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ABSTRACT

This document, the fifth of five volumes that comprise the final report of the National Assessment of Vocational Education focuses on funding and administration issues related to the Perkins Act. Chapter 1 explores issues in the within-state allocation of federal vocational education resources. It presents findings about actual allocation practices and results, examines allocations from states to school districts and postsecondary institutions and allocations within school districts and postsecondary institutions, and discusses how local recipients spend federal funds. Chapter 2 on state administration of the Perkins Act examines changes in staffing and responsibilities within state offices of vocational education, as well as the interactions between the federal government, states, and localities in implementing the act. Chapter 3 reviews statutory requirements for coordination between vocational education programs and other federal job training programs and discusses coordination efforts at the federal, state, and local level. Endnotes follow each chapter. Appendixes include Perkins Amendments Coordination Provisions, charts, and data tables. A technical appendix describes the methodology used for the major data collection efforts contributing to the final report. A list of 276 references is provided. (YLB)

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VOLUME V

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OF VOCATIONAL EDUCATION

FINAL REPORT TO CONGRESS

VOLUME V

FUNDING AND ADMINISTRATION ISSUES

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July 1994

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PREFACE

This is the fifth of five volumes in the Final Report of the National Assessment of Vocational Education, mandated by Congress in the 1990 Perkins Act and prepared in the Office of Research, Office of Educational Research and Improvement (OERI). The Final Report substantially expands and updates the Assessment's Interim Report, presented to Congress in January, 1994.

This volume contains three chapters, a technical appendix, bibliography, and other reference material. Each chapter has a principal author (or authors), but may also incorporate the work and views of other researchers. The chapters and their principal authors are as follows:

Chapter 1. Allocation and Uses of Perkins Funds — Lana Muraskin (SMB Economic Research)

Chapter 2. The State Administration of the Perkins Act — Lana Muraskin (SMB Economic Research)

Chapter 3. Coordinating Vocational Education and Federal Job-Training Programs — Debra Hollinger, James Harvey (James Harvey Associates)

Chapter 3 is new and has been rewritten since the advance version of this report was delivered to Congress in late June, 1994. The other chapters, earlier versions of which were included in the *Interim Report*, also contain new material, including survey data collected in 1993.

Because of inconsistencies between Chapter 1 of this volume and Chapter 1 of Volume IV in the advance version of the report, we have conducted additional analyses of the uses of Perkins funds and included a discussion of these analyses in the chapter on the allocation and uses of Perkins funds.

While conducted within OERI, this assessment is an independent study and does not necessarily reflect the views of OERI or the U.S. Department of Education.

David Boesel
Director, National Assessment
of Vocational Education

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INTRODUCTION

BACKGROUND

The Perkins Act provides over $1 billion each year to improve vocational programs and help special population students succeed in vocational education. The bulk of the funds are allocated by formula to states and, through the states, to local school districts and postsecondary institutions. States retain a portion of the funds to use for administrative and other purposes.

Many state vocational education agencies are administering Perkins-funded programs with fewer resources than in the past. Education budgets were cut in the early 1990s, and the Perkins Act reduced states' shares of the basic grant funds they receive. The Act also changed state responsibilities in significant ways. State vocational agencies are adapting to their new circumstances by changing priorities, reassigning staff, and sometimes reorganizing.

More broadly, federal education and employment training programs are receiving more attention and scrutiny as a range of events — international competition, organizational restructuring, military downsizing, and new technologies — are dislocating workers and forcing other changes in the economy. Providing employment training to adults and out-of-school youth is becoming a higher priority. As the need for training has increased, it has become evident that the federal government already has myriad training programs, many of them providing similar services to similar clientele. This has raised the question of whether these resources are being used efficiently — specifically, whether the nation can get greater benefit from them by increasing coordination.

ISSUES ADDRESSED IN THIS VOLUME

Allocation of Perkins Funds

The 1984 Perkins Act divided local basic grant funds into program improvement funds and numerous restricted-use set-asides, with each pool of funds allocated by separate criteria. The previous National Assessment found that this approach resulted in funds being scattered and fragmented; few sites received enough to support meaningful change, and funds were not reaching those students most in need of federal assistance.

To improve both grant size and targeting, the 1990 Perkins Act merged much of the set-aside money with program improvement funds and required that these merged funds be allocated based on a formula that heavily weights the concentration of special population students at each site. Minimum grant sizes were also established to ensure that grants are of sufficient size to have an

impact. Districts are allowed to form consortia in order to meet the minimum grant criterion, or to allow area vocational schools to receive funding.

The new provisions of the Act and the development of consortia lead to the following questions:

- How are Perkins funds allocated among and within districts? Are they more concentrated than before the Act? Are they better targeted on special population students? How are they used?

These issues are addressed in Chapter 1, on allocation and uses of Perkins funds, which examines the distribution of funds from states to localities and within localities.

State Administration of Perkins Programs

In response to concern that some states were not using their allotment of Perkins funds appropriately and that localities needed more resources and flexibility to implement the Perkins Act, Congress reduced states' administrative allotment in the 1990 Act, but also added new responsibilities. Prominent among these responsibilities was the development of new systems of performance standards and measures. Since states are important agents in vocational education, there is some concern about the effects of this change:

- Do states have sufficient resources to administer their Perkins programs and carry out their new responsibilities? How are they handling the implementation of the Act's provisions? Has their ability to assist localities been affected?

These questions are addressed in Chapter 2, on state administration of the Perkins Act. It examines changes in staffing and responsibilities within state offices of vocational education, as well as the interactions between the federal government, states, and localities in implementing the Act.

The Coordination of Perkins, JTPA, and Other Federal Training Programs

The federal government supports workforce training through several acts of Congress and numerous federal programs. Training-related legislation includes the Perkins Act; the Job Training Partnership Act (JTPA); the Adult Education Act; the National Apprenticeship Act; the Rehabilitation Act of 1973; the Wagner-Peyser Act; and the Jobs Opportunity and Basic Skills Act (JOBS).

The General Accounting Office has pointed out that there are some 125 federal education and employment training programs for adults and out-of-school youth. Because preparation for employment is an objective of all these

programs and many offer similar services to similar target populations, Congress has historically been concerned about the potential for overlap and duplication of effort, resulting in inefficient use of federal monies. Therefore, Congress has included provisions for cooperation in the authorizing legislation for all the major programs.

To further promote this objective, the 1992 reauthorization of JTPA included a provision authorizing the creation of State Human Resource Investment Councils. These broadly inclusive new councils would replace or work together with the many existing councils that oversee different education and training programs. Moreover, to make it easier for people seeking training to get information about programs, the Clinton administration has proposed One-Stop Career Centers in the FY 1995 budget.

These issues and developments raise a number of questions:

- How much and what kind of coordination are needed? How effective are traditional coordination efforts and arrangements? How are efforts to develop new means of coordination proceeding?

Chapter 3, on coordinating vocational education and federal job training programs, examines these and related issues.

CHAPTER 1

ALLOCATION AND USES OF PERKINS FUNDS

This chapter explores issues in the within-state allocation of 1990 Perkins Act funds. It reviews information presented by the National Assessment in the *Interim Report*[1] on the within-state allocation provisions of the Act and presents findings about actual allocation practices and results.

The chapter provides additional and updated information on allocations from states to school districts and postsecondary institutions. It then examines allocations within school districts and postsecondary institutions, a new focus for federal policy introduced in the 1990 Act. It also discusses how local recipients spend federal funds. Information is drawn from three sources: (a) state-level data on local awards to eligible recipients for fiscal years 1991, 1992, and 1993 (FY91, FY92, and FY93); (b) responses by school districts and postsecondary institutions to the 1993 Followup Surveys of the National Assessment; and (c) case studies of eight school districts. (See the Technical Appendix for discussion of these data sources.)

