for vocational education was split among contentious rivals. In another state, the governor and legislature purportedly held an

anti-vocational bias, emphasizing instead the need for general academic skills instruction in high school. Postsecondary vocational education in technical institutes, community colleges and postsecondary vocational centers was more highly valued, but was administered by an agency separate from the agency administering Perkins funds. In the third state, the image of vocational education was "not real positive" according to legislative respondents who cited the agency's reputation for inflexibility and resistance to change. In the less directive states, the state director was either not seen as a strong leader, or turnover in the state director and other top agency staff had at least temporarily left a vacuum. In addition, the less directive states did not administer local vocational facilities, and the state agency did not have a traditionally strong role vis-a-vis districts. For example, the two least directive states set neither the minimum instructional hours of instruction nor the minimum course sequence in vocational education. One also did not examine vocational course content. The third state set minimums in vocational program, but was also characterized as having a traditionally hands-off role regarding the county school system. Other factors that limited the role of the state vocational education agency were a very small state office and embedded procedures and practices (i.e., a longtime history of allocating all Perkins funds on a formula basis).

CHAPTER 4

VOCATIONAL EDUCATION AND SPECIAL POPULATIONS

One of the principal purposes of the Perkins Act is to serve special needs populations by providing improved access, more services, and better quality services for persons with special needs. Within Title II--Basic State Grants for Vocational Education of the Perkins Act, Part A -- Vocational Education Opportunities -- specifies that 57 percent of grant funds be available for special populations shall be distributed accordingly:

Special Population	Percentage of Funds
Handicapped	10.0
Disadvantaged, including limited English proficient	22.0
Adults in need of training or retraining	12.0
Single parents or nonmakers	8.5
Participants in programs to eliminate sex bias and stereotyping	3.5
Criminal offenders in correctional institutions	1.0

This chapter addresses several key questions about the allocation and use of Perkins funds for each of these special population groups:*

- How are Perkins Title IIA funds allocated to eligible recipients?
- How are students identified and selected to receive services?
- What services are supported under Perkins Title IIA funds?
- What access to special populations groups have to institutions offering vocational education? What factors affect their access?

*The uses of Perkins funding for the incarcerated are not included in this study.

- What is the significance of Perkins Title IIA funding for these population groups?

Key findings from the 27 communities visited include the following:

Identifying Handicapped and Disadvantaged Students

- The quality and comparability of data used in the intrastate formula to allocate Perkins Handicapped and Disadvantaged funds are suspect. Vocational administrators in districts and postsecondary institutions seldom knew the number of disadvantaged or handicapped students enrolled in vocational education, the number needing special services in order to succeed in vocational education, or the number participating in Perkins-funded activities.
- At the secondary level, handicapped students were always a subset of students with IEPs. Handicapped students in postsecondary institutions were usually self-identified.
- Within secondary vocational education, disadvantaged students were almost always defined as academically disadvantaged students; only one district considered economically disadvantaged students for service under Perkins. A similar pattern emerged at the postsecondary level: all institutions targeted services on academically disadvantaged students, while only three provided support for economically disadvantaged students.
- Districts were less likely to identify limited-English-proficient (LEP) students for service; several districts with LEP students received no Perkins LEP funds.

Perkins Handicapped and Disadvantaged Funds

- With one exception, decisions about how to allocate Perkins Handicapped and Disadvantaged funds within districts were always made at the district, not the state level.
- Where districts have multiple institutions providing vocational education, slightly more districts (11 of the 18 with multiple sites) concentrated their Handicapped funds at the area or vocational high schools than dispersed funds across schools. Fewer districts concentrated Perkins Disadvantaged funds in specialized vocational schools, but nonetheless half of the districts did so.
- Perkins Handicapped funds supported assessment activities in all districts visited. The next most prevalent use of Handicapped funds at the secondary level was for instruction in vocational classes. The same number of districts (7) used Perkins Handicapped funds for aides

in regular classes as used Handicapped funds to support separate vocational classes for handicapped students. An eighth district used Handicapped funds to support pre-vocational resource classes, and a ninth offered a separate class for handicapped students in life skills. Separate vocational classes were typically held for students who were not mainstreamed in any classes. Counseling was the next most frequent use of Handicapped funds, followed by work experience and/or job placement programs.

- As with Perkins Handicapped funds, Perkins Disadvantaged funds were often used for assessment and counseling at the secondary level. The next most frequently found use was to support instruction in nonvocational classes (e.g., learning center or remedial skills class). Work study programs were found in several districts. Perkins Disadvantaged funds were rarely used to support instruction in vocational education classes, either to fund aides in regular classes or separate vocational classes.
- Although assessment was universally available for handicapped students and usually available for disadvantaged students, only two districts noted that the provision of assessment services was stimulated in part by section 204 of the Perkins Act.
- At the postsecondary level, Perkins Handicapped funds supported a variety of support services, including counseling, specialized disability-related services such as notetaking and interpreting, and tutoring. In a few instances, Perkins funds supported aides in regular classes. In only one case were Perkins funds used to support a separate class of handicapped students.
- By far the most frequent use of Perkins Disadvantaged funds at the postsecondary level was to support separate basic skills centers or learning laboratories. Counseling was next most frequently offered. The same number of postsecondary institutions (3) sponsored aides in regular vocational classes as used Perkins Disadvantaged funds to support separate vocational classes for disadvantaged students. Tutoring was also supported in three institutions, as were recruitment services, a use not found at the secondary level.
- Almost half of the districts (12 of 25) and postsecondary institutions (6 of 18) combined at least some portion of their Perkins Handicapped and Disadvantaged funds. Combining funds were more typically found in rural districts, and in the districts and postsecondary institutions in state 5 which encouraged its use.

Perkins Adult, Single Parent/Homemaker, and Sex Equity Funds

- Perkins Adult funds were most frequently used for general vocational education purposes when recipients were school districts. At the postsecondary level, funds were most frequently used for specific-training programs (e.g., cashier, hotel/motel management, Licensed Practical Nurse). In two instances, funds were used for general evening classes. Singular uses of Adult funds were found for counselors, aides in a learning skills lab, tuition aid, and equipment.
- Child care was the most frequently cited use of Single Parent/Homemaker funds and sometimes was the only source of assistance for child care. Total funds expended for child care, however, were very small. Tuition assistance and counseling were also frequent expenses. In addition, in five institutions, Single Parent/Homemaker funds were to support operating programs for single parents (e.g., word processing, bookkeeping, and a program to learn career skills at job sites).
- Perkins Sex Equity funds usually supported workshops, brochures, and recruitment activities. Three operating programs were supported: one to teach marketing skills to women in cottage industries, another in word processing, and a third in fire arms training for women who would like a career in law enforcement.

Access to Institutions

- Among the communities visited, access to institutions by handicapped and disadvantaged students no longer appears to be the serious problem that it once was when more secondary vocational schools were "exam" schools. Where data were available, the enrollment patterns of handicapped and disadvantaged students in institutions did not seem to differ from those of nonhandicapped and nondisadvantaged students. In the larger cities, special institutions or separate programs were sometimes available.
- Within institutions, however, it appears that handicapped and disadvantaged students are enrolled in a narrower cluster of programs and seldom enrolled in the technical programs, the programs often cited by vocational educators as their "highest quality" or "best" programs.
- Handicapped students make up a small proportion of postsecondary students, usually less than five percent, although upwards of 50 percent of students enrolled are economically disadvantaged. Postsecondary institutions were less likely to have enrollment counts of academically disadvantaged students.

- Major factors affecting the access of handicapped and disadvantaged students to secondary institutions offering vocational education are: time factors (e.g., commuting time, availability of transportation, and time on a daily schedule), increased academic requirements, and enrollment caps or other restrictive district policies. At the postsecondary level, tuition may also be a factor, although tuitions were generally low and heavily state-subsidized in most institutions visited.

The Relative Importance of Perkins Funds

- The role of Perkins relative to the operation of the vocational education enterprise is a small one. In general, in our sample the amount of funds is not viewed as substantial enough for it alone to provide the impetus for new services/programs or new initiatives to serve special populations. The paucity of services generally available from any funding source for disadvantaged students seemed particularly acute.

This chapter explores Perkins-funded activities for each population group in turn. The funding allocation procedures for handicapped and disadvantaged students, new to the Perkins Act, are discussed first. Perkins-funded services for handicapped and disadvantaged are then discussed separately, starting with the secondary level. After services at the postsecondary level are described, allocation procedures and services provided under the three new setasides--Adult, Single Parent/Homemaker, and Sex Equity--are explored on a state by state basis. The chapter then turns to a general description of the access of special populations to institutions providing vocational education and factors affecting access. Closing the chapter is a discussion of the significance of Perkins funding.

FUNDS ALLOCATION PROCEDURES FOR PERKINS FUNDS: DISADVANTAGED AND HANDICAPPED

The Perkins Act specifies an intrastate formula for distributing the funds set aside for handicapped and disadvantaged students. The proportion of the total amount of state funds given to any particular eligible recipient (e.g., school district or postsecondary institution) is based on the following: one half of the funds for each group is to be distributed in proportion to the number of economically disadvantaged students enrolled in the district or institution. The other half is distributed in proportion to either the number of handicapped students or the number of disadvantaged

students served in vocational education in the previous year. The legislation also reserves for limited-English proficient (LEP) students a percentage of allotments for the disadvantaged at least equal to the percentage of disadvantaged students who are LEP.

The legislation defines "vocational education", "disadvantaged", "handicapped", and what constitutes being "served in vocational education" in the broadest terms. The states in our sample have not been prescriptive in defining these terms uniformly in their states. They have adopted the broad terminology of the federal legislation and have generally left the selection of operational definitions of terms to the local level.

While some states do have a carefully constructed definition of vocational education, they are not necessarily used in the Perkins funding allocation process. For instance, one of the most prescriptive states in our sample has developed an elaborate system for defining Vocational Education for the purpose of separating those programs supported by state initiatives from others. In this state, Vocational Education is one subcategory of Occupational Education. Vocational Education includes trade and industries, technical, etc., and classes in those programs must be scheduled for a minimum of three class periods per day and/or half the school day of uninterrupted shop or lab time for a duration of a minimum of two years. Under state law, districts are reimbursed for students in Vocational Education programs at double the rate of other students. The other programs within Occupational Education, include business and office, industrial arts, consumer and homemaking, and some distributive education courses (some distributive education courses are classified as non-vocational). In determining within state allocations of Perkins funds, districts in this state may count a student enrolled in any of the occupational education programs.

The intrastate allocation formula depends upon the accurate identification of handicapped and disadvantaged students in vocational education who require special services and assistance in order to enable them to succeed in vocational education programs. States base their distributions on enrollment figures submitted by districts and postsecondary institutions. Yet most institutions in the sample were unable to provide counts of the number of students enrolled in vocational education or of the number participating in Perkins-funded activities. In addition, in rare instances

had vocational education administrators established systematic procedures for identifying handicapped and disadvantaged students who were having difficulty succeeding in vocational education programs, although the law restricted eligibility to those students. Counts of various types of special populations for purposes of determining a district's share of the state Perkins allocation is an independent process from other activities. Counts for funding purposes are not typically used, for example, in needs assessment procedures for determining appropriate Perkins services, in identifying particular students to receive Perkins services, or in distributing Perkins funds among institutions within districts.

States also decide who shall be considered eligible recipients and can prespecify what proportion of Perkins Handicapped and Disadvantaged funds each set of institutions may receive. Until this year, one state precluded community colleges from receiving Perkins handicapped funds while four other states prespecify the total amount available.

State level decisions about whether area vocational schools shall be considered eligible recipients are shaped by how the secondary area vocational schools are administered. Secondary area vocational schools operated as independent entities with their own governing boards in five states, were administered by school districts in two states, and were state-administered institutions in two states.

In general, where the area vocational schools have their own governing boards, states treat them as eligible recipients for handicapped and disadvantaged funds. The districts that send students to these area vocational schools do not receive Perkins funds for the students sent there. The Perkins dollars "follow the students" to the area vocational school. The districts not served by an area vocational school do receive Perkins funds.

In states where the area vocational schools are administered by school districts, area vocational schools are not direct recipients of Perkins funds.

In the two states where area vocational schools are state-administered institutions their structures are very different. In the first state, the state-administered area vocational school provides both secondary and postsecondary vocational programs. These area vocational schools are eligible recipients of Perkins funds.

In the other state (State 2) where area vocational schools are state administered, the state has excluded the area schools from being direct recipients of Perkins funds. Advocates of this practice feel that the area schools are already amply funded through state dollars. Those that want them included argue that the area vocational schools play a significant role in the state's vocational education enterprise and should be included. In two of the three sample communities in state 2, no funds are allocated to the area schools. In the third community, the local school districts have elected to have their Perkins funds administered by the area vocational school. Working with vocational education staff from the high schools, the area school staff develop a three-year plan which is used to guide the distribution of funds at the area school and among the other schools. While the state does not give money directly to the area school, local decisions about funding have resulted in the area vocational school in this community being a major recipient of Perkins funds.

Matching and Excess Cost Provisions

For the handicapped and disadvantaged setasides, the legislation stipulates that such funds shall be used to pay the federal share (up to 50 percent) of the costs of supplemental resources or services provided for handicapped or disadvantaged vocational students that they would need in order to succeed in vocational education. In the case of separate programs for such students, federal funds may be used only to pay the federal share of costs in excess of per-pupil expenditures for regular students in comparable vocational programs.

In two of the nine states in the sample, the states provide matching funds, greatly facilitating the ease with which recipients locate sources for matches. Even those states that do not provide funds for districts to use as a match can markedly influence the ease with which local sites implement the provision. State 7 restricts the types of funds that districts and

postsecondary institutions can consider using. In contrast, State 2 actively helps districts find various sources to use as a match and several sites said that their states provide great flexibility in the types of funds that can be considered for the match.

At the secondary level, SSA did not accept its \$290 of Disadvantaged funds. R3 and R6 received neither Disadvantaged nor Handicapped funds.* At the postsecondary level, institutions declined the Handicapped and Disadvantaged funds because they were unable to find matching funds (U1) and a second institution in the same state (R1A) was forced to return funds because of accounting problems. Three other postsecondary institutions (R3, R4, and R7) received no Handicapped funds and one (R3) received no Disadvantaged set aside.

In our sample, postsecondary institutions and school districts in rural areas tended to have more difficulty with the funding provisions compared with urban and suburban sites.

Several districts complained that the sizes of the allocations are too small to justify the amount of paperwork required. One district had calculated that it would cost \$4000 to prepare the documents to account for the use of the \$2000 set aside for handicapped were they to receive it. They are also concerned that while the federal legislation emphasizes mainstreaming, auditors want to see separate files maintained. The district said that it did not have sufficient staff to document all the handicapped who are served.

*Districts have been assigned codes, such as U1, S3, and R7. A "U", "S", or "R" indicates urban, suburban, or rural, respectively. The numbers (1 through 9) indicate the states.

Services for All Handicapped and Disadvantaged Vocational Education Students

Section 204 of the Perkins Act specifies a set of services to be provided to all handicapped and disadvantaged students enrolled in vocational education. These services are to be provided regardless of whether the students receive any Perkins-funded services, and they include:

- Assessment of...interests, abilities, and special needs.
- Special services, including adaptation of curriculum instruction, equipment, and facilities.
- Guidance, counseling, and career development activities conducted by professionally trained counselors who are associated with the provision of such special services.
- Counseling services designed to facilitate the transition from school to post-school employment and career opportunities.

All districts visited indicated that they informed handicapped and disadvantaged students of available vocational education offerings by or during the ninth grade. All also included assessment activities for handicapped students and most districts assessed the needs of disadvantaged students. Only four districts, however, explicitly mentioned that Section 204 was a reason for providing assessment services.

SECONDARY LEVEL: PERKINS HANDICAPPED FUNDS

Access to Handicapped Funds by Schools within Districts

Districts that have multiple schools must decide how to allocate the Perkins funds among schools. The issues of whether to concentrate or disperse funds is important in understanding which students ultimately receive Perkins-funded service. None of the states in our sample regulated the within-district allocation process through provision of formula or guidelines. Decisions about the distribution of Perkins funds among schools within districts were made at the local level.

In one state, however, state level regulations concerning the types of Perkins Handicapped services to be provided had implications for funds distribution. State 9 required that Perkins funds be used to support an aide in vocational classes that had five or more handicapped students. Handicapped students were mainstreamed in classes throughout the district and every school

had at least one vocational class with five or more handicapped students in it. The requirement to place a Perkins-funded aide in every vocational class having five or more handicapped students resulted in every school receiving some Perkins Handicapped funds.

We examined the choices made by the districts in the study sample about within-district distribution of their Perkins Handicapped funds. Where districts elected to place the funds primarily in one institution, this was categorized as concentrating funds. Where districts spread their allocation across multiple institutions, this was categorized as dispersing funds. Exhibit 4.1 presents the results of our analyses in which districts have been grouped by urbanicity.

Urban districts typically have many more schools to consider and larger allocations than their suburban or rural counterparts. In our sample, 3 of the 9 urban districts (U4, U6, and U8) concentrated their Handicapped funds at their vocational high schools and did not distribute any Handicapped funds to the comprehensive high schools.

Districts U1 and U7 allocate a large proportion of their Handicapped funds to their vocational high schools and distributed the remainder. In the case of U1, the remainder was spread across the 5 junior high schools, and in the case of U7, funds were spread across three of the 17 comprehensive high schools.

In contrast, District U2 gave an equal allocation to each of its 7 secondary schools (6 comprehensive high schools, and a vocational school). An additional sum was set aside for 47 handicapped students to participate in a life skills class at the Veteran's Administration Hospital.

District U9 also distributed its allocation across the secondary schools in the district. In accordance with state recommendations, an aide was to be placed in every vocational class in the district that had 5 or more handicapped students. The result is that every secondary school is a recipient of Perkins funds. District U5 dispersed Handicapped funds among its comprehensive high schools as well.

In the seven suburban districts in our sample, one district returned its funds (S5A) and two districts contained only one school (S6 and S7) so that intra-district allocations were not a concern. Of the remaining 4

Exhibit 4.1

TYPE AND NUMBER OF INSTITUTIONS RECEIVING HANDICAPPED FUNDS BY URBANICITY OF DISTRICT

Urban			Suburban			Rural		
Commu- nity Code	Targeting Strategy	Number and Type of Institutions	Commu- nity Code	Targeting Strategy	Number and Type of Institutions	Commu- nity Code	Targeting Strategy	Number and Type of Institutions
U1	D*	5 junior high schools: 1 counselor at each				R1A	C	Area vocational schools Assess all H and D
	C	Vocational high schools: 1 coord., 1/2 basic skills teacher, 1 aide				R1B	D	1/2 to area voc. school assessment Other 1/2 to comp. HS to purchase voc. materials
U2	D	6 comp. HS and voc. HS: Pre-vocational skills	S2	D	2 comprehensive HS: 1 counselor at each	R2	C	Area vocational school 2-week exploratory, and vocational assessment
	C	VA Hospital: Life skills						
U3	C	Voc. HS: Alternative vocational ed. project Tutoring, equipment, curriculum	S3	C	Voc. HS: Assessment, counseling, equipment, curriculum aides in vocational classes	R3	-	No funds
U4	C	Postsecondary Voc. School: Aides in self- contained, shared-time program, modified curri- culum, tutoring, assessment	S4	D	4 comprehensive HS: Job placement	R4	-	Passes funds to Asso- ciation for Retarded

*D indicates that funds were dispersed among several institutions in a district.
C indicates that funds were concentrated.

Exhibit 4.1 (continued)

TYPE AND NUMBER OF INSTITUTIONS RECEIVING HANDICAPPED FUNDS BY URBANICITY OF DISTRICT

Urban			Suburban			Rural		
Commu- nity Code	Targeting Strategy	Number and Type of Institutions	Commu- nity Code	Targeting Strategy	Number and Type of Institutions	Commu- nity Code	Targeting Strategy	Number and Type of Institutions
U5	D*	-32 comp. HS: Aides for assessment -36 comp. HS: Resource specialist, aides and peer tutor -Unknown Counselor school to work -Unknown Transition to post- secondary vocational -All 52 comp. HS: Peer tutors & advisors -15 comp. HS: CAI labs	S5A	-	Returned funds			
			S5B	C	Area vocational school; Unknown services			
U6	C	Voc. school: Part day, self-contained classes. Counselor and 5 teachers	S6	N/A	At only comprehensive high school	R6	-	No funds

*D indicates that funds were dispersed among several institutions in a district.
C indicates that funds were concentrated.

Exhibit 4.1 (continued)

TYPE AND NUMBER OF INSTITUTIONS RECEIVING HANDICAPPED FUNDS BY URBANICITY OF DISTRICT

Urban			Suburban			Rural		
Commu- nity Code	Targeting Strategy	Number and Type of Institutions	Commu- nity Code	Targeting Strategy	Number and Type of Institutions	Commu- nity Code	Targeting Strategy	Number and Type of Institutions
U7	D*	Across 4 institutions: Special school for multiply-handicapped 3 comp. HS: computer applications class modified Voc. HS: aides for voc. shop classes 4 hrs. assessment and follow-up	S7	N/A	Comp. HS aide in 2 voc. ed. classes N/A Area voc. school, special culinary arts teacher	R7	D	Comprehensive HS Guidance and career awareness Voc. HS: remediation, and individual and group guidance
U8	C	Voc. HS: 2 teachers, self-contained full day				R8A	C	Area voc. school: Work study subsidiaries
						R8B	C	2 area voc. schools: 2 yr. school-to-work transition
U9	D	7 comp. HS: aides in voc. classes, pre-voc.				R9A	N/A	Pre-voc. resource class
						R9B	N/A	5 aides in voc. classes

*D indicates that funds were dispersed among several institutions in a district.
C indicates that funds were concentrated.

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districts, two dispersed their funds among all their comprehensive high schools (S2 and S4) and two concentrated Handicapped funds at the area vocational school or the vocational high school (S3 and S5B).

For the eleven rural districts in the sample, practices varied. Two rural districts received no funds (R3 and R6), a second two rural districts contained only one institution (R9A and R9B) and a fifth district turned over all of its funds to an Association for Retarded Citizens (R4). Of the remaining six rural districts, 4 concentrated funds at their area vocational schools (R1A, R2, R8A, and R8B) and 2 dispersed funds between their single comprehensive high school and their vocational school (R1B and R7).

Selection of Participants Among the Handicapped

In every district in our sample, handicapped students for the purpose of the Perkins act were synonymous with a subset of students who have been identified as handicapped under P.L. 94-142, the enabling legislation of the special education program. Students who are referred to Special Education are screened and diagnosed and categorized according to definitions of handicaps developed at the federal level which are relatively uniformly applied by school districts. For each handicapped student, it is required under PL 94-142 that an individualized education program (IEP) be created outlining the school program that will best meet that student's special needs. In most cases, the IEP must address a handicapped student's need for vocational education.

Vocational educators are not involved in large scale efforts to identify students who are handicapped. The identification is done by special education program personnel. An IEP of a handicapped student that indicates the need for vocational education determines the services that the student will receive. If Perkins funds are paying for those services, the student becomes a recipient.

Decisions are made locally, at the school level, as to which specific handicapped students to serve. Exhibits 4.2, 4.3, and 4.4 summarize for each district, the number of handicapped students served in each institution, some of their characteristics, and the amount of Perkins funds used. Where relatively large amounts of funds were targeted for services to a relatively small number of handicapped students we categorized this practice

Exhibit 4.2

HANDICAPPED: SCHOOL AND STUDENT TARGETING DESCRIPTIONS FOR THE URBAN DISTRICTS IN THE STUDY SAMPLE

<u>School Targeting</u>		<u>Student Targeting</u>		Perkins Allocatic
Target Strategy*	Schools/Activities	Target Strategy*	Number & Type of Student	
<u>Community U1</u>				
D	1 counselor at each of 5 junior high schools	D	1150 handicapped/ disadvantaged	\$129,00
C	Vocational high school: 1 coordinator, 1/2 basic skills teacher, 1 aide	C	140 at-risk students H&D	
<u>Community U2</u>				
D	6 comp. GS & voc. HS: pre-vocational skills	C	86 mainstream handicapped	67,00
C	VA hospital: life skills	D C	680 non-mainstreamed 47 handicapped	
<u>Community U3</u>				
C	Voc. HS: alternative voc. ed. project Tutoring, equipment, curriculum	C D	250 non-mainstreamed handicapped 300 mainstreamed handicapped	87,00 4,42
<u>Community U4</u>				
C	Postsecondary voc. school: aides; in self-contained, shared-time program, modified curriculum, tutoring assessment	D	40-50 mainstreamed handicapped interested in vocational education	34,20
<u>Community U5</u>				
D	32 comp. HS: aides for assessment	D	7,780	2,800,00
	36 comp. HS: resource specialist, aides and peer tutors	D	6,653	
	Unknown: counselor school to work	D	3,309	
	Unknown: transition to post- secondary voc.	C	H&D 2,413	
	All 52 comp. high schools: peer tutors and advisors	D	3,392	
	15 comp. HS's: CAI Laboratories	D	1,001	

*D indicates dispersion; C indicates concentration

Exhibit 4.2 (continued)

HANDICAPPED: SCHOOL AND STUDENT TARGETING DESCRIPTIONS FOR THE URBAN DISTRICTS IN THE STUDY SAMPLE

<u>School Targeting</u>		<u>Student Targeting</u>		Perkins Allocati
<u>Target Strategy*</u>	<u>Schools/Activities</u>	<u>Target Strategy*</u>	<u>Number & Type of Student</u>	
<u>Community U6</u>				
C	Voc. school: part-day, self-contained classes. Counselor and 5 teachers	C	51 educably mentally handicapped and some learning disabled	unknow
<u>Community U7</u>				
D	Special school to multiply handicapped deaf students	C	7 mentally handicapped	\$42,6
	3 comp. high schools: computer applications class (modified)	C	34 physically handicapped	69,2
	Voc. HS: aides for vocational shop classes	C	75 mainstreamed	66,5
	Voc. HS: 4 hrs. assessment and follow-up	D	180 handicapped	44,6
<u>Community U8</u>				
C	Voc. high school: 2 teachers, self-contained full day	C	10-15 moderately and severely retarded/class	70,0
<u>Community U9</u>				
D	7 comp. high schools: Aides in vocational classes.	D	750 mainstreamed handicapped	23,5
	Aides in pre-vocational classes.	D	200 non-mainstreamed 9th graders	

*D indicates dispersion; C indicates concentration

Exhibit 4.3

HANDICAPPED: SCHOOL AND STUDENT TARGETING DESCRIPTIONS FOR THE
SUBURBAN DISTRICTS IN THE SAMPLE

<u>School Targeting</u>		<u>Student Targeting</u>		Perkins Allocation
Target Strategy*	Schools/Activities	Target Strategy*	Number & Type of Student	
<u>Community S2</u>				
D	1 counselor at each of the 2 comprehensive HS's	D	All students, including handicapped and disadvantaged	\$34,00
<u>Community S3</u>				
C	Voc. HS: Assessment, counseling, equipment, curriculum aides in vocational classes	C	Estimated 74-125 handicapped	15,16
<u>Community S4</u>				
D	4 comprehensive high schools: Job Placement	C	30-40 non-mainstreamed	33,40
<u>Community S5A</u>				
				Turned back \$29
<u>Community S5B</u>				
C	Area vocational school	?	Unknown	17,90
<u>Community S6</u>				
N/A	Only at comprehensive high school	C	20 behaviorally disordered and educably mentally handicapped in self-contained class (mainstreamed for art and physical education)	
<u>Community S7</u>				
N/A	Comprehensive high school aide in 2 vocational ed. classes	C	mainstreamed handicapped in word processing and business classes	3,01
N/A	Area vocational school: Spec. Culinary Arts teacher	C	96 students, of whom 36 are handicapped; some self-identified	18,00

*D indicates dispersion; C indicates concentration

Exhibit 4.4

HANDICAPPED: SCHOOL AND STUDENT TARGET DESCRIPTIONS FOR THE
RURAL DISTRICTS IN THE SAMPLE

<u>School Targeting</u>		<u>Student Targeting</u>		Perkins Allocati
<u>Target Strategy*</u>	<u>Schools/Activities</u>	<u>Target Strategy*</u>	<u>Number & Type of Student</u>	
<u>Community R1A</u>				
C	Area voc. school: Assess all handicapped and disabled	D	1½ hrs. of assessments for each of 500 H or D students	\$12,5
<u>Community R1B</u>				
D	¼ area vocational school: assessment	D	All handicapped & disabled (state disallowed for next year)	9
	Other ¼ to comprehensive HS: purchase vocational materials	D	Available to all students, including handicapped and disadvantaged	
<u>Community R2</u>				
C	Area vocational school: two-week exploratory Vocational assessment	C	7th & 8th grade handicapped	41,0
		D	All 9th graders, including handicapped and disadvantaged	
<u>Community R3</u>				
<u>Community R4</u>				
<u>Community R6</u>				
<u>Community R7</u>				
D	Comprehensive HS: guidance and career awareness		80 handicapped	7,00
	Vocational HS: remediation	D	200 H, plus others at risk	27,80
	Individual and group guidance	D	Unknown number	9,00

*D indicates dispersion; C indicates concentration

Exhibit 4.4 (continued)

HANDICAPPED: SCHOOL AND STUDENT TARGET DESCRIPTIONS FOR THE RURAL DISTRICTS IN THE SAMPLE

<u>School Targeting</u>		<u>Student Targeting</u>		Perkins Allocati
<u>Target Strategy*</u>	<u>Schools/Activities</u>	<u>Target Strategy*</u>	<u>Number & Type of Student</u>	
<u>Community R8A</u>				
C	Area vocational school: work-study subsidiaries		Unknown number	\$37,00
<u>Community R8B</u>				
C	2 area vocational schools: 2 yr. school to work transition	C	108 total students, of whom 80 are handicapped	31,8.
<u>Community R9A</u>				
N/A	Pre-vocational resource class	C	71 handicapped	--
<u>Community R9B</u>				
N/A	5 sides in vocational classes	C	40 handicapped students	--

*D indicates dispersion; C indicates concentration

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as one of concentrating services and coded it with a "C". In those districts where funds were spread across relatively large numbers of students this practice was labeled dispersion and coded it with a "D".

To illustrate the practice of dispersion of Perkins-funded services, examine the information of RIA. In this district a large number of handicapped students representing a range of handicapping conditions was each provided a one-hour vocational assessment supported by Perkins funds. Rather than providing intensive service for a small number of handicapped students, funds were used to provide services for many students and the services were of short duration.

In other instances Perkins-funded services were concentrated on small numbers of handicapped students having similar handicapping conditions. In district U7, \$69,262 of Perkins funds went toward the modification of a computer applications class for 34 physically handicapped students in three comprehensive high schools. In another district, U4, \$22,806 of Perkins handicapped funds were used to support aides in a self contained vocational education class of 40 to 50 handicapped students at the vocational high school who were mainstreamed in their other classes at their home schools.

Urban districts have many more handicapped students and larger allocations relative to suburban and rural districts. Four of the urban districts in our sample used both targeting strategies, providing short-term, one-time services to a large number of handicapped students and providing more intensive longer-term services to a small number of handicapped students. Services located only at the vocational high schools tended to be concentrated on small groups of handicapped. The exception to this was when handicapped students from throughout a district might be brought to the vocational high school for a one-time vocational assessment. When Perkins-funded services were found throughout the comprehensive high schools in a district, they tended to be less intensive types of services (counseling sessions, vocational assessments). The exception in these settings might be when aides were present in vocational classes to offer individual assistance to mainstreamed handicapped students.

The suburbs in our sample tended to concentrate Perkins services on a small number of handicapped students. In several instances, however, this reflects the fact that enrollments in the suburban districts were small and the total handicapped population in turn was few in number.

Nearly half of the districts in our sample that had Perkins funds (12 of 25 districts) provided services in which the setasides for the handicapped were combined with those for the disadvantaged. In the rural areas especially, districts in our sample were more likely to combine their handicapped and disadvantaged setasides. Seven of the nine rural districts used their funds in this way (compared with two of the nine urban districts and three of the seven suburban districts). It appears that where the amounts of the separate setasides are small, districts are more likely to combine their setaside funds to support similar activities for both groups. Districts that combine funds to provide services appropriate for both handicapped and disadvantaged also seem to be more apt to spread services across greater numbers of students. Services supported by combined funding tended to be used for vocational assessment and remediation.

Services for the Handicapped Funded by Perkins

In this section we group the school districts by state and describe the following for each district: a) the types of services for handicapped students supported by Perkins funds, b) the type and number of students served, c) the type of institution in which the services were provided, and d) the amount of Perkins funds used. We have also indicated when other students (i.e., nonhandicapped) received the services. Not all of this information was available for every site, but where the data were available we have included them.

Perkins handicapped funds supported assessment activities in all districts visited. The next most prevalent use of handicapped funds was for instruction in vocational classes. The same number of districts (7) used Perkins handicapped funds for aides in regular classes as used handicapped funds to support separate vocational classes of handicapped students. An eighth district used handicapped funds to support pre-vocational resource classes, and a ninth offered a separate class for handicapped students in life skills. Separate vocational classes were typically held for students who were

not mainstreamed in any of their classes. Counseling was the next most frequent use of handicapped funds, followed by work experience and/or job placement programs.

U1, a medium sized urban district in the south, received \$33,000 in Perkins Handicapped funds in 1987-88. It combined \$28,000 of these funds with \$101,000 of its Disadvantaged allocation to pay for one full-time vocational special needs counselor at each of five junior high schools. Among the services provided by the counselors were assessments, assisting teachers with the creation of Individualized Education Programs (IEPs), one-on-one help for students in classrooms, and advocating for special education students in the system. The program aims to provide handicapped students with more counseling than other students. Thus, while other counselors have loads of approximately 350 students, these Perkins-funded counselors have loads of approximately 230. The maximum total number of students (handicapped and disadvantaged) served by all five counselors was estimated to be somewhat less than 1150. While counselors give preference to handicapped students who are in vocational education, they also serve some handicapped students who are not in vocational education. There were three primary reasons for U1's decision to target services at the junior high school level: first, because of discipline problems in those grades; second, because many of the targeted students drop out before high school, and this program is an attempt to mitigate that rate; and third, because of the Perkins Section 204 assessment requirement.

An additional \$5,000 of the Handicapped allocation was combined with \$118,000 Disadvantaged funds and went to the vocational high school. These funds were used for one full-time special needs coordinator, a half-time basic skills specialist, and a full-time paraprofessional aide in basic skills at the vocational high school. According to the plan submitted to the state, the basic skills program was intended to serve 140 highest risk students of the 100 handicapped and 200 disadvantaged students in the school. The number of handicapped students actually served was not available.

EIA is an economically poor district that encompasses 231 square miles and has an enrollment of 873 students at grades 9-12. EIA combines its Handicapped and Disadvantaged allocations (\$2831 and \$9682 respectively) and passes the funds on to a Cooperative that serves over 20 districts. With these funds the Cooperative provides media services, loaning the member

districts films, tapes, books, VCRs, and video tapes for use in special education (resource room) vocational programs. The Cooperative also provides assessment services using a specially equipped mobile van to travel to the schools. All tenth graders who qualify for special education under P.L. 94-142 are given complete assessments whether or not they are currently enrolled in vocational education. Approximately 500 students from 50 districts were assessed and each assessment took about one and one-quarter hours. Interest inventories are also administered to all seventh and eighth graders under Section 204(b) as part of the state mandated career education class. Upon distribution of the results of the inventories, staff describe vocational courses available in the district. Staff of the Cooperative also conduct inservice training for counselors, special education teachers and vocational education teachers to help them learn how best to use the results of the assessments. District counselors mentioned, however, that they have lacked both ability and time to put the results to use. Given the limited time the Cooperative could spend in any given district, district staff indicated that assessment seemed a "natural" service to provide.

The Handicapped allocation in R1B, which is a considerably smaller district than R1A, is \$488. Like the other districts in State 1, it combines its Handicapped set aside with its Disadvantaged allocation (\$1,370). It retains half of the total amount and passes half to a Cooperative. The former amount is used to purchase materials and video tapes for career exploration activities. Theoretically, these materials should be used only by handicapped or disadvantaged students; however, in practice they may be accessed by any student who desires to use them. The district decided to spend part of its funds on software and other career exploration materials because they thought their prior materials were outdated.

The Cooperative also provides assessment services using a mobile van that travels among the 22 member districts. All handicapped and disadvantaged students are assessed, then if there is time other students are assessed as well. We were told that little use is made of the results for two reasons. First, the school counselor has little time or interest. Second, there are very few program options in R1B; thus, few adjustments in program enrollments can be made on the basis of assessment outcomes. The Cooperative has been

told by the state that this use of Perkins funds is improper since the services are not supplemental. As of next year, the state will fund the assessments and the Perkins funds will be used for other services.

In 1987-88, of the 15,000 students in grades 9 through 12, there were approximately 815 special education students enrolled in district U2. Of these, 47 were in a special life-skills program located at the Veterans Administration Hospital, 86 were mainstreamed in vocational education classes in the district's six comprehensive high schools and the vocational high school but needed special help, and 680 were non-mainstreamed special day students who received a pre-vocational class. U2 used its \$67,400 Handicapped allocation to fund the life-skills program for the first group, an instructor to provide special services for the second group, and a full-time liaison between Vocational Education and Special Education. Perkins funds were also used to purchase APTICOM to aid in assessing students. In 1987-88, 86 handicapped students were assessed.

S2 combined its \$11,000 Handicapped allocation with its \$23,000 Disadvantaged allocation to fund one guidance counselor at each of the district's two comprehensive high schools. In addition to performing some administrative functions, the counselors offered guidance to all students in vocational education, not just to special needs students. Neither the counselors nor other district staff could provide numbers of handicapped or other special needs students in each school with any precision. It is estimated that there were approximately 90 handicapped students in vocational education in the two comprehensive high schools. However, one of the counselors did state that handicapped students "get more services because they are more visible."

In 1987-88 R2 used its Handicapped and Disadvantaged allocations (\$21,000 and \$20,000 respectively) for career exploration, assessment and guidance. In seventh and eighth grades, all special education students are given a tour of the local vocational high school during which time they complete an interest survey and participate in practice interviews. After that, they work at the vocational high school three hours daily for two weeks using hands-on equipment. In the 9th grade all special education students are provided with a computer-generated four-year vocational plan which becomes part of their Individual Education Program. In the 9th and 10th grades,

students are given further vocational guidance using computerized screening assessments and work sampler. Lastly, the final semester of the students' senior year is devoted to the school-to-work transition, and students are assisted with job placement. These programs served approximately 190 handicapped students in the first semester of 1987-88.

It is district R2's philosophy not to use Perkins Handicapped and Disadvantaged funds for supplies and equipment, but to try to use the funds in a way that will have a long-range impact. This philosophy results in an effort to conduct an in-depth prescriptive vocational assessment of each special population student.

With the exception of \$1,600, U3's \$93,000 Handicapped funds was distributed across the comprehensive high school and the vocational school in 1987-88. (The \$1,600 was spent at an adult vocational center attended by a few high school students.) Over \$87,000 was used to fund an alternative vocational education program for non-mainstreamed handicapped students which existed in all secondary schools. In addition to work experience, the program includes assessments, transitional counseling, and supplemental services. The district had used general funds for this program prior to Perkins; however, it had served mostly mentally handicapped students. Perkins funds, along with the Perkins mandate to serve special populations, resulted in the broadening of the program to serve students with other types of handicaps as well as mentally handicapped students. However, staff attempt to limit the program to "those who need it," mainstreaming most students. The program attempts to match students to jobs based on the students' needs and job tasks. Once a student is placed in a setting, the school tries to phase out the school's support in favor of co-worker and employer support. Approximately 250 students were served by the program in 1987-88.

About \$4,425 of the allocation was used to help provide supplemental services to approximately 300 special education students who were in mainstream vocational education classes at the vocational high school. Such services include tutoring and modification of curriculum and equipment.

S3 is a rather affluent suburb of U3. Ten percent of the students in the district are in special education, which is an unusually high percentage. All of S3's \$15,169 Handicapped allocation is given to its vocational high school, which serves 740 students. Over half of these funds

was spent on tutoring, a career fair, equipment purchase, and modification of equipment and curricula. Approximately \$750 was used for paraprofessional aides in vocational classrooms, and \$300 was used for guidance and assessment. Assuming that 10 percent of the 740 students at the vocational high school are in special education, we estimate that about 74 students could have received Perkins services.

The three main goals for vocational education in S3 are to: 1) prepare students for specific occupations; 2) prepare students for further education and/or training; and 3) prevent students from dropping out. The use of Perkins funds primarily for tutoring and the career fair were seen by district personnel as helping to meet these goals.

There seemed to be some confusion in district R3 over whether the district received any IIA funds at all. During a visit to the site, the Vocational Director and Vocational Planner for the district stated that the district received about \$3,500 in IIA funds in 1987-88; however, the high school principal and district Superintendent indicated that no IIA funds were received. In a subsequent attempt to determine the district's funds status, personnel in the Vocational Director's office stated that no IIA funds were received.

There were approximately 4,500 special education students in the 13 middle and 10 high schools in U4 in 1987-88. All special education students in middle school are enrolled in vocational education classes. In high school, about 50% to 65% are enrolled in a vocational education program. During the 10th grade, special education students who are interested in vocational education or are recommended by their teachers are bussed from their home high schools to the postsecondary vocational technical center and are given a thorough vocational assessment and provided vocational guidance by an Exceptional Education teacher and a Vocational Evaluator assisted by two aides.

Of the 150 to 200 students who are evaluated each year, forty to fifty enroll in a program called "Shared Time" the following year. The Shared Time program is not solely for handicapped students. Any student who is interested in the vocational offerings at the postsecondary institution may participate. Handicapped students in the Shared Time program spend half days in their regular high school and half days at the postsecondary vocational

school. They are mainstreamed at the area vocational school at least two-thirds of the time and have aides to help them in classes--the same two aides who assist in the evaluations. Curricula are modified for handicapped students if necessary. There is also a resource room for them staffed by the Exceptional Education teacher and the two aides in which students receive tutoring, employability skills, and assessment.

Approximately 40% of the district's \$57,016 Handicapped allocation pay the salaries of the two aides. Another 40% of the funds are used to pay for a full-time person who acts as liaison between special education and vocational education providing consultations with teachers, counselors, and aides. She recently designed a vocational assessment instrument that is currently being used by the district. About 20% of the allocation is spent on curriculum modification for Shared Time students.

S4 is located in a fast-growing affluent suburb of a prosperous Southern metropolis and has a total enrollment at the secondary level of 5500 students. No blind or deaf students are served by the district; they are sent to a special school outside the district. Approximately 85% of the handicapped students who are enrolled in the district are mainstreamed and do not receive Perkins services--indeed, they are not even counted as handicapped students for administrative purposes. The remaining 15% are the non-mainstreamed handicapped students (an estimated 30 to 40 students), most of whom take some vocational courses--primarily home economics and industrial arts which have special labs for the handicapped. The entire Handicapped allocation of \$33,405 was used by S4 to pay for a full-time Job Placement Specialist who works with the Office of Vocational Rehabilitation and serves non-mainstreamed handicapped students from all of the district's four comprehensive high schools.

R4 is a small, poor, rural district serving 973 secondary students at two comprehensive high schools. It uses its \$31,189 Handicapped allocation to provide educationally related services--mostly Adult Basic Education--for adults at the Association for Retarded Citizens Center. No special services are provided for high school age handicapped students. Historical precedent was cited as the reason for serving the Retarded Citizens Center rather than high school students.

By far the largest district in the sample, U5, received an allocation of \$1,035,670 in Handicapped funds in 1987-88. With this grant, it funded the following programs: 1) Vocational assessment of all special needs students enrolled in vocational classes. The assessment includes an interest inventory, APTICOM, TAPS, and CASE. Thirty-two schools have vocational aides who assist in evaluations. The use of the assessments varies by school. 2) Vocational Education for the Handicapped supported a resource specialist in 36 schools to facilitate services to handicapped students. Services begin in the 8th grade with assessment and an individualized career plan. Vocational aides and peer tutors also assist handicapped students. 3) Vocational Articulation for Handicapped Students. Counselors work with the Office of Vocational Rehabilitation to assist the transition of handicapped students from school to work. 4) A program assists handicapped and disadvantaged students with the transition to postsecondary vocational programs. 5) Student services cooperative provides peer tutors on either a short- or long-term basis. The program is available in all of the district's 52 high schools. Advisors communicate with teachers to identify students in need of tutoring. 6) CAI labs in reading and math in 15 schools.

The number of handicapped students served by each program was not available; however, the district did provide a document that shows the numbers of handicapped students who received various categories of services in 1987-88. They were as follows: Assessment, 7,870; counseling, 6,653; peer tutoring, 3,392; tutoring by vocational aides, 3,039; visits to postsecondary institutions, 200; CAI labs, 1,001; orientation, 2,213. Many of these services are only partially funded by Perkins. For instance, equipment for the CAI labs was purchased with local funds while the software was purchased with Perkins funds. The Director of Vocational Education was not able to provide the amount of Perkins funds that went toward each type of service; however he did state that most services provided directly to students were Perkins funded.

S5A would have received a total of \$290 in IIA funds in 1987-88. It declined the funds because personnel felt that the cost of administering the funds would have exceeded the amount of the allocation.

S58 received \$5,500 in Handicapped funds in 1987-88. The district, which has one comprehensive high school and a secondary area vocational school, spent the entire allocation at the area vocational school funding assessments, aides, and modifications of curriculum and materials.

U6, an urban school district in the midwest, includes four comprehensive high schools and an area vocational school, which serve approximately 6400 secondary students. In 1987-88 U6 spent all of its Handicapped allocation at the area vocational school to finance a counselor and five teachers in a work experience program. The Special Vocations Program is mandatory for all of the district's educably mentally handicapped high school students and is also attended by some learning disabled students. A total of 51 such students participated in the program in 1987-88. Participants receive on-the-job experience in laundry, food service, building maintenance and trades, and business. Each skills area also teaches employability skills. As soon as teachers think they are ready, students begin trial employment. The counselor oversees the transition of students from school to work. Perkins funds five teachers for the Special Vocations Program.

S6, an affluent suburban community in the midwest has a secondary school enrollment of 1450 students, all of whom are enrolled in one comprehensive high school. In 1987-88 there were approximately 65 students receiving special education services in S6. Of these, approximately 20 behaviorally disordered and educably mentally handicapped students received vocational instruction in a self contained classroom. (These students are mainstreamed only for physical education and art.) In this setting the teacher explored as many as 35 occupations with groups of four students at a time, and students tried out various occupations. Perkins Handicapped funds in the amount of \$2,478 were used for partial support of the program. In 1987-88 a welding simulator was purchased for the program to enable the students to become familiar with the experience of welding without using equipment that might be dangerous to them.

The provision of a separate vocational program to these students was described as a consequence of the difficulty of dealing with these students in mainstream classrooms, rather than as a consequence of federal matching or excess cost requirements.

The 700 secondary students in R6 are equally divided between the comprehensive high school and the area vocational school. It is not clear whether district R6 received any IIA funds at all in 1987-88. Some district staff members stated that no IIA funds were received, while others indicated that approximately \$10,000 in Handicapped funds in 1987-88 were received and passed on to the area vocational school that provides member districts with vocational assessments of handicapped students. It is a fact that R6 paid some funds to the area vocational school, but whether or not these were Perkins funds is not certain. In a follow-up telephone call, the district superintendent stated that he was not sure of the district's funding status related to Perkins.

As a large school district, U7 has a variety of programs and services for its handicapped students. In 1987-88 U7 used the \$223,112 it received in Handicapped funds in several types of institutions: in a special school for the multiply handicapped, in three comprehensive high schools, and in the vocational high school. About \$42,000 of the allocation was used to fund a special program for multiply handicapped deaf students who cannot be mainstreamed because of cultural, emotional, mental or physical problems in addition to deafness. The program, which is located in a school for the deaf, served seven multiply handicapped students in a supported work model for the transition from school to work. These students, unable to succeed in any academic program, were provided work experience including job coaches, peer counselors and full-time support teachers.

Another \$69,262 of the Handicapped allocation was used for the Adapted Business Computers program which served 34 physically handicapped students in three of the city's comprehensive high schools. The program consists of training in computer applications, data bases, and spread sheets for business/office career.

Shop Assistance for the Handicapped was funded at \$66,565 and provided aides to assist handicapped students in shop classes at the vocational high school. The emphasis of the program is on proper use of equipment and shop safety. The aides are necessary because of the large number of special needs students involved in shop programs at the vocational high school. Approximately 75 students benefited from the services of the aides in 1987-88.

Lastly, \$44,616 was used to provide a complete vocational assessment for handicapped students at the vocational high school. Four hours of assessment and follow-up counseling time were provided to 180 handicapped students. One reason for choosing to provide assessment services was to fulfill the state's requirement that 20 percent of the Handicapped funds be spent on "guidance."

District S7 contains one comprehensive high school with an enrollment of 800 students. S7 combined its 1987-88 Handicapped and Disadvantaged funds (\$2,330 and \$686 respectively) to provide an aide for individualized instruction in word processing and business classes in its only comprehensive high school.

In the same year the area vocational school enrolling secondary level and postsecondary level students located in S7, received its own allocation of \$8,000 in Handicapped funds which it combined with its \$10,000 Disadvantaged allocation to hire a Special Educational Culinary Arts Instructor. The instructor works with both the handicapped and non-handicapped students in culinary arts as well as with small groups of "substantially separate" handicapped students. Of 96 students enrolled in culinary arts, 36 were identified as special education students. It should be noted that the vocational school recruits special education students, and in 1987-88 approximately 40% of the freshman class were so classified. However, according to the Administrator of Special Services about 33% of these students have no special needs. They simply self-declare upon admission in order to be exempted from certain other classes and requirements. There had been no physically handicapped students at the vocational school for the past six years.

In R7, the comprehensive high school enrolls 435 students in grades 9-12 and the area vocational school has a population of 628 students. R7 received \$17,023 in Handicapped funds in 1987-88. Of this amount, \$7,000 paid for a subprofessional at the comprehensive high school who provided guidance and career awareness for 80 handicapped students. The remainder of the Handicapped funds was spent at the vocational high school which was attended by approximately 200 handicapped students. About \$7,700 of the Handicapped allocation was combined with \$20,147 in Disadvantaged funds to fund the Crisis

Center, which provided special remediation to students in danger of dropping out. The remaining \$2,256 was combined with \$6,716 Disadvantaged funds and used for individual and group guidance in the vocational resource room.

Five main reasons for funding the Crisis Center were offered by vocational high school staff. First, State 7 prohibits funding any given project with IIA funds for longer than three years. Since the Center is supplemental to the school's operation, it can be discontinued easily at the end of the three-year funding cycle without substantially disrupting the school's operation. Second, districts in State 7 must write proposals in order to receive funds. Dropout prevention is a state priority. Thus, R7 staff felt that the likelihood of a project dealing with dropout prevention was high. Third, at the time the proposal for the center was written, other support services for handicapped and disadvantaged students were already in place. Fourth, there was a federal remediation program available to serve as a match. Last, by serving handicapped and disadvantaged students in remedial skills and guidance the project allowed for the combining of funds into a meaningful amount of money.

U8 has a secondary school enrollment of 13,500 students who attend one of 7 comprehensive high schools or the vocational high school. U8 used its entire Handicapped allocation of \$70,000 to pay the salaries of two teachers who provide a year long exposure to multiple occupational programs for moderate and severely retarded students at the vocational high school. The programs rotate every ten weeks. It is estimated that each class contains approximately 10-15 students. The district allocates its Perkins handicapped funds on a competitive bid basis. Traditionally, all Perkins handicapped funds have gone to the vocational high school because it is the only school that has responded to the district's request for proposal.

In R8A the area vocational school, which has a total enrollment of 330 juniors and seniors, is an eligible recipient of Perkins funds in the intrastate formula allocation process. The area school serves 14 feeder districts that have a total kindergarten through grade 12 enrollment of 22,000 students. The area vocational school receives \$17,000 Handicapped Perkins funds which it combines with its \$20,000 Disadvantaged funds. Funds were used to help work study students obtain work and to subsidize their employ-

ment. The effort is conducted jointly within the Office of Vocational Rehabilitation, which has a representative part time at the area vocational school.

R8B is an educational cooperative made up of 4 area vocational schools that together serve 28 feeder districts. R8B combined its Handicapped and Disadvantaged allocations (\$31,844 total) to fund one counselor in each of two area vocational schools who run a two-year school-to-work transition program for 108 students, 80% of whom are handicapped. (The remainder are disadvantaged.) The counselors also work with the cooperative's special education personnel to provide other services (e.g., tutoring) to handicapped students, and with the Office of Vocational Rehabilitation in some districts in referring students. In addition to setting up work placements in the community, the counselors follow-up students for one year after graduation. Lastly, the counselors work with the person responsible for vocational assessments throughout the cooperative.

U9, an urban school district in a southern state, has a secondary enrollment of 17,200 students spread across 11 comprehensive high schools. U9 received \$23,558 in Handicapped funds in 1987-88. These funds were used for aides in vocational classes in 7 comprehensive high schools attended by approximately 750 mainstreamed handicapped students. A vocational class will have an aide to assist the instructor when there are 5 or more special education students in the class. The allocation also provides for aides in a pre-vocational resource class attended by approximately 200 non-mainstreamed ninth-grade handicapped students. The use of Perkins funds to provide aides in special vocational education classes is mandated by the state.

R9A encompasses an entire rural county in a hilly region of a poor southern state. The district contains two high schools, each of which has a vocational center. The total district enrollment is 5300 students K-12. The district used its Handicapped allocation to fund pre-vocational resource classes for handicapped students in one of the district's two high schools. Approximately 60 students were served in 1987-88. Funds were insufficient to provide classes at both schools.

District R9B also comprises a large rural county and has a total enrollment of 4600 students K-12. Like other districts in State 9, it has a state-mandated Perkins program for handicapped students. The program, which

is housed at the district's only comprehensive high school in its vocational center, includes assessment and individualized assistance to mainstreamed handicapped students. Five aides for the program were funded by Perkins in 1987-88. The aides participate, along with the classroom teacher and vocational shop instructor, in developing an IEP for each student assigned to the program. Each aide is assigned to a different substantive vocational area. For instance, one aide is assigned to General Building Trades and Woodworking/Cabinetmaking, while another is assigned to Food Management and Health Occupations. Once the preliminary planning is completed, the aides assist teachers a minimum of four periods a day, using the remaining two periods for preparing instructional materials or for individual tutoring sessions for students with greatest needs. In 1987-88 approximately 40 handicapped students were served by this program.

SECONDARY LEVEL: PERKINS DISADVANTAGED FUNDS

Access to Disadvantaged Funds by Schools Within Districts

The types of institutions that received the Disadvantaged funds in each district is shown in Exhibit 4.5. The practices followed by districts in our sample to allocate Disadvantaged funds among schools followed a pattern similar to Handicapped funds. There is perhaps a slight tendency to spread Disadvantaged funds across more schools compared with Handicapped funds.

Selection of Participants Among the Disadvantaged

In the Perkins legislation, the term "disadvantaged" includes those (other than handicapped) who have economic or academic disadvantages. The legislation includes in the disadvantaged population "individuals who are members of economically disadvantaged families, migrants, individuals who have limited-English proficiency, and individuals who are dropouts from or who are identified as potential dropouts from secondary school (Section 521(12)).

States in our sample have not been prescriptive about who should be served or about which groups should be given priority for services. Districts have been allowed flexibility in the identification of disadvantaged students and in determining the recipients of services.

Exhibit 4.5

TYPE AND NUMBER OF INSTITUTIONS RECEIVING DISADVANTAGED FUNDS BY URBANICITY OF DISTRICT

Urban			Suburban			Rural		
Commu- nity Code	Targeting Strategy	Number and Type of Institutions	Commu- nity Code	Targeting Strategy	Number and Type of Institutions	Commu- nity Code	Targeting Strategy	Number and Type of Institutions
U1	D*	5 junior HS: 1 counselor each				R1A	C	Area voc. school: 1 1/4 hrs. assessment each
	C	Voc. HS: Special Needs coordinator, 1/2 basic skills teacher, 1 aide				R1B	D	Area voc. school: Assessment Comp. HS: Vocational materials
U2	D	6 comp. HS: Counselors and paraprofessionals	S2	D	Both com HS: 1 counselor each	R2	C	Area voc. school: Assessment; aides in basic skills lab
	C	Vocational HS: Supervisor of CAI labs						
U3	D	UK: Special classes, counseling, remediation 10 comprehensive HS: Tutors, guidance Vocational HS: Learning resource center, assessment, tutoring	S3	C	Vocational HS: Tutoring, career fair, modification of curriculum	R3	-	No funds

*D indicates that funds were dispersed among several institutions in a district.
C indicates that funds were concentrated.

Exhibit 4.5 (continued)

TYPE AND NUMBER OF INSTITUTIONS RECEIVING DISADVANTAGED FUNDS BY URBANICITY OF DISTRICT

Urban			Suburban			Rural		
Commu- nity Code	Targeting Strategy	Number and Type of Institutions	Commu- nity Code	Targeting Strategy	Number and Type of Institutions	Commu- nity Code	Targeting Strategy	Number and Type of Institutions
U4	-	Passed funds to postsecondary	S4	C	Vocational HS: Work evaluation lab	R4	-	Passed funds to postsecondary
U5	D*	All 52 comp. HS: Assessment, peer tutors counseling Unknown: transition to post- secondary, voc. programs, visit institutions 15 comp. HS: CAI reading and math lab Comp. HS: Tutoring from voc. aides 15 comp. HS: Coordination and tutors	S5A		Returned funds			
			S5B	C	Area vocational school: Support services			
U6	C	Area vocational school: Career learning center, work-study program Alternative Ed. Center: Work experience, basic skills	S6	N/A	Comprehensive HS: math and reading	R6	-	No funds

*D indicates that funds were dispersed among several institutions in a district.
C indicates that funds were concentrated.

Exhibit 4.5 (continued)

TYPE AND NUMBER OF INSTITUTIONS RECEIVING DISADVANTAGED FUNDS BY URBANICITY OF DISTRICT

Urban			Suburban			Rural		
Communi- Code	Targeting Strategy	Number and Type of Institutions	Communi- Code	Targeting Strategy	Number and Type of Institutions	Communi- Code	Targeting Strategy	Number and Type of Institutions
U7	D*	All junior high schools: 1 week exploratory, recruitment & transition to vocational HS Vocational HS: 4 hrs. assessment/student Unknown: Number of comp. HS apprenticeship program, career guidance; preparation & entry into apprenticeship training HS and vocational HS: Voc. math support, remediation in math Vocational HS: Remediation in communication Systemwide: Aide conducts vocational assessment profiles 1 comp. HS: Bilingual business Systemwide: Outreach worker assists with job search	87	N/A	Comprehensive HS: Aide in word processing and business classes Area vocational school: Special education culinary arts	R7	D	Comprehensive HS: Guidance and career awareness Vocational HS: Crisis center, remedia- tion, resource room, individual and group guidance

*D indicates that funds were dispersed among several institutions in a district.
C indicates that funds were concentrated.

Exhibit 4.5 (continued)

TYPE AND NUMBER OF INSTITUTIONS RECEIVING DISADVANTAGED FUNDS BY URBANICITY OF DISTRICT

Urban			Suburban			Rural		
Communi- Code	Targeting Strategy	Number and Type of Institutions	Communi- Code	Targeting Strategy	Number and Type of Institutions	Communi- Code	Targeting Strategy	Number and Type of Institutions
U8	D*	5 of 8 comp. HS: stipends for work-study program Vocational HS: Summer school vocational education classes Unknown: Teacher for separate vocational classes				R8A	C	Area vocational school: Work-study stipends
						R8B	D	Comprehensive HS: Part-time counselors Area vocational school: School-to-work transition
U9	D	7 of 10 comp. HS: Remedial skills classes as they relate to vocational areas				R9A	N/A	Comprehensive HS: Basic skills remedia- tion, pre-employment and job search
						R9B	N/A	Comprehensive HS: 2 teacher provide math and language skills

*D indicates that funds were dispersed among several institutions in a district.
C indicates that funds were concentrated.

155

168

100

In our sample, only in one district (District U3) were economically disadvantaged students considered for service. (They were defined as students who received a free or reduced-price lunch.) For most districts, the emphasis was on the educationally disadvantaged.

In five districts (District U3, U5, U7, U8, and R2) Perkins funds were used to provide special services for limited-English proficient students in vocational education. Perkins Disadvantaged funds in other districts were not targeted for this group. This occurred despite the fact that there were large numbers of LEP students in other sample districts.

Criteria used by some districts to define disadvantaged included measures such as grade point average, scores on a standardized test, an failing proficiency tests or competency tests. Some or all of these factors were mentioned by three urban districts in our sample.

Students who were judged to be potential dropouts or at-risk of dropping out were the targets of Perkins-funded services in several instances (District U1, U3, U6, and R7). Criteria for identifying potential dropouts were usually not made explicit, however.

Teacher judgments about who was academically disadvantaged appears to be a major factor in decisions about who receives Perkins-funded services. Even in those districts that use objective measures of educational disadvantage, teacher judgment plays a role. Except for districts U1, U2, and U9 mentioned above, the student selection process tends not to be a uniform one within districts. There are not districtwide systematic procedures in place for referring and screening students. Policies have not been established for determining the types of students who should have priority for services (e.g., those in greatest need). The numbers of students who actually receive Perkins-funded services are frequently not recorded and counts of numbers served must often rely on the best estimates of program personnel.

Exhibits 4.6, 4.7, and 4.8 for urban, suburban, and rural districts respectively, present information about the number and type of disadvantaged students receiving Perkins-funded services. Information about both school and student targeting are presented on the same table. Again the D code indicates that funds were dispersed across either institutions or students and the C code indicates that funds were concentrated.

Exhibit 4.6

DISADVANTAGED: SCHOOL AND STUDENT TARGETING DESCRIPTIONS FOR URBAN DISTRICTS IN THE SAMPLE

<u>School Targeting</u>		<u>Student Targeting</u>		
<u>Target Strategy*</u>	<u>Schools/Activities</u>	<u>Target Strategy*</u>	<u>Number & Type of Student</u>	<u>Allocation</u>
<u>Community U6</u>				
D	5 junior high schools: 1 counselor each	D	1150 H&D students. D have GPA less than 2.0, are less than 25th percentile. and in voc. ed.	\$129,000
C	Voc. HS: Special needs coord., ½ basic skills teacher, 1 aide	C	200 most "at-risk"	
<u>Community U2</u>				
D	6 comprehensive high schools: counselors and paraprofessionals	D	D have grade of C or lower in English or math. Less than 25th percentile.	190,000
C	Vocational high school: Supervisor of CAI lab	C	Teacher judgement used to select students.	
<u>Community U3</u>				
D	UK: Special classes, counseling, remediation 10 comp. HSs: tutors, guidance Vocational high school: Learning Center--assessment, tutoring	C	Limited English proficient in vocational education	198,000
		D	UK	10,500
		C	200 academically disadvantaged based on teacher judgment.	
		C	100 economically disad. based on free or reduced price lunch.	
<u>Community U4</u>				
	Passed funds to postsecondary		UK	
<u>Community U5</u>				
D	All 52 comp. ES: Assessment Peer Tutors Counseling			2,800,000
	UK: Transition to postsecondary Vocational programs Visit institutions	D	All 32,781 disad. 9th graders	
	15 comprehensive high schools: CAI reading and math labs	C	12,697 disadvantaged	
	Comprehensive high schools: Tutoring from vocational aides	D	27,415 disadvantaged	
	15 comprehensive high schools: Coordination and tutors	D	3,200	
		C	10,132	
		D	24,515	
		C	LEP students in voc. ed.	989,000

*D indicates dispersion; C indicates concentration

Exhibit 4.6 (continued)

DISADVANTAGED: SCHOOL AND STUDENT TARGETING DESCRIPTIONS FOR URBAN DISTRICTS IN THE SAMPLE

School Targeting		Student Targeting		Perkins Allocation
Target Strategy*	Schools/Activities	Target Strategy*	Number & Type of Student	
<u>Community U6</u>				
C	Area vocational school: Career learning center Work-study program	C	60 potential dropouts	Unkno
	Alternative ed. center: Work experience, basic skills	C	104 returning dropouts	\$175.0
<u>Community U7</u>				
D	All junior high schools: 1 week exploratory, recruitment and transition to voc. HS	C	UK 8th graders	446,2
	Voc. HS: 4 hrs assessment/student	D	Disadvantaged across district	34,2
	UK number of comprehensive HS: Apprenticeship program	D	3,000 students grades 8-12	49,0
	Career guidance; preparation and entry into apprenticeship program			
	2 comp. HS and voc. HS: Vocational math support remediation in math	C	300 vocational students	42,8
	Vocational high school: Remediation in communication	C	120 students	208,0
	Systemwide: Aide conducts vocational assessment profiles	D	LEP students	112,0
	One comp. HS: bilingual business	C	150 LEP students	15,5
	Systemwide: Outreach worker assists with job search	C	100 LEP students in business program	62,0
<u>Community U8</u>				
D	5 of 8 comp. HS: stipends for work-study program		UK	43,0
	Voc. HS: summer school vocational education classes		UK	40,0
	UK: teachers for separate vocational classes	C	LEP students	36,0
<u>Community U9</u>				
D	7 of 10 comp. HS: remedial skills classes as they relate to vocational areas	C	Priority to 11th and 12th graders who: fail proficiency test; %ile less than 25; GPA less than 2.0; failure to meet minimum competencies; repeated lack of progress in regular voc. ed. And must be recommended by disciplinary team.	334,8

*D indicates dispersion; C indicates concentration

Exhibit 4.7

DISADVANTAGED: SCHOOL AND STUDENT TARGETING DESCRIPTIONS FOR
SUBURBAN DISTRICTS IN THE SAMPLE

<u>School Targeting</u>		<u>Student Targeting</u>		Perkins Allocati
<u>Target Strategy*</u>	<u>Schools/Activities</u>	<u>Target Strategy*</u>	<u>Number & Type of Student</u>	
<u>Community S2</u>				
D	Both comprehensive high schools: 1 counselor each	D	All students, including handicapped and disadvantaged	\$34,0
<u>Community S3</u>				
C	Vocational high schools: Tutoring, career fair	D	UK	23,9
	Modification of curriculum	D	UK	2,6
<u>Community S4</u>				
C	Vocational high schools: Work evaluation lab	D	UK	29,8
<u>Community S5A</u>				
<u>Community S5B</u>				
C	Area vocational school: Support services	D	150 disadvantaged	17,9
<u>Community S6</u>				
N/A	Comprehensive high school: remedial math and reading	C	UK	4,7
<u>Community S7</u>				
N/A	Comprehensive high school: Aide in word processing and business classes	C	22 disadvantaged	\$3,0
	Area Vocational School: Special education culinary arts teacher	C	UK	18,0

*D indicates dispersion; C indicates concentration

Exhibit 4.8

DISADVANTAGED: SCHOOL AND STUDENT TARGETING DESCRIPTIONS FOR RURAL DISTRICTS IN THE SAMPLE

<u>School Targeting</u>		<u>Student Targeting</u>		Perkins Allocati
<u>Target Strategy*</u>	<u>Schools/Activities</u>	<u>Target Strategy*</u>	<u>Number & Type of Student</u>	
<u>Community R1A</u>				
	Area vocational school: 1 1/2 hours assessment each	D	All 500 handicapped and disadvantaged	\$12,5
<u>Community R1B</u>				
	Area vocational school: Assessment	D	All handicapped & disadvantaged (state disallowed for next year)	9
	Comprehensive high school: Vocational materials	D	Available to all students, including handicapped and disadvantaged	9
<u>Community R2</u>				
	Area vocational school: Assessment	D	284 disadvantaged in one semester	41,0
	Aides in basic skills lab	C	LEP vocational students	19,1
<u>Community R3</u>				
<u>Community R4</u>				
	Passed funds to postsecondary		UK	
<u>Community R6</u>				
<u>Community R7</u>				
	Comprehensive high school: Guidance and career awareness	D	UK	7,00
	Vocational high school: Crisis center, remediation	C	UK potential dropouts	27,80
	Resource room, individual and group guidance	D	UK	9,00

*D indicates disbursement; C indicates concentration

Exhibit 4.8 (continued)

DISADVANTAGED: SCHOOL AND STUDENT TARGETING DESCRIPTIONS FOR RURAL DISTRICTS IN THE SAMPLE

<u>School Targeting</u>		<u>Student Targeting</u>		Perkins Allocati
<u>Target Strategy*</u>	<u>Schools/Activities</u>	<u>Target Strategy*</u>	<u>Number & Type of Student</u>	
<u>Community R8A</u>				
	Area vocational school: Work-study stipends	C	UK	\$37,0
<u>Community R8B</u>				
	Comprehensive high schools: part-time counselors	D	UK	31,8
	Area vocational school: School-work transition	C	108 students, 20 of whom were disadvantaged	
<u>Community R9A</u>				
N/A	Comprehensive high school: Basic skills remediation, pre-employment and job search	C	100 disadvantaged students in vocational classes; groups of 15	39,2
<u>Community R9B</u>				
N/A	Comprehensive high school: Two teachers provide math and language skills	C	Multidisciplinary team reviews teacher referrals of those problems with basic skills in vocational education	

*D indicates disbursement; C indicates concentration

Services for the Disadvantaged Funded by Perkins

In this section we describe the kinds of services that Perkins Disadvantaged funds were used to support in each sample district. The districts have been grouped by state. The type and number of recipients, and the location and level of funding are also presented.