DISTRIBUTION OF FUNDS FROM STATES TO ELIGIBLE RECIPIENTS

The 1990 Perkins Act tightens federal control over the distribution of federal vocational funds by states to eligible recipients (school districts and postsecondary institutions). First, the legislation prescribes formulas for allocation of approximately three-fourths of the Title II-C, or "basic grant" funds.[2] In previous legislation, only about a third of basic grant funds were allocated through federally prescribed formulas.

Second, the allocation factors in the new formulas are based primarily on student counts for other federal programs — Chapter 1 and IDEA at the secondary level, Pell Grants at the postsecondary level — so they are not subject to the same degree of state and local interpretation as some of the factors used in previous formulas for within-state fund allocation.[3] The intent of the new provision is to concentrate federal resources in school districts and postsecondary institutions with large numbers of disadvantaged and disabled students.

Third, the legislation prescribes minimum grant sizes of $15,000 at the secondary level and $50,000 at the postsecondary level in an effort to forestall local grants too small to aid in improving vocational education. School districts not eligible for minimum awards are encouraged to join consortia to qualify for an award. (A recent technical amendment has extended the consortium provision to postsecondary institutions.)

Although there was considerable debate on this point prior to enactment, the 1990 Act did not take a position on the division of basic grant funds between secondary and postsecondary sectors. Like previous legislation, the 1990 Act left this decision entirely to the states. The legislation did, however, make the decision on secondary/postsecondary division of funds more visible, by requiring states to indicate the expected shares to each sector in their state plans and to explain the rationales for their choices. In states in which 15 percent or less of basic grant funds are allocated to either the secondary or postsecondary sector, the legislation allows that sector to forgo the federally specified formula for the allocation of basic grant funds to local recipients.

The Secondary/Postsecondary Split

Information presented in the *Interim Report* of the National Assessment showed that, nationally, 38.1 percent of local basic grant (Title II-C) funds were distributed to the postsecondary and 61.9 percent to the secondary level in FY92.[4] These rates represent a small decrease from the 40.2 percent of basic grant funds allocated to the postsecondary level in the final year of the previous legislation. State data on local awards updated to include FY93 show that the decline in funds to the postsecondary level continued into the second year of the new legislation, with the postsecondary share of Title II-C funds for FY93 totaling 37.8 percent (Table 1.1). This means that over the two-year period the decrease in Title II-C funds allocated to postsecondary recipients was approximately 6 percent.[5]

It should be noted, however, that the postsecondary share of **all** Perkins funds was slightly higher than its share of Title II-C funds, because postsecondary institutions received somewhat larger shares of funds under other parts of the Perkins legislation. Their greatest proportional share occurred in the state allocation of Title III Tech-Prep awards, where postsecondary institutions received 69.6 percent of the funds awarded in FY92. Nonetheless, combining Title III and all portions of the FY92 basic grant for which local award data were available raised the postsecondary share only a few points, and it did not alter the slight decline in funds to the postsecondary sector between FY91 and FY92.[6]

It appears that even the limited 1990 statutory requirements on secondary/postsecondary shares exerted an impact on state decisions. State-level local award data now available for two years indicate that far fewer states made changes in secondary/postsecondary shares between FY92 and FY93 than made changes between FY91 and FY92. Only one state increased or decreased the share to a sector by 10 percent or more between 1992 and 1993, compared with 10 states between 1991 and 1992. That substantial share changes occurred in the first year of the new legislation but not the second suggests that the statewide needs assessment and share estimates required by the legislation did lead to examination of secondary/postsecondary share decisions. Most of the individual state changes in share allocations that resulted appear to have led to somewhat smaller shares for postsecondary providers.

Table 1.1
Perkins Basic Grant (Title II-C) FY93 Allocations to Secondary and Postsecondary Levels, and Shares to Secondary Level for FY92 and FY93 (n = 44 states)

States	FY93 Allocations		Secondary Share (Percent)		Difference in Percentages
	Secondary	Postsecondary	FY93	FY92	
Alabama	$ 9,081,316	$ 4,643,309	66.2	66.2	0.0
Alaska	—	—	—	—	—
Arizona	11,393,773	1,583,137	87.8	85.6	2.2
Arkansas	6,201,095	2,471,764	71.5	71.0	0.5
California	32,179,158	44,014,730	42.2	45.3	-3.1
Colorado	3,597,489	5,396,235	40.0	40.0	0.0
Connecticut	5,689,030	1,450,201	79.7	78.5	1.2
Delaware	2.564,357	424,975	85.8	85.0	0.8
Florida	16,432,289	14,572,031	53.0	52.8	0.2
Georgia	10,961,821	10,034,589	52.2	50.1	2.1
Hawaii	1,756,443	1,756,443	50.0	50.0	0.0
Idaho	2,412,359	1,154,708	67.6	70.0	-2.4
Illinois	17,633,629	9,759,058	64.4	66.0	-1.6
Indiana	11,213,269	6,423,203	63.6	63.6	0.0
Iowa	4,386,183	4,295,683	50.5	28.0	22.5
Kansas	—	—	—	—	—
Kentucky	—	—	—	—	—
Louisiana	8,073,085	6,343,138	56.0	56.0	0.0
Maine	1,760,841	1,760,841	50.0	52.6	-2.6
Maryland	7,335,550	3,143,807	70.0	70.0	0.0
Massachusetts	10,786,482	3,318,087	76.5	81.1	-4.6
Michigan	16,360,588	10,775,829	60.3	58.0	2.3
Minnesota	2,133,051	9,157,068	18.9	9.2	9.7
Mississippi	5,125,250	5,854,456	46.7	45.7	1.0
Missouri	10,203,239	4,180,361	70.9	70.0	0.9
Montana	2,054,778	1,210,920	62.9	65.0	-2.1
Nebraska	2,419,999	2,419,995	50.0	50.0	0.0
Nevada	2,635,360	878,454	75.0	75.0	0.0
New Hampshire	—	—	—	—	—
New Jersey	13,058,821	4,376,406	74.9	76.7	-1.8
New Mexico	442,528	4,710,449	8.6	7.9	0.7
New York	22,246,005	11,408,092	66.1	66.3	-0.2
North Carolina	14,693,441	6,671,337	68.8	69.4	-0.6

(continued)

Table 1.1 (continued)
Perkins Basic Grant (Title II-C) FY93 Allocations to Secondary and Postsecondary Levels, and Shares to Secondary Level for FY92 and FY93 (n = 44 states)

States	FY93 Allocations		Secondary Share (percent)		Difference in Percentages
	Secondary	Postsecondary	FY93	FY92	
North Dakota	1,989,635	1,101,922	64.4	64.8	-0.4
Ohio	27,324,325	5,504,680	83.2	82.2	1.0
Oklahoma	9,405,842	1,762,950	84.2	84.0	0.2
Oregon	3,906,532	3,892,756	50.1	50.3	-0.2
Pennsylvania	25,930,664	11,043,328	70.1	71.0	-0.9
Rhode Island	3,299,792	291,155	91.9	89.5	2.4
South Carolina	10,187,770	1,629,114	86.2	86.8	-0.6
South Dakota	1,364,485	1,766,287	43.6	41.8	1.8
Tennessee	13,626,882	2,000,000	87.2	85.9	1.3
Texas	31,239,317	23,609,000	57.0	56.1	0.9
Utah	3,767,440	2,511,626	60.0	60.0	0.0
Vermont	2,454,315	613,581	80.0	79.8	0.2
Virginia	13,946,028	2,461,064	85.0	85.0	0.0
Washington	—	—	—	—	—
West Virginia	4,585,637	1,419,375	76.4	77.2	-0.8
Wisconsin	6,218,609	8,202,388	43.1	45.0	-1.9
Wyoming	—	—	—	—	—
Total for states shown	414,078,502	251,998,532	62.2	61.9	0.3

Source: State Finance Record Collection

As of FY93, eight states for which we have administrative data elected to allocate 15 percent or less of Title II-C funds to one sector or the other, thus qualifying for a waiver of the federal formula for that sector. Two states provided 15 percent or less to secondary education, and six states provided 15 percent or less to postsecondary education. In the final year of the 1984 legislation there were also eight states allocating 15 percent or less to one sector or the other, although only three states had done so earlier (in 1987).[7] These findings suggest that the 1990 legislative provision waiving the within-state formula in low-allocation sectors had little effect on state decisions, inasmuch as the number of states allocating a small share to one sector or the other increased only during the years covered by the 1984 legislation.