As with Perkins Handicapped funds, Disadvantaged funds were often used for assessment and counseling. The next most frequently found use was to support instruction in nonvocational classes (e.g., learning center or remedial skills class). Work study programs were found in several districts. Perkins Disadvantaged funds were rarely used to support instruction in vocational education classes, either to fund aides in regular classes or separate vocational classes.

U1 combines its Disadvantaged and Handicapped allocations to fund five counselors in the junior high schools. Junior high school students with a GPA of less than 2.0 or with test scores below the 25th percentile on standardized tests who are enrolled in vocational education classes are eligible for the counseling services. A special needs coordinator, a basic skills specialist, and a paraprofessional at the vocational high school are also funded by Perkins. There were approximately 200 disadvantaged students at the vocational high school in 1987-88. Students judged to be the most at risk of dropping out were selected for the program.

Districts R1A and R1B also combine their Disadvantaged and Handicapped allocations. Services provided with the funds are described in the previous Section on Handicapped.

U2 used its \$190,000 Disadvantaged allocation in both its vocational high school and its comprehensive high school. Students at the vocational school who lack basic skills, as evidenced by a grade "C" or lower, standardized test scores below the 25th percentile, or teacher judgment are eligible to use the learning lab, which features computer assisted instruction (CAI). In 1987-1988 Perkins Disadvantaged funds were used to purchase software for the lab. Additional Disadvantaged funds were used to pay the salary of one full-time professional who runs the CAI lab and who works with teachers of those vocational education classes throughout the district that produce entry-level skills.

Approximately eight Perkins-funded counselors, three of whom were certificated and the rest of whom were paraprofessionals, provided vocational guidance to disadvantaged students who are enrolled in vocational education classes in four of the district's six comprehensive schools. Vocational counselors in the other two high schools were paid out of state funds as part of the match.

Although U2 is a large district with computerized databases, the quality of information obtained from the district is questionable. Each time the Vocational Director was asked to describe Perkins-funded programs in terms of amounts of funds, services provided and number of students served, his answer was different. Information from a questionnaire returned as a separate part of this study was not consistent with any of the oral descriptions. The above paragraphs represent a reconstruction based on the available information.

As indicated in the Section on Handicapped services, in 1987-88 S2 combined its \$23,000 Disadvantaged allocation with its \$11,000 Handicapped allocation to fund one guidance counselor at each of its two comprehensive high schools. The counselors worked with all types of students, including disadvantaged and handicapped, but no priority was given to special needs students. The district does not keep records of the numbers served and does not have a systematic method for identifying disadvantaged students in vocational education for Perkins-funded services.

Disadvantaged students in R2 were brought to the area vocational school for vocational assessment. Combined Disadvantaged and Handicapped set asides amounted to \$41,000 for vocational assessment. Two hundred eighty-four disadvantaged student participated in the assessment program in 1987. Disadvantaged funds for LEP students in the amount of \$19,134 were used to support aides for LEP vocational students in the basic skills lab at the area vocational school.

U3 received a Disadvantaged allocation of \$198,000 in 1987-88. The district spent \$10,500 of the allocation on services to limited-English proficient (LEP) students enrolled in vocational education. They were provided special classes, counseling, guidance and remediation. Disadvantaged funds for non-LEP students in vocational education classes in the district's ten comprehensive high schools were also spent on tutorial assistance and

guidance. Lastly, Disadvantaged funds were used to support in part the learning resource center at the vocational high school. The center employs two full-time professionals and provides a wide variety of services for both handicapped and disadvantaged students, including vocational and academic assessments, tutorial assistance in basic skills and vocational subject areas, computer assisted instruction, career planning, resume writing workshops and handicapped specific services.

Special services are available to students who are academically and/or economically disadvantaged. The former students are identified by teacher referrals; the latter group are those who receive free or reduced price lunches. Approximately two hundred academically disadvantaged and one hundred economically disadvantaged students were served in 1987-88. The number of students in comprehensive high schools receiving services is not known.

All of S3's Disadvantaged allocation (\$26,543) was spent at the vocational high school. Eighty six percent of the funds were spent on tutoring, a career fair, and supplies. An additional 10% was spent on development and modification of vocational curricula, and minor amounts were spent on basic skills instruction and guidance. Thus, Disadvantaged and Handicapped funds were spent on the same types of services except that Handicapped funds were also used for classroom aides and equipment purchases and modification. The number of disadvantaged students using the services was not available; however, 12% of the students at the vocational high school are disadvantaged.

R3 does not appear to have received IIA funds in 1987-88. (See Section on Handicapped.)

District U4 spent all of its Disadvantaged funds at the postsecondary level. In general, it is state policy not to fund basic skills remediation at the secondary level; instead, the state encourages the use of Disadvantaged funds for supplemental services--usually aides--in vocational courses. State staff indicated that there has been some difficulty with the adoption of this approach by districts as aides tend to be viewed as support for instructors rather than for students. Such a view may account for S4's decision to use Disadvantaged funds entirely at the postsecondary level, where they may be used for basic skills remediation.

All of the \$29,827 Disadvantaged allocation was used by S4 to fund the Work Evaluation Lab at the vocational high school. Disadvantaged and handicapped students who are in vocational education programs in any of the district's high schools may use the Lab. It is designed to help students "about whom faculty question which vocational programs could be best" identify appropriate programs.

R4 is a high poverty rural district containing two high schools. It is estimated that at least 80% of secondary students are economically disadvantaged. In 1987-88, R4 allocated its entire Disadvantaged grant to the area vocational center, which is predominantly a postsecondary institution.

With its \$1,797,652 Disadvantaged funds, district U5 provided the following services, all of which have been described more fully in the section on handicapped services. 1) Vocational assessment for all disadvantaged freshmen; 2) Assistance for disadvantaged students with the transition to postsecondary vocational programs; 3) Peer tutors; 4) CAI lab in reading and math. In 1987-88, 32,781 disadvantaged students received assessment services, 27,145 received counseling; 12,697 received peer tutoring; 24,515 received tutoring from vocational aides; 3,200 visited postsecondary institutions; 10,132 used CAI labs; and 362 participated in orientation activities. Limited-English proficient funds of \$989,085 were used to support a coordinator and tutors for LEP students in vocational education in 15 high schools in the district.

S5A declined IIA funds.

S5B combined its Disadvantaged and Handicapped funds (\$12,400 and \$5,500, respectively) to pay for support services at the area vocational school. One hundred fifty disadvantaged secondary students attended the school from the 14 feeder districts in 1987-88.

All of district U6's Disadvantaged funds are spent on programs at the area vocational school. Disadvantaged funds were used for the Career Learning Center and the Alternative Education Center. In 1987-88, 60 students participated in the former program which has a work-study program featuring half-days of academic classes, half-days of vocational classes and a work component. The program, whose aim is to deter students from dropping out, also includes employability skills.

The Alternative Education Center, which was attended by 104 students in 1987-88, is also a work-study program. Its goal is to help dropouts obtain a high school diploma and to become employable. The program provides supervised work experience as well as basic skills training. The program is completely individualized and was funded at \$175,000 in 1987-88.

District S6 is an affluent suburb in which over 90% of the graduating high school seniors go to college. In 1987-88 district S6 used its Disadvantaged grant of \$4,730 to develop a learning model for assisting students who need remedial help in math and reading. That was the first year the district had received Perkins funds; in prior years it had not applied.

R6 appears to have passed on any IIA funds it may have received to an area vocational school that provides assessment services.

In 1987-88 U7 used its Disadvantaged allocations of \$446,230 to fund a variety of programs in both comprehensive high school and its vocational high school. The Transition for the Disadvantaged (\$34,281) funded a teacher to help eighth grade students throughout the system develop plans for high school following their one week exploratory experience at the vocational high school. The primary purposes of the program are recruitment of students and to fill what vocational administrators call the "guidance gap" in the city.

A second program in U7 was funded at \$49,000 to provide complete vocational assessments (four hours of assessment and follow-up counseling time) to students enrolled in vocational classes. The Apprenticeship program (\$42,807) serves students in grades 8-12 throughout the system. More than 3,000 students receive some career guidance and job preparation training. In addition, an apprenticeship coordinator provides counseling to students concerning opportunities and process for preparation and entry into apprenticeship training programs. This program is part of efforts by private industry to involve more vocational students in apprenticeship programs. The Vocational Math Support program (\$208,023) provided remediation in mathematics to 300 vocational students at two comprehensive schools and the vocational high school. Lastly, the Vocational Communications Program (\$112,082) is the only program that operates only in the vocational school. In 1987-88, it provided remediation in communications to 120 students at the vocational high school.

An additional \$77,500 was available as part of the LEP disadvantaged allocation in U7. Of these funds, \$15,000 was used for aides to complete vocational assessment profiles for 150 students systemwide. Approximately \$62,000 was used for a bilingual business program in which 150 LEP students in one high school took business training from a bilingual instructor. One hundred LEP students in business programs at other high schools receive assistance from an outreach worker in applying for jobs.

As stated in the section on Perkins services for Handicapped, S7 combined its \$686 Disadvantaged grant with \$2,330 Handicapped funds to pay for an aide in word processing and business classes in 1987-88. Twenty-two disadvantaged students were served by the aide.

District R7 combined its Disadvantaged and Handicapped allocations in 1987-88. Combined funds in the amount of \$7,000 were used to fund guidance and career awareness activities for handicapped and disadvantaged students. At the vocational school, \$20,147 of the Disadvantaged allocation was combined with \$7,767 of the Handicapped allocation to fund the Crisis Center while \$6,716 Disadvantaged funds were combined with \$2,256 Handicapped funds to provide individual and group guidance in a resource room.

In 1987-88 U8 used \$43,000 of its \$83,000 Disadvantaged grant to pay student stipends in a work-study program that operates in five of the district's eight comprehensive high schools. Students in the program receive one credit for in-class instruction focusing on job seeking and employment skills as well as two credits for their work as long as they pass the in-class course. Another program jointly funded by Perkins (\$40,000) and JTPA (\$160,000) in 1987-88 was the summer school program. Participating students may not have room in their schedules for vocational education during the regular school year. The summer program is held at the vocational high school.

An additional \$36,000 of LEP disadvantaged funds was used by U8 to pay for the salaries of teachers for separate vocational classes for LEP students.

R8A combines its Disadvantaged and Handicapped allocations (\$20,000 and \$17,000, respectively in 1987) to fund a work-study program.

R8B also combined its Handicapped and Disadvantaged grants for a total of \$31,844. In 1987-88 R8B funded part-time counselors in comprehensive high schools and two counselors in a school-to-work transition program at one of the area vocational high schools. (Services provided are more fully described in the section on Handicapped). Of the 108 students who were served by the school-to-work transition program, only about 20% of them were disadvantaged.

U9 used its 1987-88 Disadvantaged allocation of \$344,831 to fund remedial classes for academically disadvantaged students enrolled in vocational classes. The primary focus of the program is basic communication, math, and science skills as they relate to vocational areas. Eligibility is determined by: 1) failing the state proficiency test; 2) scoring below the 25th percentile on a standardized achievement test or aptitude test; 3) secondary school grades below 2.0; 4) failure to meet minimal academic competencies; or 5) repeated lack of progress in a regular vocational education program. Priority is given to 11th and 12th grade students. Selection into the program is done by a multidisciplinary committee, which also formulates an IEP for each student selected. Students' progress is evaluated periodically at which time the IEP may be changed if necessary. The program operated in seven of the district's ten comprehensive high schools in 1987-88. Remedial programs for academically disadvantaged students have been strongly encouraged by State 9 for several years.

As in most districts in State 9, disadvantaged students enrolled in vocational classes receive remedial instruction in district R9A. Class sizes are small, with about 15 students to a section, allowing for individualized attention. Basic skills remediation as well as pre-employment and job search skills are taught. Programs at both high schools were funded by a Perkins Disadvantaged grant in 1987-88. Approximately 100 students were served.

R9B also offers remedial classes for disadvantaged students in vocational education. In 1987-88, two teachers were funded by the IIA Disadvantaged grant. R9B's program focuses primarily on mathematical and language skills. A multidisciplinary team selects students for the program from a pool of students who have been recommended by their teachers because of

problems with basic skills in their vocational classes. The multidisciplinary team then constructs an IEP for each student selected. Students' progress is evaluated periodically.

POSTSECONDARY LEVEL: PERKINS HANDICAPPED FUNDS

In the 27 communities that were part of our sample, we gathered information on the amount and use of Perkins Handicapped funds received by one postsecondary institution in the community. Eighteen communities had postsecondary institutions that received Perkins Handicapped funds for which we were able to obtain information. In one state (state 9), we were unable to obtain access to postsecondary institutions in the state. In state 2, the suburb in our sample (S2) was served by the postsecondary institution in the urban sample community (U2). Three of the postsecondary institutions in the sample received no Perkins Handicapped funds (R3, R4, and R7). An additional two postsecondary institutions in the sample, both in State 1 (U1 and R1A) received funds but in one instance declined them because it could not provide matching funds, and in the second instance, was forced to return them because of accounting problems.

Over one-third (eight of the 18) of the sample postsecondary institutions combined their handicapped set-aside with their disadvantaged set-aside funds (R1B, U3, U5, S5A, S5B, R6, and S7). Three of these institutions are located in one state (State 5) in which the practice of combining funds is encouraged at the state level. The other four postsecondary institutions are in four different states in our sample. Institutions that followed the practice of combining set-aside funds used them to support activities such as basic skills assessment and remediation, outreach and recruitment of special populations, and in one case, aides in vocational education classrooms.

Identification of Postsecondary Handicapped Students

The postsecondary institutions in the sample tend not to have systematic procedures for identifying handicapped students. Many of the institutions relied on students to identify themselves as handicapped. In one case, U3, handicapped students are identified on the basis of assessment or are referred for assessment at the time of registration, especially those who because of their handicap come to register with a parent or counselor.

Physically handicapped students are targeted by some postsecondary institutions, possibly because they are more readily identified. In S4, for example, Perkins funds are used to provide equipment for 5 visually impaired students. In U3, \$55,000 of Perkins funds were used to support 12 interpreters for 15 deaf students.

In other instances, low scores on basic skills assessment tests are used to identify students in need of special services. Institutions do not necessarily attempt to determine if a low score on an assessment test is caused by a particular handicap (e.g., learning disability) or some other factor. In such cases, institutions may not make distinctions between the handicapped and the academically disadvantaged.

The following sections provide descriptions of the services funded by Perkins Handicapped monies in each postsecondary institution, and, in our sample when known, the number and type of handicapped students who were served.

Services for the Handicapped Funded by Perkins

There are four postsecondary area vocational schools and three community colleges in U1. None of the community colleges receives Perkins funds. Data were gathered from the largest postsecondary school--a vocational technical center. The center was eligible to receive approximately \$9,000 in Handicapped and Disadvantaged funds, but declined them because it was unable to make the match. The financial officer of the school indicated that the school was matching funds for other federal programs, but that the Perkins Handicapped and Disadvantaged funds were too small an amount to justify the costs of matching and administration. It should be noted that all postsecondary vocational technical centers in State 1 are state run and receive state funds as their primary source of income.

In earlier years, the center did receive Handicapped and Disadvantaged funds and used them for an instructor at Goodwill Industries and a counselor for handicapped and disadvantaged students. During that time, Goodwill Industries provided the match.

There are no community colleges in R1A. At the postsecondary level, vocational education is provided at one area vocational school which serves both secondary and postsecondary students. The center received \$3,903 in Handicapped funds and \$16,920 in Disadvantaged funds in 1986-87. Reporting and/or accounting problems categorizing the funds caused the institution to have to return them to the state. No data were available on 1987-88 allocations.

In 1986-87, the postsecondary vocational technical center in R1B received \$1,859 in Handicapped funds which it combined with \$10,857 in Disadvantaged funds to provide aides in vocational education classrooms.

In recent years all IIA Handicapped funds at the community college in U2 have been allocated to a program that provides comprehensive services for handicapped students. The program provides academic and personal counseling as well as staff support and handicapped specific services. The latter services range from note-taking to special computers for the physically disabled. In 1987-88, the Handicapped grant amounted to \$56,900. Of this amount, \$2,400 was spent on supplemental basic skills; \$13,000 was used for remedial development; \$5,000 purchased hardware and software; \$12,500 funded a special counselor for handicapped students; and \$24,000 paid for a counselor to track services. While the number of students using the facility was not available, it is estimated that there were approximately 2,200 handicapped students at the community college in 1987-88.

The nearest postsecondary institution available to S2 is the one described above in U2.

There is one community college in R2. In 1987-88 the \$22,204 Handicapped allocation was used to support counselors to recruit, identify, and interview disabled students; to assist them in program selection; and to identify equipment and services that will facilitate access.

U3 contains both a community college and a large vocational technical center. In 1987-88, the community college received a Handicapped grant in the amount of \$10,000 which was used primarily to fund tutoring and handicapped specific services, such as braille and interpreting. About 300 students receive such services each year through an award-winning center. Most handicapped students receive the bulk of their services at the beginning

of each year until they are settled in classes. Other handicapped students, for instance deaf and/or blind students, continue to receive services throughout the year. A fairly large portion of the Perkins allocation was spent for interpreters for deaf students. In 1986-87 the college spent approximately \$55,000 in Perkins and other funds for interpreting, employing 12 interpreters for 15 deaf students, most of whom are in vocational programs. Handicapped students self-identify.

A wide array of services is provided at the vocational technical center in U3, which serves over 30,000 students annually. No breakdown of services funded by Handicapped and Disadvantaged grants separately was available. However, documents provided by the center indicate that the Handicapped grant (\$59,941) and the Disadvantaged grants (\$86,781) together funded an assessment lab that includes academic and vocational testing and counseling. A communication and study skills program is also offered at the assessment lab. The program offers a series of presentations designed to help students identify areas where they need to improve their communications and study skills, and to help them make those improvements. Additional support services for handicapped and disadvantaged students include tutoring, computer-assisted instruction, adult basic education, and remedial classes in subjects related to the student's vocational classes (e.g, remedial math for a student whose goal is electronics). There are 13 tutorial assistants--eight professionals and five peer tutors. For handicapped students, there is also a special counselor who works with the Office of Vocational Rehabilitation, Workmen's Compensation and the private sector. Programs and equipment are also modified for handicapped students, as needed. Additionally, Perkins funds transitional counseling and feedback for all vocational students.

The center did not provide statistics on the number of handicapped students using the programs or at the institution. Handicapped students are identified by assessments. Students may request assessment or be referred for assessment upon registration, or once in classes. Handicapped students are often identified upon registration by the fact that they come in to register with a parent or counselor, or are under contract with an outside agency. This signals the registrar to have them assessed.

In 1987-88 the community college in S3 received \$20,010 in Handicapped funds. The allocation was used to provide assessment, tutoring, and counseling services for handicapped students. Upon entering the college, all students are assessed in basic skills unless they hold a degree. In addition to the basic skills assessment, handicapped students, who are self identified take the career ability placement survey and a learning styles inventory.

There is one community college in R3, which has not received IIA funds in recent years, if ever. Very few handicapped student are enrolled in the college.

There are five postsecondary institutions that provide vocational education in U4: one community college, two vocational/technical centers and two adult schools. Information is available for one vocational technical center, which is the largest institution of its kind in State 4. At that center almost half of the \$69,000 Handicapped grant was used to support aides in vocational classrooms in 1987-88. Approximately \$10,000 each was used for curriculum modification and consultants, and the remaining \$15,000 funded guidance, assessment, and job placement activities. According to personnel at the center, Perkins is the center's only source of funds for handicapped students which comprise about one percent of the institution's population.

S4, which comprises an entire county of 644 square miles, contains the fastest growing community college in State 4. Most of the students at the community college in this affluent area seek associate degrees, rather than certificates, and transfer to four-year colleges. About 30% of the school's 5,000 students are in vocational programs. In 1987-88, the \$33,000 Handicapped grant received by the college was used to provide visually impaired vocational students with necessary equipment for mainstreaming. There were five blind students at the college that year.

There is a regional postsecondary institution in R4 that serves four counties. The school received no Handicapped funds in 1987-88. No reasons were offered.

The community college system in U5 comprises eight community colleges. Information on the amounts and uses of Perkins funds by the colleges was very difficult to obtain from U5 college staff. No breakdown of

Handicapped and Disadvantaged funds was provided, and during different conversations, college staff (including the Director of Fiscal Affairs) indicated that the Handicapped and Disadvantaged funds received in 1987-88 were \$3.2 million, \$2.5 million, and \$1 million.

Handicapped and Disadvantaged funds are allocated to each of the eight colleges by formula. During the site visit, college staff indicated that a variety of programs for special populations were partially funded by Perkins IIA. The Career Guidance Center acts as a guidance resource to school districts, postsecondary institutions and other agencies that deliver guidance services, and also provides direct services to out-of-school youth. The Cooperative Education Program/Early School Leavers program provides for-credit work cooperative education classes and work experiences related to students' career goals. The Early School Leavers program also has a basic skills component.

The Center for Disabled Student Services is an umbrella program whose mission is to provide access for all physically and developmentally disabled students. The Center includes the Special Needs Program, which offers a variety of services. Among the services provided are vocational and academic assessment, vocational guidance, classroom aides and advisors who advise teachers on how to work more effectively with disadvantaged and disabled students in the classroom, and referrals to campus and community resources. Disability-related services such as notetakers, readers, and recordings for the blind are also available for handicapped students. According to a document published by the college, tutors are available for any student who needs them to succeed with vocational training.

Also part of the Center are the Vocational Training Programs for the Developmentally Disabled and the Learning for Life Skills Programs, which receive funding from at least one other source in addition to Perkins. The former program consists of a classroom component including pre-employment skills and job readiness, and hands-on training in food service, hotel services hospital services, maintenance/laundry services and clerical services. On the job training takes place at a university, a bank, and two hotels. The goal of the program is to prepare handicapped students for

competitive, unsubsidized employment. The latter program provides Adult Basic Education and independent living skills for the developmentally disabled. Pre-employment skills are covered in the independent living skills component.

While college staff indicated that all of the above listed programs received Perkins funds, a document from the college which lists sources of funding for each program does not mention Perkins at all. In order to be certain of the funding of each program, a call was made to the Director of Financial Affairs some months after the site visit. During the telephone conversation, the Director indicated that he thought that the college received only \$1 million in Handicapped and Disadvantaged funds, and used the entire amount to fund tutorial services through the Center for Disabled Student Services. Thus, both the specific level of funding and the use of the funds remains unclear.

There were 173 handicapped students at the community college in S5A in 1987-88. In that same year, the college received a grant in the amount of \$25,000 for Handicapped, Disadvantaged and LEP combined, which it used to fund tutors, notetakers and student aides. The college anticipated that the Handicapped and Disadvantaged grants would be increased to \$89,000 the following year. The additional funds were to be used to develop a library containing useful materials for special populations.

S5B contains a community college and an area vocational school which serves both secondary students and postsecondary students. Grant amounts and services provided at the area vocational school are described in the section on services at the secondary level. At the community college the grant was used to fund a Special Needs Coordinator who worked with disadvantaged students providing assessment, guidance and counseling, and brokering tutoring assistance.

The community college in U6 received a Handicapped allocation of \$17,000 in 1987-88 which it used to fund support services for approximately 100 handicapped students.

An area vocational school in the city nearest S6 received approximately \$33,000 in Handicapped funds in 1987-88. Fifty percent of this allocation was spent on aides and staff for separate vocational classes for handicapped students. No information was provided on the use of the other 50% of the funds.

In 1987-88 the postsecondary area vocational school in R6 combined its Handicapped and Disadvantaged grants for a total of \$22,000. The funds were used to pay the salary of a teacher in the learning skills center, which provides remedial instruction in math and reading. Eligibility for remediation is determined by low scores on a basic skills test which is administered at the beginning of the year. Those students needing remedial assistance attend the Learning Skills Center daily for one hour of remedial instruction. Approximately 87 handicapped and disadvantaged students used the center in 1987-88. There were 16 handicapped students at the institution.

Two community colleges serve the city of U7 with others located in the larger suburban area. Data were provided for one of the urban institutions. There were 303 handicapped students at the college in 1987-88. Of these 55 were mobility impaired, 10 were visually impaired, 10 hearing impaired, 40 cardiovascular disabled, 8 neurological disabled, 20 respiratory disabled, 50 emotionally disabled, 200 learning disabled, and 10 had other disabilities. There has been a moderate increase in handicapped students in recent years.

Until 1987-88 State 7 had ruled that community colleges were ineligible for Handicapped funds. This was changed for the 1987-88 year without consulting with community college officials. The college in U7 was then surprised to receive approximately \$40,000 in Handicapped funds. As determined by state formula, \$30,000 went for training and \$10,000 for guidance. These funds are to be administered separately according to state policy. The training funds went for competency based reading, study skills work, and tutorial services. The guidance funds were used for planning support services, developing an orientation program for handicapped students, and providing small group sessions.

As described in the section on secondary-level services, the regional vocational technical center in S7, which served secondary and postsecondary students, received \$8,000 in Handicapped funds which it combined

with \$10,000 in Disadvantaged funds to pay for a Special Ed/Culinary Arts teacher. Thirty-six handicapped students took these classes. The numbers of secondary and postsecondary handicapped students in the classes were not provided.

In 1987-88 the community college in R7 received no Handicapped funds.

The community college in U8 serves approximately 20,000 students, 50% of whom are in technology oriented courses. Approximately 8,000 students are enrolled in industry-specific training. In 1987-88 the college received a Handicapped grant of \$18,000 which was used primarily for counseling services.

In 1987-88 the community college in R8A had an enrollment of approximately 1,800 students. Sixty percent of the total student enrollment was in vocational programs. A Handicapped grant of \$6,000 was used to hire part-time staff to buy release time for an individual to develop a three-year plan for a pilot program for students with learning disabilities. The program will help learning disabled students in high school learn about the community college, start to plan their courses and prepare to attend the college. The goal of the program is to bring learning disabled students to the college and help them have a smooth transition. Links are being developed with feeder high schools to identify learning disabled students who may want to go to the community college. As of the site visit, there were 10 students in the program.

The community college in R8B anticipated receipt of a \$36,669 grant for 1988. The funds were used for recruitment, orientation, aptitude and interest assessments, exploration of career goals. Handicap specific services, such as notetakers, readers, scribes and interpreters for students who are not eligible for Office of Vocational Rehabilitation services were also provided. Counseling and tutoring are also available but are funded mostly by other sources. A career night at a nearby four-year university was also sponsored by the program.

Perkins eligible students are actively recruited at all three campuses of the community college. In 1987-88, some 30,000 letters were sent to social service recipients, counselors visited churches, high schools, and hospitals in minority areas of the community as part of the recruitment

effort. The college in R8B differs from other postsecondary institutions in the sample in that once students are recruited by the Perkins funded efforts, they become "Perkins students." Their progress is followed carefully, and they have routine individual sessions with a counselor each year to discuss progress. Students are also followed-up for one year after graduation.

Handicapped students are defined as anyone having a physical, mental, or learning disability as determined by the counselor for disabled students. For the 1986-87 year, approximately 280 students were identified as handicapped.

No information was available on Perkins programs for handicapped students postsecondary institutions in State 9.

POSTSECONDARY LEVEL: PERKINS DISADVANTAGED FUNDS

Identification of Postsecondary Disadvantaged Students

Of the 27 communities in our sample, we have some information about the use of Perkins Disadvantaged funds at the postsecondary level in 20 communities. All 20 communities targeted Perkins Disadvantaged services on the academically disadvantaged students. Eight of these institutions (U3, S3, U4, S4, R4, F6, U7, and R7) administer basic skills tests to enrollees and have cut off scores (e.g., 3 years below average, below the 25th percentile) to determine who is in need of basic skills remediation.

Of the 20 sample institutions, three postsecondary institutions (S5A, S4, and R2) specifically included the economically disadvantaged as part of their target group for Perkins services. In another three cases (U8, S8, and U7) services for Limited-English proficient students were also supported by Perkins.

In the section that follows, the use of Perkins Disadvantaged funds is described for each postsecondary institution in our sample for which we have information. Where levels of funding and numbers of students served were known, these data have been included. As in the earlier sections on handicapped services, institutions are grouped by state and are presented in order of urban, suburban, and rural communities.

Services for the Disadvantaged Funded by Perkins

As stated in the above section on Handicapped, the postsecondary vocational technical center in U1 declined to receive approximately \$9,000 in Handicapped and Disadvantaged funds because it was unable to match the funds.

The postsecondary institution in R1A returned \$16,920 in Disadvantaged funds to the state in 1986-87 due to reporting and/or accounting problems categorizing the funds.

In 1986-87, the postsecondary vocational technical center in R1B received \$10,857 in Disadvantaged funds which it combined with \$1,859 in Handicapped funds to provide aides in vocational education classrooms.

While the community college in U2 is located in a central urban neighborhood, the college also runs a vocational training center in an economically depressed area. The goal of the center is to retrain displaced employees or to train new entrants to the labor market. Entry and exit are open at the center which offers non-credit classes during the daytime in six-hour blocks. There is no tuition or registration fee, except for third-party referrals whose tuition is paid by the referring agency. Programs offered are Auto Mechanics, Body and Fender, Clerical Training, and Maintenance Mechanic. All classes require that a student not score below the fourth grade level on a short English placement test. Enrollment at the center was about 250 in 1987-88. The college used its entire Disadvantaged grant to assist in the funding of the center: \$89,000 was used for instructors' salaries while \$35,000 went for other costs such as counseling and assessment.

The postsecondary institution in U2 is the nearest one available to S2.

Disadvantaged students comprise a large proportion of the student body at the community college in R2. In 1987-88 the college used about half of its \$38,610 Disadvantaged grant to support a financial aid specialist to recruit, enroll, and retain disadvantaged students. The other half was used to pay peer advisors to assist in recruiting and retaining the students and to provide counseling and academic follow-up services.

The community college in U3 received \$100,000 in Disadvantaged funds in 1987-88. The majority of the funds were used for tutoring with a smaller component used for counseling. Perkins funds supported tutors who assisted students with acquiring skills that are specific to vocational programs, while a state funded lab provided tutoring in basic skills.

All students are given a basic skills assessment upon entry to the college unless they have completed at least one year of college or have an ACT/SAT score above the 35th percentile. Students whose scores indicate they are three years below grade level on the basic skills assessment, and students who are failing, expected to fail or whose employability is in jeopardy are considered academically disadvantaged. A brochure from the vocational center states that all vocational students "who have difficulty with basic skills, struggle taking tests or completing other course requirements, or need help in choosing a job or career" qualify for supplemental services.

In the last five years the proportion of students in the vocational center in U3 who are economically disadvantaged has increased; however, the institution did not provide counts of such individuals.

In 1987-88 the community college in S3 received \$93,770 in Disadvantaged funds. The allocation was used to provide assessment, tutoring, and counseling services for disadvantaged students. Upon entering the college, all students are assessed in basic skills unless they hold a degree. Academically disadvantaged students are identified by their placement on the assessment. In addition to the basic skills assessment, disadvantaged students take the career ability placement survey and a learning styles inventory. Economically disadvantaged students are identified through financial aid procedures.

While a sizeable proportion of the student body at the community college in R3 was disadvantaged, the institution received no Disadvantaged funds in 1987-88. No reason was indicated; however, it is possible that the institution chose to pursue funding in other categories. It wrote several successful proposals for Adult funds.

The vocational technical center in U4 received \$182,000 in Disadvantaged funds in 1987-88; however it returned over \$100,000 because the funds were received "too late," according to center staff. The primary use of

the funds was for the maintenance of a remedial lab, a somewhat smaller amount supported teacher in a career exploration lab, and approximately 15% was used for aides in vocational courses.

The remedial lab is part of a state initiative and provides a computerized individualized learning program designed to increase basic skills of academically disadvantaged students. Students are selected as follows: Basic skills testing is required for all postsecondary adult students enrolled in vocational programs lasting a minimum of 450 hours. If a student falls below a minimum level of competency (defined separately for each program) he or she must demonstrate competency at the corresponding level before receiving a certificate. Students who fall well below the minimum competency level for their program of interest are encouraged to attend the remedial lab full-time before beginning the vocational program; students who fall below standards but not overwhelmingly, typically split their time between the vocational course and the lab.

Approximately 30% of the center's students were considered academically disadvantaged 1987-88. Most of such students received services in the remedial lab. No figures are available for the numbers of students served by the career exploration lab or the aides.

The community college in S4 used \$38,300 of its \$82,600 Disadvantaged grant to recruit economically disadvantaged students. The Perkins-funded recruitment efforts have increased the proportion of such students attending the college in recent years. The number of disadvantaged females enrolling in office occupations programs has shown a particularly large increase. The remaining \$44,300 of the grant is used for a remedial program for academically disadvantaged students, who are identified on the basis of not meeting state mandated minimum competencies in basic skills.

In 1987-88 the R4's regional vocational technical center received a Disadvantaged grant in the amount of \$114,000. Of this amount \$60,000 was used to operate a remedial lab, \$30,000 funded an outreach and recruitment program targeted at high school dropouts, and \$24,000 paid the salary of an aide in the Commercial Food Preparation Class. The remedial lab is part of the same state initiative that was described for U4 above. Outreach and recruitment take place as the program coordinator is notified by high schools of any student who has not attended school for three consecutive days without

an explanation. The coordinator attempts to track down such students and persuade them to enter the GED program at the vocational center. Individuals between 14 and 21 years of age are eligible. When enrolled at the center students receive counseling at least once every other week, and financial assistance. The coordinator works with a variety of local agencies (JTPA, welfare, etc.) to secure additional support services for eligible clients. Students are encouraged to get vocational training along with the GED.

For a description of funds and services at the community college in U5, see the section above on postsecondary service for the handicapped.

Services for disadvantaged students in S5A have already been described in the section on services for the handicapped. In 1987-88, there were approximately 2,500 disadvantaged students at the college. Economically disadvantaged students were defined as students receiving Pell grants. The definition of academic disadvantage was not provided.

In 1987-88 a Special Needs Coordinator who worked with disadvantaged students, providing assessment, guidance and counseling, and brokered tutoring services was funded by Perkins at the community college in S5B. A \$12,400 Disadvantaged grant at the area vocational school, which serves both secondary and postsecondary students, was used to fund classroom aides, guidance and assessment, and modified curriculum materials.

The community college in U6 received a Disadvantaged allocation of \$79,800 in 1987-88 which it used to fund a learning resource center. The center was used by approximately 2,300 disadvantaged students during the course of the year.

The regional vocational technical center in the city adjacent to S6 received a Disadvantaged allocation of \$101,500 in 1987-88. Approximately 75% of that amount was spent on aides and staff for separate vocational classes. No further information was provided on the use of the grant.

The total amount of Perkins Handicapped and Disadvantaged funds received by R6 in 1987-88 was \$22,000. Funds were used to provide basic skills remediation in a learning center used by approximately 87 students during the year. Eligibility for remedial services is determined by low

scores on a basic skills test which is administered at the beginning of the year. Those students needing remedial assistance attend the Learning Skill's Center daily for one hour of remedial instruction.

At the community college in U7 for which information was provided over the last five academic years, nearly 67% of the entering student population scored below the 50th percentile in reading comprehension examinations. Over 44% scored below the 25th percentile. In math, 76% placed below the 50th percentile while 56% placed below the 25th percentile. In recent years there has been a large increase in the numbers of academically disadvantaged students at the college.

Economically disadvantaged students are defined by the college as students who receive financial assistance. In 1987-88 approximately 33% of the students qualified for student aid: about 16% received Pell grants and about 17% received state student scholarship grants. Nearly 75% of the student population is employed or seeking employment.

In 1986-87, the college received approximately \$107,000 in Disadvantaged funds, including LEP funds. Disadvantaged funds have been used by the college for the Advising Center because so much of the student population met the definition of Perkins. The Center provides year-round services including career awareness, career decisionmaking, and career placement. Counseling services are stepped-up during the first six to nine weeks of school, when dropout rates are highest.

In State 7, LEP allocations must be expended in total or in part prior to receiving a Disadvantaged allocation. At the community college in 1987-88, LEP monies in U7 were used to fund in part an ESL electronics program and an ESL clinical assisting program. The ESL electronics program is a one-year certificate program enrolling some 38 students--primarily Vietnamese and Cambodian. Since its inception in 1982 Perkins funding has provided the most consistent dollars to level out other monies, such as Refugee Resettlement funds and JTPA funds. The program developed out of business and industry demand for more trained (but not professional level) workers.

As described in the secondary-level section, the area vocational school in S7, which served secondary and postsecondary students, received \$10,000 in Disadvantaged funds which it combined with \$8,000 in Handicapped funds in 1987-88. The grant was used to pay for a Special Ed/Culinary Arts teacher.

In 1987-88 the community college in R7 received a Disadvantaged grant of approximately \$22,000. The monies were used to fund the Learning Center, which offers basic skills remediation to students entering the college who fall below the 25th percentile on an admission test or who pass the test but feel they can benefit from the remediation. Some 60% of the students were served by the Center.

The community college in U8 used its Disadvantaged grant to provide special counseling, supplemental tutorials, and cross-cultural orientation for LEP students.

In 1987-88 the community college in S8 received approximately \$36,000 in Disadvantaged, LEP, Single Parent and Adult funds. The exact amount of each individual grant was not provided. The Disadvantaged grant was used to fund an outreach network to let people throughout the community know about offerings in the community college. In addition to holding workshops, the college reaches the population through other community contacts, such as a booth in a shopping mall.

LEP funds were used for a non-credit communication program for Hispanics, which is part of a larger State- and locally-funded project for displaced homemakers. The larger program provides individuals a training period to assess skills and interests, learn about educational and training opportunities in the community, and set goals. In the prior five years, 300 students graduated through the displaced homemakers project.

Also in S8, Combined Disadvantaged/Adult/Single Parent funds were used to fund the Collaborative Career Learning Program in which student learn career skills in fields in which jobs are available locally. Students learn basic career skills at job sites without pay. The program requires collaboration with local businesses and is popular with re-entry and dislocated workers.

The proposed Disadvantaged grant for 1988 at the community college in R8 was \$129,290. Each year a particular number of disadvantaged students are recruited. Those who enroll at the college become "Perkins students" and are tracked on a computerized database. Services include orientation, assessment, guidance, tutoring and follow-up activities.

SERVICES SUPPORTED BY PERKINS: ADULT, SINGLE PARENT/HOMEMAKER, AND SEX EQUITY

This section of the report presents information on the set asides related to Adults, Single Parent/Homemaker, and Sex Equity. Descriptions of activities supported by these funds are presented for each community in our sample. The communities are grouped by state, as in earlier presentations, however, secondary and postsecondary activities are described together.

Unlike the Disadvantaged and Handicapped monies, the legislation does not provide an intrastate formula for distributing the funds for any of these three categories. Prior to describing the Perkins-supported services at the local level, each set of community descriptions is preceded by a brief summary of the way in which their state distributes the Adult, Single Parent, and Sex Equity funds. State decisions are reviewed about the relative amounts of each setaside given to the secondary versus the postsecondary levels and the method of distribution (i.e., by a state-generated formula or by a Request for Proposal competition).

Perkins Adult funds at the secondary level were spent in only a third of the communities visited and usually supported general vocational education purposes. At the postsecondary level, on the other hand, Perkins Adult funds were most frequently used for specific training programs (e.g., cashier, hotel/motel management, Licensed Practical Nurse). In two instances, funds were used for general evening classes. Singular uses of adult funds were found for counselors, aides in a learning skills lab, tuition aid, and equipment.

Child care was the most frequently cited use of Single Parent/homemaker funds and sometimes was the only source of assistance for child care. Perkins funds going for child care, however, were very small. Tuition assistance and counseling were also frequent expenses. In addition, in five

institutions, Single Parent/Homemaker funds were to support operating programs for single parents (e.g., word processing bookkeeping, and a program to learn career skills at job sites).

Perkins Sex Equity funds usually supported workshops, brochures, and recruitment activities. Three operating programs were supported: one to teach marketing skills to women in cottage industries, another in word processing, and a third in fire arms training for women who would like a career in law enforcement.

Allocation Procedures in State 1

In State 1, Perkins Adult funds are distributed through a proposal writing process. Only postsecondary area vocational schools may apply for funds and almost all applicants are funded.

The Single Parent/Displaced Homemaker, restricted to postsecondary area vocational schools, are used to support ten centers. Funds not used for the centers are used for child care and transportation at the schools. Sex Equity funds at the state level are distributed by RFP for secondary and postsecondary institutions.

Use of Funds at the Local Level in State 1

The postsecondary vocational technical school in U1 receives about \$32,000 in Adult monies. It is used to support a cashier program and a hotel/motel management program. These are one-semester programs that provide training/retraining for adults.

The postsecondary area vocational school receives \$50,384 in Single Parent/Homemaker funds. The funds are used to support child care, transportation, and some tuition assistance.

Of the \$28,241 the institution receives for Sex Equity, 26% is used to recruit students into nontraditional fields, 40% is used on staff to provide programs in nontraditional fields, 17% for child care, 8% for counseling and career development, and 9% for sex equity scholarships.

The postsecondary area vocational school in R1B received only Sex Equity funds and no Adult or Single Parent/Homemaker funds. The \$7,000 in Sex Equity money was used to support a program to help 80 women in cottage industries market their products and keep accurate accounts.

The postsecondary area vocational school in R1A received only Sex Equity funds amounting to \$4,000. The monies were used to fund 25 percent of a staff position to support activities in recruitment, counseling and in service.

Allocation Procedures in State 2

In State 2, Perkins Adult, Single Parent, and Sex Equity funds are split evenly between the secondary and postsecondary levels. Adult funds go out on a Request for Proposal (RFP) basis at the secondary level and focus on guidance/counseling, innovative programs, support services, modernization of equipment, and programs with verified labor market needs. At the postsecondary level, each community college receives \$5,000 and the remainder is distributed by formula.

Single Parent funds are distributed by formula and some special grants at the secondary level. Of the \$1.8 million, over one-half million dollars goes to minority districts and another half million is used for curriculum development. At the postsecondary level each community college receives a minimum of \$3000 and the remainder is distributed by formula. If a community college has Single Parent funds, it must also accept Sex Equity funds.

Sex Equity funds are allocated at the secondary level such that districts receive a minimum of \$1500 with the remainder based on formula. Similarly community colleges each receive a \$2000 minimum and the remainder is determined by a formula. The state does not allow Sex Equity funds to be used to buy equipment and 6% of the funds must be used for guidance and counseling.

Use of Funds at the Local Level in State 2

In the urban community in State 2, the school district in U2 received no Adult funds, \$10,500 in Single Parent/Homemaker funds, and \$3,500 in Sex Equity funds. The Single Parent monies were used to put on workshops

jointly with the area vocational center, which does not receive any Perkins funds. The Sex Equity funds were used to develop brochures to raise awareness of sex equity issues.

At the postsecondary level in U2, the community college received \$83,000 in Adult funds. One fourth of this money was used to purchase instructional equipment for vocational training and three-fourths was used to help support the vocational training center for disadvantaged adults located off campus in a downtown area. The tuition-free center has open entry/open exit policies and offers classes in six hour blocks each day. Approximately 200 to 300 students are enrolled in the center in an average day.

Of the \$18,000 of Single Parent/Homemaker funds received by the community college in U2, \$6,000 is used to support a career counselor and \$2,000 is used to support the career center. The community college in U2 received \$10,700 in Sex Equity funds. Nearly half of these funds are used to support workshops and the remainder is used for brochure development and production on topics such as sexual harassment.

The school district in the suburban community in State 2 (S2) received the following amounts of Perkins funds: Adult - \$5,500; Single Parent - \$5,800; and Sex Equity - \$1,800. The Adult funds are used to support the adult school operated by the district, which offers a business certificate program. A day care center for the children of single parents is operated on one of the high school campuses. It is funded partly by Perkins. Sex Equity funds were used for books and supplies, workshops for teachers, and to support travel to conferences. The workshops have focused on how teachers can encourage females to take nontraditional classes.

The closest community college to S2 is the one located in U2, which was described above.

The rural community of R2 received no Adult funds at the secondary level, \$7,500 in Single Parent funds, and \$1,800 in Sex Equity funds. These monies are being used to conduct workshops on how to recruit students into nontraditional occupations.

At the community college in R2, the Perkins Adult monies, totaling \$25,000 were used to support instructional aides in the learning skills laboratory. Nearly two-thirds of the Single Parents monies (\$16,083) were

used to provide partial support for a re-entry program specialist. This individual established the re-entry program in 1984 when it served 48 people. In 1986, 400 people used the program's services. The program helps returning or new students 25 years old or older, the majority of whom are female. Program services include assistance with finding child care, purchasing text books, housing, transportation, financial aid, and counseling.

Allocation Procedures in State 3

In State 3, the distribution of Adult, Single Parent/Homemaker, and Sex Equity funds differs from one another. Adult funds are restricted to the community colleges and are allocated on the basis of a formula with a small amount being reserved to fund two RFPs. Single Parent/Homemaker funds go to postsecondary institutions and community based organizations. The RFP process is used to allocate Sex Equity monies among secondary and postsecondary institutions.

Use of Funds at the Local Level in State 3

In U3 the school district received \$5,900 in Sex Equity funds, which were used to recruit females into nontraditional programs and to conduct workshops for faculty on awareness. The district did not receive Adult or Single Parent funds.

A fully-accredited four-year adult high school is operated by the urban school district in U3. It serves over 30,000 adult students each year and all classes are open entry/open exit. Perkins Adult funds are used to support some of the instructional offerings at the adult school, but documents did not allow us to determine which ones. Single Parent/Homemaker funds are used to pay for child care vouchers for teen parents in vocational education who are not pursuing high school diplomas. These funds also support academic and vocational assessment for those students as well as life skills workshops. Sex Equity funds (\$70,000) were used to fund a career fair and to support the counseling into nontraditional areas of females at the time of registration.

At the community college in U3, Single Parent/Homemaker funds were used to support a program for 400 single parents who live in subsidized housing projects. The program offered fast track (intensive for a short

duration) certificate programs in word processing and other fields. The Sex Equity funds were used to support fast-track courses on campus in word processing.

In the suburban community, S3, the school district received no Adult, Single Parent, or Sex Equity funds. The district has submitted proposals for sex equity monies but has never been successful.

The community college in S3 received no Perkins Adult monies. It did have a continuation Single Parent grant of \$9,200 to support its Women's Center, and a Sex Equity grant of \$22,800 used to recruit women into high technology fields.

In the rural community of R3, the school district did not receive Adult, Single Parent/Homemaker or Sex Equity funds. At the postsecondary level the community college received \$32,000 of Perkins funds that represents both Adult and Single Parent/Homemaker funds. (The college was not positive about the specific category of Perkins funds. It may be entirely Single Parent funds.) These monies were used to support a program for farm women. This program operated in four regions throughout the state and was part of a state-level initiative. The program offered seminars for farm women affected by the farm crisis. Perkins funds were also used to teach home business courses to individuals operating cottage industries. The instruction was available at several off campus sites.

Allocation Procedures in State 4

In State 4, Adult funds of over \$3 million are distributed by the state in two ways. A portion of the funds are given to 10 centers in community colleges (\$650,000) and for industry services (\$369,000). The remainder (except for the \$350,000 in Adult funds allocated for the incarcerated) is distributed by formula based on the number of adults and number of unemployed. Districts and community colleges must write proposals describing how they will spend the funds in order to receive them.

About 12% of the Single Parent funds of \$2 million and 27% of the Sex Equity funds of \$900,000 are used to support coordinators statewide. The remaining monies are distributed on the basis of formula to those eligible

recipients willing to write proposals describing the use of these funds. In both the Single Parent and Sex Equity categories, there are large amounts of unspent funds because agencies failed to submit proposals.

Use of Funds at the Local Level in State 4

At the secondary level in community U4, the district does not receive Perkins funds for Adults, Single Parents, or Sex Equity. At the postsecondary level, the community college receives \$129,000 of Perkins Adult funds. These dollars are merged with the general operating budget of the institution and are marked for recruitment activities. The Sex Equity monies (\$70,000) and the Single Parent/Homemaker funds (\$68,000) are combined to support a firearm training program targeted at women who would like a career in law enforcement. The goal of the program is to increase the physical strength of the participants so that they can accurately fire a rifle.

In community S4, the school district does not receive Adult funds. It did not prepare a proposal for the estimated \$3,000 of Sex Equity funds it would have received and it turned over its Single Parent funds to the community college.

The community college used the Single Parent/Homemaker funds (\$27,500 including the money from the school district) to support a program that recruits and counsels single parents and displaced homemakers and funds child care, tuition, and other expenses. Perkins Adult funds (\$57,000) are used to purchase equipment updates for the data processing program.

In the rural community R4, we were unable to determine the amount of Adult, Single Parent, or Sex Equity funds received at the secondary or postsecondary levels. The individuals who would be able to provide this information were unavailable.

Allocation Procedures in State 5

In State 5, Perkins Adult monies are restricted to the postsecondary level. Funds are distributed by formula and are to be used for in-plant training and retraining of employees.

Single Parent/Homemaker funds are distributed by RFP with a total of 52 awards ranging from \$35,000 to \$90,000. The Sex Equity funds are also distributed by RFP, and the 106 awards range in size from \$800 to \$85,000.

Use of Funds at the Local Level in State 5

In U5, the school district does not receive Adult, Single Parent, or Sex Equity funds. The community college operates a Displaced Homemaker Center partially funded by Perkins. The purpose of the Center is to assist displaced homemakers to become socially and economically independent and self-supporting through development of a plan. Students are provided individual and group guidance, individual skills evaluation, a pre-employment skills workshop, advise and referral to education and training and employment referral, placement and follow-up.

The community of SSA receives no Adult Perkins funds. The community college combines its Single Parent/Displaced Homemaker funds with its Sex Equity funds (a total of \$10,000), to pay part of the salary for a staff coordinator. The coordinator was involved with staff development and curriculum development and in the development of articulation agreements with secondary schools.

The schools in community S5B receive no Adult, Single Parent/Homemaker, or Sex Equity funds.

Allocation Procedures in State 6

In State 6, the process for distributing Adult funds is unclear. There is a statewide match using State Department of Commerce funds and others. Adult, Single Parent and Sex Equity funds are all distributed on the basis of RFP. School districts as well as postsecondary institutions are eligible to apply.

Use of Funds at the Local Level in State 6

In the communities visited in State 6, we were able to gather very little information about the Adult, Single Parent, and Sex Equity set asides. In U6, the area vocational school offers vocational training at both the secondary and postsecondary level. Sixty percent of the student body is

postsecondary. The area vocational school uses its Single Parent allocation to provide child care assistance and tuition grants. Nothing is known about whether the institution receives any of the other setasides. The director of the area vocational school provided a minimal amount of information for the study.

In S6, the area vocational school received \$12,121 in Single Parent funds which were used to provide an aide in the classroom. Site administrators did not know the rationale for the use of the money in this manner. The district and postsecondary area vocational school in the S6 sample received no Adult or Sex Equity funds, as far as we are able to determine.

In R6, the area vocational school received \$6,200 in Sex Equity funds and \$13,613 in Single Parent funds. These funds were used for tuition assistance, books, transportation and child care. Sixteen single parents received child care assistance.

Allocation Procedures in State 7

State 7 restricts Adult, Single Parent, and Sex Equity funds to different types of institutions. Only those institutions that have at least 5 state-funded vocational education programs (excluding business, home economics, and industrial arts) may submit proposals to the state for Adult funds. All funds were spent by area vocational schools. Single Parent monies are given only to community colleges through formula and competition. In State 7, only school districts are allowed to compete for Sex Equity funds. A total of 14 Sex Equity projects were funded involving \$475,000 altogether.

Use of the Funds at the Local Level in State 7

In the large urban community of U7, the school district received a \$50,000 Sex Equity grant. The funds were used to provide 2,000 eighth-grade, at-risk students with equity counseling and high school planning with an emphasis on nontraditional opportunities. The district personnel did not indicate that it had received any Adult funds.

At the postsecondary level, the community college in U7 has a 2-semester single parent program with an enrollment of 30 single parents. This Perkins-supported program (\$142,295) is designed to prepare students to work in industry and business to coordinate computer utilization services. To date it has a 100 percent placement rate.

In suburban S7, neither the school district nor the area vocational school received Adult, Single Parent, or Sex Equity funds.

In R7, the district completed a three-year Sex Equity project the year prior to the study, but received no Sex Equity funds during the study year. At the postsecondary level, the community college received a Single Parent/Homemaker grant of \$39,230, which was used for a computer aided bookkeeping project for welfare mothers attempting to re-enter the work force.

Allocation Procedures in State 8

State 8 distributes its \$5 million of Adult funds by formula with a small amount going out by RFP. Two-thirds of the money is allocated to the secondary level and the remaining one-third to the postsecondary level.

Sex Equity funds are distributed in two ways. At the secondary level the one million dollars in Sex Equity funds are allocated by formula. The one-half million dollars at the postsecondary level is distributed by RFP. Formula allocations range from \$1200 to \$600,000, and the proposal grants average about \$30,000.

All of the nearly \$4 million of Single Parent/Homemaker fund is distributed by formula with 70% assigned to the secondary level and 30% assigned to the postsecondary.

Use of Funds at the Local Level in State 8

In U8 the school district uses its Adult funds (\$130,254) to support evening vocational classes at the vocational high school. Nearly 1000 adults attend various classes each night. Among the uses of the Single Parent/Homemaker funds (\$104,567) were a full-time aide in the child care center and 20 percent of a Coordinator's salary to operate a Young Mothers Program. The program has been in the district since 1969 and provides pregnant teenagers

with comprehensive support services and continued education. Among the uses of the Sex Equity funds (\$35,956) was partial support for a coordinator who examines curricular materials.

The community college in U8 used its Adult (\$16,370) monies to support retraining programs for companies that contract for specific training customized to their needs. About \$5000 of additional Adult funds were used to train LPNs to become RNs. The Single Parent/Homemaker funds (\$32,957) were used for the Tuesday/Thursday college that the community college has created to meet the needs of the single parent. It allows students to schedule college courses on just two days each week and on these days additional support counseling is provided to deal with the practical problems of returning to school and to help with selection of appropriate academic programs.

In the rural community of R8A, the area vocational school received \$10,000 in Adult funds, and \$15,000 for Single Parent and Sex Equity funds. The Adult setaside is used to pay for the tuition of adults to attend the area vocational school. Tuition for adults was \$3200 per year and is now \$1600 because of a change in state legislation. The Single Parent monies are used for tuition, child care, and transportation. In addition, it pays for lecturers to come and speak about self-esteem and time management. The Sex Equity funds were used to support a Sex Equity coordinator shared with three other area vocational schools. This individual has developed newspaper articles, radio spots, and a video used for recruiting students from the feeder high schools.

The community college in R8A combined set asides for Adults, Single Parents, and some Disadvantaged to fund a Collaborative Career Learning Program. Students learn basic career skills at job sites without pay. The program operates in conjunction with local businesses.

In R8B the area vocational schools (there are four of them) received \$55,754 in Adult, \$42,198 in Single Parent, and \$17,905 in Sex Equity funds. Portions of the monies from the different setasides were combined to support various activities. A coordinator, 70% supported by Single Parent and 30% by Sex Equity, offered a number of life skill workshops (30 one-hour programs) for which there were tuition waivers (\$6000 of Single Parent funds were used for the tuition waivers, which supported 120 to 150 people.). The life skills workshops had about 50 participants. She also offers single day life

skill/career readiness workshops (up to 45 people attending). Thirty percent of the Single Parent funds were used to support LPN instruction. The rationale for use of the funds in this way was that the LPN class has a large proportion of single parents enrolled.

The Sex Equity funds support 30% of the coordinator just described above, and 15% of an adult counselor. The adult counselor provided seven, two-hour training sessions for about 150 adults in taking interest tests, doing values clarification, resume writing, etc.

The Adult monies support the remaining 85% of the adult counselor and 1764 hours of adult instruction. The community college reimburses the area vocational school for the adults enrolled and the instruction is provided by staff of the area school on the community college campus.

There are three campuses of the community college in rural R8B. The entire institution received \$68,000 in Adult, \$50,000 in Single Parent, and \$60,000 under an RFP for Sex Equity. These funds are combined with Disadvantaged and Handicapped (a grand total of \$343,699 Title IIA funds for the three campuses) and the monies were used to support 5 full-time professional counseling staff. Students in each of the special population categories were recruited. For instance, Adult monies are targeted at those individuals facing dislocation in the next year. Counselors do on-site recruiting at the plants that are closing. (An estimated 2,000 workers will be laid off when two manufacturing plants close.) In the last decade the proportion of single parent families has increased by 30 percent and counselors work to find mentors and tutors for these individuals. In addition, all "Perkins students" participate in an orientation that covers college survival skills, aptitude and interest, and exploration of career goals. Once enrolled, they receive faculty advisement, tutoring, and counseling.

Allocation of Funds in State 9

In State 9, all Adult monies are distributed by formula with \$1.2 million for the secondary level and \$700,000 for the postsecondary. Sex Equity funds, \$500,000 for secondary and \$51,000 for postsecondary, are distributed by RFP. Single Parent monies (\$500,000 secondary and \$1 million

for postsecondary) also go out by RFP, but recipients must be in metropolitan areas and surrounding counties where there are concentrations of single parent/homemakers.

Use of Funds at the Local Level in State 9

In the urban community of U9, the school district received \$130,240 of Adult Perkins funds. These funds were used to pay for vocational instruction for adults in the schools throughout the city. A Single Parent program funded at \$187,840 served 300 single parents and 240 displaced homemakers. Services include guidance, counseling, child care, job readiness, and pre-employment assistance. Two coordinators, supported by \$80,000 of Sex Equity funds, worked in 17 middle schools recruiting for vocational courses emphasizing income potential and administering an interest inventory. They sent all eighth-grade parents a letter describing the vocational opportunities available.

No information was available about Perkins funds for the post-secondary institutions in State 9.

In R9A at the school district, Adult funds were used to support an Adult LPN course. Although the program has an excellent reputation and 100% job placement, applications for enrollment have decreased. The Single Parent/Displaced homemaker project served over 40 individuals. Services provided include literacy, pre-employment and job search assistance, individual and group counseling, and child care. Child care is not provided by other programs in the area.

The district in R9B also had a Single Parent program, which is located at the high school. The 30 students who were in the program met one day a month for an all-day workshop. The program included some parenting skills, field trips, occupational interest tests, employee presentations, job skills, and life skills. Attendees were also given a child care voucher for the day of the workshop.

ENROLLMENT OF SPECIAL POPULATIONS IN INSTITUTIONS PROVIDING VOCATIONAL EDUCATION

Overview

Access to quality vocational education programs can be considered a two-stage process. The first stage concerns access to the institutions that may offer high quality programs. In order to participate in a high quality program, a student must have access to the institution where it is available. The second stage concerns access to programs within institutions. Assuming now that a student is enrolled in an institution, we can then examine the degree to which there is access to its various program offerings. Barriers at either stage can prevent a student from enrolling in a high quality program. Approaches to removing barriers call for different types of actions depending on whether they effect across-institution or within-institution enrollments. The optimal targeting of Perkins funds can only be determined when there is a clear understanding of which factors are influencing access of special populations at each stage.

This section of the chapter focuses on enrollment patterns of the handicapped and disadvantaged across institutions and the factors that influence these patterns. We had hoped to be able to identify within-institution enrollment patterns of handicapped and disadvantaged students. However, too few institutions included in the study maintained adequate and accessible records of enrollments of special need students by vocational program major.

In our case study sites, we find that special needs students have access to (are enrolled in) the range of institutions that provide vocational education and are seen in increasing proportions in the area vocational schools. In many of the area vocational schools in our sample, handicapped students and disadvantaged students represent a much larger proportion of the enrolled student body than in previous years. We find that it is now rare for an area vocational school to have admissions requirements for entrance. Basic skills labs and tutors are now widely available in vocational high schools for students who need remediation. Specially designed programs for at-risk students are also found in many of the vocational schools in the sample.

The population attending the community colleges in our sample has changed over the past five to ten years. The median age is at or over 27 years old and the basic skill levels of attendees are lower than those of past years. Enrollments are increasing among females. As the population in general contains more limited-English proficient individuals and minorities, the community college student body's reflect these trends as well. At the community colleges we do not have information that will allow us to determine the enrollment of handicapped students, except for the physically handicapped.

We find several community colleges in our sample that are actively seeking new students from population groups that have not traditionally been enrolled before. When this occurs, these colleges are increasing and diversifying the types of support services available to meet the changing needs of the entering new students. In general, support services such as remedial labs, financial aid, and ESL classes are widely available. Less often provided are child care, transportation, and housing assistance.

We find then, that access to high quality programs no longer seems to be an issue of access to institutions. While there are areas where improvements can be made and are continuing to be made, on the whole our evidence suggests that enrollments of special needs students are increasing at the area vocational schools and the community colleges.

Secondary Enrollment Patterns

Of the districts that provided information, enrollment of special populations across institutions at the secondary level varies a great deal due partly to district demographics, and partly to the configuration of institutions within the district. In addition, it should be noted that the representation of special populations in particular institutions depends partly upon their likelihood of being enrolled in a district at all. Since the patterns of each group are somewhat different, each is discussed separately below:

Handicapped. In the districts visited for this study, enrollments in institutions of most handicapped students do not differ systematically from those of nonhandicapped students. That is, handicapped students are enrolled both in comprehensive high schools and at vocational high schools and area high schools, where such exist.

In some districts, a segment of handicapped students are enrolled in special purpose institutions. For example, in one district in the study, blind and deaf students attend a special school; while in another district there is a special institution for severely orthopedically handicapped students; and in still another, emotionally handicapped students are referred to a school for retarded citizens. Such special purpose institutions tend to exist mainly in large urban centers that have sufficient numbers of severely handicapped students to form a constituency. In other cases, districts do not serve some segment of the handicapped population at all. For instance, at one site all trainable mentally retarded students are served by the county and not by the district while in another site, all handicapped students are served by a state-managed regional center. Clearly, enrollment of a segment of the handicapped population outside of the district or at special purpose institutions decreases their presence at the high schools in a district.

In several districts in our sample, the vocational high school or area vocational school is the site of the special facility for handicapped. Where this is the case, handicapped enrollments at the site tend to be comparatively high. For example, the vocational high school in one urban district is the site for a full day program for trainable mentally retarded students. An additional fifty percent of the handicapped students in the district come to the vocational high school for a half-day program.

Disadvantaged. The percentage of students who are disadvantaged varies greatly from district to district. In one district visited, only four percent of the students are academically disadvantaged, according to the district personnel while in other districts, the percentages range up to 23%. The percentage of students who are economically disadvantaged ranged from insignificant to close to 75%. Urban and rural districts tend to have higher proportions of economically and academically disadvantaged students compared to suburban districts. However, both academically and economically disadvantaged students are enrolled in all types of secondary institutions in districts of all sizes.

In many districts visited, there are alternative or continuation high schools for disadvantaged students, students with behavior or attendance problems, or other students labeled "potential drop-outs." In one district,

the head of the alternative school described his students as simply having "coping problems," and needing the smaller classes and individualized attention offered by his school.

Often attendance at such schools is voluntary; however, in some cases it is mandatory, provided a student chooses to stay in school. The length of time students stay in such schools varies from district to district, and is not necessarily related to whether the attendance is mandatory. For instance, in one district where attendance is mandatory for students with disciplinary or attendance problems, students attend the continuation school for only one semester and then return to their comprehensive high schools. As with special purpose institutions for handicapped students, where these schools exist, they reduce the proportions of disadvantaged students that would otherwise be in the other types of high schools. In many cases, these institutions are quite small--in some cases serving only 20-30 students in small districts; however, as would be expected, in larger districts, they tend to serve larger numbers of students.

Postsecondary Enrollment Patterns

As with secondary enrollments, community demographics greatly affect enrollment profiles in the sample of postsecondary institutions considered in this study. Urban and rural communities tended to be poorer than the suburban sites, for example, and the existence of specialized schools also affected enrollments. One community college had a large proportion of deaf students because graduates of the local high school for the deaf tended to settle there.

Handicapped. Many postsecondary institutions, both community colleges and postsecondary vocational schools, reported only very few handicapped students--three or four per year. In general, the percentage of the student body that is handicapped does not exceed five percent.

It is likely that the numbers of handicapped in postsecondary institutions are to some extent underreported. While some postsecondary institutions report enrollments of all types of handicapped students, many postsecondary institutions report enrollments of physically handicapped students, but not of emotionally or mentally handicapped, or learning disabled students.

Unfortunately, there are not sufficient data to investigate differences in total proportions of handicapped students enrolled by type of postsecondary institutions considered here or whether one type of institution is more more likely than an other to serve particular segments of the handicapped population.

What should be noted, however, is that according to federal law, handicapped students between the ages of 18-22 may be enrolled in secondary institutions. Indeed, enrollment in secondary institutions may depress their enrollments in postsecondary institutions, and this may be especially true for emotionally and mentally handicapped, and learning disabled students.

Disadvantaged. The proportion of disadvantaged students in the postsecondary institutions visited by this study was generally quite high and growing. Most institutions reported that well over 50% of their students are eligible for financial assistance. Several reported figures over 80%. As would be expected, more urban and rural districts were poor and had larger percentages of economically disadvantaged students. However, postsecondary institutions in some suburbs--especially those in poor states--also had high proportions of economically disadvantaged students.

Data were not available to allow us to compare the enrollment patterns of disadvantaged students in community colleges with those of area vocational schools. In some cases, the most economically disadvantaged students (e.g., JTPA students or other third-party referrals) attend programs at special purpose institutions specifically targeted to them. Such institutions, which are often technically part of the local community college, usually feature intensive non-credit occupational training programs. As with other special purpose institutions, these training schools are found mostly in large communities.

For example, the community college in one urban community operated a vocational training center in a separate location. The center was attended by 200 to 300 economically and academically disadvantaged students, most of whom had been referred by JTPA or social services agency. Courses were open entry/open exit in all day time blocks. But the range in course offerings was restricted. In this instance, Perkins funds were used to help support the vocational training center.

The community college in another urban community has been considering the creation of a downtown location in addition to its multi-acre site four miles from the city. The college president has so far resisted the idea because he is afraid that the course offerings would have to be at a lower level to meet the needs of the more disadvantaged inner city population that would attend. He did not want to be accused of operating a second class institution downtown.

In a third urban community, a larger postsecondary area vocational school serves 30,000 students each year. While many of these students are economically and/or academically disadvantaged, the administrative staff indicated that these students are enrolled in the same classes with non-disadvantaged students.

Postsecondary institutions are less likely to have enrollment counts of the number of academically disadvantaged students than of economically disadvantaged students. Being economically disadvantaged does not necessarily mean that a student will be academically disadvantaged. For instance, at a community college at one site, 20% of students were on financial aid and 68% required basic skills remediation. At another site 88% of the students were economically disadvantaged but only 12.5% were academically disadvantaged. At a third site, 85% of the students at the community college receive federal financial aid, while 75% of the students score below the 50th percentile on a standardized test, and 44% scored below the 25th percentile. The two percentages of academically disadvantaged students reported in the last example point out the extent to which the percentages of students reported can vary simply depending upon the definitions of the categories. While exact numbers of academically disadvantaged students at postsecondary institutions visited for this study cannot be reported, it is clear that academically disadvantaged students are enrolled in both types of postsecondary institutions, and in increasing numbers.

Single Parents/Homemakers. All types of postsecondary institutions--community colleges, postsecondary vocational schools, adult schools, and technical/occupational training centers--report enrollments of single parents and displaced homemakers. Furthermore, they report increases in this population in recent years. However, the institutions visited were not able to provide statistics on the total numbers of single parents/ displaced

homemakers, since in few cases are data on marital status and dependents collected, except for financial aid purposes. Such data were not made available to us.

On the other hand, the claim that single parents and displaced homemakers are enrolled is not based merely on the subjective impressions of institutional staff, but rather on the use of single parent centers and day-care services by students. While no institution was able to provide us with exact numbers of students using these services, and such figures would understate the total number of single parents/displaced homemakers in any case, staff at all types of postsecondary institutions did indicate that the proportion of students making use of services for single parents/displaced homemakers is large and growing.

FACTORS THAT AFFECT ACCESS OF SPECIAL POPULATIONS TO INSTITUTIONS OFFERING VOCATIONAL EDUCATION

Access of special population groups to institutions offering vocational education is influenced by a number of factors, the most important of which are described below.

In the districts in our sample where area vocational schools or vocational high schools exist, a number of time related factors may affect the access of students to these institutions. These include such things as the amount of time required to commute between a student's home high school or residence and the vocational school, the availability of transportation, and the amount of time available for vocational courses in a student's schedule.

At the secondary level increased academic requirements have exacerbated the scheduling problem for students in some sites. This problem has been offset somewhat by strategies such as providing remedial services at the vocational schools and by granting academic credit for selected vocational courses. At the postsecondary level, scheduling problems are often solved by offering classes in the evenings and on weekends.

There are some factors that directly impact a student's chance of being admitted to a vocational school. Feeder schools, in some sites place upper limits on the number of students they will send to the area vocational

schools. These caps on enrollments can prevent students from having access to the institution. Admission requirements to vocational schools have been virtually eliminated and those imposed at the postsecondary level are minimal.

The presence of various types of special purpose institutions such as magnet schools, schools for students with particular handicapping conditions, or schools for at-risk students (sometimes called alternative or continuation schools) also influenced a student's chances of attending a vocational school. Students in special purpose institutions were not always permitted to attend the vocational schools and special purpose institutions themselves do not always provide vocational offerings. For example, in the alternative high school in a rural district in the sample no vocational courses were offered, while in another suburban district, only the lowest level courses are offered. Thus, it is in a role for the most disadvantaged students in these districts to participate in high quality vocational programs if the entire school day is spent at the alternative school.