Allocations to Districts and Consortia

Other trends in allocation identified in the *Interim Report* were sustained into FY93. The *Interim Report* indicated that between the final year of the 1984 legislation and the first year of the 1990 Act (1991–92), the total number of Title II-C awards to eligible recipients decreased and the average dollar amount of local awards increased substantially at both secondary and postsecondary levels. At the secondary level, the number of awards dropped from 7,625 to 3,958, a relative decline of 48 percent. The typical award more than doubled, moving from $44,516 in FY91 to $99,616 in FY92.[8]

The decline in number of awards was accompanied by the creation of consortia of districts. Altogether, 8,170 of the nation's 11,300 school districts with secondary schools (72%) were in consortia in FY92, while 2,825 districts (25%) received individual Title II-C grants. Thus, almost all school districts participated in the Perkins Act, either directly or indirectly. In 16 of the 43 states for which complete data were available, almost all districts were in consortia.

Not all districts in a consortium actually received support, but data from the 1993 Followup Survey indicate that 84 percent of school districts with secondary schools received and used basic grant funds. This is a substantial increase from the last year of the 1984 Act, when about 67 percent of districts were funded. Through the consortium mechanism, basic grant funds are being distributed to more districts than before.

While consortia are widespread and include many school districts, they received only 35 percent of the II-C funds allocated to the secondary level in FY92. Consortium grants were larger than grants to individual districts ($115,342 in contrast to $89,609 in FY92), but the average consortium included about seven school districts.

Spot checks for FY93 show almost no change in the number of secondary awards or the mix of individual and consortium grantees. Information from the Followup Survey of school districts shows a considerable regional difference in use of consortia, with school districts in the Central region of the country much more likely to participate in consortia (Table 1.2). These data also show that districts participating in consortia tend to be small; only 23 percent of the high schools in multiple-school districts were in consortia in FY93.[9]

Allocations to Postsecondary Institutions

At the postsecondary level, the introduction of the within-state formula and minimum grant requirements had important, if less dramatic, effects. Overall, there was a 20 percent decline in the number of local grantees. At the same time, the average award increased 26.4 percent, from $177,116 in FY91 to $223,922 in FY92.[10] Additional information from the Followup Survey shows that, despite

Table 1.2
Percent of School Districts in Each Region With Perkins Title II-C Funds Participating in Consortia, FY93

Region	Percent in Consortia[a]
Northeast	49
Central	82
South	44
West	42

[a] In this survey, the percentage of all districts in consortia is slightly lower than the percentage shown in state financial records data. This should not affect the magnitude of regional differences, however.

Source: 1993 Followup Survey of School Districts

the decline in the number of grantees, 87 percent of eligible postsecondary institutions continued to participate in the Perkins basic grant program, including almost all community colleges (93 percent). It would appear that most of the decline in participation occurred among schools with fewer than 2,000 students and among vocational-technical institutes (Table 1.3). The vocational-technical institutes report a FY93 Perkins participation rate of 79 percent and schools with fewer than 2,000 students show a participation rate of 77 percent.[11]

Targeting Funds on Disadvantaged Students

The implementation of the 1990 Act also led to greater concentration of federal resources in districts and postsecondary institutions with disadvantaged students, although Perkins funds were already somewhat targeted to such recipients. As shown in the *Interim Report*, students in districts with the highest per-student Chapter 1 allocations also received the highest per-student Title II-C Perkins allocations, and their percentage of Perkins funds increased under the new legislation. In FY91, the final year of the 1984 legislation, the quartile of students in school districts with the highest Chapter 1 allocations received 33.4 percent of Perkins funds; in the first year of the new Act that percentage increased to 37.4.[12] In other words, students in these districts received about 40 percent more funds per student than they would have received were awards based solely on numbers of students. Nonetheless, their percentage of Perkins funds remained smaller than their percentage of Chapter 1 funds (42.8%) because Chapter 1 allocations account for only 70 percent of the Perkins formula. At the

Table 1.3
Percent of Postsecondary Institutions Receiving Perkins Title II-C Support by Type of Institution, Enrollment, and Region, FY93

Institution Characteristics	Percent With II-C Support
Type	
Community colleges	93
Vocational-technical institutes	79
All institutions	87
Enrollment	
Less than 2,000 students	77
2,000–4,999 students	93
5,000 students or more	93
Region	
Northeast	89
Central	84
South	83
West	96

Source: 1993 Followup Survey of Postsecondary Institutions

postsecondary level, introduction of the formula increased grants to institutions above the state median for (absolute) number of Pell Grant recipients from 68 percent to 77 percent of Title II-C funds.[13]

There is also evidence of greater concentration of funds in urban areas under the new legislation, although the extent of concentration is not as great as the concentration in school districts with large numbers of disadvantaged students. In the final year of the 1984 legislation (FY91), school districts in the 50 largest cities received 17.6 percent of Title II-C funds, about 7 percent more than they would have received were awards based solely on total city population. In the first year of the 1990 Act (FY92), they received 20.2 percent of the funds, or about 22.4 percent more than they would have received were awards based on city population. Postsecondary institutions in the 50 largest cities received 15.6 percent of II-C funds in FY91, slightly less Perkins II-C funds than those cities' share based on population. In FY92, they received 18.8 percent, about 14 percent more than their share based on population.

DISTRIBUTION OF FUNDS WITHIN DISTRICTS

The 1990 Act provides guidance on the allocation of funds within school districts and postsecondary institutions, a topic not touched on in previous legislation. Among the requirements are the following:

- Funds are to be spent in a limited number of sites or in a limited number of program areas,
- Priority is to be given to sites or programs serving "the highest concentrations of individuals who are members of special populations,"
- Funds are to be spent on programs that "are of such size, scope and quality as to be effective,"
- The schools in which the federal funds are spent must provide services (with state and local funds) that "are at least comparable to services being provided in schools. . .which are not receiving. . .funds."

These provisions are designed to ensure that localities give special population students first priority in funding decisions, without jeopardizing the ability of the schools or programs receiving federal funds to claim other funds as well. The provisions also seek to ensure that funds are spent in a manner sufficiently concentrated to make a difference.

These rules apply to school districts and postsecondary institutions receiving individual grants; the legislation does not specify comparable within-grantee allocation rules for consortia (which encompass 72% of secondary districts). The regulations indicate that consortia are to operate joint projects ("of sufficient size, scope and quality") providing services to all LEAs that belong, with equitable participation of special populations. The rules also prohibit subgrants within consortia to individual districts. Neither the law nor regulations anticipated the allocation situation that developed — that consortia awards would be larger, on average, than awards to individual LEA grantees, and that a typical consortium would encompass more than seven districts. Given the numbers of participating districts, the choices consortia make about which districts/students to serve and what programs to support are of greater consequence than originally imagined.