Tuition at the postsecondary level may prevent some disadvantaged students from attending, however, in many cases the fees are relatively modest and a variety of financial aid is available.

Secondary Level

Time-related factors. All else being equal, geographic distance of a school, whether a comprehensive high school or a vocational school, from a student's residence tends to decrease the likelihood of enrolling in that school. The reasons are obvious. Enrollment at a distant school tends either to decrease the number of classes a student may take, or increase the length of the student's day.

Geographic location was a frequently cited reason for students not attending a vocational school in districts of all sizes. Indeed, 10 out of 27 districts mentioned that the distance to the vocational school dissuaded some or all of the district students from attending. (In large districts, a vocational school is likely to be located close to some students but far from others, while in smaller districts the nearest area vocational school may be located in a neighboring district.)

Some examples will serve to illustrate the dimensions of this situation. In one rural county district in our sample which covers a large geographic area, the area vocational center is in the same campus as one of the two comprehensive high schools. Transportation to the vocational center is available, but the drive takes an hour each way. A student from the non-adjacent high school who wants to take a course at the vocational school must commit a half day. That is difficult to do and still meet graduation requirements. Not surprisingly, most secondary students at the vocational school attend the high school which shares its campus.

Several urban districts in our sample have vocational schools located on the fringes of their cities (U3, U8). Both provide bus transportation, but in one of the two districts (U8), the location is inaccessible enough that a missed school bus necessitates a 1-1/2 hour bus ride on city transportation.

Distance is not the only locational factor that may affect enrollments. Where vocational schools are magnets, they are often located in depressed areas of communities. While such a strategy often works to attract students from the entire district, it may also result in reduced enrollments.

Indeed, the location of the vocational school in one district in the heart of an urban ghetto that was regarded as the most dangerous and crime ridden area in the city was cited as an important reason for low enrollments (U7).

When a district provides no transportation to an institution that is geographically removed, it may be impossible for some students to attend. This is especially likely to be the case among handicapped and disadvantaged students who cannot provide their own transportation. In contrast, when transportation is provided to institutions, the effect of geographic distance is somewhat mitigated.

Most districts provide transportation to any school within the district that offers unique programs in order to guarantee equal access to such programs for all students. A few districts do not provide transportation to all of their schools. In the case of one large urban district, students attending the vocational high school must provide their own transportation. While the vocational high school in this district is accessible by public

transportation, the cost of and difficulty of using public transportation may render the school inaccessible for some students. In another large urban district, no transportation was provided except to handicapped students, leaving the other populations to fend for themselves. Here again, the cost of using public transportation may bar economically disadvantaged students from attending the school.

When the nearest area vocational school is located outside of the district, it is often the case that no transportation is provided. Such a situation usually occurs in rural, and less frequently in suburban, districts. Of the 27 districts visited, five reported this as a problem.

Every district in the sample has experienced some type of academic reform. In all districts sampled, the number of total courses required for graduation has been increased. In most districts, the number of academic courses required to graduate has also increased. Where there has been no increase in academic requirements, overall enrollments and especially those of disadvantaged populations in vocational institutions have tended to increase.

For those districts in our sample where academic requirements have increased, the effect on vocational enrollments is less clear. Districts are responding to this potential threat to vocational enrollment in a variety of ways. One significant way is to provide remedial services at the vocational school.

In one district (S3) in a state where the state university had increased entrance requirements (State 3), graduation requirements were increased. The net effect reported by district staff was an increase in dropouts so the new requirements were dropped. The only students who had to meet the higher requirements were those who were juniors and seniors at the time of the field visit. Another district (R2) in a state where academic reform has become a major political issue responded by upgrading curriculum in vocational courses, such as Business English and Math, to meet academic requirements. In addition, some of the newer courses, such as Principles of Technology, meet science requirements where they are offered.

However, while some of the sample districts can find ways to mitigate some of the negative effects academic reform movements have on vocational enrollment, there is no doubt that these movements increase pressures on academically disadvantaged students. In particular, requirements that failed classes be repeated until they are successfully completed, limit available time for elective and, thus vocational enrollments (U1, R1A, R13).

When particular classes are offered in long time blocks or only at certain times of day, conflicts in scheduling may arise, making it impossible for a student to attend the vocational school or resulting in longer school days. For handicapped and disadvantaged students, scheduling can pose a particular problem if conflicts arise with special classes at their comprehensive high schools.

Districts in the sample have attempted to deal with scheduling problems in a variety of ways. One district has reduced all of its 3-hour classes by one hour. In another district juniors attend the vocational school in the morning and seniors come in the afternoon. Other districts group the feeder schools into blocks and each block is scheduled to attend the vocational school at a different time of day.

Scheduling constraints are obviously complicated by the previously discussed factors of poor location and transportation. Their presence necessitates greater time commitments from students, either half or full day enrollment at the vocational school. Two of the three districts (U2, R2) which required full day enrollment were in this situation. In contrast, the area vocational school in one rural district was located 5 minutes away from the two comprehensive high schools of one feeder district. The district ran hourly shuttle buses, and students were thus able to take vocational classes at any time of the school day (S3).

Another type of scheduling problem that may impede access of particular populations to vocational schools concerns yearly, not daily, schedules. For instance, in one rural district visited, the area vocational school is located at the community college, and secondary and postsecondary students take classes together. The community college begins its year in August, and postsecondary students begin signing up for classes then. Most classes are closed by the end of the month. The alternative high school, which has about 20 students, does not begin its year until September, and its

students may not sign up for classes at the community college until then. Since most classes are already closed by September, it is almost impossible for alternative school students to attend classes at the community college.

Districts in our sample have devised a variety of arrangements to cope with scheduling conflicts. In all, scheduling was mentioned as a barrier to attending the vocational school by fewer districts than mentioned geographic location or transportation.

Factors Related to Admission to a Vocational School. Few vocational schools in the districts in our sample reported admissions requirements. The rural district described above which required its own non-handicapped students to take assessment tests to secure applicants was an exception. It should be noted that this requirement did not come from the vocational school, but from the district superintendent. A second exception was a vocational magnet that uses attendance records in the admission process. Students must not be absent more than six days in the semester preceding admission (for any reason) in order to be admitted for full-time enrollment. The requirement does not apply to part-time students.

Enrollment in a particular school is sometimes regulated by placing a maximum on the number of students allowed to enroll. This often occurs in our sample when total enrollments have declined in an area and institutions must compete for students, and each district must pay the vocational school on a per pupil basis for educational services rendered. Where the vocational school serves multiple districts, the sending districts will place an upper limit on the number of students they are willing to send. In such situations, students may be admitted on a first-come, first-served basis until the pre-established limit on enrollments is reached. This procedure does not usually apply to handicapped students.

Two of the rural sites in our sample (R3, R6) placed caps on the number of students they were willing to send to the vocational school for financial reasons. One school board (R3) reduced from \$35,000 to \$20,000 the amount of money it would spend sending students to the vocational school. The board also required that any student who wished to attend the vocational school obtain its approval. The \$20,000 allocated was enough for six students to attend.

In the other district, students who wished to attend the vocational school were required to take assessment tests. It was acknowledged that the only purpose these tests served was to limit the number of students who attended the vocational school because the school district did not want to pay for them.

In one case in our sample (U3), the designation of the vocational school as a magnet produced substantial economic benefits. 2-1/2 million dollars in federal money became available to the district and it was able to upgrade all of the equipment at the school. This, coupled with administrative charges, has increased enrollment at the school from 550 to 850 students, which is full or almost full capacity.

There were technically caps on the number of students each of the comprehensive high schools could send to this school. However, even with the increased enrollment it has not been necessary to enforce those limits, and, so far at least, all students who wish to attend are accommodated.

In other instances, the presence of a magnet school for academically able students in one district and for those interested in computers and science in another district changed the distribution of students across institutions. District personnel believed that these new special purpose institutions were attracting the more academically able students, some of whom would have attended the vocational school. The result was that on the average the students attending the vocational school were a lower achieving group than in previous years.

Special Purpose Institutions. Various types of special purpose institutions exist in districts. In this discussion, special purpose institutions include schools only for the handicapped; schools that serve only potential dropouts, disciplinary or attendance problems, students and other types of at-risk students; and magnet schools that offer a specialized curriculum in a particular subject area (e.g., math and science, computers, performing arts, etc.).

The reason that special purpose institutions are important in examining vocational enrollments is that the presence of special purpose institutions alters enrollment patterns. Students who might otherwise have enrolled in a vocational school full or part time, may now attend one of the other special purpose schools instead.

Urban districts often use magnet schools--schools designed to attract students from all over the district--to achieve racial/ethnic balance. Such schools alter enrollment patterns, especially affecting the proportions of disadvantaged students in the magnet schools as well as the other schools. Vocational and technical schools in desegregated districts tend to be magnet schools, located in depressed areas for the purpose of drawing students from more affluent areas of the district.

In the districts sampled, special schools for the handicapped tend to serve severely handicapped populations. Some schools in our sample specialize in serving a particular group of severely handicapped, such as orthopedically handicapped or trainable mentally retarded, and have specially designed facilities for the population. For instance, the school for the orthopedically handicapped is physically and organizationally linked to a major medical center. In such cases, targeted populations appear to be quite well served by such institutions.

While most districts sampled reported that mainstreamed handicapped students are enrolled in the full range of vocational programs, a substantial proportion of districts indicated that handicapped students tend to be clustered in food service, home economics, welding, and auto mechanics. Indeed, six districts mentioned clustering in food service and home economics, while four cited clustering in auto mechanics, and three reported clustering in welding. (These results should be interpreted with some caution, since program offerings vary across districts, affecting patterns of all students, including handicapped students.) Eleven districts reported that handicapped students were also likely to be enrolled in work-study programs. A variety of other programs were cited by one or two districts as containing comparatively large proportions of handicapped students, among them industrial arts, horticulture, agriculture, electronics, and distributive education.

In contrast, several districts reported that handicapped students were not in programs in which their handicaps would prevent them from being successful. Three districts reported that handicapped students did not tend to be in business programs. Other programs that were mentioned as containing small numbers of handicapped students varied from district to district. For instance, only one district each mentioned cosmetology, truck driving, meat cutting, carpentry, and nursing. As stated above, some of these programs may be mentioned by only one district in the sample, because they may be offered only in that district. Thus, findings should be viewed with caution.

Disadvantaged. Most districts sampled indicated disadvantaged students are found in all of their programs. However, about half the districts reported some, if modest, clustering of disadvantaged students in certain programs. In general, where there are differences in enrollment patterns of disadvantaged and nondisadvantaged in vocational programs students, districts tended to indicate that disadvantaged students are somewhat less likely to be enrolled in "technical" classes, or courses that require academic skills. The most frequently mentioned programs in which disadvantaged students were said to cluster were autobody, auto mechanics, and food service. Nevertheless, there was little consensus, since each of these programs was mentioned by only three districts. Home economics was mentioned by two districts, and a variety of other programs, such as cosmetology, small engines, and graphic art were mentioned by one district each.

Alternative or continuation schools generally serve disadvantaged populations-- dropouts or potential dropouts, students who work during the daytime, teen parents, and/or students with attendance or behavior problems. In our sample, most large districts and several smaller districts--at least two suburban and three rural districts--also had such schools.

Alternative schools in our sample generally offer few vocational education programs on their campuses. Vocational opportunities are provided in other ways. Special work-study arrangements are also possible at some alternative schools. For instance, the alternative school in one urban district in the sample offers a high school diploma for students who work during the days and attend classes one night a week. Another alternative school in a rural area offers an arrangement, targeted at high-risk 9th graders, in which students work one week and attend school the next.

Students in alternative schools tend not to use the option of attending a vocational school for part of their school day. While few vocational schools have admissions requirements that would prohibit their enrollment, in some cases schedules at the alternative schools are incompatible with part-day enrollment at another institution. In other cases, students prefer not to lengthen the school day by attending a vocational school part time.

Recruiting and Counseling. Recruitment by institutions of particular populations can affect enrollment patterns. Likewise, counselors at comprehensive high schools may counsel students in or out of vocational institutions. Few vocational schools reported recruiting particular populations. However, among the exceptions were a vocational school in an urban district that recruited high-risk gifted and talented students (U3), and various recruitment programs trying to attract females into high-tech or other nontraditional programs (S3, U5 and U9).

Counseling at the home high school may increase or decrease the numbers of particular groups of students at vocational schools. No systematic pattern of counseling was found in the districts sampled. In some cases, counselors encouraged disadvantaged and/or handicapped students to enroll in vocational schools while in others there was little counseling or guidance. In no district did we find any evidence that disadvantaged or handicapped students were being counseled away from vocational schools.

In one district (R2) the area vocational school has counselors on staff who are actually physically located at the home high schools to recruit students for its programs. This district has also made extensive use of assessment tools, and the counselors have access to some of this material. This includes the TARGET system which is being implemented at the 9th grade level. Students who elect an occupational course of study are given a computer read-out, which shows all the courses they need to take including all deficiencies they will need to make up order to successfully complete their program.

Recruiting by providing exploratory courses in which students visit the vocational school tend to increase enrollments in such schools. In five of the districts sampled, exploratory classes were targeted exclusively at handicapped students, with the students visiting the vocational school for

periods of up to ten weeks. In another district, at-risk 9th graders visited the vocational school once a week. In addition to exposing students to the substance of the various programs, such exploratory courses increase enrollments by familiarizing the students with the setting. Thus, the choice of attending the vocational school is not affected by fear of a new environment.

Postsecondary Level

Many of the factors that affect access to institutions at the postsecondary level are the same as those affecting enrollments at the secondary level although some of them operate in slightly different ways. Factors that are similar include geographic location of institutions, transportation, scheduling, and special purpose institutions. The most important additional factors at the postsecondary level include tuition costs and financial aid. The effects of each of these factors on enrollments of postsecondary students in the districts sampled is discussed in this section.

Geographic location. A central location of an institution is equally important at the postsecondary level as at the secondary level for the same reasons. The importance of geographic location is attested to by the fact that more sites in the sample mentioned its influence on enrollments more often than any other single factor. Indeed, in ten communities, the fact that a postsecondary institution was located far away was cited as an important deterrent to enrollments. Likewise, a central or otherwise "good" location was mentioned as a plus by five institutions. While geographic location affects all individuals to some extent, it tends to have the strongest effect on the disadvantaged special populations.

For example, in one city the community college was located only four miles from the downtown urban center, but the college president believed it might as "well have been 400 miles", as many of the students in the city schools had probably never been outside the city limits. The available public transportation was not great, a real barrier for the economically disadvantaged.

While many postsecondary institutions serve quite large geographical areas, few postsecondary institutions provide transportation. Indeed, of the institutions sampled, only one rural institution did so. This greatly

facilitated enrollment, especially of disadvantaged and handicapped students. The problem of students having to commute long distances can be overcome when the institutions are easily accessible by public transportation. Seven institutions indicated that public transportation to them was either nonexistent or poor, and that this was likely to depress enrollments. In contrast, two institutions reported that they are well served by public transportation, and that this facilitates enrollments.

Scheduling. While at the secondary level scheduling conflicts tend to revolve around coordinating enrollment at two educational institutions, at the postsecondary local conflicts tend to concern work and/or child care responsibilities and enrollment. This is a result of the increasing number of older students enrolled in community colleges nationwide. The average age of students in the postsecondary institutions in our sample was 27 or older. These students thus have the daytime responsibilities that necessitate evening or weekend schedules. For example, at one institution (S3) which is not atypical, 40% of the student body take only evening classes. An additional 20% take a combination of evening and day classes. The remaining 40% of the students attend solely in the daytime.

Another institution in the sample (U8) offers a somewhat different approach to scheduling. It has what it calls the Tuesday/Thursday program for re-entry women which allows them to schedule all of their classes on two days a week to conform more easily with work and family responsibilities. The college also has additional support counseling available on those days to deal with the practical problems of returning to school as well as to provide academic guidance and counseling.

While community colleges and postsecondary area vocational schools tend to offer evening and weekend schedules, several technical or occupational training centers run by these institutions do not. For instance, at the occupational training center in a large urban district which offers training primarily in auto mechanics and office occupations, classes are offered in six hour blocks--usually beginning at 9 or 10 in the morning. Intensive training is the rationale in such centers. Since they are targeted at displaced workers, no scheduling conflicts are envisioned.

Modular classes and open entry/exit are also featured by most training centers, as well as by some other postsecondary vocational schools. The ability to begin a program on any day, work at a self-paced schedule, and end the program upon completion is thought to be a strong factor in attracting a variety of individuals, including those who have recently been displaced from a job and those who prefer to work at a slower pace.

Special Purpose Institutions. While at the secondary level, there are a variety of special purpose institutions for handicapped and disadvantaged students, at the postsecondary level, the most frequent type of special purpose institution is the occupational or technical training center. Such centers are generally located in depressed areas of urban or suburban communities and offer intensive training in a limited number of occupations. Programs are usually open entry/open exit and are self paced. Where these occupational or technical training centers exist, they tend to increase enrollments of disadvantaged adults at the postsecondary level. That is, such centers do not appear to attract disadvantaged adults away from other postsecondary institutions, but appear to attract an additional population that would not be served otherwise.

Another factor which distinguishes these institutions is that their students are often referred to the school by social service or criminal justice agencies. Their attendance may be voluntary, but it may also be mandated by the referring agency as a requirement for continuing to receive welfare benefits, or as a condition of probation. At one such institution (U3), 95% of its students fall into this category, 40% of whom need training in basic skills before they can begin their vocational training.

Recruitment and Outreach. Recruitment and outreach can result in real increases in enrollments in postsecondary institutions. Both of these efforts vary considerably across institutions in our sample. One institution in a growing urban district recruits students by advertising in the local TV Guide. However, most institutions that recruit at all target their recruitment efforts at a narrower population. For example, the community college in one urban district recruits all special populations, but focuses on limited English proficient students. Two institutions recruit females into nontraditional programs. One postsecondary vocational school recruits the individuals from the latter group into non-credit courses by offering

refreshments at locations that dispense food stamps. Several institutions recruit high school dropouts and/or economically disadvantaged. One used Perkins money to hire a recruiter to go after economically disadvantaged and single parents (S4).

Recruitment generally involves advertising of some sort. Outreach, on the other hand, involves bringing individuals into the institution through special programs, generally offered off-site. For instance, when the recent farm crisis threatened the stability of many households in its service area, one rural community college ran outreach programs for farm women, focusing on self-esteem, crisis management, and prevocational training. The same institution later developed and ran outreach workshops on how to turn cottage industries into profit-making enterprises (R3).

Tuition. High tuition can make enrollment in a postsecondary institution virtually impossible for many disadvantaged individuals. In most vocational schools sampled, tuition was either free or quite low. On the other hand, tuition varies considerably across the community colleges in the sample, ranging from \$5.00 per credit hour to \$56.00 per credit hour. Thus, while tuition does not tend to reduce enrollments of disadvantaged students in area vocational schools in the sample, it is quite likely to depress their enrollments in some community colleges.

The effects of high tuition are somewhat mitigated by financial assistance available at postsecondary institutions. In addition to Federal grants, such as Pell grants, states have various financial aid programs for economically disadvantaged postsecondary students. Furthermore, some institutions sampled provide assistance to particular population groups.

For instance, a community college in a medium sized urban district offers fee waivers to disadvantaged handicapped students, while at another, sex equity scholarships are available to females in nontraditional programs. Several institutions sampled offer financial aid as part of their single parent programs. One community college offers aid to cover books, tuition and housing, while another offers up to \$40 per week for child care and a stipend of \$210 per month. In a third case, a postsecondary vocational school sampled offers tuition grants for single parents. All of these aid programs increase enrollments of special populations in the institutions.

CONCLUSIONS

A primary purpose of the Perkins legislation was to facilitate the access of handicapped and disadvantaged students to high quality vocational education. Although increasing numbers (and proportions) of handicapped and disadvantaged students are enrolled in institutions offering a wide range of vocational programs, it appears that handicapped and disadvantaged students are enrolled in a narrower cluster of programs and seldom enrolled in the technical programs, the programs often cited by vocational educators as their "highest quality" or "best" program. The ability to perform basic mathematical functions is necessary for many of the technically sophisticated vocational education programs. For the most part, the special services available to the academically disadvantaged through vocational education are not tailored to recruiting them into such courses and helping them to succeed in them. Instead the services tend to concentrate on improving basic skills.

Those vocational education administrators in the sample who have resisted offering basic skills instruction at the vocational schools generally believed that responsibility for such remedial instruction rests with other parts of the educational system and not vocational education. Over the past five years, however, an increasing number of vocational schools in our sample have begun providing basic skills instruction. While the information gained from basic skills instruction is generalizable to all education and employment activities, including vocational education, it was seldom integrated with the vocational education curriculum. The remedial services that are supported by Perkins funds for educationally disadvantaged students were seldom directed specifically at helping low achieving students to succeed in vocational programs.

The paucity of services generally available for disadvantaged students seemed particularly acute. Seldom did an infrastructure exist to identify students, develop individualized education plans, and monitor the provision of services. Although some states visited provided ancillary remedial services through state or federal compensatory education funds, many did not. Perkins funds would support assessments or counseling services helping students to enroll in vocational programs, but continuing services were often not available.

In our sample, the role of Perkins relative to the operation of the vocational education enterprise is a small one, but as we have seen, it can be an important one. In general, in our sample the amount of money available to districts and institutions is not viewed as being substantial enough for it alone to provide the impetus for new services/programs or new initiatives to serve special populations. In those institutions whose local priorities coincide with Congressional intent, Perkins funds can play a critical role in making services available to special populations.

For instance, many urban districts in the sample are attempting to address the issue of high dropout rates. District personnel sought to devise special programs and services to retain potential dropouts in the school system. Furthermore, vocational education was viewed as one possible vehicle for keeping students interested in school, especially where the academic curriculum is perceived as pushing them out. Products of this combination of forces appear to be the placement at vocational schools of basic skills laboratories, pull-out remedial skills projects, basic skills tutors, and self-contained classes for at-risk youth. Perkins funds are often used to help support these activities, particularly remedial services.

In our sample it was a common practice for institutions to use their handicapped and disadvantaged setasides to help support their vocational assessment centers. Use of the money in this way is in keeping with the legislation. The assessments are often elaborate and detailed. Potentially they could be very useful for assessing student needs, designing special services/programs, and determining appropriate vocational programs for individuals to pursue. Unfortunately, the information available from the assessments does not appear to be used very often in decision making. We have few examples in our sample where assessment data were aggregated across students for use in programmatic decision making. For instance, no profiles of the abilities and interests of handicapped or disadvantaged students as a group are being generated and used to determine the types of services/programs that would be most appropriate. Nor can we find any evidence that the assessments are changing program enrollment patterns. Thus, the heavy use of Perkins funds for assessments whose results are not acted upon severely restricts the potential influence that the Perkins Act might have in improving the life chances of special populations.

Two institutions in our sample illustrate situations in which Perkins plays a larger role in meeting the needs of special populations. Both of these institutions were at the postsecondary level and happen to be in the same state.

Community college A exists on three campuses in a county which includes a larger city that has suffered economic hardships from the closure of major industrial and manufacturing plants. It receives a total of \$343,699 in Perkins Title IIA funds to be used by all three campuses. It actively recruits various special population groups through some 30,000 letters sent to social service recipients, video tapes of the respiratory/occupational therapy program to be used to increase minority access; and counselors going to churches, high schools, hospitals, etc. Goals are established for the number of special population students to be recruited in each category. Students are called "Perkins students." Once enrolled they receive faculty advisement, tutoring, counseling, and referral to other social agencies and are tracked on a student-level data system by the staff of the Perkins' office. If students miss a pre-set number of classes, their names are flagged and a counselor contacts them to determine why they have not been attending and to encourage them to return. There are routine individual sessions each semester to check progress and there is follow-up after graduation for one year.

The program is operated by 5 full-time professional counseling staff who meet bi-weekly for planning. Since the spring of 1986, they have recruited 1,189 Perkins eligible students and have provided additional tutoring or mentoring services to 3,612 more. Of the 1,189 recruited, some 701 (59%) are enrolled, 397 (33%) have dropped, and 91 (8%) have graduated. The retention rate for "Perkins students" exceeds that for the general student body as a whole.

A second community college receives \$41,000 in Title IIA funds. It serves a two-county rural area with a declining population. Rather than develop separate services/programs for each special population, the community college's philosophy is to combine funds and design programs that will attract and serve students who are eligible in more than one special population category. The dean of vocational education indicates that while the amount of Perkins Title IIA funds is small relative to the total funds available for vocational education, the other funds are all used to maintain current

programs. Thus the Perkins Title IIA funds represent 100% of the discretionary monies available for initiating new programs. (The Title IIB funds are used for equipment.) As the new programs become established and prove that they can be self-supporting, the college takes over their support, freeing the Perkins dollars to be used for the start up of new programs.

Perkins funds have been used in this institution to establish a program that is popular with single parents, re-entry homemakers, and displaced workers. Students learn career skills in fields in which jobs are locally available. Through collaborations with local businesses, students learn basic career skills at job sites without pay.

A second project in the same institution, started in 1982, is targeted at displaced homemakers. It provides individuals a training period to assess skills and interests, learn about education and training opportunities in the community, and set employment goals. Over the past five years, 300 students have graduated through this project. This year Perkins funds will be used to add a component to the project that involves a non-credit communication program targeted at limited-English-proficient Hispanic students.

In such cases as these just described, Perkins Title IIA funds can play a pivotal role in making services available to special populations. In general, however, the linkage between Perkins-funded services and access to high quality vocational programs remains tenuous. Seldom did vocational educators appear to view the needs of special populations in programmatic terms, but concentrated instead on an individual service model, a mode also encouraged by the language of the Act. Coupled with the modest funds available, the individual service model led to a predominance of ancillary services among Perkins-funded activities. For disadvantaged students, the absence of a direct tie between Perkins services and vocational programs was particularly apparent in the communities visited. Perkins funds were rarely used to support vocational instruction for disadvantaged students.

CHAPTER 5

PROGRAM IMPROVEMENT AND CHANGE IN VOCATIONAL EDUCATION

The Program Improvement component (Title IIB) of the Perkins legislation continues the federal government's longstanding commitment to vocational program change and improvement. The Perkins Act, however, departs from precedent by mandating that all non-set-aside funds in the State grant (or 43% of the grant) go solely for improvement, innovation, and expansion of programs. The intent of Congress was that these funds, matched with non-federal dollars, would leverage state and local money to modernize vocational education, making it more responsive to technological development and economic growth.

The central questions for this part of the study are:

1. What kinds of program improvement activities were undertaken in vocational education in the communities visited?
2. What activities are funded through Perkins Title IIB funds?
3. What is the relative importance of Perkins Title IIB funds for program improvement initiatives?

A related issue also addressed by this part of the study is the extent of coordination and cooperation between institutions providing vocational education and JTPA—a linkage mandated by Congress.

This chapter is organized in the following way: We begin with a description of overall program improvement in our study sites; general trends and patterns in program improvement are also discussed. In the next section, we focus on Perkins Title IIB funds, discussing grant size, uses and factors influencing how the funds are used. The significance of Title IIB funds for program improvement initiatives is discussed in the following section. We then present a description of coordination between vocational education and other agencies. The final section summarizes the chapter.

Key findings from the 27 communities visited include the following:

Innovation and Change in Vocational Education

- Communities visited varied in the amount and kind of program change and improvement undertaken. Characteristics of the more innovative institutions included: a culture supportive of innovation, especially prevalent in key administrators; a strategy for growth that included active recruitment of new student populations; ongoing program-level assessment; and active collaboration across educational and other institutions, especially in funding efforts. In such innovative institutions, Perkins Title IIB funds were incorporated into a larger strategy for improvement.
- Postsecondary institutions tended to be more innovative than their secondary counterparts. Community colleges appeared the most innovative, most likely because of their course mix, flexible hiring practices, entrepreneurial nature, and close ties with JTPA and employers.
- Secondary institutions tended to have a difficult time breaking through the status quo to try new ideas, in part because of uncertainty about the appropriate content and skills levels of new fields, less flexible staffing arrangements, and student scheduling issues related to academic reform initiatives.
- The extent of program improvement did not appear to be strongly correlated with urbanicity or economic status of the community, although all urban areas had at least some program improvement underway.
- Outreach and services targeted on new student populations were common improvement strategies. At the secondary level, activities targeted gifted and above-average students as well as disadvantaged and handicapped students and single parents. At the postsecondary level, the most pervasive change was the implementation and expansion of customized training programs for industry, although over a third of the communities also expanded recruitment of disadvantaged students.
- New programs were relatively rare. Secondary institutions were more willing to upgrade current programs with new equipment or provide supplemental support or remedial services. At the postsecondary level, the most dramatic increases were in customized training programs.
- All sites purchased some new equipment during the past two years. The impact of equipment purchases was greater when the equipment was part of a coherent

program improvement strategy than when dispersed or rotated through an institution's ongoing programs. Program improvement strategies were less commonly found than dispersed or rotated methods.

- Articulation agreements were found in many study sites. Most had been initiated fairly recently and the trend appears to be growing. Agreements typically either encouraged further discussions among interested parties or permitted credits for secondary graduates. Agreements that attempted to integrate curricula were not observed.
- Curriculum development and modification were also a frequently mentioned innovation, although we did not look systematically at classroom improvements.

Uses and Importance of Perkins Title IIB Funds

- Perkins Title IIB funds were often viewed as federal equipment money. Area vocational schools visited, for example, spent over 90 percent of their Title IIB funds on equipment; community colleges, about two-thirds; and comprehensive high schools, about one-third (with the rest going primarily to instructional or professional development).
- Equipment purchases were a longstanding practice for federal vocational dollars, especially because equipment was often reported as a difficult expenditure for local boards to approve. Some administrators also reported that equipment purchase was "safe" from an auditing viewpoint.
- The primary influence on the use of Title IIB funds for other than equipment purchases appeared to be state-imposed limits or prohibitions on equipment purchases. Alternate sources of equipment funding were available in these instances. In addition, where states awarded Title IIB funds on a competitive basis, the resulting programs appeared to be of higher quality than those based on formula funding, most likely because the competition for funds encouraged more careful needs assessment, planning and design of activities.
- The matching requirement under Title IIB was met without difficulty in almost all sites, but the match was seldom connected with the activities supported with Title IIB funds. The result was often a compartmentalized use that limited Title IIB's leveraging potential.
- Nevertheless, particularly from the perspective of local administrators, Perkins Title IIB funding played

a larger role than one would expect given the comparatively low level of funding. Funds are flexible; amounts have remained relatively stable over time; and because of their program improvement focus, the funds have a positive image at the local level. The funds served primarily as support rather than as a catalyst for change.

Coordination with JTPA

- Although coordination between JTPA and vocational education providers was mandated in legislation, actual cooperation was more influenced by such pragmatic concerns as the availability of substantial JTPA resources and the decline in vocational enrollments. JTPA grants were typically two to three times the size of Title IIB grants.
- JTPA programs operated in both secondary (usually summer youth programs) and postsecondary institutions (as "slot-ins" in regular programs or for support of industry-specific training). In some cases, Perkins IIA and JTPA funds were combined to fund JTPA clients in particular programs, including very short-term customized training.

Implications

- Because targeted RFPs appeared to result in more creative uses of Title IIB funds, Congress may wish to consider measures to increase the use of targeted RFPs. As the same time, dissemination of information about successful projects and a range of support options may help local administrators make more informed decisions about Title IIB spending.
- The leverage potential of Title IIB funds would be increased if grant recipients were to use matching funds in direct support of the Title IIB allocation.
- Although combining Perkins and JTPA funds to serve the same population groups is a productive use of funds, some clarification may be needed to ensure that Perkins funds do not support the very short-term customized training.
- Title IIB funds were seldom used for activities designed for special populations, and Title IIA funds for special populations did not support program improvement and change. Additional incentives may be necessary to have program improvement activities addressing the needs of special populations.

GENERAL PROGRAM IMPROVEMENT ACTIVITIES

Overview

The 27 communities in our study exhibited considerable diversity in terms of the extent to which they launched innovations or other program improvement activities. While the objective for this study was not a comprehensive assessment of the change process within institutions providing vocational education, nor an assessment of the intensity of innovative activity, we present, as part of our analyses, a discussion of the kinds of changes that have taken place since the implementation of the Perkins Act in the vocational institutions and the factors that seemed to influence their implementation. This discussion serves as a context for understanding the role of Perkins IIB funds at the local level.

Before we begin the discussion of change in vocational education, it may be useful to note that the term "vocational education program improvement, innovation and expansion," as defined in the Perkins legislation, encompasses a broad range of activities. For the most part, institutions providing vocational education routinely implement changes or program improvements on an ongoing basis. These changes are often in response to the changing environment in which vocational education is taught or to specific circumstances arising in an institution or program. Often these changes are not in the direct control of vocational administrators. For example, educational equipment becomes obsolete and is replaced with new versions; rapidly changing technologies related to occupational areas lead to corresponding modifications in vocational curricula in order to incorporate the new technologies.

Similarly program expansion (and contraction) may also be externally generated. A change in enrollment leads to a drop off in the number of "traditional" vocational students and institutions turn to new populations as a source of students. A change in the economy or labor market demand causes an increased (or decreased) demand for particular skills, and institutions respond by adjusting their program mix to meet the employers' (and students') needs. This is not to suggest that all program improvement and expansion activities are responses to external influences. During our data collection we saw examples of such activities that were developed and initiated by

proactive staffs within the vocational institutions with the objective of improving the quality of education. Our intent is to point out that most institutions providing vocational education are continually undergoing changes, often in response to external influences.

By definition, program improvement and change describe activities based in existent programs. In contrast, program innovation suggests a more dramatic type of change, one which involves the introduction of a brand new activity. Compared to modifications of existing programs, the adoption of an innovation typically requires a greater investment of resources (both financial and human energy) and generally results in a more dramatic change in the institution. As with program change and expansion, the impetus for innovation is sometimes external to the organization. But even when externally initiated, the introduction of innovations generally requires more involvement and commitment from educational staff. In its most robust form, innovation suggests creativity in designing and planning the new activity.

For this study, site selection included a procedure designed to increase the likelihood that our sample would include at least some innovative representatives. In our discussions with state officials regarding the identification of possible sites for our field work, we asked them to nominate one community that demonstrated a high degree of program improvement initiative. Although the states' classifications of innovative communities were not always consistent with what we found during our data collection, we did visit a number of communities in which there was considerable program improvement activity.

It was possible to align the institutions on a continuum with routine, largely passive change at one end and creative, proactive and influential (in the sense that a significant part of the institution or community was affected) change at the other. In this chapter we will refer to routine changes and expansions either as program improvements or changes. More creative, proactive and/or dramatic introductions will be described as innovations.

When looking across the communities that exhibited the most innovation, we found that their vocational education delivery systems shared the following characteristics:

- A culture supportive of innovation--that is, one in which administrators and staff were encouraged to try new things, even if it involved some risk taking. Moreover, there tended to be one or more key administrators who functioned as internal change agents. These individuals had a defined strategy for improvement of the vocational delivery system and they rallied the ideas and resources requisite to achieving their objectives.
- A strategy for growth that included the active recruitment of new student populations in order to address the decline in the traditional vocational student population. These new population groups often overlapped with those identified in Title IIA of the Perkins legislation.
- Program level dynamics, characterized by ongoing assessment of curriculum, equipment, and instructional materials to ensure that the materials were appropriate for both the students and corresponding labor market.
- Active collaboration across educational institutions and coordination of vocational programs with employers, JTPA, and other government agencies. This collaboration has the objective of maximizing the resources available for vocational education.

Despite these similarities, there was an interesting dichotomy in how the districts and institutions decided which program improvement activities were to be implemented. Generally, these activities were initiated in one of two ways--either as a series of generally unrelated activities dispersed throughout the institution, or as part of a more focused strategy for improvement and change. This latter approach usually resulted in fewer but more significant changes. While neither pattern is inherently better, the type of approach employed generally had important implications for the types and intensity of activities initiated.

While some of the communities in our study appeared quite innovative, at the other end of the continuum, a few of the sites we visited exhibited almost no new initiatives or program improvements in vocational education. These communities tended to be small communities in economically depressed areas. Even in these sites, there were some minor changes, especially at the postsecondary level.

The rest of the communities in our sample tended to have a moderate level of program improvement or change, although the extent of innovation was

not always consistent across the different types of educational institutions; area vocational schools and community colleges, for example, often showed considerably more innovativeness than their high school counterparts. Before we present our description of the types of changes and other program improvement activities undertaken in our study sites, we will discuss significant factors that do or do not appear to influence the extent of activities undertaken in vocational institutions.

Trends in Program Improvement

In this section, we will discuss patterns of vocational improvements and changes, focusing in particular on factors that do and do not seem to influence their initiation. We will begin by summarizing briefly the conditions that do not appear to be related to program improvement, and then will move on to the more influential factors.

The extent of program improvement or change did not appear to be strongly correlated with either urbanicity or the economic status of the community. Examples of extensive program improvement and change were found in all three types of communities--urban, suburban and rural areas. However, in contrast to rural and suburban types of communities, both of which were represented by a few sites where there was virtually no innovation, all urban communities had at least some examples of program improvements underway. Apparently, their larger size and number of actors and influences provided at least the minimum number of opportunities for the introduction of changes.

The most significant community-level characteristic that influenced the extent of program improvement was the commitment of individuals representing a range of institutions to working with each other to improve vocational education. Representatives of the following types of institutions were key to the implementation of innovations that had broad range implications for the community:

- secondary and postsecondary educational administrators;
- industry representatives, in particular those with sufficient status within the company to bring additional resources--funding, equipment/materials, and time--to the effort; and

-- government agencies, to leverage each organization's funding allocation and to facilitate client referral and targeting.

As with community size, the local economic situation was not a consistent factor in predicting the extent of program improvement in the community. Improvement and change were found under the spectrum of economic situations from rapidly declining to highly prosperous. It does appear that such improvements are more difficult to undertake in communities where the economy is declining because resources are more scarce. In some of the poorer communities, secondary and postsecondary institutions viewed themselves as competitors for survival, and both types of institutions ran parallel programs that, at least upon initial evaluation, appeared to be duplicative of each other and of those operated by JTPA.

On the other hand, several small communities with declining economies turned out to exhibit considerable program improvement and change. In those instances, rather than viewing themselves in competition with each other, the vocational providers joined with JTPA and other agencies for both funding and programmatic purposes.

The extent of program improvement activities in our study communities appears to be somewhat related to type of educational institution, with the postsecondary institutions tending to be more innovative than their secondary counterparts, particularly, the comprehensive high schools. Based on our site visits, community colleges exhibited the most potential for program improvement, compared with other types of postsecondary educational institutions. Community colleges had the most flexibility in implementing changes (because of their hiring policies), were generally more entrepreneurial (because their survival was closely linked to student demand), and had close ties with JTPA and employers. The course mix in community colleges tended to be less dependent on extensive, expensive (and often quickly outdated) equipment inventories. Some area vocational schools appeared to be committed to maintaining their existing curricula and program mix simply because they had acquired the corresponding equipment. Administrators admitted that they didn't know how to dispose of the equipment, had no storage space available, so, therefore felt compelled to offer the relatively unpopular course.

Secondary institutions, including area vocational schools primarily serving secondary students, tended to have a much more difficult time breaking through the status quo in order to try new ideas. The less flexible requirements for scheduling and teacher certification make it more difficult to use temporary and/or part-time instructors. Uncertainty also inhibited the extent to which administrators were willing to innovate. This uncertainty was encroaching from several fronts. The program mix was evolving from what had been traditionally an employment preparation mechanism for blue collar workers to one which is increasingly technical and sophisticated. Meanwhile, at a time when competition for students is growing, increased emphasis on basic skills following from the academic reform movement has resulted in scheduling limitations which make it more difficult for students to take vocational courses. Finally, as skills become increasingly complex, the emphasis on postsecondary vocational education raises questions about the appropriate role for secondary vocational education, further adding to secondary administrators' uncertainty and anxiety.

As a result of the uncertainty and ambiguity about the appropriate role of secondary vocational education, a few systems have fallen into a state of atrophy in terms of change or improvement. The most extreme example from our data collection occurred where uncertainty about the future was particularly acute. During the previous year the state legislature had considered a bill that would have discontinued all secondary level vocational education. Although the bill did not pass, some vocational administrators interviewed took a fatalistic position, claiming that it was only a matter of time before there would be no secondary vocational education in the state. This viewpoint inhibited any attempts at innovation or change in the district.

Although in most communities, more innovation took place at the postsecondary level, in a few communities, the secondary level initiated most of the changes or program improvements. In one eastern urban community, the district was willing to pilot or "try anything" that the state education office proposed. That district had a wide array of program initiatives underway during our visit, ranging from support programs for 9th graders who were children of alcoholics or drug addicts to the establishment of a nonprofit corporation where companies and professional societies have partnerships with a school; that corporation also provides mini-grants to

selected teachers. Important to recognize is the fact that the district had a history of picking up the costs of new programs after they were successfully implemented. Similarly, districts in a few other communities in our study were very active in starting new programs.

At the secondary level, it appears that a crucial element related to the extent of program improvement and change is the administrators' willingness and ability to coordinate with external organizations and employers to obtain funding for the new programs. This additional funding is important because routine school operating budgets could not support such a high level of change. At the same time, administrators also recognized that the funding might not turn out to be permanent.

The issue of transitory programs seems to be a sensitive one at the secondary level. While it was fairly common for postsecondary institutions to implement trial or pilot programs, or programs with a limited timespan, the practice was much less typical at the secondary level in the communities we visited. In particular, programs initiated as a result of coordination with employers and other agencies tended to be somewhat different from the typical high school vocational program. In addition to being more temporary, programs were often offered at a different location, for example, at a firm. Control over the programs' design and format was often shared by representatives of external agencies as well as the school. Even when the program was part of a state-funded pilot, teachers often had more direct contact and involvement with state level staff. The bureaucracies at the secondary level tended to be more conservative about starting (or discontinuing) programs involving "soft money," and about sharing control over their programs; as a result, they tended to be more hesitant about entering into joint initiatives.

Based on our site visits, the single most important factor in the introduction of program improvement activities was effective leadership. Highly innovative institutions and districts had leaders or change agents who were willing to experiment and take some risks in attempting to improve their programs. The identity of the leader was not necessarily the same across our study sites. They ranged from vocational directors, principals, and superintendents at the secondary level, to college presidents and employers at the postsecondary level; some teachers also were key to the introduction of change.

The educational leaders were tuned into sources of ideas for program improvement and change. One source turned out to be the state, but administrators also looked to interstate consortia, regional resource centers (such as the Appalachian Regional Commission), consultants, advisory boards and educational literature for new ideas. The importance of leadership for program innovation is also supported by our examples of noninnovative communities or institutions. In those sites, leaders tended to be strongly resistant to change, not willing to take risks, and lacking in creativity.

In looking at patterns of program improvement and change, another issue to consider is the extent to which overall program improvement activities are undertaken as part of a comprehensive strategy with long term objectives consistent with need of students, institutions, and labor market, or only as a series of relatively unrelated activities undertaken in a more scatter shot mode. For example, in examining how institutions allocated funding for new equipment, we identified two basic patterns. In the first, equipment allocations were targeted toward specific strategic objectives, such as the introduction of a new program, or significant upgrading of the equipment in an entire department. Under the alternative broad disbursement process, funds for new equipment were doled out to programs or departments in relatively equivalent chunks, allocations so small that major improvements in any area was not possible.

Parallel trends were apparent in terms of overall program improvement activities. Some communities initiated a series of generally unrelated changes. Other communities targeted their resources in order to achieve one or two primary objectives. Even the most innovative, in terms of number and types of activities underway, exhibited both of these patterns. The less focused approach was typified by the district mentioned above, which was willing to "try anything." Although that district had a large number of projects underway, there was little coordination across them.

On the other hand, the more strategic approach was exemplified by another large urban district. That district made a deliberate decision to target all program improvement activities to high-risk, economically disadvantaged high school students. Projects were given priority status if they had addressed one of the following three objectives: 1) Reducing the drop-out rate; 2) Encouraging teen parents to remain in school; or 3)

Enhancing the abilities and successes of minority populations through occupational skill training. The overall thrust of program improvement activities over the past three years has focused on those priorities. The priorities were identified in response to a downturn in the local economy over the past decade, and reflect the district's commitment to the community.

It is interesting to note that in the same community, the community college has also adopted a focused strategy for program improvement. The college president is committed to involving the entire college community in the process of deciding priorities for change at the school. Over a period of months, input was solicited from different segments of the community. Based on this input, goals for change are defined. Funding for new projects must fit in with one or more of the college's action goals. As with the corresponding district, the college's goals over the past few years have emphasized serving the needs of the special population groups. (Ironically, the college has had difficulty in qualifying for Perkins' sex equity grants because it already exceeds the targets set by the state for female enrollment in nontraditional courses.) Although the priority areas defined by the college dominate program improvement activities, funding for routine equipment updates is allocated across all program areas on a rotating basis which allows one department to make a major purchase each year.

In the preceding section, we have described the factors that seem to be associated with those program improvement and change activities undertaken in the study sites. In the next section, we discuss the range of those activities.

Categories of Program Improvement Activities

Before describing the types of program improvement activities undertaken in the study communities, we discuss the recent decline in vocational enrollments evident in the communities we visited. That decrease in the number of students served as a catalyst for many of the changes initiated.

In almost all of our study sites, vocational enrollments were declining. While this decline was most evident at the secondary level, it also was true for many postsecondary institutions. In those institutions where the number of vocational participants was holding steady or increasing,

vocational enrollments were directly related to an overall increase in enrollments. Even in those communities, the proportion of vocational students within overall school enrollment tended to be decreasing.

At the secondary level, declining enrollments were reportedly due to the educational reform movement and the corresponding emphasis on basic skills development, or else due to overall enrollment declines. Particularly hard hit were the programs at area vocational schools serving secondary students. These schools typically operated half-day or three-hour block programs; participation in them made it more difficult for students to satisfy concurrently the course requirements for graduation.

Some districts sought to offset the impact of declining enrollments on their vocational programs through structural changes such as adding a class period to the school day. Other districts adopted curricula for vocational programs that would also yield academic credit.* Along with those structured changes, most communities also adopted strategies to recruit new types of students in order to ameliorate the enrollment decline.

Many of the postsecondary institutions providing vocational education in our study also experienced a recent decline in enrollments. Three primary factors account for the postsecondary enrollment decline: 1) the phase out of the GI educational bill for Vietnam veterans which had subsidized a significant portion of their student body; 2) the transition from the Comprehensive Employment and Training Act (CETA) to the Jobs Training Partnership Act (JTPA) (in comparison with CETA, JTPA emphasizes shorter training programs and eligible participants tend to be much more economically disadvantaged); and 3) the decline in the unemployment rate and the corresponding availability of job opportunities in many of the sample sites which resulted in increased competition from employers for individuals' time. Like their counterparts at the secondary level, community colleges and postsecondary area vocational schools tried to offset the declining enrollments by making changes in their programs to attract new types of students.

*Principles of Technology is the best known example of such curricula.

In the following section, we will describe the specific categories of program improvement and change. Secondary and postsecondary activities are discussed separately within each category. We caution the reader that, at the secondary level, our data collection focused on individual schools, therefore district level information is minimal. At the postsecondary level, the small number of schools visited, along with the complexity of the schools, limits the generalizability of the findings.

Outreach and Services Targeted on New Student Populations

The most pervasive type of program improvement activity undertaken in our study sites was outreach initiatives targeted to population groups which have not traditionally participated in vocational programs. Added to these outreach activities were support services designed to increase the retention of these new groups once they have entered the vocational system. Over two-thirds of the secondary programs in our study had implemented programs targeted to new population groups; one-third of the postsecondary programs had adopted such initiatives. For all types of institutions, the primary impetus for these changes was declining enrollment.

Secondary institutions sought to expand their enrollment base by targeting a number of types of students who historically were not typical vocational students, including:

- the college bound high school students who in the past focused exclusively on academic courses;
- high-risk students who would likely become dropouts without some form of intervention;
- dropouts and other academically disadvantaged students who did not have a high school diploma or GED;
- other special population groups including the handicapped, and single parents.

At the postsecondary level, in particular for area vocational schools, class schedules were modified to accommodate more part-time students, many of whom were already employed. Previously these schools had relied largely on full-time students who wanted to learn a skill in order to secure a job.

In order to attract new populations, districts and postsecondary institutions adopted a variety of strategies, customized to address the special requirements of each target group. These strategies will be described below, separately for secondary and postsecondary institutions.

Recruitment of New Population Groups: Secondary School Strategies

At the secondary level, one common strategy designed to broaden the mix of students was to attempt to lure gifted and other above-average students into vocational courses. These efforts benefited from the availability of new technologies which could be applied in traditional vocational programs--old industrial arts metamorphosed into the more seductive Modern Technology. The most popular program for attracting such students was Computer-Assisted Drafting (CAD) which was available in the majority of districts in our sample.

Classes such as CAD allowed vocational programs to change their image from one associated with "blue collar" skills to one offering education that prepared students for professional or "high tech" careers. At least one vocational administrator mentioned that this image change was important for both students and their parents; parents with ambitions of college for their children had previously discouraged them from taking vocational programs. Other programs successful in attracting the more academically advanced student were those involving other new technologies such as computers and robotics. These programs were offered at comprehensive and vocational high schools, although in multi-school districts, usually only in a selected number of the comprehensive high schools. In almost all cases, students turned out to be academically above-average, college-bound male students.

Some districts introduced structural or operational changes in their vocational programs in order to attract new types of students. In order to inform potential vocational students about the options available to them, several school districts initiated vocational exploration programs for junior high (or ninth grade) students.

One urban community in our study started an extended day program at the vocational high school. This two-hour after school program had enrolled eighty-one students in high tech programs, including computerized commercial art, computer assisted drafting and word processing. In addition to

attracting college bound, high achieving students into vocational courses, the program also reportedly improved the community's previously negative image of vocational education.

In contrast to programs targeted to more academically advanced students through upgrades in the equipment and technology of the courses, program improvement designed to attract the other new population groups tended to 1) focus more on the provision of support services, ancillary to the vocational program and 2) be generally less costly to initiate. The recent increase in the high school dropout rate experienced in almost all of our study sites resulted in a parallel growth of programs designed to help high-risk students stay in school and encourage high school dropouts to return to school. Almost two-thirds of the districts in our sample offered such programs, although these programs generally served only a fraction of the target population.

High-risk students were generally defined as those who would probably be high school dropouts unless a successful intervention were implemented. Most of the students were academically and/or economically disadvantaged, although one district offered a program for gifted at-risk students. Services ranged from remedial education programs designed to help academically disadvantaged students demonstrate the competencies requisite for graduation, to work experience programs which offered students the possibility of earning wages while attending high school.

Programs for high school dropouts focused on recruiting former students into vocational programs, generally at the area vocational school or alternative high schools, with the objective of teaching the students a skill that would make them job ready. Often a GED program was offered in conjunction with the vocational program. Several of the districts hired a recruiter whose primary mission was to go after high school dropouts and convince them to return to school. These recruiters told us that they tended to be more successful if they could reach the individual soon after he or she left school. In one community, the high schools would notify the recruiter whenever a student had three consecutive days of unexcused absences.

Programs for high school dropouts offered a range of support services designed to make it easier for the student to stay in school. These services included stipends for transportation; referral to food stamps, AFDC,

JTPA and other social service programs; educational counseling; and job placement services. Dropout programs usually served a significant number of single parents; in those cases a stipend for child care was often available as well as additional counseling services.

The other target group recruited for vocational programs was the handicapped. As discussed in Chapter 4, the availability of Perkins Title IIA funding facilitated implementation of initiatives for handicapped students. Changes implemented to facilitate recruitment of the handicapped include vocational skill assessment labs, modifications of existing equipment and facilities, and the provision of aides to assist handicapped students in vocational courses.

One of the more interesting new initiatives implemented to increase participation of handicapped students in vocational programs was rooted in the idea that instructors were key to recruitment. In one district vocational instructors tended to come from the private sector, teaching the skills used in their own businesses. These vocational teachers often did not have the same level of training in instructional techniques as their academic counterparts, and as a consequence, tended to be less confident in their abilities to work with new types of students. Recognizing the reluctance of vocational instructors to work with the handicapped students, the district initiated a program of support services for vocational instructors focusing on working with handicapped students. The objective of the program was to change teachers' attitudes by familiarizing them with special needs and issues related to handicapped individuals, and thereby making the instructors more comfortable with the prospect of having handicapped students in their classes. Local respondents reported that instructors' attitudes changed from fear of having the handicapped get hurt in class to being much more receptive to enrolling special needs students.

Recruitment of New Populations: Postsecondary Strategies

As in secondary institutions, community colleges and postsecondary area vocational schools made changes in their programs in order to attract and retain a different type of student. The most pervasive change was the implementation and expansion of customized training programs for industry. Over half of the postsecondary institutions operated customized training or

industry-specific programs. In these programs, educational institutions worked closely with a local employer or union (often in conjunction with JTPA, the Employment Service, or other state agency) to design and operate a training program for current or prospective employees. Students differ from the more traditional vocational students in that they are not usually enrolled in a degree or certificate program. Moreover, the programs tend to be short in length--ranging from a couple of days to two weeks and are geared toward the operations of a specific employer.

Customized training programs offer a number of advantages to vocational providers:

- linkage with employers is generally coordinated by another agency such as the employment service or JTFA; schools do not have to seek out the employers themselves. In some communities, state funded employer recruiters fill the function of identifying employers and bringing them together with representatives of the institutions.
- ease of student recruitment (students are generally identified by employers or other agencies);
- tuition (typically paid for by employers or subsidized by JTPA) is comparatively lucrative; and
- employers often allow the school to use their facilities and equipment for training, thereby reducing the need for the school to purchase costly (and quickly outdated) equipment, while providing an opportunity for instructors to work on state-of-the-art machines.

Over a third of the postsecondary institutions we visited also reported an increased emphasis on the recruitment of more academically disadvantaged students. Increasing numbers of such individuals are referred to the institutions by JTPA and state-sponsored work welfare programs. Upon entry into the school, these students often have not attained the level of basic skills requisite for mastering the vocational program. In order to retain such students, postsecondary institutions have implemented remedial basic skills programs which are offered as a prerequisite for, or in conjunction with, vocational courses.

Almost half the postsecondary institutions we contacted offered Displaced Homemaker or Single Parent Programs. These programs usually offered

a variety of support services such as transportation, educational and personal counseling, and financial assistance, in addition to vocational training.

The Perkins Act appears to play a role in the increased emphasis on the recruitment and retention of new population groups in vocational programs. Except for the college-bound at the secondary level, and the customized training students at postsecondary institutions, the new target groups parallel those cited in Title IIA of the legislation: the handicapped, academically disadvantaged, economically disadvantaged, and single parents.

It appears that the Perkins legislation facilitated the introduction of programs targeted to new population groups. As we will discuss in more detail later in this chapter, it is somewhat disappointing to note that although Perkins Title IIA funds played a key role in the initiation of programs geared to the target population groups, Perkins Title IIB funds were rarely used to support such new efforts.

Programmatic Initiatives

Another type of program change or improvement common in the study sites was the introduction of new types of vocational programs. There were considerable differences between levels of institutions in the extent to which new programs were initiated.

Programmatic Initiatives: Secondary Level Strategies

At the secondary level, few new programs were introduced. Instead, we saw enhancements of existing programs, usually through the application of new technologies. The most common examples include business programs replacing typewriters with word processing equipment; drafting classes including CAD; printshops experimenting with desk-top publishing; automotive courses using computer diagnostic equipment, and electronics programs expanding to include robotics. Several districts attempted to help students meet their academic requirements by offering programs that integrated basic skills with vocational programs. The nationally recognized Principles of Technology program served as an important precedent for such programs.

Secondary institutions also made changes to existing programs through the addition of support services and concurrent remedial basic

education. While they were reluctant to implement new programs, secondary institutions were also reluctant to discontinue existing ones. Rather than terminate a program due to low student interest and the decline of available jobs in the area, programs operated at a low level of enrollment, because of the effort required to dismantle a program--the psychic costs of laying off an instructor and removing equipment. We were also told that it was hard to predict demand. The building trades program, for example, is one which apparently experiences cycles of student interest and employer demand.

Programmatic Initiatives: Postsecondary Strategies

At the postsecondary level, the most dramatic increase in new programs was due to the introduction or expansion of customized training programs. The growth of customized training initiatives was apparent at both area vocational schools as well as in community colleges. Although employers or economic development agencies often provided the initial impetus for such programs, once school administrators recognized the potential value of such programs to their institution, they quickly attempted to increase their involvement.

Apart from customized training programs which usually did not pose extensive demands on the institutions' resources, some postsecondary institutions, mostly area vocational schools, were reluctant to start new programs because of the significant costs associated with their introduction, and the possible risk of failing to attract a sufficient number of students.

Interestingly, two new programs were initiated in a number of study sites, despite the fact that each required a fairly sizeable financial investment. Half of the Southeastern communities initiated truck driving programs (apparently at the encouragement of local industry). The costs of the equipment required to launch these programs runs into the millions of dollars. Some of these programs were introduced in very economically depressed communities as a means of curtailing the exodus of young people to parts of the country where more jobs were available. Start-up funding for these programs was largely provided by JTPA.

A number of health-related programs also opened recently in a few postsecondary schools. In addition to the costs of securing the requisite equipment, the process for gaining certification from the state in order to be

eligible to offer these programs is apparently fairly rigorous, and tends to dissuade some schools. It is interesting to note that in some communities where AIDS has raised the level of public concern, enrollment in health-related programs has sharply declined; by contrast, other communities report long waiting lists of students.

While most communities in our study took a reactive approach in their decision to start new programs, initiating new ones only in response to student or employer demand, one innovative community college took a proactive stance, and started programs that affected the economy of the area. The community was a small agricultural one, with a declining economy, hard hit by the farm crisis of the 1980s. Among the series of new programs initiated was a Farm Ranch Program to help farmers avoid bankruptcy. The three-year course teaches skills in marketing, computer literacy (records of milk production, etc.) and sophisticated business practices. Of the 200 farms participating since the program's inception, none have gone under. The college also has conducted a series of one-day seminars at outreach locations throughout the rural areas of the state. These seminars have dealt with the emotional and financial aspects of the farm crisis. The program has also provided staff inservice on how to be helpful in crisis situations, and has developed a video "Rural Crisis Comes to School," designed to help teachers recognize signs of stress in their students.

The college also presented a series of seminars for farm women on developing cottage industries to supplement farm income. The focus of this program was to teach home-based business owners marketing techniques and strategies. The businesses served ranged from custom pig breeding to jewelry making. One of the major goals of the program was to help the women involved develop a financial base that would enable them to remain in the community. In addition to the agri-business programs, the community college also opened up one of the only (if not the only) liquid petroleum gas programs in the country, attracting students to the community from all over the country.

While the extent of program improvement in one institution as illustrated by the above discussion is dramatic, it is not unique. Other small rural community colleges in our study also demonstrated considerable entrepreneurship in initiating new programs that led to community-wide changes. These colleges were based in communities which were largely

agricultural and had declining economies--characteristics associated with programmatic atrophy in other sites. The factors that seemed to make a difference were energetic and proactive administrators, and a strong emphasis on forming alliances with other organizations (e.g., JTPA, economic development agencies, employers) which serve as a source of new ideas, as well as a mechanism for assembling a base of funding for new projects.

Acquisition of New Equipment

All study sites purchased some new equipment during the past two years. It is interesting to note that the acquisition of new equipment was as much perceived as a prerequisite to program maintenance as a program improvement or enhancement. From what we were told by respondents, there are two universal axioms about the relationship between equipment and vocational education: 1) the acquisition of new equipment is vital to vocational education's existence; and 2) vocational programs always need more new equipment. Given vocational education's emphasis on preparing students for jobs, schools need equipment and facilities similar to the ones used by a relatively large number of prospective employers.

We observed two interesting patterns related to the acquisition of new equipment. The first has to do with the way new equipment is obtained, and the second with the decision making process involved in the acquisition process.

Based on our sample of sites, equipment is almost always acquired as a direct purchase. This was somewhat surprising given the significant cost of the equipment. In her design paper for NIE's National Assessment of Vocational Education, Patricia Flynn (1987) noted that for vocational programs, the use of rental equipment should be preferable to large capital outlays that may hinder future flexibility and prohibit investments in new, improved, less expensive and standardized models of equipment.

During our data collection, we saw only one example of rented or leased equipment. Moreover, apart from customized training and one other example, we saw no examples of equipment acquired more creatively--such as borrowed, loaned or donated from industry. When we did see donations by industry, the equipment tended to be near or at obsolescence, with limited value for training. Other creative practices for equipment acquisition,

including the coordination of purchases with other organizations such as schools or employers in order to negotiate a volume discount, were not evident in our study sites. Administrators tended to view each purchase as unique and directly related to the local setting. The one interesting exception to the standard mode of equipment acquisition was established by a community college in a large urban area. The college established a not-for-profit corporation for the purpose of getting equipment and other donations.

Distribution of new equipment tended to follow two patterns that can be characterized as strategic and dispersed. Under the strategic approach, allocations for equipment purchases are targeted to specific projects or programs. Identification of the targeted activity is often done at the state level. Under that scenario, the states typically issue competitive RFPs to which districts or educational institutions respond. Grants under such allocations often are sizeable--\$500,000 to over a million dollars. Awards are made to more than one bidder and the funded projects often receive additional support such as training or assistance in the selection and purchase of the equipment. In those cases, the programs are viewed as pilot or prototype programs to be assessed for the possibility of replication in additional sites in the state.

Districts and schools also use the strategic approach to channel all or most of their equipment budget into a single program or activity. This strategic approach was evident most often at the postsecondary level, although it did occasionally occur in secondary vocational schools. The objectives of the targeted allocation decisions are generally associated with the introduction of a new program or a dramatic overhaul of the equipment used in an existing program. In all instances, large-scale equipment replacement is a function of a desire to update the equipment so that it is more technologically advanced. Examples ranged from replacing the typewriters in an office education course with word processors to the installation of robotically-controlled lathe equipment.

Equipment purchases made under the strategic allocation process resulted in clear improvements in existing activities, or in the initiation of new programs. Under the other scenario in which equipment funds are more broadly dispersed across programs, there was usually a much less dramatic change in program quality attributable to the new equipment.

The broad disbursement method of allocating equipment funds is typically employed at the secondary level. Under this approach, administrators made allocation decisions in a way that would be perceived as equitable. Instructors or department heads come up with an annual "wish list" of new equipment that they would like to acquire. Then some decision-making body--typically the vocational director and advisory group at the secondary level or some administrative subgroup at the postsecondary--meets to decide whose request will be granted.

At the secondary level, the broad disbursement mode of equipment acquisition generally followed one of two annual routines with historical precedent setting the guidelines. Under one allocation scenario, each year almost every department gets a new piece of equipment. Under the other scenario, annual equipment purchases are concentrated in one or perhaps two, program areas. Each department is aware of the distribution sequence, cognizant of when it will be their turn in the queue.

Although these allocation processes are attractive in that they are perceived as fair by the actors involved, they have the significant disadvantage of precluding administrators from launching a more comprehensive, longer term strategy for program improvement, or of taking advantage of unforeseen but especially appropriate purchases in certain areas. In particular, the allocation scheme under which every department gets some new equipment every year tends to dilute the impact of the acquisitions because the funds are spread over a number of departments.

In secondary districts with a vocational high school, equipment decisions again follow a pattern that is based on the rotation of funding for new equipment across the various departments. For the most part, districts with a vocational high school target the majority of funding for new equipment to the vocational high school, rather than to comprehensive high schools. Administrators explain this practice by saying that students at the vocational high school are more likely than their counterparts to go directly into a job after graduation and therefore need training on equipment comparable to that used by industry. In one large urban district, new equipment went to the vocational magnet school, following from a deliberate decision to centralize high quality programs in that school.

Postsecondary institutions generally demonstrated the most flexibility in decisions related to the funding of new equipment. At that level, program expansion and decline are more directly enrollment driven, making it easier for administrators to allocate funding to the more active or promising program areas.

For the communities in our study, equipment purchases were the primary use of Perkins Title IIB funds at the local level; later in this chapter we will explore the role of federal funding in the equipment acquisition process. Before beginning our discussion of the federal funding, several less common types of program improvements or changes are described.

Articulation Agreements

Agreements among educational institutions that allow students to get credit in one school for courses taken in another are one of the newer and most promising types of changes. Such agreements are known as articulation agreements. The format of articulation agreements range from:

- Agreement among secondary and postsecondary officials to talk to one another;
- Agreement that students who complete secondary programs can get credit for them at a postsecondary institution;
- Agreement that students who complete secondary programs can get advanced standing or more directly to advanced courses at a postsecondary institution;
- Allowing high school students to take vocational courses at a postsecondary institution but get high school (and/or college) credit for the courses;
- Agreement to divide subject matter responsibilities, with some programs offered exclusively at one level or the other; to
- A coordinated four year program (often called two plus two) in which students take broad vocational preparation at the secondary level and more specialized vocational courses at the postsecondary level.

Almost half of the communities reported that they had implemented some form of articulation, or were in the process of negotiating an agreement. However, those agreements generally were in form of one of the first two formats described above. The more comprehensive and difficult types

of agreements were not implemented. One state had mandated a policy called "leveling," under which vocational schools (secondary and postsecondary) in each district were required to develop a plan for ensuring that programs operated by different schools were not duplicative. The policy was intended to minimize competition across schools for students. While leveling did reduce competition and duplication of course offerings, at least in our study sites, it did little to foster coordination of programs across schools.

The articulation agreements found typically involved one or more secondary institutions and a community college, although there was at least one case of an agreement between two community colleges. For the most part, when articulation agreements were initiated, they focused on a single course or program area and usually only involved a handful of students. In some more progressive communities, there was commitment to significantly increase the number of programs involved.

Institutions providing vocational education in two large urban communities displayed a higher degree of articulation. In one site, three community colleges maintained articulation agreements with the vocational high school that allowed students to obtain advance placement in college courses through advanced placement exams. One of those community colleges also joins with the vocational high school in offering a variety of programs including vocation/weekend college experience programs in computer science and CAD, inservice training for high school vocational staff, and a summer enrichment program for graduates of the high school before their enrollment at the community college.

In the other urban community, curriculum among the secondary and postsecondary vocational institutions are almost fully integrated. In addition, the postsecondary vocational center offered extension programs for high school students so that they can take courses not offered elsewhere in the district. Fifty or sixty students were enrolled in the extension program. In that site articulation agreements have evolved over a long period of time.

In contrast, in many study sites, establishment of articulation agreements was a fairly recent phenomenon, one that was gaining momentum. Even in communities where articulation agreements did not yet exist, there was often movement in that direction underway. In about half the cases, impetus

for the initiation of the agreements came from the state level (sometimes through joint coordinating committees involving representatives of both secondary and post-secondary programs), although in other cases, local interest sparked the activity. At least in some communities, implementation of such agreements was viewed as a marketing mechanism, designed to boost declining enrollments. Often personal relationships between teachers at the participating institutions were a key factor.

Curriculum and Instructional Development

Many secondary districts we visited claimed to be in the process of adopting new curricula. In contrast, we noted few curriculum development efforts at postsecondary institutions, although that apparent absence of such efforts might have been a function of our data collection strategy, in which fewer resources were devoted to the postsecondary level.

At the secondary level, curriculum packages were often based in parallel efforts arising from the state or regional consortia. Almost all of the sites reported their teachers' participation in workshops on new curricula.* Many communities were "working on" curricula which integrated vocational and academic content, although it seemed that much of the activity centered on fairly minor updates to existing curricula. A more systematic study of curricula modules coupled with classroom observation would provide a better assessment of the magnitude of the change across communities.

In terms of instructional development and training, almost every secondary school reported periodic inservice training sessions. Districts also provide release time for participation in state or region-wide conferences. Training sessions for instructional staff typically focus on course content, not instructional techniques.

*One state has a much more decentralized process--local districts have autonomy in selecting curriculum within broad guidelines developed by the state. To quote a state administrator: "Auto mechanics is auto mechanics wherever you are." Districts have substantial resources available from the state for curriculum development activities. All three communities we visited in the state had undertaken significant curriculum development activities using Perkins IIB funds. That focus on curriculum development is related to the state policy that designates Title IIB funds for the development of curricula and articulation agreements.

Since vocational instructors often come directly from industry (compared with their academic counterparts who come from college programs which stress instructional methods), we were somewhat surprised that there were not more programs for vocational teachers that focused on quality of instruction. Only two communities offered such programs--both were in large urban communities. One district initiated a training program for instructors participating in new programs integrating basic skills and vocational education; the other example was in a postsecondary institution that had a new teacher peer support program.

In the following section, we will describe the role of Perkins Title IIB Program Improvement Funds within the general context of program change and improvement at the local level.

PERKINS TITLE IIB PROGRAM IMPROVEMENT FUNDS

Allocation and Size of Perkins Title IIB Grants

According to the legislation, Perkins Title IIB Program Improvement funds are intended for program improvement, innovation and expansion.* While the legislation continues the emphasis on program improvement activities that was part of the Vocational Education Acts of 1968 and 1976, the Perkins Act is unique in that it restricts the use of all non-set-aside funds in the state grant to use for improvement, innovation and expansion. Maintenance of existing programs is no longer an allowable use of Perkins' funds under this section.