Suballocations in School Districts With Direct Funding

At the secondary level, most districts with individual Perkins grants report that they offer Perkins-funded services at the district level as well as allocating resources to specific schools or programs. When allocating funds within districts, officials consider the need of a school or program for funds as well as its special population concentrations. There is little evidence that the Perkins requirement to give priority to schools or programs with the highest concentrations of special

population students has led districts to support fewer schools than they would otherwise have supported.

In FY93, 71 percent of regular school districts with individual grants (i.e., those not in consortia) offered at least some services on a district-wide basis (Table 1.4). This finding is important because it means that some funds may not be subject to the within-district allocation guidance in the legislation. Of course, district-wide services (such as counseling, or the cost of a special needs coordinator) may be used more heavily by some schools than by others, even when no funds or personnel slots are explicitly suballocated. Districts may not consider these activities within-district transfers, however, and may not view their decisions about where district-wide staff offer their services, for example, as subject to the within-district concentration rules.

Table 1.4
Within-District Targeting Practices for Perkins Title II-C Funds: Districts With Individual Grants and Districts in Consortia, FY93

District Targeting Practice	Percent Using Practice	
	Districts With Individual Grants	Districts in Consortia
Provides some district-wide or consortium-wide services	71	85
Allocates within district (to programs and/or schools)	86	67
Allocates to specific programs	82	67

Source: 1993 Followup Survey of School Districts

Most school districts with individual grants (86%) do target Perkins II-C funds to particular schools, programs, or both. Targeting to particular programs is the more popular option; 82 percent of the districts that target funds select this approach. Districts that target funds indicate several important determinants of their within-district Perkins allocations (Table 1.5). These include a school or program's need for funds (78% of districts), its number or proportion of disadvantaged students (77%), and its overall enrollment (71%). The "size and scope" of programs appear slightly less important, cited by 67 percent of the

Table 1.5
Criteria in Within-District Targeting of Perkins Title II-C Funds: School Districts With Individual Grants, FY93

Criteria	Percent of Districts Using the Criterion
Need for program improvement funds	78
Number (or proportion) of special population students	77
Number (or proportion) of students in school	71
Size and scope of vocational program(s)	67
Existence of courses that integrate academic and vocational curricula	56
Need to maintain continuity of funding	44
Other	8

Source: 1993 Followup Survey of School Districts

districts that target funds. Considerations that are important to fewer districts include the existence of courses or programs that integrate academic and vocational curricula (56%), and the need to maintain continuity of funding (44%). As noted earlier, the Perkins Act specifies that in allocating funds grant recipients must "give priority. . .to sites or programs that serve the highest concentrations of. . .special populations."[14] These data suggest that, while most districts use the location of special populations as a criterion in targeting, it is just one among several criteria that are often used. About one-fifth of districts (23% of the 86% of districts that target) seem not to be in compliance with this provision of the law.

Although a substantial percentage of districts with multiple schools report that they target to only some of the schools in their districts, there is little evidence that the 1990 Act's guidance on criteria for funds targeting has affected the number of schools receiving support. Fifty-seven percent of the districts with multiple schools report that they target particular schools for receipt of Perkins Title II-C funds.[15] However, these districts report that 64 percent of their high schools received support in FY93, exactly the same percentage of schools as received support in FY91, the final year of the 1984 legislation. The new rules do not seem to have limited the number of schools with Perkins support.

In fact, there was no reason to assume that the 1990 legislation would decrease the percentage of schools receiving support. Evidence from studies of the implementation of the 1984 legislation showed that funds were already targeted on particular schools or programs.[16] The intent of the new rules was to ensure targeting to schools and/or programs with concentrations of disadvantaged students.

Case Study Findings on Directly Funded Districts

Information from case studies of eight school districts with individual grants (the Funding Case Studies) reinforce survey findings and expand our understanding of the within-district targeting of funds. These districts were selected for study because they had major increases or decreases in their basic grant funds under the 1990 Act. Most are large districts and are not typical of all grantees. Almost all of these districts have targeted some resources to specific schools based upon special populations, but there are still substantial resources allocated on the basis of other criteria (Figure 1.1). None of the districts described allocations to **programs** based on concentrations of special need students, although within individual schools this form of targeting was mentioned. In other words, case study districts decided first which schools would receive funds; then, within those schools, some district (or school) staff decided which programs would receive assistance. (However, systematic information on within-school targeting was not collected as part of the study.)

Six of the eight districts explicitly target funds to **schools** with concentrations of special populations, but the proportion of II-C funds targeted varies considerably. Across the districts, the proportions range from almost all basic grant monies in the two smallest districts (with only two high schools) to less than half the funds in some of the largest districts. In most of the large districts, central staff or committees also consider individual school needs for equipment, curriculum materials, or other resources in allocating resources. Their decisions about need play a significant independent role in determining actual allocations to schools, sometimes diluting the effects of targeting on special populations.

In addition, almost all the districts retain funds for services described as district-wide, such as career guidance and vocational assessment, special needs coordinators, in-service training, and administrative staff (such as persons coordinating academic-vocational integration or evaluation). Though the activities are consistent with the purposes of the Act, where these staff provide assistance or these services are used may have little to do with within-district concentrations of special needs students.

When districts in the case studies target resources to schools with special populations, they generally do so on the basis of absolute numbers, not proportions of special needs students. Because of the ways data are maintained, counting mechanisms vary, but one common approach is to add together the

Figure 1.1
Perkins Title II-C Allocation Decisions and Expenditures in Eight School Districts

School District Characteristics	Methods for Within-District II-C Allocation	FY93 II-C Grant Sizes and Expenditures
Large, urban district, 17,000 students grades 9–12, 75% qualify for free/reduced price lunch, 93% minority; 20 comprehensive high schools (1 with strong vocational emphasis), 2 magnet programs (1 is vocational)	Committee of teachers and administrators meets annually to determine allocations. In FY92, it decided to spend funds in all schools but to spend additional funds obtained under new Act (approximately two-thirds of basic grant) in 7 schools with highest numbers of disadvantaged students. In FY93, decided to add 6 more schools on same basis. The rest of the schools will be added in FY94, so that all will be supported at about the same rate.	$1,329,509 1) Learning Centers in all high schools by end of FY94. Each will include computer lab (30 networked PCs), 2 interactive audio-video consoles, and 3 Associate Teachers. Centers will provide academic remediation and career guidance during and after school hours. Main aim: students in vocational classes pass state graduation requirements. 2) Form academic-vocational integration teams at each school and plan activities (Perkins pays for teacher time, equipment, curriculum/materials purchases). 3) Two district-wide officials: job placement coordinator, special populations director. 4) Small amounts for teacher inservice, attending regional and national meetings.
Large, urban district, 20,000 students in 9–12, 32% qualify for free/reduced price lunch, declining enrollment until recently, 8 comprehensive high schools, 1 area vocational facility	All funds described as allocated district-wide, but aide slots are targeted to particular occupational programs in all high schools (more aides are in schools with large LEP populations); guidance program serves all 9th graders; academic-vocational integration program was initially in the area school and is moving into some comprehensive high schools; job placement and exceptional student programs are housed at the area school and rotate to all schools; equipment is primarily for the area school.	$2,000,000 1) $700,000: 24 instructional aides for vocational teachers, including inservice for aides and teachers 2) $800,000: 4 teachers and 1 administrator; curriculum development, materials, and teacher inservice to implement academic/vocational integration 3) $250,000: 3 counselors and 1 support person to implement 9th grade vocational assessment district wide; 3 job placement personnel plus support 4) $250,000: equipment for Learning Center at area school (hardware, software, camera, video, etc.) 5) $140,000: development of vocational programs for special education students

(continued)

Figure 1.1 (continued)
Perkins Title II-C Allocation Decisions and Expenditures in Eight School Districts

School District Characteristics	Methods for Within-District II-C Allocation	FY93 II-C Grant Sizes and Expenditures
Large district with suburban towns, 29,000 students in 9–12, heavily minority, 29% qualify for free/reduced price lunch; 20 comprehensive high schools (5 with extensive vocational education), 2 alternative high schools, 5 special education schools	More than half of funds are allocated to high schools with the highest absolute numbers of disadvantaged students (not proportions) based on duplicated counts (all special population characteristics count equally). In FY92, 5 schools received funds; in FY93, 6 schools were added. Teams at the schools decide on uses of funds and received grants ranging from $16,000 to $81,000 in FY93 based on a district formula. The rest of the funds support district vocational staff and various guidance services (for accounting purposes, these are "allocated" across the schools with Perkins funds).	$941,486 1) 11 schools received grants ranging from $16,000 to $81,000. Bulk of funds have been used for purchases of hardware and software for vocational assessment and academic remediation. Also funds for technical assistants in career and remediation labs, joint curriculum development among academic and vocational teachers, inservice in guidance. 2) Small grants to 2 alternative high schools for support services. 3) $55,000 to develop learning styles assessment for 7th grade students district wide. 4) District-wide services including 3 central office vocational staff, 1 vocational support person in a school, child development aides and other services in alternative schools, additional $41,000 for administration.
Small, rural district, 1,650 students in 9–12, 2 high schools, growing population, few minorities, median income high for state.	All funds are allocated to the high school with the highest absolute number of special population students (the other high school appeared to have a higher proportion).	$48,000 1) $46,000 to establish a second career counseling position at one high school (aimed at special population students without respect to enrollment in vocational education). 2) $2,000 for inservice training.
Medium sized urban district, 11,243 students in 9–12, 60% qualify for free lunch, 9% special education, large percentage are minority; 6 comprehensive, 3 magnet, 2 alternative, and 1 special ed high school; district also feeds to county area school.	District shifts about half of resources across 2 technical and 4 other comprehensive high schools — as one school completes purchases (vocational equipment, career guidance hard/software) funds move to other schools; other half of resources are personnel shown as district-wide services, not funds allocated to individual schools — but in fact the funds support one position at each comprehensive high school.	$980,286 1) Curriculum and equipment purchases for career guidance, special ed career education. 2) 6 career counselors with necessary equipment and supplies.

(continued)

Figure 1.1 (continued)
Perkins Title II-C Allocation Decisions and Expenditures in Eight School Districts

School District Characteristics	Methods for Within-District II-C Allocation	FY93 II-C Grant Sizes and Expenditures
Small poor district near large metro area, growing population, 4,261 students in 9–12, 2 high schools, 90% minority, 50% qualify for free/reduced price lunch at high schools, 6–7% special education	Three quarters of funds go to school with the greatest proportion of special needs students, although the two schools are fairly similar. The school receiving the funds has more vocational programs, however. Within the school, programs needing equipment receive support. The rest of the funds are retained for district-wide staff and other needs.	$101,900 1) $35,000 computers and CAD software for construction graphics drafting program. 2) $15,000 travel for vocational student organizations. 3) $40,000 salaries: special populations coordinator, assessment clerk for data collection. 4) Small amounts for teacher inservice on vocational/academic integration.
Large, urban district, high percentage special needs students, declining enrollment; 4 comprehensive high schools, 5 magnet high schools, district feeds to 3 area schools in county.	No information available on within-district allocations. Under court-ordered desegregation, the bulk of funds are transferred to a county area school district originally designed to serve special ed students. Funds are used for the general support of city students at three area schools in that district.	$1,784,000 1) $1,472,000 transferred to area school district to support full-day tuition and supplemental services (counseling, supplemental and resource teachers, interpreters, special ed teachers) for 396 special population students from district. 2) $71,000 equipment for vocational assessment system, basic skills lab, support staff. 3) $68,000 for guidance/counseling/placement services. 4) $32,000 for program improvement.
Medium sized suburban district in fast growing county; 6 comprehensive high schools, 13,261 students in 9-12, 25% minority.	Funds allocated to schools and programs based on "need" determined by school requests to district staff. An additional consideration has been added with the 1990 legislation: the 2 schools with highest numbers of free lunch and below C students received more funds in FY92 (each had about 1/3 of resources), the schools with greatest numbers of disabled received more funds in FY93 (about 28 percent of resources), and the school with more LEP students will receive more funds next year (it received almost no funds in FY93).	$249,700 1) $63,000, 2.5 FTE special ed salaries (teaching assistant, part costs of 6 job coaches — one for each school — located at work sites, part of work experience specialist). 2) $17,000 aide to auto body program at one school. 3) $24,700 inservice, workshops for vocational teachers across district. 4) $48,000 upgrading automotive mechanic program at one school. 5) $70,000 equipment and other expenses for expanding technology education at one high school. 6) $26,000 district vocational assessment program.

total numbers of special population characteristics (i.e., number of economically disadvantaged students plus number of students with IEPs plus number of LEP students, etc.) with each characteristic counting equally. Schools with the highest total number of characteristics receive the funds. This means that all special population characteristics count equally and that large schools are more likely than small schools to receive funds. One reason this method is used may be that districts do not have individual-level student data available that would allow them to determine the (unduplicated) number of special population students in each school. Only one of the districts in the case studies considers the proportion of special populations to a school's total enrollment in allocations to schools.

At the time the case studies were conducted (FY93), some of the districts were still implementing a system for carrying out suballocations, while others were examining the effects of previous suballocations and making changes. The most common change appeared to be expanding the number of schools receiving funding. The expansion seems to have been motivated by political pressures and a strong sense among administrators about "fairness" to all schools (especially those schools that had built up substantial vocational offerings over the years but did not have high concentrations of special populations). Districts that received substantial increases in basic grant funds under the 1990 Act apparently faced acute pressures to spread these new funds across many schools.

From both the survey and the case study data, it appears that the within-district allocation of basic grant funding needs to be more fully specified. There are several questions: (a) Do the within-district allocation requirements extend to all basic grant funds, including (for example) personnel slots as well as funds for purchases? If so, what procedures should districts use to allocate slots? (b) Should there be rules for the extent of funds concentration — that is, how should districts decide when funds are sufficiently concentrated? (c) How should special populations be taken into account in suballocations — for example, should all characteristics count equally? Should allocations be based on absolute numbers of students or on proportions? (d) Should there be opportunities, over time, to shift some funds among schools independent of their concentrations of special populations, or to favor different special populations (special education students one year, LEP students the next)? Clearly, districts are currently making quite different ad hoc decisions on these matters.

Suballocations for Districts in Consortia

Although most districts in consortia report that services are offered consortium wide (85%), 67 percent report targeting Title II-C funds to specific programs within their districts (Table 1.4).[17] Further, almost half the consortium districts with more than one school (47%) also report within-district funds allocation to specific schools. Both of these targeting rates are lower than the within-district targeting rates for districts with individual grants, but they clearly suggest that consortia are suballocating as well as operating the joint programs envisioned in

the rules. These findings are not surprising, however, given that the average consortium includes over seven school districts and its Perkins II-C grant is larger than the average grant to an individual district. Further, in the Followup Survey, districts in consortia are almost as likely to report that they target basic grant funds to specific schools or programs as are districts as a whole.[18]

THE USES OF FEDERAL FUNDS

The 1990 Act offers more direction on within-district funds allocation but also seeks to provide greater local flexibility in the use of funds. Once they arrive at districts (and schools or programs), federal funds may be used for virtually any activity, so long as the activity provides equitable participation to special populations. Previous legislation had detailed rules for which students could receive support (set-asides for students with disabilities, disadvantaged students, adults in need of retraining) and what the funds could buy (funds under the set-asides for disadvantaged students or students with disabilities could only be used to pay for half of the greater or excess costs of providing services to students who met the definitions). The new legislation allows the funds to be spent for any purpose or student so long as the larger goal is to enhance vocational education in the school or program. This latitude is designed to increase local discretion and enable federal funds to be used for school-wide or program-wide vocational reform.