As discussed in Chapter 3, states allocate Title IIB funds to districts and educational institutions through Requests for Proposals (RFPs),

*Title II, Part B of the Carl D. Perkins Vocational Education Act defines twenty-four categories of purposes, activities or items of expenditures for which Title II B funds may be used. These categories include improvement and expansion of programs in general; programs for special-need populations and other specified types of programs or services; introduction of new and innovative programs, including new programs of specified types; acquisition of equipment; renovation of facilities; construction of such facilities as area vocational schools; provision of certain ancillary services, such as day care services, stipends, and placement services; and curriculum development and teacher training.

formulas (for example, based on enrollment), discretionary means or through some combination of these methods. All but two of the communities we visited received some Title IIB funds. One district that did not receive Title IIB funds was a small rural district that, until recently, had limited interest in vocational education. Apparently, administrators were unwilling to put together the response to the state's RFP. In the other community that did not receive Title IIB funds, the state targeted most of the Title IIB funds on curriculum development, not on operating programs.

Across the communities we visited, 55% of the Title IIB funds went to secondary institutions—districts and secondary area vocational schools; the other 45% went to community colleges and postsecondary area vocational schools. These figures may understate the level of postsecondary funding for the following reasons:

- In our field work, we generally obtained funding data from only one postsecondary institution in each community; in urban areas particularly, there were other institutions providing vocational education for which we do not have data; and
- Postsecondary schools often did not know the amount of Title IIB funds that they received, or in some cases, whether they actually received any. In these cases, funding at the state level generally went from the State Board of Education through the State Board of Regents. State Boards often merged the federal funds with the state grant without identifying the funding source, so receiving institutions were not able to identify the funding source.

In Exhibit 5.1, we summarize Title IIB grant size by size of community (urban, suburban, and rural/small town) and by four categories of institutions: school districts, secondary area vocational schools, postsecondary area vocational schools, and community colleges.*

Grant size ranged from \$1,200 to almost half a million dollars. The smallest grant went to a large urban area in the state which invested most program improvement funds in curriculum development. The largest grant went

*Although vocational administrators in some schools acknowledged that they had received Title IIB funds, they were unable to provide us with information on grant size.

Exhibit 5.1

PERKINS IIB GRANT SIZE, BY SIZE OF COMMUNITY AND TYPE OF INSTITUTION

Code*	Economy**	School District	Secondary AVS	Postsecondary AVS	Community College
U1	D	\$ 1,200	\$ 8,054	\$ 28,858	
U2	G	122,006			
U3	D	70,832		87,743	\$155,061
U4	G	41,528		85,099	
U5	D	403,000			100,000
U6	D		364,000		
U7	G	288,644			
U8	G/S	192,918			172,000
U9	G/S	297,162			
S2	G	32,000			
S3	D	3,000			92,000
S4	G	17,000		500,000	50,900
S5A	G/S	12,000			
S5B	G/S				
S6	G/S	0	0	0	0
S7	G/S		67,022		
R1A				25,275	
R1B	D	0	0	0	0
R2	G/S	33,632			86,202
R3	D	1,250			
R4	D	15,000	40,000		
R6	D			69,000	
R7	G/S				
R8	D		15,000		17,000
R9B	G/S	15,000			
R8B	D		42,147		123,580
R9A	D				

*U=Urban
S=Suburban
R=Rural Small Town

**G=Growing Economy
S=Stable Economy
D=Declining Economy

to a suburban postsecondary regional vocational center. Average grant size was slightly under one hundred thousand dollars (\$98,558). On average, postsecondary schools had larger grant sizes than secondary schools. Postsecondary area vocational schools had the largest average grant size--\$132,662, community colleges the next largest--\$96,305. School districts had an average grant size of \$90,951, and secondary area vocational schools received the smallest average grant--\$89,370.

Factors Influencing Grant Size

Size of community appears to be correlated with size of the Title IIB grant, particularly at the secondary level: the average district grant for urban comprehensive districts was \$177,161, compared with \$16,000 for suburban districts, and \$16,221 for the rural counterparts. A similar pattern applies to secondary area vocational schools. Urban area vocational schools had an average grant size of \$186,027--almost three times the size of suburban areas (which got an average of \$67,022), and almost six times that of rural areas (which received an average of \$32,382).

The small number of representatives in each cell for the postsecondary level schools precludes generalizations. For the postsecondary area vocational schools in our study, the pattern of urban communities receiving the larger grant does not appear to hold true. The single suburban postsecondary vocational school for which we have information was the recipient of the largest program improvement grant in our study.

In our sample, there were nine community colleges that reported receiving program improvement grants. On average, urban community colleges had the largest grant size (\$142,354), community colleges in suburban communities towns received the smallest (\$71,450), and community colleges in small towns or rural areas received an average of \$74,196.

Overall, districts and area vocational schools in urban communities received almost two-thirds (64.6%) of all Title IIB program improvement funds, although these communities represent only one third of the communities in our sample. Two factors account for this disproportional distribution: 1) Many states used a formula based on enrollment figures to allocate at least part of the Title IIB program improvement funds. Urban districts have significantly higher enrollments than do suburban or rural communities, and under an

enrollment-based formula, would receive more funds; and 2) Urban communities are somewhat more likely to have entrepreneurial administrators who, as a result of both their experience and political savvy, are more likely to respond to RFPs. Clearly, not all such administrators are based in urban communities, but there is a greater likelihood that they will be, because of the comparatively large administrative staff and degree of sophistication in urban areas. Local initiative is key to the receipt of funding for special initiatives.

Uses of Perkins Title IIB Funds

Under program improvement components of previous federal vocational education legislation--the State grant (VEA of 1976, Sec. 130) and the non-matched Exemplary Projects (VFA of 1976, Part D)--researchers found that federal funding went largely for the maintenance of on-going programs rather than toward the initiation of new programs or significant improvements. Benson and Knachlander (1981, p. 235) found that, in 1979, 40% of the secondary districts surveyed spent 90% or more of their funds supporting existing programs.

The Perkins Act mandate which specifies that Title IIB funds be used solely for improvement, innovation and expansion of programs was intended to alter schools' reliance on federal vocational education funds for routine replacement of equipment. The intent of Congress was that Title IIB funds, matched with non-federal dollars, would leverage state and local monies to modernize vocational education, making it more responsive to technological development and economic growth. Much of the new language in the Perkins Act is directed at responding to technological change by modernizing equipment, updating curricula, and encouraging enrollments in programs for emerging, high growth, high-tech occupations.

Under earlier federal vocational education legislation, a majority of the funds were used to purchase equipment. The Perkins Act permits the funds to be used for equipment purchases only if the equipment is used for a new program or results in a significant change in the content of an existing program; routine replacement of equipment is not an allowable use of Title IIB funds.

Equipment purchases continued to be the dominant use of Perkins Title IIB funds in our study sites and for three of the four categories of vocational institutions. Comprehensive high schools were unique in that, on average, they spent only about one third of their Title IIB allocation on equipment purchases. Overall, 62.9% of the Title IIB funds were used to purchase equipment.

From interviews with local administrators, it appeared they were aware of the limitations imposed by the legislation on equipment purchases, although in some cases, they thought it was state rather than federal policy. Given the rapidly changing technology associated with almost all areas of vocational education, new equipment purchase would result in course content changes since it will almost surely be more advanced than its predecessor.

Historical precedent was the primary reason communities made extensive use of Title IIB funds for equipment purchases. Local administrators were accustomed to spending federal vocational funds on equipment. In fact, during our field work, some administrators had difficulty recognizing that they received and used Perkins Title IIB funds, until they made the connection between the grant type and what they called "federal equipment money."

Local administrators tend to view federal funds as having fewer restrictions than state grants and their use as less scrutinized than locally supplied funds. We were told in several sites that it was difficult to get approval from local school boards to use local funds for equipment. Some administrators also pointed out that the use of federal funds for equipment was "safe," in terms of avoiding audit problems. However, previous research found that while equipment purchase may simplify meeting audit requirements, schools that once invested heavily in equipment to duplicate industrial conditions could no longer afford replacements given the rapidly changing technology (Rosenfeld 1986, p. 14).

Exhibit 5.2 summarizes the use of grants by size of community and type of institution. In the following section we will describe the uses of Perkins funds, by type of institution, focusing the activities which were not purely equipment purchases.

Exhibit 5.2

TOTAL PERKINS IIB GRANT FOR EQUIPMENT OR OTHER USES,
BY TYPE OF INSTITUTION

Community Urban	School District		Secondary AVS		Postsecondary AVS		Community College	
	Equipment	Other	Equipment	Other	Equipment	Other	Equipment	Other
U1	\$1,200 100%	0 0	0 0	\$8,054 100%	0 0	\$28,858 100%		
U2*	0 0	\$122,006 100%						
U3	\$4,250 6%	\$66,582 94%			\$87,743 100%	0 0	\$90,000 58%	\$65,061 42%
U4	\$41,528 100%	0 0			\$85,099 100%	0 0		
U5*	0	\$403,000 100%					0 0	\$100,000 100%
U6	0 0	0 0	\$364,000 100%		0 0			
U7*	\$50,000 17%	\$238,644 83%						
U8	\$48,230 25%	\$144,689 75%					\$96,353 56%	\$75,647 44%
U9	\$297,162 100%	0 0						

*Community in states which impose limits on the use of Title IIB funds for equipment.

**Exhibit 5.2
(continued)**

**TOTAL PERKINS IIB GRANT FOR EQUIPMENT OR OTHER USES,
BY TYPE OF INSTITUTION**

Community Urban	School District		Secondary AVS		Postsecondary AVS		Community College	
	Equipment	Other	Equipment	Other	Equipment	Other	Equipment	Other
S2*	0	\$32,000 100%						
S3	\$2,000 67%	\$1,000 33%					\$92,000 100%	0 0
S4	\$17,000 100%	0 0			\$500,000 100%	0 0	\$50,900 100%	
S5A*	\$12,000 100%	0 0						
S5B								
S6	0	0	0	0	0	0	0	0
S7*			\$67,022 100%					

*Community in states which impose limits on the use of Title IIB funds for equipment.

**Exhibit 5.2
(continued)**

**TOTAL PERKINS IIB GRANT FOR EQUIPMENT OR OTHER USES,
BY TYPE OF INSTITUTION**

Community Urban	School District		Secondary AVS		Postsecondary AVS		Community College	
	Equipment	Other	Equipment	Other	Equipment	Other	Equipment	Other
R1A					\$ 7,583 30%	\$17,693 70%		
R1B	0	0	0	0	0	0	0	0
R2*	0 0	\$33,632 100%					\$ 84,702 98%	\$1,500 2%
R3	\$ 1,250 100%	0 0					\$ 38,000 54%	\$32,000 46%
R4	\$15,000 100%	0 0	\$40,000 100%	0 0				
R6					\$69,000 100%	0 0		
R7								
R8	0 0	0 0	\$12,500 83%	2,500 17%			0 0	\$17,000 100%
R8B	0 0	0 0	\$42,147 100%	0 0	0 0	0 0	\$123,580 100%	
R9A								
R9B	\$15,000 100%	0 0						

*Community in states which impose limits on the use of Title IIB funds for equipment.

Uses of Title IIB Funds by School Districts

As previously mentioned, unlike other categories of vocational institutions, on average, school districts in our sample did not spend a majority of their Title IIB funds on equipment purchases. The primary influence on the use of Title IIB funds for other than equipment purchases in the study sites appears to be state policy. Five of the districts which primarily used Title IIB funds for activities other than equipment purchases were in states that restricted Title IIB for that use. When added together, the amount of funds allocated for non-equipment purchases in those five districts accounted for 80% of the total amount of funds designated by comprehensive high schools for other purposes. That is, for the majority of the non-equipment funds, the allocation decision was, at least in part, driven by state policy.

Apparently, state-imposed limits on Title IIB funding of equipment purchases was an important factor in encouraging the districts to identify alternative uses. It is important to recognize, however, that when states discouraged use of Title IIB funds for equipment, alternative sources of equipment funding were provided by the state. Another factor that probably facilitated the use of Title IIB funds for other than equipment purchases was the fact that, especially in large urban areas, the proportion of the school districts' budget represented by the Title IIB grant was fairly small.

When schools districts used Title IIB funds for purposes other than equipment, they funded a variety of activities as summarized in Exhibit 5.3. Four categories of activities were found in more than one site:

- Instructional or Professional Development;
- Curriculum Development;
- Sponsorship of the Vocational Industry Clubs of America (VICA) or other vocational student organizations; and
- Support services for special populations.

It is interesting to note that apart from equipment purchases, the two most popular activities funded by Title IIB funds in school districts were instruction and curriculum development--activities which likely parallel ones undertaken by the vocational staffs' academic counterparts. During our field

Exhibit 5.3

USE OF PERKINS TITLE IIB FUNDS BY SCHOOL DISTRICTS
FOR PURPOSES OTHER THAN EQUIPMENT PURCHASE

Community	Use of Funds
U2	Instructional Development Support for VICA Release time for curriculum development
S2	Inservice training
R2	Curriculum Development Inservice Training Student Organizations
U3	Vocational guidance and counseling for handicapped
S3	Career Fair
U5	Teacher salaries for curriculum development
U7	Initiation of new vocational programs
U8	Instructional Salaries Curriculum Development Substitute teacher salaries so that regular teachers could attend VICA meetings Portion of costs of transition specialist for special populations

work, vocational staff in comprehensive high schools often commented that they were perceived by the academic staff as "second class citizens." It is possible that the use of Title IIB funds for activities designed to improve both instructional and curricular quality may reflect an effort to enhance the image of vocational instructors and assimilate them into the more general environment of the school.

Activities such as curriculum or instructional development that take teachers away from their routine classroom teaching are perceived by teachers as real "perks;" moreover, administrators comment that such staff development opportunities become a real stimulus for program improvement through teacher stimulation and enrichment. One administrator in a district that opted to use all of its \$33,000 Title IIB grant for staff and curriculum development said he did so because the grant simply was not sufficient to purchase equipment, adding that curriculum and staff development provide the "biggest buy for the buck."

The Perkins Act identified activities of vocational student organizations as an acceptable use of Title IIB funding. In two districts in the same state, Perkins Title IIB funds were used to foster VICA participation. One of these districts subsidized low income students' participation in club-related activities; in the other district, Title IIB funds paid for substitute instructors so that the regular vocational teachers could attend VICA conferences along with their students.

As will be discussed later in this chapter, in the communities in our study, we saw only two examples of Title IIB funds being used in conjunction with programs for the special population groups identified in the Perkins Title IIA legislation. One example was in an urban school district. Under a project funded jointly with Title IIB and Office of Vocational Rehabilitation (OVR) funds, a transition specialist was hired to organize materials about OVR-available services, and disseminate that information to the parents of handicapped students.

Uses of Title IIB Funds by Area Vocational Schools

This discussion encompasses both secondary and post secondary area vocational schools because the two types of institutions used Title IIB funds in a similar way. In our study communities, area vocational schools at both

the secondary and postsecondary levels used almost all (98% for secondary area schools and 94% for postsecondary area schools) of the Title IIB funds for equipment. School administrators reported that they need to stay current with existing technology in order to survive. Unlike school districts or community colleges, they do not also offer academic alternatives. In addition, area vocational schools at the secondary level often offer a wider array of vocational programs than comprehensive high schools that rely on extensive and expensive equipment inventories.

One rural area vocational school used its relatively small (\$2,500) grant to provide inservice training for instructional staff. In a large urban community, both the secondary and postsecondary area vocational school used their Title IIB grants to launch recruitment activities targeted on improving the image of vocational education in the community in order to attract additional students. The secondary area vocational school also used a portion of its grant to train staff on a new computer system.

Uses of Title IIB funds by Community Colleges

For the community colleges represented in our sample, approximately two-thirds of the Title IIB funds were used for equipment, the rest for other purposes. On average, urban community colleges used less than half their grant for equipment purchases, compared with 100% for suburban community colleges and almost 83% for those located in rural areas and small towns.

Of the three urban community colleges for which we have data, one was prohibited by state policy from spending Title IIB funds on equipment. In all three urban community colleges, the Title IIB grant represented a relatively small portion of their total operating budget, making it easier for administrators to use discretion in determining how funds should be used.

Some community college administrators stated that equipment money was the "hardest kind of funding to get" for their programs. Within the overall context of programs offered at community colleges, the costs associated with start-up and maintenance of vocational programs are considerably higher than parallel costs for more academically oriented offerings.

As with other types of institutions, community colleges that opted not to spend their entire grant for equipment used Title IIB funds for a variety of purposes. Funds devoted to each project were relatively small with the largest amount of funding for a single project being a \$90,000 project in a large urban community college; that project funded consultants to upgrade the quality of instruction.

Another large urban community college received a total of \$65,000 of Title IIB funds in addition to a Title IIB grant for sponsored equipment. These funds were used to support a variety of projects including:

- Vocational guidance and counseling for the handicapped within a setting designed to simulate actual employment;
- An alternative education program conducted in coordination with the local alliance for business. The program is intended to help students overcome educational cultural and personal barriers to success.
- Career guidance for high risk gifted and talented secondary students.
- The provision of assistance to the local public school system in the implementation of the course, Principles of Technology.

These projects were all initiated by college staff in response to RFPs issued by the state.

Other activities undertaken by community colleges included the hiring of an industry coordinator whose mission was to work with local employers to ensure relevance of vocational training and facilitate placement of graduates, and a project designed to initiate articulation with other schools in the area.

The Influence of Federal Requirements

Two federal requirements were intended to influence how Perkins Title IIB funds were to be used. The first limited the use of Title IIB funds to improvement, innovation or expansion of existing programs; the second imposed a matching requirement. The federal prohibition against use of Title IIB funds for program maintenance did seem to play a role in the way local administrators used the funds. Most administrators were aware of this

restriction (even if they did not know whether it was state or federally-imposed) and took it into consideration when making decisions about how to use their funds. There were a few examples of postsecondary institutions, primarily community colleges, whose administrators did not appear to be aware of the regulation.

Generally, this requirement was not difficult to address. Given the rapid change in technology associated with just about all vocational areas, it was fairly easy for administrators to demonstrate that almost every use of Title IIB funds, including equipment purchases, resulted in a substantially changed program, even if not a dramatically new one.

While the federal mandate restricting use of Title IIB funds for program improvement or innovation had implications for the way Title IIB funds were used in most of the communities in our study, the federal matching requirement influenced spending decisions in only a few communities. A third of the nine states in our study met the requisite match at the state level. In these states, several grant recipients were required to document a "paper match," itemizing local contributions, but did not have to demonstrate that they had met the federal share dollar for dollar.

In the other six states, the matching requirement was passed down to the local level and in most cases was met without problem. Seldom was local match directly tied to the activity sponsored by the Perkins grant. The local match reflected more general local funding for vocational education. The fact that, for most communities, the locally supplied match was not directly tied to how the Perkins grant was spent minimized the leveraging ability of the federal requirement.

There were only three instances where the local matching requirement posed a problem for the communities in our study. Two were districts in the same state that were scrambling to put together a match package in response to a recent state ruling that prohibited the use of instructor salaries as part of the match. In the third community, the area vocational school administrator said there had been a problem, but he did not elaborate.

An apparent third federal influence is Title IIA of The Perkins Act. The Perkins legislation includes activities targeted on the special populations defined under Title IIA as appropriate uses of Title IIB funds.

Yet, in the communities in our study we saw only two examples of Title IIB funds being used in conjunction with programs for the special population groups. As described in the previous section, both examples were in large urban areas and were only one of several activities supported by Title IIB funds in these communities.

The scant use of Perkins IIB funds to support programs for special population groups is apparently no accident. In discussions with administrators during our field work, we were told that they deliberately used Title IIB funds for other purposes because they felt that the amount of funding allocated for special population groups was excessive, and unfair to the rest of the students. In particular, as articulated by one administrator of a large district, the "kids in the middle, the good old average Joes" are the ones losing out. On one hand, the low achievers and kids with special needs get help from Perkins and other special programs; at the other end, the college-bound get lots of attention and programs. "There's nothing [targeted] for the kids in the middle--those that will need to get a job when they graduate from high school."

State Influence on Use of Perkins Title IIB Funds

State policy often played a key role in decisions about how Title IIB funds were used. States influenced the use of funds in one of two ways--awarding Title IIB funds through RFPs targeted on specific topics, or restricting how the funds are used (for example, putting limits on how much of the grant can be used for equipment). As noted earlier in this chapter, state policy seemed to have made the difference in whether districts followed traditional practices, and spent their allocation on equipment, or instead used Title IIB funds for different purposes. The influence of the state was particularly apparent in school districts. It is worth repeating that states that discouraged the use of Title IIB funds for equipment purchases generally provided an alternative state source of funding for equipment.

In cases where states awarded Title IIB funds on an RFP basis, the resulting programs appeared to be more innovative than those which were based on formula funding, most likely because the competition for funding encouraged more careful planning and design of activities. Often the state facilitated innovativeness by providing guidance or information about programs operating

in other parts of the state or country. Some of the smaller grants awarded through RFPs also wound up having a more significant influence than the larger counterparts. For example, the total of \$65,000 that went to a postsecondary institution in one urban area was used to launch four separate, diverse initiatives. In contrast, the number of individuals served under the largest Title IIB grant in our study (\$500,000, also awarded by RFP) used to start a truck driving program, was almost certainly fewer than the number served by the series of small grants.

State leadership in decision making regarding the use of Perkins Title IIB funds may have important implications for the extent of innovation at the local level, particularly in districts or institutions where internal leadership or creativity is lacking. It is not uncommon for institutions to routinely use Title IIB funds for equipment purchases without considering alternative uses. In such cases, more guidance from the state, either in the form of policies on how the funds are to be used or simply the provision of information about possible alternative uses, perhaps could have led to more effective use of funds.

As discussed in Chapter 3 some states in our study also had policies that restricted overall Title IIB funds distribution across institutions. Three states limited access by postsecondary institutions to Perkins Title IIB funds. One excluded postsecondary institutions entirely; another restricted postsecondary institutions to less than 10 percent of Title IIB funds, and a third excluded postsecondary institutions from state-mandated counseling activities.

Local Influence on Use of Perkins Title IIB Funds

At the local level, there were two primary types of influences on how Title IIB funds were used. The first was related to how funds were distributed across schools and/or programs, and once distributed, whether funds were sufficient to undertake a significant initiative. The second was the local context for program improvement activities, in particular, the existence (or nonexistence) of an overall strategy for program improvement. These factors have been discussed earlier in this chapter.

In summary, the most common use of Title IIB funds in our study communities was equipment purchase, and that pattern was consistent with

historical use of federal funds. When institutions deviated from this pattern, it appeared due primarily to state policies which targeted the funds for other purposes. Federal guidelines restricting the use of funds for program improvement and innovation were generally followed, but did not play a decisive role in how the funds were used. Matching requirements did not seem to pose a serious problem in most communities, and were not usually effective in leveraging local funds in support of Perkins-funded activities. Local administrators had the potential for directly influencing how Title IIB funds were used; the extent of this influence is linked to local administrators' creativity and overall plan for improvement.

SIGNIFICANCE OF PERKINS TITLE IIB FUNDING IN VOCATIONAL PROGRAM IMPROVEMENT

The Perkins legislation was intended to alter the reliance of local vocational administrators on federal funds for routine program maintenance, by limiting the use of funds to improvement, innovation or expansion of existing programs. However, while consistent with the legislation, most of the activities sponsored under Title IIB resulted in relatively minor changes or improvements. The lack of more dramatic improvement is largely related to two factors:

- the continued reliance on Title IIB funds for equipment purchases; and
- the lack of more significant influence of the matching requirement.

These two factors were operational in most study sites, although there were some institutions which did not share them. At least in our study sites, the reliance on Title IIB funds for equipment purchases does seem to have decreased under the Perkins legislation, although it does remain quite strong. The use of Perkins Title IIB funds for equipment purchases is consistent with the legislation's emphasis on improvement. Given the rapidly changing technology, it is probably the case that the replacement of any equipment can be categorized as an improvement over its predecessor.

We do not intend to imply that equipment purchases cannot be innovative, although such cases were rare.* Most equipment purchases can lead to the improvement of the vocational programs but do not add anything more than their value. The more innovative activities sponsored by Title IIB funds

involved more complex projects. While these projects often included equipment purchases, they typically involved a number of different components--needs assessment, planning, representatives from other organizations, staff training, and often additional resources. The synergy of these components had the potential for resulting in an innovation that was more than the sum of its parts.

The idea that Title IIB grants result in activities with "added value" seems to be consistent with Congressional intent. For the most part, this "added value" was apparent in only a handful of cases in our study sites. In those cases, usually either state leadership (either by allocating funds through RFPs or by limiting the use of Title IIB funds for equipment purchases) or entrepreneurship on the part of vocational administrators or staff led to the application of Title IIB funds for innovative purposes.

Congress had intended that the matching requirement would serve as a mechanism for leveraging additional resources to support the Title IIB initiatives. Although states and locals meet the minimum match and report no difficulties in doing so, the match is seldom paired with the activities specifically supported with Title IIB funds. Although perfectly legal, the result is often a compartmentalized use of Title IIB funds with limited leveraging potential.

The scarcity of available new funding is related to the status of vocational education in the communities. Given the recent emphasis on academic reform, vocational education was not been a key priority in most communities and funding for vocational education was tight.

A final factor helps explain the relatively low level of innovation associated with Title IIB funded projects. Educational bureaucracies are notoriously resistant to change and the traditional use of federal non-set aside funding for equipment is a pattern that seems hard to break. This is not intended to imply that equipment purchases are not a productive use of

*Perhaps the most innovative equipment purchase included in our study included the modification of rifles in a law enforcement course. The modification was made in order to facilitate the participation of female students by gradually improving their physical strength. (Funding came from a Perkins Title IIA Sex Equity grant.)

Title IIB funds; indeed, equipment modernization is an increasingly important component of vocational education. However, in some communities in our study, administrators were not aware that the funds could be used for other activities, and states did not always provide information about possible alternatives. Moreover, school districts are reluctant to start up major new initiatives with "soft" money. While, overall, Title IIB funds are a relatively stable source of funding, the restriction of Title IIB funds for start-up of new initiatives, rather than support of existing ones, seems to make districts more cautious about using it for major initiatives, especially those involving acquisition of staff, which will then have to be maintained through another funding source.

It is important to recognize that Title IIB funds represent only a small fraction of the costs of vocational programs. Since at the national level federal funds represent only a ten percent share of vocational education costs, then Title IIB funds (which are 43% of Perkins) provide on average then only 4.3%. In many of the larger districts and postsecondary institutions, the relationship of the Perkins grant to overall budgets for vocational education was even less significant, in some cases, less than one percent. At this comparatively low level of funding, it is somewhat unrealistic to expect that Title IIB funds could have a dramatic influence on program improvement.

In some communities visited, we found that Title IIB funds did play a role in program change and improvement--a role more significant than one would expect based on the comparatively low level of funding. In particular, access to Title IIB funds was important to school administrators. Two factors serve to enhance the influence of the funding. First, local administrators, especially at the secondary level, have come to depend on Title IIB funding; it is not as "soft" as other funding sources. While some districts experienced significant decreases in grant size, they still retained a base of funding. Potentially, this comparative stability could provide administrators the flexibility to develop multi-year strategies for use of funds.

The other factor that increases the importance of Title IIB funds for administrators is that they can be used for a variety of purposes, allowing more flexibility than other types of funding that have designated targets. Creative administrators can initiate a wide array of activities under the rubric of the 25 categories specified in the legislation. In most

communities, the use of federal funds is not as carefully scrutinized by superintendents and School Board members as are local funds, again allowing vocational administrators added flexibility.

Finally, it is important to note that Title IIB funds have a positive image at the local level. With the Perkins mandate that the funds be used for program improvement and not maintenance, administrators must use the funds for purposes that make a positive change in program operations. Even when used to support equipment purchases, they result in some visible change or improvement. In instances when they were used for instructional development, they were viewed as "perks" or mechanisms for rewarding staff. However, at the local level, school level staff were rarely aware of the receipt of Title IIB funding. Decisions regarding use of Title IIB funds generally rested with district administrators and vocational directors of schools.

In our study communities, administrators tended to apply Title IIB funds toward their priority, or special activities. As part of our field research, we asked administrators to identify their most important innovation. Seventy-five percent of those who responded cited programs which were supported, at least in part, with Perkins funds as the most important change in their institution.

In summary, although at the local level there was a consensus that Title IIB funds are an important funding source, the funds served more as support than as a catalyst for change. Only in a few instances, primarily at community colleges, were Title IIB funds used to launch new innovative activities.

COORDINATION WITH JTPA AND OTHER AGENCIES

The linkage between JTPA (Jobs Training Partnership Act)* and vocational education is mandated by Congress. Both the JTPA and Perkins legislation, passed early in this decade, included provisions designed to foster joint planning and coordination between the two programs. At the local level, applications submitted by educational agencies for Perkins funds must describe coordination with relevant JTPA programs and be available for review and comment by the corresponding local JTPA program administrators. The JTPA legislation requires representation by education (although not necessarily vocational education) on the Private Industry Council. Both acts required increased involvement of the private sector in program planning.

Although coordination between Private Industry Councils and vocational education providers was emphasized by legislation, actual cooperation on the part of vocational educators was influenced by more pragmatic concerns--specifically ameliorating the impact of the decline in vocational enrollments. As vocational programs were experiencing enrollment declines in their traditional types of students, substantial funding was made available by JTPA operators looking for training providers to serve their clients.* Institutions offering vocational education were the most likely candidates. JTPA-sponsored programs were operated in at least one institution in all but one of the study communities. The extent of JTPA funding was not always accessible during our data collection. Where information was available, JTPA awards were typically at least two to three times that of the Perkins Title IIB grant received by the corresponding institution.

*JTPA is the legislation which authorizes the federal Department of Labor's nationwide conduct of job training and related activities. A majority of JTPA funds are designated for the provision of employment and training services for economically disadvantaged individuals.

Section 123 of JTPA directs the governor of each state to use 8% of the state's JTPA IIA allotment for financial assistance to any state agency responsible for education and training. These funds are to be used for direct service provision for eligible participants through cooperative agreements and for efforts related to the coordination of education and training for eligible individuals.

*During the most recent program year, the national allocation for title IIA of JTPA was \$1.7 billion, approximately five times larger than the total federal vocational education funding for the same period.

The VEA coordination requirements under the Vocational Education Act, as amended in 1976, had produced little programmatic activity under the Comprehensive Employment and Training Act (CETA), the precursor to JTPA. The requirements for one thing offered no incentives for agencies and institutions to work together (National Institute of Education, 1981, p. V-25). The CETA provisions, on the other hand, provided funds for program coordination, although research studies indicated that its effectiveness was often minimal (Praeger and Goldberg, 1980).

There were several important differences between the CETA and JTPA. JTPA clients, on average, were significantly more disadvantaged and had less work experience than clients served under CETA. JTPA-eligible individuals usually also were part of the disadvantaged group targeted by Perkins Title IIA. JTPA emphasized short-term training programs (as exemplified by industry-specific training sessions) compared with the long-term programs sponsored by CETA. Finally, increasing numbers of JTPA-funded programs were using performance-based contracts.

In order to meet these requirements, vocational programs, in particular those at the postsecondary level, made adjustments to their programs. In our study communities, JTPA programs operated in both secondary and postsecondary institutions. At the district level, JTPA funds were typically used to operate the summer youth employment program (using JTPA IIB funds)* and often, programs for high school dropouts or high risk students. In a handful of districts, JTPA paid for special services for educationally or economically disadvantaged students. These services look very much like those supported by Perkins Title IIA. In one of those districts, JTPA-funded services replaced identical ones which previously had been paid for by Perkins. The administrator said they made the shift in funding source because no match was required under JTPA.

At the postsecondary level, JTPA typically paid for slots in regular programs or for support of industry-specific training. When JTPA paid for tuition in regular programs, JTPA students generally were in classes with regular students. Apart from industry-specific training, there were only two

*In one study site, the summer youth program was operated at the community college.

cases in our study sites where a whole class was composed of JTPA students. In those cases, separate classes were held for JTPA students, only if there were sufficient numbers to warrant a segregated class. For the most part, as stated by a JTPA administrator in one of our study communities, "JTPA funds clients, not contracts."

In some cases, Perkins Title IIA and JTPA funds were combined to fund JTPA clients in particular programs. For example, salary costs for the intake worker/assessment counselor would be funded jointly by Perkins Title IIA and JTPA; eligible students would then take part in training programs at the school, with their tuition, books, and supplies funded by JTPA. In a number of institutions, usually area vocational schools or community colleges, JTPA would place an out-station staff person in the school to conduct eligibility determination and placement services. Because some JTPA-sponsored students were more academically disadvantaged than the more traditional type of students, vocational programs often added remedial education programs that operated in conjunction with the vocational training.

The one exception to the general practice of JTPA's funding individuals not entire classes was customized, or industry-specific training. In customized training programs, all students are trained for positions in a specific company. Funding for the training came from a variety of sources: JTPA, prospective employers, or other economic development agencies. Usually the student did not pay to participate. The training programs were comparatively short, usually lasting from a few days to two weeks. The mechanism used to identify potential participants in the program tended to be related to funding source. If JTPA was charged with the task of identifying candidates, then typically all students would be JTPA-funded. Under an alternative approach, employers screened candidates, made their selection of individuals that they wanted to be trained, and then asked JTPA to make a determination of their eligibility for JTPA funding. In those cases, generally some, but not all, participants in the class were JTPA-eligible.

Because they are so closely rooted in the operations of a specific company, customized training programs were not considered part of the routine course offerings. As mentioned earlier in this chapter, vocational administrators looked with favor on customized training programs because they

generally were well-funded, provided an opportunity for staff exposure to state-of-the-art operations in the private sector, and tended to result in a high placement rate, usually due to relatively rigorous pre-enrollment screening.

The placement rate issue was often a sensitive one for vocational administrators in our study. Vocational programs were under pressure from a variety of sources (the state, district and school administrators) to demonstrate high overall placement rates as well as training-related placements. Under JTPA program guidelines, there was significant emphasis placed on the use of performance-based contracts, placing additional burdens on vocational administrators to demonstrate client placement.* Under performance-based agreements, the service provider was reimbursed on a basis that reflected participant achievement of specific milestones related to their training--typically these included enrollment, completion of some portion of training, completion of training and placement.

For the most part institutions providing vocational education in our study were willing to enter into performance-based contracts in order to obtain JTPA funds. However, there was some significant resistance. The primary complaint of vocational administrators about performance-based contracts concerned the placement issue. Administrators felt that client placement was not always under the direct control of the educational institution. According to one administrator who does accept performance based contracts: "It is unfair to penalize the training institution for unsuccessful placement when clients refuse to accept employment that is [both] available and [which] meets all of the contracted conditions." Despite resentment of performance-based contracts, only one administrator in our study voluntarily declined to accept a contract because of its performance-based requirements.

There were only a few instances where there was not at least some discussion, if not actual contracting, between JTPA and vocational institutions and districts. One vocational technical school administrator commented: "They [JTPA] just don't want to dance with us." Another district

*The emphasis on performance-based contracting is not a priority for JTPA IIB (summer youth) programs at this time.

administrator who had not responded to RFPs issued by the local PIC said; "I'm so fed up with the strings associated with any federal program, that I never bothered responding." The fact that the corresponding district and school budget were fairly affluent probably made it easier not to rely on JTPA for funding.