This new intent to provide flexibility in spending resources was, to a degree, overshadowed by a debate over support services. Much like the previous legislation, the 1990 Act included service requirements for special populations that complicated efforts to draw a distinction between fund allocation rules and the uses of federal resources. The legislation required recipients of funds to assure that they were providing various special populations with support services to enable them to succeed in vocational education. Under the 1984 legislation, states and recipients viewed the set-aside funds as the resources available to provide those services.

The 1990 Act did not clarify the relationship between the support service requirements and federal funds. In fact, it extended the service requirements to postsecondary institutions as well as school districts. Further, in eliminating the set-asides, the legislation appeared to remove what many state and local officials had viewed as unofficial limits on their financial responsibility to provide support services. The new legislation appeared to open the door to use of all basic grant funds for special services. The debate now centered on whether school districts were obligated to provide such services even when federal funds were exhausted, with the original regulations holding that they were not.

Uses of Funds at the Secondary Level

According to survey results, the most frequent uses of Title II-C funds by school districts with individual grants were for purchases of materials, followed by investments in upgrading staff capacity to implement new programs (Table 1.6). They were less likely to use their funds to provide supplemental services for special population students.

Specifically, survey respondents were asked to select which uses their districts supported from a list of 22 possible uses of Perkins basic grant funds. In FY93 the three top choices among individually funded districts were:

- Purchase of occupationally-relevant equipment (82% of districts)
- Purchase of vocational curriculum materials (81% of districts)
- Purchase of materials (computers, software, or curricula) for learning labs or other remedial programs (76% of districts).

Most of the next several choices focused on staff activities or staff development:

- Curriculum development or modification (75% of districts)
- Staff development to support vocational-academic integration (68% of districts)
- Career counseling or guidance activities (68% of districts)
- Other efforts to support the integration of academic and vocational education (62% of districts).

The use of Perkins funds to provide supplemental services for special populations occurred in 60 percent of the directly funded districts, and development or expansion of tech-prep programs in 50 percent, rounding out the top ten uses. It should be noted that supplemental services are not the only expenditures that affect special populations students. For example, learning labs are likely to provide remedial academic assistance, hence they serve educationally disadvantaged students disproportionately. If all the questionnaire categories that identify services for special populations are combined, 87 percent of districts with individual grants are found to have spent Perkins resources in at least one of them. These categories include the purchase of materials for learning labs, adapting equipment for students with disabilities, remedial courses, and special populations coordinators.

The use of federal funds for purchases of equipment and curriculum materials has been noted in other studies of federal vocational education legislation as

Table 1.6
Ten Most-Often-Selected Uses of Title II-C Funds, FY 93: Districts With Individual Grants, Urban Districts, Districts in Consortia, and Postsecondary Institutions

Use Category	Percent Indicating Some Title II-C Funds Used in Category			
	Districts With Individual Grants	Urban School Districts	Districts in Consortia	Postsecondary Institutions
Staff development for vocational-academic integration	68	85	85	61
Other staff development	58	80	65	[a]
Other efforts to integrate academic and vocational education	62	74	71	62
Purchase of occupationally related equipment	82	88	67	77
Purchase of vocational curriculum materials	81	90	72	73
Purchase of materials (computers, software, curricula) for learning lab or other remedial programs	76	88	67	73
Curriculum development or modification	75	81	72	67
Support services for special population students	60	81	53	87
Career counseling or guidance	68	76	69	81
Development of tech prep	50	76	55	[a]
Hiring vocational staff (other than special populations coordinator)	[a]	[a]	[a]	70
Remedial courses	[a]	[a]	[a]	60

[a]Not one of ten most commonly selected uses.

Sources: 1993 Followup Surveys of Schools Districts and Postsecondary Institutions

well. Such uses are essentially one-time expenditures, which means that they do not lock districts into the kinds of multiyear commitments necessitated by spending resources to hire staff or to introduce new programs with extensive development periods. Possible expenditures of these latter types — such as hiring special populations coordinators, hiring other vocational staff, apprenticeship programs — were included in the list of possible fund uses and did not rank among the top ten district expenditure choices. It is important to remember, however, that the fact that many districts indicate they use funds for a purpose does not mean the use commands the greatest share of their basic grant resources.

Directly funded districts with concentrations of special population students spend funds differently than directly funded districts as a whole. As Table 1.7 shows, the quartile of individually funded districts with the largest concentration of special population students spent resources on a wider range of activities than did other individually-funded districts. In particular, they were considerably more likely to spend resources for vocational-academic integration, learning labs, curriculum development/modification, development of new courses, support services for special populations, and tech prep. Spending in more categories does not necessarily mean that these districts spread resources more thinly, however, as this quartile includes many of the largest school districts in the country.

Expenditure priorities reported by urban districts also look different than those reported by all districts with individual grants (Table 1.6). (Seventy-six percent of urban districts with Perkins funding received individual grants.) Urban districts are more likely than others to report that they use federal funds for each of the top ten uses cited above. They are particularly more likely to use federal funds for supplemental services and for various forms of staff development. For urban districts, the use of funds for supplemental services ranks fifth rather than ninth (its rank for districts as a whole).

School districts in consortia were also asked about expenditures, and their responses show some differences from those of districts with individual grants. Districts belonging to consortia were more likely to report using basic grant funds for staff development, particularly that focused on academic-vocational integration (Table 1.6). They were less likely to report using funds to purchase equipment and materials. Consortium members were slightly less likely than individual districts to report using federal funds for support services for special populations, ranking this use 10th. These findings support the notion that consortia tend to offer, or make available, widely applicable services to their participating districts — staff development is probably the best example of that type of service.

Regardless of spending pattern, few school districts consider Perkins Act or other federal funds adequate to cover the costs of services for special populations. Only 13 percent of individually funded districts and 18 percent of districts in consortia

Table 1.7
Individually-Funded Districts' Uses of Perkins Funds, by District Special Population Quartiles (Percent of Districts)

Use Category	Quartile			
	Low	Med-Low	Med-High	High
Staff development to support integration	64	59	55	85
Other staff development activities	67	36	62	63
Other staff efforts to support integration	66	51	61	76
Purchase occupationally-relevant equipment	71	82	76	89
Purchase vocational curriculum materials	75	69	80	88
Purchase material for learning labs	79	56	68	90
Curriculum development or modification	79	56	68	90
Support services for special population students	56	52	63	71
Career counseling/guidance activities	69	63	63	72
Develop/expand tech-prep programs	49	36	48	70
Develop "all aspects" curriculum	34	17	28	41
Adapt equipment for disabled students	19	28	32	40
Remedial courses	23	26	34	32
Special populations coordinator	24	20	36	25
Hiring other vocational staff	36	31	49	51
Establish/expand industry-education partnerships	47	19	36	41
Develop/expand vocational performance assessment	31	26	52	37
Create/expand vocational course sequences	40	41	40	65
Apprenticeship programs	5	8	8	8
Program part of state/local economic development	29	29	20	36
Purchase services from other providers	38	21	19	41
Upgrade teacher competencies at institutions of higher education	57	26	24	34

Source: 1993 Followup Survey of School Districts

report that federal funds fully cover the costs of such services (Table 1.8). Some 45 percent of districts with individual grants and 44 percent of districts in consortia are using non-federal funds as well to pay for these services. In addition, a sizable minority of districts (42% individually funded districts and 39% of those in consortia) provide services only to the extent possible with federal funds.