Overall, coordination between vocational programs and JTPA was increasing. One additional indicator suggests that this coordination is likely to continue growing. As part of the national welfare reform movement, one state in our study had a mandatory work requirement for selected welfare recipients. Under this program, welfare clients received training, often in vocational schools, with JTPA funds. The communities in our study reported an increase in students due to this work-welfare project. Since other states in the country are in the process of implementing work-welfare demonstrations, usually in conjunction with JTPA, the role of vocational programs in training welfare recipients is likely to increase.

Apart from JTPA, the institutions in our study occasionally had agreements with other state or local agencies. Secondary districts often had arrangements with other programs for disadvantaged and handicapped students. These agreements typically involved the vocational school provision of training services to individuals not enrolled in the schools' regular programs. Another type of agreement resulted in staff from the agency providing counseling, job placement or other support services to handicapped vocational students.

Some area vocational schools provided services similar to those sponsored by JTPA using funding from the state or local Office of Economic Development. The extent to which there was coordination between the programs depended upon the political context. Programs sponsored by JTPA and the economic development agencies either tended to operate cooperatively (sometimes with the economic development agency working with employers to identify a training opportunity and JTPA supporting the training offered at a vocational school) or competitively. In cases where the programs are in competition, the agencies appear to run very similar programs in parallel.

SUMMARY

The extent of program improvement and change and the impact of Perkins funding on the expansion and improvement of vocational programs varied widely across the communities in our study.

First, declining enrollments led to efforts to recruit and retain "nontraditional" populations in vocational programs. These efforts were impressively diverse, and responsive to the circumstances of the local population. Thus, we found vocational courses enhanced by "high tech" to attract the academically advanced; support services to assist the economically and academically disadvantaged, as well as high-risk students and dropouts; and assessment services, classroom aides, equipment modifications, and instructor awareness training to enable handicapped students to successfully participate in vocational classes.

Articulation agreements between secondary and postsecondary institutions were formed to attract students into a vocational course of study that will lead to advanced training and college credit. Most secondary and postsecondary vocational institutions were linking with JTPA to provide vocational training. This linkage often took the form of customized training programs and was frequently accompanied by remedial or basic education components to meet the needs of the significantly disadvantaged population that JTPA serves.

While declining enrollments and the need to attract new populations influenced the types of program improvements being implemented, the impact of these changes was determined by other factors. It is important to note that while type of educational institution played a role in the extent of innovation and improvement, the availability of leadership and an overall plan for improvement seemed to have the most significant impact on an effort's success. Economic climate and urbanicity of the community did not seem to matter; institutions in severely depressed rural areas often had active and extensive improvement efforts underway, usually due to the vision of one particular individual in the community. Of the two primary types of improvement modes we saw -- strategic and dispersed, usually a strategic approach had the most significant impact because it targeted a greater percentage of the funding for a specific goal, and was tied to a programmatic

initiative. The dispersed approach usually funded a number of unrelated items that served no broader need.

The Perkins Act mandated that Title IIB funds be used exclusively for improvement, innovation and expansion of programs. While some study sites used Title IIB funding for curriculum development, instructional support, and public awareness efforts; by far the most common use of the funds in almost all types of institutions was the purchase of equipment. In the communities in our study, almost two-thirds (62.9%) of the Title IIB funds were used to buy equipment. The primary reason for this use of the money seems to be simply reliance upon historical precedent and tradition. It has always been easier to use federal funds for equipment than other local funds. Additionally, many districts seemed reluctant to use the Perkins funds to start up new initiatives that would have continuing long term costs (e.g. staff). In some cases, state policy and leadership enhanced local creativity and effectiveness by directing that Title IIB be applied the funds to uses other than equipment. For the most part, the federal matching requirement did not seem to be a factor in influencing how the money is used, nor did it typically serve to leverage other than the minimal additional funding to complement the Title IIB grant.

Although limited by the small dollar amount of the grants (in comparison to the entire vocational budget), a strong precedent for equipment purchase, and administrators' reluctance to use the money more creatively, the impact of Perkins Title IIB funding is important, if not especially innovative. The stability of funding has enabled some administrators to develop multi-year plans for improvement. In addition, within the 25 categories specified by the legislation, enterprising administrators can find the flexibility to implement improvements that address their particular circumstances and visions. Whether used for equipment purchase or some unique component of an overall strategy to attract a new population, Perkins Title IIB funds result in a tangible improvement in program operations.

While Perkins Title IIB funds have made some degree of difference in terms of program improvement and change in most of the communities in our study, our research identified several issues for consideration by the Congress in planning the reauthorization of the Perkins legislation. The first issue relates to the propensity of districts and vocational institutions

to use Title IIB funds for equipment purchases. For the most part, this tendency is driven more by reliance upon tradition, rather than a deliberate choice based on evaluation of alternative uses. In many instances, administrators simply did not have information available about other possible uses. Some states tried to influence how the funds were used by allocating the funds by RFPs targeted on specific objectives. These targeted RFPs usually resulted in more creative use of Title IIB funds. Congress may want to consider measures to increase the use of targeted RFPs for program improvement activities. At the same time, dissemination of information about successful program improvement or change projects would likely help administrators make more informed decisions about how to spend their Title IIB funds.

While the Perkins legislation sought to enhance the significance of the federal funding through the matching funds requirement, the match did not usually serve to leverage more than the minimal additional funds required at least in most of our study sites. In some cases, the match was made at the state level; state administrators acknowledged that this practice was at least partly a function of attempting to avoid the paperwork that would be associated with transferring the matching requirement to the local level. When required to document a local match, administrators tended to create a "paper match." Rarely was the match comprised of additional funding used specifically to supplement the Title IIB grant. In addition, there was considerable confusion over the issue of whether JTPA funds could be used to match Perkins funds. Congress may want to consider strengthening the leveraging potential of the match by requiring that grant recipients document additional funds to be used in direct support of the Title IIB allocation, to prevent the often compartmentalized use of Title IIB funds.

An additional consideration for Congress relates to the use of Perkins funds for short-term customized training. One can question whether the very short-term programs (e.g., up to two weeks long) are appropriate under the education focus of the Perkins Act, and therefore may belong under another funding source, such as JTPA. Perkins and JTPA funds can and have been productively combined to serve the same population groups, but some clarification may be needed about the length of program to be supported.

A final issue for consideration by Congress is related to the use of Title IIB funds for programs targeted on the special population groups defined

under Title IIA of the legislation. In the communities we visited, Title IIB funds were rarely used for activities designed for special populations. Instead, administrators often commented that, in reaction to what they perceived as an unfairly large concentration of funds on the special population groups under Title IIA, they deliberately used Title IIB funds for services used by other categories of students--specifically for the students in the middle achievement range.

At the same time, program improvement and change activities are not as likely to be undertaken with Title IIA funds. Funds are typically used for individual services such as assessment and counseling. Disadvantaged funds in particular are seldom used for vocational programs, but rather for ancillary services and basic skills instruction. In addition, funds are allocated to districts and other vocational institutions on a formula basis, rather than a competitive one that could be structured to concentrate funding in projects designed specifically for the improvement of vocational programs for the special population groups.

To the extent to which Congress intended Title IIB funds be used for program improvement activities addressing the needs of special populations, it may be necessary to add additional incentives for districts and institutions to use the Title IIB funds for those categories of students.

CHAPTER 6

CONCLUSIONS AND IMPLICATIONS

Through its field work in nine states and 27 communities, this study has sought to explore three questions:

- What is the capacity and willingness of states to provide leadership in vocational education? What guidance do the states provide regarding the implementation of the Perkins Act?
- What is the nature of activities funded under Perkins Title IIA for special populations? What is the relative importance of the Perkins Act in assuring that special population groups have access to high quality programs?
- What is the nature of program improvement activities in vocational education? To what extent has the Perkins Act contributed to program improvement initiatives?

Separate chapters have been devoted to each of these topics. This chapter integrates study findings across the chapters to assess the implementation of the Perkins Act as a whole and to highlight continuing issues.

This chapter is divided into four sections. The first two sections look at Perkins Title IIA -- the Vocational Education Opportunities Program, and Perkins Title IIB -- the Vocational Education Improvement, Innovation and Expansion Program. For each, the following topics are examined in turn:

- intentions under the Perkins Act,
- state role in implementing Perkins,
- local practice,
- significance of the Perkins Act, and
- continuing issues.

The third section explores special issues related to the administration of the Perkins Act, including funds allocation procedures for handicapped and disadvantaged students, matching and excess costs provisions, the implementation of section 204, and coordination between JTPA and the Perkins Act.

The fourth, and final, section explores select state issues in the implementation of the Perkins Act. The topics addressed are the implications of the "sole state agency" concept for secondary and postsecondary vocational education, and the importance of Perkins funds at the state level.

PERKINS TITLE IIA -- SPECIAL POPULATIONS

Handicapped Students

Perkins funds were intended to assure access of quality vocational education programs to handicapped students who because of their handicapping condition cannot succeed in vocational education without special education assistance. At the secondary level, recipients typically used Perkins funds for assessment, followed by assisted instruction in vocational classes, either through the use of aides or instructional support in separate vocational classes. At the postsecondary level, Perkins Handicapped funds supported support services and, in a few instances, aides in regular vocational classes. In only one case were funds used to support a separate class for handicapped students.

States played little role in how the 10 percent set-aside for handicapped students was used. Rarely did states restrict the types of services that could be provided to handicapped students, nor did they further define the types of students eligible for services. Only one state influenced the intradistrict allocation of Perkins Handicapped funds.

At the secondary level, Perkins funds appeared to round out a variety of services available to handicapped students through P.L. 94-142 and other sources, and students served were always a subset of those with IEPs. Perkins appeared to play a small, but significant, role that would be strengthened by a closer connection between vocational assessments and vocational education services. A hopeful sign in some districts were the connections being made between Perkins-funded work placement programs and services from the Office of Vocational Rehabilitation to facilitate entry into either independent or sheltered employment.

Perkins appeared to play a small but important function at the postsecondary level as well. The modest grants appeared well-targeted on such basic support services as counseling for entering students, braille for the blind and interpreters or signers for the deaf. There was little use of funds to ease the transition to work or further schooling.

Disadvantaged Students

As with handicapped students, the 22 percent set-aside for disadvantaged students under Perkins was intended to assure access to quality vocational education programs for academically and/or economically disadvantaged students who required special services in order to succeed in vocational education. Disadvantaged funds were rarely used to support instruction in vocational classes at either the secondary or postsecondary level. At the secondary level, Disadvantaged funds were most often used for assessment and counseling, and then most frequently supported instruction in nonvocational classes (e.g., learning centers or remedial skills classes). At the postsecondary level, the pattern was reversed, with Disadvantaged funds most commonly supporting separate basic skills instruction and then counseling services. Although the law included both academically and economically disadvantaged students, local providers almost always considered only academically disadvantaged students for Perkins-funded services.

As with Perkins Title IIA Handicapped funds, states did not further define eligible disadvantaged students for services, and rarely restricted allowable services that could be provided. Nor, with one exception, did states influence the intradistrict allocations of Perkins Disadvantaged funds.

Perkins funds also played a small but important role for disadvantaged students, but its impact is ambiguous. Seldom could a link be made between assessments given disadvantaged students and access to quality programs; and basic skills classes, while clearly needed, also did not appear to be directly tied with vocational programs. Few resources were seemingly available from any funding source for disadvantaged students, so the ancillary services available through the Perkins Act were insufficient for the demand.

Adults

The new 12 percent set-aside of Perkins Title IIA funds focused on the needs of adults, including vocational education programs for training or retraining adults. In the sites visited, Perkins Adult funds at the secondary level usually went for general vocational education purposes, and therefore had little visible impact. At the postsecondary level, they were most frequently used for specific training programs, and were less likely to be

used for general adult classes, counselors, tuition aid or equipment, although some Perkins funds supported all of those activities.

Almost half the states (four of the nine) restricted institutions that were eligible for Adult funds, usually by earmarking funds for post-secondary institutions. States generally provided little direction on how Perkins Title IIA Adult funds should be spent, distributing funds primarily by formula to selected providers. Nevertheless, one state combined its Perkins Adult funds with state and industry funds to create a funding pool for RFPs for postsecondary institutions to provide in-plant training and retraining activities. Another combined some Title IIA Adult funds with JTPA for programs for older adults in one competition. In another competition it combined other Title IIA Adult funds with monies from the Adult Education Act to support ten adult career counseling centers. Yet another state targeted half of the funds going to secondary institutions on placement services for adults.

For many of the institutions visited, adults were a new and expanding market, whether they were currently employed or seeking employment. The availability of Perkins funds appeared to ease the transition for the institutions to serve this population group.

Single Parents/Homemakers

Also new with the Perkins Act was the 8.5 percent set-aside for single parents/homemakers to help make vocational education and training more accessible and to provide them with marketable skills. Perkins Title IIA Single Parent/Homemaker funds were most often used for increasing access to vocational education in general, through child care, tuition assistance, and counseling. It was the only source of aid for child care in some cases, although funding amounts were always small. Title IIA funds less frequently supported operating programs for single parents, including welfare mothers. Programs were often in traditionally female occupations such as word processing, bookkeeping, child care and hospitality; although Title IIA funds also supported computer applications and computer maintenance/technology.

Four states provided some direction on how single parent funds should be spent. Two states earmarked funds for displaced homemaker centers, another focused funds on teen parents at risk of dropping out of school. A

third state used Title IIA funds only to support operating programs, because other funds were available to support ancillary services. In yet another state, recipients of Title IIA Single Parent/Homemaker funds were also required to receive Perkins Sex Equity funds.

In two states, Single Parent/Homemaker funds were distributed by formula to "hold harmless" the shifts in allocations created by the federal intrastate formula for allocating Handicapped and Disadvantaged funds that was new with the Perkins Act.

Among the communities visited, the median Single Parent grant at the secondary level was \$12,000; at the postsecondary level the median grant was \$27,000. State sex equity coordinators in a number of states visited strongly encouraged large concentrations of grants, arguing that until individual grants reached \$20,000 to \$30,000 no staff could be hired to devote substantial attention to the issues.

Sex Equity

The Perkins Sex Equity funds, 3.5 percent of the basic state grant, were designed to overcome the sex bias and sex stereotyping that long characterized vocational education and to support students pursuing nontraditional careers. Seldom did the vocational educators interviewed appear informed or concerned about this issue, and nontraditional enrollments in vocational education were rare. Perkins funds usually supported brochures, workshops, and recruitment activities, and only rarely supported operating programs. The Perkins grants usually seemed too diluted to have much effect.

Although states have the authority to concentrate funds, only two states defined minimum allocations (\$1200 and \$1500 at the secondary level), but four other states provided substantive direction on the content of sex equity project, including one state that focused all its funds on proposals to expand opportunities for women in high technology occupations. The four states that provided substantive direction for Sex Equity grants were the same four states providing guidance for Single Parent/Homemaker grants. In contrast, one state distributed Sex Equity funds (as well as its Single Parent/Homemaker funds) by formula to "hold harmless" shifts in allocations created by the federal intrastate formula for Handicapped and Disadvantaged funds.

As with Title IIA Single Parent/Homemaker funds, large concentrations of grants may be needed, especially at the secondary level. Among secondary recipients, the median grant was \$6,000; while among postsecondary recipients, it was \$23,000. As a number of state sex equity coordinators noted, until grants reached \$20,000 to \$30,000 no staff could be hired to devote substantial attention to the issues.

In general, the role of Perkins Title IIA funds in the vocational education enterprise is a small one, and the amount of funds was not viewed as substantial enough for it alone to provide an impetus for new services/programs or new initiatives to serve special populations. Where the Perkins goals were closely aligned with those of local providers, on the other hand, funds were well-targeted and apparently well spent. Without targeting funds or linking Perkins services more directly with vocational instruction, the act is not accomplishing as much as it could.

PERKINS TITLE IIB -- PROGRAM IMPROVEMENT

The extent to which program improvement was generally taking place in vocational education varied among the communities visited. Characteristics of the more innovative institutions included: a culture supportive of innovation, especially among key administrators; a strategy for growth that included the active recruitment of new student populations; ongoing program-level assessment; and active collaboration across educational institutions and programs, especially in funding efforts.

New programs were relatively rare. Secondary institutions typically upgraded current programs with new equipment or provided supplemental support or remedial services. At the postsecondary level, customized training for prospective or current industry employees was the largest growth area. Many communities were working on articulation agreements, although most were either general agreements to work together or were college credit for a single or a few programs. Also a number of institutions were engaged in curriculum and staff development activities, particularly where the state strongly encouraged such efforts.

The broad message that Perkins Title IIB funds were to be used for a variety of program improvement and expansion efforts has not been effectively

implemented at the community level. Unless states limited or prohibited the use of funds for equipment purchases, institutions saw the Perkins Title IIB funds primarily as "federal equipment money." Well over 90 percent of both secondary and postsecondary area vocational schools visited spent all of their Perkins Title IIB grant on equipment. Community colleges spent two-thirds of their funds on equipment, while the school districts visited spent only one-third, largely due to state limitations on whether funds could be spent on equipment.

Four states limited the use for equipment and channeled funds for different purposes. Two states prohibited the purchase of equipment under Title IIB and a third urged that funds be spent on curriculum renewal and staff development. A fourth state restricted equipment purchases to 10 percent or \$50,000, whatever was higher. The four states had state funds that could be used for equipment. Two of them also funded technical assistance specialists as resources to districts in curriculum and other areas.

When the equipment purchases were part of a larger program improvement strategy, they appeared to have a catalytic effect. But when equipment purchases were dispersed more broadly, they appeared to have no effect beyond the equipment itself. The muted effect of Title IIB funds was further limited because the state or local match was seldom used in direct support of the Title IIB allocation. Federal funds could have a more visible and concentrated impact if the federal and required matching funds supported the same activities.

At the local level, Perkins Title IIB funds played a supportive role, although they were seen as an important resource because of their flexibility and positive image. Not inconsequentially, Title IIB funds were also one of the few sources for equipment that local providers had identified.

For Title IIB to be seen as something more than equipment money, either stronger incentives must be built into the law or more states encouraged to provide direction for alternate uses of the funds.

One possible approach to strengthen the use of federal funds for program improvement would be to use targeted program improvement competitions to capitalize on the more innovative institutions providing vocational education, especially those in economically depressed areas. Such

competitions could include demonstrations that could be observed and more widely disseminated.

Another strategy may be to use federal funds to help strengthen the conditions found in the more innovative institutions. One example would be to encourage jointly funded linkage projects. Here some Perkins funds and other state or federal funds would be combined at the state level and released through requests for proposals. To obtain funding, vocational providers would have to demonstrate they had established working relationships with the corresponding other local agencies. One state is already funding such projects on a small scale.

Finally, an additional approach to strengthen the uses of Title IIB funds would be to strengthen the role of the state in program improvement, especially because it appeared that those projects funded through requests for proposals appeared to be of higher quality than those funded through formula allocations.

SPECIAL PERKINS ISSUES

Special issues related to the administration of the Perkins Act, include funds allocation for handicapped and disadvantaged students, matching and excess costs provisions, implementation of section 204, and coordination between JTPA and the Perkins Act.

Funds Allocation

The intrastate allocation formula for distributing Title IIA Handicapped and Disadvantaged funds, new with the Perkins Act, depends upon enrollment figures submitted by districts and postsecondary institutions. Yet most local respondents interviewed were unable to provide counts of the number of students enrolled in vocational education or of the number participating in Perkins-funded activities. In addition, only in rare instances had vocational education administrators established systematic procedures for identifying handicapped and disadvantaged students who were having difficulty succeeding in vocational education programs, although the law restricts eligibility to those students. The data on which the intrastate formula depend may not be

accurate or consistent from one recipient to another. We do not recommend changes in the distribution process, but recommend that states take steps to ensure that accurate and reliable data are reported.

Although combining Title IIA Handicapped and Disadvantaged funds may be a financially sensible and educationally effective practice, clarification is needed so that disadvantaged students receive a fair share of the resources. In about half the districts and postsecondary institutions visited, at least some Title IIA Handicapped and Disadvantaged funds were combined, usually to provide assessment, counseling or remedial services. Combined funds were most often found in rural districts, and in all communities in the state that encouraged the practice. Although information in some cases was spotty, it appeared that the proportion of handicapped and disadvantaged students served did not match the proportional investment of funds. Handicapped students were more likely to be overrepresented, and in one instance were the only students enrolled in a jointly-funded work experience program. Some guidance should be given states so that disadvantaged students receive the services to which they are entitled.

Although nothing precludes the use of Perkins Title IIB Program Improvement funds for the special population groups defined under Perkins IIA, states rarely used Title IIB funds for those groups. It appeared that states made a clear distinction between Title IIA and Title IIB population groups, so that "program improvement" was seen as improvement for the "regular" vocational education student, that is, the average achieving white male student. States wanting to fund special projects for disadvantaged and handicapped students through competitive funding mechanisms either had to use Title IIB funds (and face considerable pressure) or drop the initiatives. While maintaining the rule that all Handicapped and Disadvantaged funds be distributed to eligible recipients, it may be worthwhile to allow a small proportion of funds be made available for state-initiated competitive procurements.

Matching and Excess Costs

Matching and excess costs requirements did not appear particularly problematic for districts or postsecondary institutions. Occasionally concern was voiced over what could be used for the match, but rarely were funds returned or refused for failure to meet a match.

Matching was not an issue for Title IIB Program Improvement funds, except in three communities, two in a state that had recently decided that instructor salaries could not be used to help meet the match. A postsecondary institution that refused \$9000 in Title IIA Handicapped and Disadvantaged funds had never met the match, having relied instead on Goodwill Industries. When they pulled out, the institution refused the funds rather than come up with the match and secured JTPA funding.

The size of grant and timing of funds receipt appeared more related to refused or returned funds than difficulties with meeting the match. One rural district turned back \$290 in Handicapped and Disadvantaged funds, but accepted \$12,000 in Program Improvement funds. The smallest Program Improvement grant was \$1,200, with the next smallest at \$12,000. The smallest Handicapped or Disadvantaged grant accepted (after the \$290 turn back) was \$900, with the next smallest at \$15,000. Title IIA Handicapped and Disadvantaged funds, taken separately, were larger than Title IIB Program Improvement funds in about half the secondary districts.

Timing appeared to be the problem in another district that failed to meet a match on Title IIA Disadvantaged and Handicapped funds, because they received them late in the school year when they no longer had uncommitted funds..

Four of the nine states visited relied on a match aggregated at the state level, so took some burden off local recipients to come up with the dollar for dollar match. The availability of at least some state funds appeared essential for states to use an aggregated match. Without supplemental funding sources, states transferred the matching responsibility to individual recipients.

Section 204

Section 204 required, among other features, that equal access would be provided to handicapped and disadvantaged students in recruitment, enrollment, and placement in vocational education. Furthermore, each handicapped and disadvantaged student who enrolled in vocational education would receive an assessment, special services, and guidance and counseling.

The federal regulation interpreting the Perkins Act did not expand on the legislative language; and most states appeared not to provide additional information on section 204, past instructing districts to inform handicapped and disadvantaged students, usually no later than the ninth grade, of opportunities in vocational education. In four districts, section 204 played some role in decisions to offer assessment services.

If this section of the Perkins Act is to be interpreted as more than a general notice, further clarification would be needed in the law.

Coordination with JTPA

Seldom was there any coordination at the state level between vocational education and the office concerned with the Job Training Partnership Act, except for such formal interactions as the review of state plans required in the Perkins Act. Among the nine states visited, only one state had developed a programmatic linkage at the state level, through a competitive procurement combining Perkins IIA Adult funds and JTPA funds for older workers.

While lack of cooperation at the state level may have resulted in lost opportunities, it did not seem to hamper local initiatives. Local vocational providers were often involved with JTPA programs, either through summer youth employment programs or with JTPA participants as "slot-ins" in regular school year programs. Providers have entered into performance contracting arrangements under JTPA, although not without some resistance. JTPA funds provide substantial funds to vocational institutions, with grants averaging about three times the total Perkins grant.

In some cases, Perkins Title IIA and JTPA funds were combined to fund JTPA clients in particular programs, including very short-term customized training. Although combining Perkins and JTPA funds to serve the same population groups is a productive use of funds, some clarification may be needed to ensure that Perkins funds designed for longer term education programs do not support the very short-term customized training.

THE STATE ROLE IN PERKINS ADMINISTRATION

This fourth, and final, section addresses the implications of the "sole state agency" concept for secondary and postsecondary vocational education, and the importance of Perkins funds at the state level.

The "Sole State Agency" Concept

Under the Perkins Act, as under its predecessors, each state named a single agency to serve as a board of vocational education. By looking within the contracting agency to the office directly responsible for administering the Perkins Act, several patterns emerge within the nine states visited.

The office administering the Perkins grant was more likely to channel Perkins funds to those institutions under its direct administration than to institutions administered either by a separate unit within the education agency or by a separate board. Prior to allocating Perkins funds, eight of the nine states visited either established a proportion of funds for secondary and postsecondary sectors or limited eligibility to some Perkins set-asides by type of institution. The prespecified percent splits were described as long standing practice; and in at least four of the nine states visited, institutions that came under the purview of the Perkins office were likely to receive more funds than they would have been allocated based upon vocational enrollments. States were much more likely to restrict institutional access to Perkins funds than they were to restrict allowable activities under the act.

The Perkins Act was always administered by the office with administrative authority over secondary vocational education, but in only one instance did the office have administrative authority over all postsecondary vocational education as well. As a result, the office overseeing Perkins had less involvement in postsecondary vocational education generally and, in most cases, less influence over Perkins-funded activities there as well. Another consequence for those offices that did not oversee any postsecondary vocational education was no involvement at the state level in economic development initiatives.

An increased federal interest in postsecondary vocational education or in using the Perkins Act to help foster economic development initiatives

may require reconsideration of the "sole state agency" concept. Furthermore, any shift in state funds allocation procedures among institutions would also require explicit federal directives.

The Importance of the Perkins Act at the State Level

The Perkins Act played a significant role at the state level, to provide base funding for states to pursue a statewide agenda in vocational education. Under Perkins Title II, states could withhold up to 20 percent of the state grant for their own use.* All states supported curriculum development, professional staff development, occupational information systems, and usually some research and evaluation. Whether states carried out activities within the state office, or worked with universities, consortia, or consultants, the Perkins funds served as core funding. The seven percent administrative budget allowed under the Perkins Act also paid for state salaries.

Two states used Perkins funds as a lever to obtain other funds. One strategy was to pool Perkins funds with other funds to create a large enough investment to make a difference. One state matched Perkins funds with state or industry funds to support customized training. Another state combined a small amount of Perkins funds with funds from a number of different state agencies (e.g., Office of Older Adults, Office of Vocational Rehabilitation, state welfare office) to force local vocational providers to establish working relationships with other public service agencies, in order to become the vocational trainers for their clients. The second state also used Perkins funds to support a small-scale version of a new statewide initiative (e.g., a regional Economic Development Center) until such time as it had demonstrated its effectiveness and could be sold to the state legislature to obtain state funding. Perkins funds were its source of flexible "start-up" money.

Whatever were the ways that states used Perkins funds for their own activities, Perkins funds were of primary importance. In almost all cases, no other funds were identified that enabled the state office overseeing Perkins to move beyond its fiscal and regulatory role.

*It is unclear how large a proportion was used because of contracts to universities for staff development. It appeared that one state used at least 40 percent of its funds on state projects, while another spent less than ten percent.

METHODOLOGICAL APPENDIX

SAMPLING

States for the Case Studies

The nine states for the case studies were selected from among the 18 states selected for the national survey. The 18 states for the survey were selected, using lattice sampling techniques, to ensure diversity on vocational education enrollments, census region, distribution of vocational students between secondary and postsecondary programs, per pupil expenditures in education, and change in core course requirements for graduation (a measure of state activity in academic reform). The nine states were then selected ensuring variation in each of the categories listed above. Four states were selected with certainty because they were included in earlier mandated studies of vocational education and enroll a significant number of vocational education students.

Communities for the Case Studies

In drawing the sample of three communities per state, one community was selected purposively because of (1) a particularly interesting, innovative or exemplary approach to vocational education for special populations and/or education and employment linkages; (2) a creative use of Perkins funding; and/or (3) innovative efforts to engage new students in vocational education.

The remaining two communities in each state were selected to show variations with respect to urbanicity (urban, rural, or small town, suburban) and local economic conditions (growing/stable versus declining). Based on the findings of previous studies of vocational education, the nature of vocational education programs appears to be very different in small town or rural, suburban, and urban communities. The characteristics of the populations and the resources available for services are distinctly different in each setting. The economic health of the community also shapes the types of vocational education services offered. Programs in communities with stable or growing local economics can be expected to operate differently from those whose economies are in decline. By using these two stratification variables to define our sampling frame, we believe that the sample of communities will

be illustrative of a number of different contexts in which the Perkins Act is implemented.

Exhibit A.1 shows the distribution of the 27 communities across the cells of the sampling frame.

Exhibit A.1

Number of Communities in Each Cell of the Sampling Frame

Urbanicity	Economy			
	Growing/Stable		Declining	
	Innovative	Traditional	Innovative	Traditional
Urban (9)	2	3	2	2
Suburban (9)*	2	3	1	3
Rural or Small Town (9)	1	3	1	4
Total (27)	5	9	4	9

*Two suburban districts were subsequently reclassified as small towns when field work was completed.

RESPONDENTS

At the state level, we interviewed program administrators, policy-makers and their staffs. At the community level, we interviewed secondary and postsecondary district-level administrators, school-level administrators and teachers, city/community public officials, and representatives of business and industry. Prospective respondents are described in Exhibit A.2.

DATA COLLECTION METHODS

Case studies were conducted using semi-structured interview guides, combined with a structured reporting form. The structured reporting format included both descriptive questions as well as such analytic questions as the relative importance of Perkins funding. The interview guides and reporting formats were field tested in a large urban community prior to staff training. Each community site was asked to complete the mail questionnaire prior to our field visit, in order to simplify and minimize the intrusiveness of the site visit. A variety of documents, including state and local plans for vocational education, were reviewed prior to field work. These are listed in Exhibit A.3.

Two-person teams of experienced researchers conducted the state and community case studies. All teams visited at least two states and their associated six communities. Exposure of each field team to multiple sites facilitated cross-site analysis.

Each state/community set of studies was conducted in a two-week block, for a total of 20 person days for the state/community combination. During the first week, three person days were spent in the state capital, interviewing and gathering documents on state administration issues. The remaining seven person days were spent in the largest community. In the second week of field work, the team allocated five person days to each of the two remaining communities.

Each team member spent two weeks for writeup of structured reporting forms and displays after each round of site visits. Materials written by one team member were reviewed and discussed with the other, prior to submission.

DATA ANALYSIS PROCEDURES

Case study analysis was cross-case analysis, where commonalities and differences across cases and state-community linkages were explored; and propositions generated and tested.

The qualitative data analysis methods recently reported by Matthew Miles and A. Michael Huberman (1984) was used, and Miles was a consultant to the study on developing data displays and on data analysis. Their methods emphasized well-defined study variables to ensure the comparability of cross-

site data; suggested the development of case studies according to a standardized format to inform cross-site analysis; and encouraged the reduction of data so that simple relational analysis can be conducted.

Their approach also stressed the data analytic responsibilities of the field research staff. Senior field staff participated in designing the overall analytic framework and in preparing data collection and analysis plans as well as instrumentation and reporting formats. Each senior researcher focused on a specific topic area in which she was expert. The assignments were: Christine Wood--special populations; Joann Jastrzab--program improvement; and Mary Ann Millsap-administration. Each reviewed each other's designs, and Millsap and Wood together field tested the materials.

During their site visits, all researchers recorded their daily impressions in an analytic diary which guided topics for next-day interviews and also informs later analysis. Questions for evening meetings of the field team included: what is restricting access of special population groups to vocational education? is there any pattern to program improvement activities in this community?

When field work was completed, researchers wrote up all data in structured reporting formats and data displays, which were then reviewed by the three senior analysts.

About one month after all field work was completed, the field researchers attended a three-day analytic meeting where summary displays were presented by each of the three senior analysts for comment by all researchers. Researchers generated propositions and tested them against their own cases. This intense, joint analysis enhanced final products and served to cross-check that analysts were correctly interpreting each other's cases. Final versions of the standardized case study reports on the 9 states and 27 communities were submitted after the analytic meeting. Secondary documents were also submitted.

Exhibit A.2

State and Local Respondents

State Level

- person to whom state vocational education director reports
- state director of secondary vocational education
- state director of postsecondary vocational education
- person responsible for determining policy about the distributions of Perkins funds
- person knowledgeable about state-wide projects, curriculum development, and state-supported industry-specific training programs (if any) in vocational education
- sex equity coordinator
- a monitor/consultant of Perkins programs at the post-secondary level
- state supervisor for special needs populations
- state special education official, if that office provides vocational education services
- director of Job Training Partnership Act (JTPA)
- key legislative staffer on education issues
- education advisor to the governor
- executive director of state advisory council

Community Level

Community college/technical institute (i.e., the largest institution)

- president
- dean overseeing career/occupational programs
- federal projects officer overseeing Perkins funds
- program directors/faculty of largest demand program (if time)
- career/vocational counselors (if time)

Exhibit A.2
(continued)

State and Local Respondents

Another postsecondary provider with Perkins funds (for example, private technical institute (e.g., Rochester Institute for Technology), proprietary school, or community based organization.

- director
- federal projects officer (if different)
- director of Perkins-funded program (if different)

Community Level

Secondary

- superintendent (e.g., as part of exit interview)
- district director of vocational education
- other central office personnel (e.g., special education, adult vocational education), as appropriate
- a principal of (area or city) vocational high school
- a principal of comprehensive high school
- vocational education director within comprehensive high school
- high school teachers (including some with Perkins funding for LEP, handicapped, disadvantaged, and program improvement)
- high school career/vocational counselors (if time)
- students (informally)

Others in Community

- employer connected with vocational education programs (e.g., member of craft council)
- employer connected with an industry-specific training program
- director of JTPA Service Delivery Area or director of the Private Industry Council (PIC), as appropriate
- person with overview of business/industry climate in the community (e.g., representative of Chamber of Commerce, state-employed regional vocational education official)

Exhibit A.3

Documents

State Level

- state plan submitted to the federal office
- state Perkins application forms sent to districts and postsecondary institutions (includes state guidance for local operations)
- state guidance on evaluation of vocational education programs, as available
- state prepared reports on curriculum development, state goals for vocational education, state initiatives in vocational education, etc., as available
- organization charts of the state department of education and board of higher education (if vocational education also administered there)

Community Level

- local plan submitted to the state for Perkins funding (from both the district and from the postsecondary institution)
- other planning documents on vocational education
- internal documents on student and community demographics if not contained in the local plan