Table 1.8
Sufficiency of Resources for Services to Special Populations: School Districts With Individual Grants, School Districts in Consortia, and Postsecondary Institutions, FY93 (Percent)

Sufficiency of Resources	Districts With Individual Grants	Districts in Consortia	Postsecondary Institutions
Federal funds cover the costs	13	18	12
Nonfederal funds are also used to cover costs[a]	45	44	74
Federal funds do not cover costs; costs covered only to extent possible with federal funds	42	39	14

[a] Questionnaire to school districts said "only" nonfederal funds were used to pay for services while questionnaire to postsecondary institutions did not include the term "only." Nonetheless, the other response choices exclude only the possibility that nonfederal funds are used, not that nonfederal funds are the only source of funds.

Sources: 1993 Followup Surveys of School Districts and Postsecondary Institutions

Findings on Expenditures From the Funding Case Studies

Among the Funding Case Study sites, the large school districts appear to be using Perkins II-C funds somewhat differently than the smaller districts.[19] Districts with substantial funds are investing in staff more than in equipment (Figure 1.1). Staff supported with Perkins II-C funds include instructional aides, guidance counselors, coordinators of special populations, and teachers or

administrators conducting curriculum development efforts (such as vocational-academic integration). Smaller districts are also hiring staff, but equipment purchases are more likely to figure prominently. Although Figure 1.1 does not display this information, the greatest use of Perkins II-C funds for staff positions seems to be occurring in the districts that experienced large increases in their basic grants under the 1990 Act. Many of these districts, with large concentrations of disadvantaged students, have also experienced severe budget constraints and staff cutbacks in the past several years.

Across the case study sites, equipment purchases are primarily for computers and software for learning centers. In this respect, the case study sites do not reflect districts as a whole, which were somewhat more likely to report purchases of occupationally relevant equipment. In the case study sites, basic grant funds are being used to establish or augment centers that provide remedial academic instruction. Some centers limit their access to students enrolled in vocational courses, while others do not. The equipment used for academic remediation may also be used to provide vocational assessments and career information, however. Since this category of purchase (vocational assessment) was not included in the Followup Survey, some survey respondents may have selected "occupationally relevant equipment" to categorize this type of purchase. Guidance services from central administrative offices are almost always available to all students, not only to students in occupational programs.

Finally, in-service training for teachers appears to be a relatively small expenditure item among the case study sites. It may be that curriculum development activities include substantial resources for in-service training but that the in-service costs associated with curriculum development are not shown separately. In addition, the states provide much in-service training.

Uses of Federal Funds in Postsecondary Institutions

At the postsecondary level, the most common reported uses of basic grant funds are different than at the secondary level, with services for special populations a more common use of funds (Table 1.6). While purchases of materials are also prominent at the postsecondary level, expenditures for support services and for staff play a more prominent role than at the secondary level. Some of the differences across the levels may be due to differences in the ways secondary and postsecondary institutions view their mission and the boundaries of occupational programs, a point discussed further below.

At the postsecondary level, 87 percent of institutions with basic grants report that they use Title II-C funds for supplemental services. Only 12 percent indicate that federal funds are sufficient to meet the need for these services (a rate comparable to the secondary level), but postsecondary institutions are more likely than school districts to indicate that they use nonfederal funds to pay for special

services — 74 percent of postsecondary institutions in contrast to 45 percent of school districts with direct grants (Table 1.8).

The second most common expenditure at the postsecondary level is career counseling or guidance, meaning that the top two expenditure categories entail ongoing staff costs. Purchases of equipment, curriculum materials, and materials for learning labs are ranked next. In addition, postsecondary institutions indicate that hiring vocational staff (such as coordinators or other specialists, teachers' aides, or paraprofessionals) as well as supporting remedial or developmental courses are among their ten most common uses of Perkins funds. These items are not among the ten highest ranked items at the secondary level.

While these findings about differences between secondary and postsecondary uses of federal funds are intriguing, their significance should not be overplayed. In part, the differences in funding choices may reflect differences in the ways secondary and postsecondary institutions view the boundaries of occupational programs. At the secondary level, students are enrolled to obtain a general education, of which occupational training may be one part. Consequently, most instruction, including most remediation and support services, is offered (and funded) within the context of general education. It is not viewed as the responsibility of occupational education. Expenditures under the Perkins Act are likely to be spent on activities linked fairly closely to the responsibilities of occupational programs or to the students in occupational courses. The main exception appears to be vocational assessment and career guidance.

At the postsecondary level (i.e., at community colleges and technical institutes), students enroll to pursue various occupational or academic goals. For those who enroll in occupational programs, the program is the general context for education. All instruction may be seen as focused on helping the student reach his or her occupational goal and hence all expenditures associated with program completion may be seen as appropriate for Perkins funds. These expenditures would include the support of general counseling and remediation.

It is also important to keep in mind that discussions of the uses of federal funds tell us little about how school districts and postsecondary institutions support occupational offerings as a whole. We are observing only a small piece of the funding pie. Estimates generally hold that federal funds account for 4 or 5 percent of the costs of secondary occupational programs (there are no comparable estimates at the postsecondary level). At most, the examination of how recipients spend federal funds can help us understand how school districts and postsecondary institutions use money at the margin, that is, the limited discretionary funding provided by federal Perkins funds.

CONCLUSION

Nationally, about 37.8 percent of Perkins Title II-C funds were allocated to postsecondary recipients in FY93, a 6.4 percent decrease in funds to the postsecondary sector over the first two years of implementation of the 1990 Act. Statutory requirements that states conduct needs assessments and estimate secondary and postsecondary shares in state plans appear to have had an impact on sector shares, as most of the changes in shares occurred in the first year of the new legislation.

A number of changes in within-state allocations identified in the *Interim Report* continued into the second year of Perkins implementation (FY93). These included the decrease in the number of basic grant awards, the increase in the size of remaining awards (at both levels, but especially at the secondary level), and the large-scale formation of school district consortia. Federally specified formulas for within-state basic grant allocations have also resulted in greater concentration of federal funds in school districts and postsecondary institutions with disadvantaged students, as well as in urban areas. On the other hand, because of the widespread formation of consortia, Perkins funds are now disbursed to more districts than they had been in the past.

New Perkins rules for allocations within school districts are being implemented in most districts with individual grants, but a number of implementation issues have arisen. Most districts with individual grants allocate some funds to schools or programs and retain some funds for use at the district level. District-wide services may not be considered subject to the Perkins within-district priority on funding sites and programs with the highest concentrations of special populations. Rules about within-district allocations in the 1990 Act do not appear to have changed the total number of schools receiving support.

Case study findings suggest that administrators balance legal requirements to give priority to schools and programs with concentrations of disadvantaged students, with desires to support schools or programs that need to upgrade offerings or that are seen as high quality and hence deserving of support. The case study sites also reveal that districts making allocation decisions are more likely to consider absolute numbers rather than proportions of special needs students in a school when determining within-district allocations.

School districts with individual grants report that purchase of equipment or curriculum materials is a primary use for some portion of their basic grant funds, followed by expenditures aimed at upgrading staff capacity. Supplemental services are reported as a use of Perkins funds in only 60 percent of the districts, but 87 percent of districts have spent funds on at least one kind of service aimed at special population students. Districts with the greatest concentrations of special population students and urban districts report a somewhat different set of spending priorities, including a greater likelihood of using funds for supple-

mental services. Case study districts, most of which are relatively large, appear to be using Title II-C funds for instructional and counseling staff more than for equipment. Their equipment purchases are likely to be for computers and software in learning labs that offer remediation as well as career assessment and guidance.

Roughly 60 percent of districts say that all needed supplemental services are provided; roughly 40 percent say that these services are provided only insofar as federal funds permit.

Postsecondary institutions report that supplemental services for special populations and career guidance and counseling are the most likely uses of at least some of their II-C funds. This difference from secondary recipients of basic grant funds may not reflect actual differences in services available to special needs students at each level, however, because special needs students in secondary schools receive many support services outside of vocational education. Further, it is important to remember that Perkins funds account for extremely small shares of occupational funds at both levels. At most, the uses of Perkins funds show how districts and institutions spend resources at the margin.

The findings about within-state and within-district basic grant allocations and expenditures lead to a number of specific recommendations for consideration by federal policymakers. They include:

(1) **Specifying the role of consortia at secondary and postsecondary levels.** The 1990 Act and subsequent regulations anticipated that consortia would be used primarily for a limited purpose — to enable very small school districts to band together, obtain relatively small grants, and operate joint projects. Actual consortia are large in dollar terms and involve many districts, although consortia account for only about 35 percent of basic grant funds at the secondary level. **Given their size (and findings about grant suballocations within participating members), it is important to spell out the conditions under which consortia should be formed and operate. It should be emphasized that consortia cannot be bookkeeping entities established by states in order to move resources among districts or institutions independent of the within-state formulas. This issue takes on even greater importance now that the consortium provision has been extended to the postsecondary level.**

(2) **Reconsidering the concept of targeting by program within multischool districts**. At first blush this appears to be a policy of symmetry — it is a means for districts with only one secondary school (or for postsecondary institutions) to concentrate funds in much the same way districts with multiple schools might concentrate on particular schools. Nonetheless, this option is also provided to multischool districts. In case study sites, all of which had multiple schools, we saw no evidence that targeting to programs

with concentrations of special needs students was used exclusively. If some districts with multiple schools did target by program exclusively, however, it could result in funds flowing to programs in schools with both large and small concentrations of special needs students. This would not appear to be the intent of the Act.

Moreover, targeting to programs could serve as an incentive to enroll special population students in the programs that receive funds, which may or may not be in their best educational interests. **Congress should consider the merits of targeting funds to sites but not to programs.**

(3) **Specifying the within-district process of allocating funds to individual schools (or to programs in one-school districts and postsecondary institutions).** This may entail a formula or a set of conditions that should be met. As we have already noted, districts with multiple schools are using different ways of suballocating to individual schools and are suballocating varying percentages of their basic grant funds. (Comparable program-level suballocation information in one-school districts and postsecondary institutions is not currently available.) Several areas warrant additional direction:

- Do the within-district allocation requirements extend to all basic grant funds, including personnel slots as well as funds for purchases? If so, what procedures should districts use to allocate slots, staff time, or other non-money resources?

- Should there be formulas or rules for extent of concentration — that is, how should districts decide when funds are sufficiently concentrated?

- How should special populations be counted in suballocations — should all characteristics count equally, for example? Are allocations based on absolute numbers or proportions equally desirable?

- Should there be opportunities, over time, to shift some funds among schools independent of their concentrations of special populations, or to favor different special population considerations at different times (e.g., special education students one year, LEP students the next)?

(4) **Clarifying the scope of grantee responsibility for support services for special populations**. In one form or another, provisions mandating support services have now been law for a decade, yet there continues to be debate over whether these are directions for the use of basic grant funds or service mandates. In the 1990 Act, the support service requirements were extended to postsecondary grant recipients as well. **There is clearly a need for Congress to state explicitly whether these requirements extend beyond the use of Title II-C funds.**

ENDNOTES

1 U.S. Department of Education (1994), *National Assessment of Vocational Education: Interim Report to Congress.*

2 These funds are distributed under Title II-C, and are called the "basic program" in the legislation. The formulas for distribution of these funds to eligible recipients are described in detail in Chapter 2 of the *Interim Report*.

3 The postsecondary formula is still subject to some differences in interpretation because it is based on the number of Pell Grant recipients **enrolled in vocational programs**, leaving it to states or individual institutions to further define vocational enrollments.

4 *Interim Report*, Chapter 2, Table 2.2. These findings draw heavily on information from Klein, S., et al. (1994), *State Allocation of Basic Grant Funds: A Comparison of the Carl D. Perkins Acts of 1984 and 1990*, MPR Associates.

5 To maintain comparability, Title II-C funding is compared with funding under the handicapped, disadvantaged, and adult set-asides and program improvement funds under the 1984 Act.

6 See *Interim Report*, Chapter 2, Table 2.3.

7 *Interim Report*, Chapter 2, Table 2.2; National Center for Education Statistics (1988), *State Policies Concerning Vocational Education, Survey Report* (NCES 89-420), Table B-1, U.S. Department of Education.

8 These figures have not been adjusted for inflation.

9 This and other information from the Followup Survey are drawn from tables included in Chaney, B. (1994), *1993 Followup Surveys, National Assessment of Vocational Education Programs, Survey Report*, Westat.

10 These figures have not been adjusted for inflation.

11 Schools that fit neither category (community college or vocational-technical institute) indicate a lower participation rate (67 percent) but there are very few such institutions.

12 Because it is not possible to make a break of school districts at exactly 25% of students, 26.7% of students and 3.2% of districts are in the quartile with the highest Chapter 1 allocations. See *Interim Report*, Chapter 2, Table 2.7.

13 *Interim Report*, Chapter 2, Table 2.9.

14 Section 235 (b).

15 Districts with multiple high schools include about 47% of the high schools in the United States.

16 Muraskin, L. (1989), *National Assessment of Vocational Education, Final Report, Volume II, Implementation of the Perkins Act*, U.S. Department of Education. See especially Chapter 2.

17 The wording of the survey question leaves some ambiguity here. The question asked respondent districts whether Title II-C resources were used to provide "district-level or consortium-level services... ."

18 Expenditures are discussed in the next section of this chapter. Eighty-two percent of consortia reported spending funds for specific purposes, as did 84% of all the districts receiving basic grant funds.

19 It is important to remember that few small districts are included in the case study sites.

CHAPTER 2

THE STATE ADMINISTRATION OF THE PERKINS ACT

This chapter examines the role of states in administering the 1990 Perkins Act. It presents data on the size of state staffs administering secondary and postsecondary vocational education, drawn from the 1992 and 1993 Omnibus surveys of state directors of secondary and postsecondary vocational education. It then takes a more specific look at the relationship between state staff, federal resources, and state responsibilities, focusing on the secondary level. That discussion makes use of data from both sets of state surveys as well as state finance data on awards of Perkins funds to local recipients. The chapter explores the role of the federal government in providing states with guidance to administer federal vocational legislation; it is based upon state survey responses and a series of interviews conducted with federal officials. The discussion concludes with a presentation of school district views of state administrative performance. The data for the district perspective are drawn from the 1992 and 1993 Omnibus surveys of districts. (The Omnibus Survey and other data collections are described in the Technical Appendix.)

CHANGES IN STATE STAFFING AND RESPONSIBILITIES, 1990–1993

The *Interim Report* presented evidence that the number of state staff available to administer secondary vocational education declined during the period from 1987 to 1992, and that the remaining staff managed greater resources.[1] Most of the decline appeared to have occurred between 1990 and 1992, a period during which state agencies administering secondary vocational education saw a decline of at least 28 percent in federal vocational funds. This finding suggested that changes in the 1990 Perkins Act that shifted more resources to eligible recipients and away from state agencies probably accounted for the decline in staff. However, it was impossible to attribute the reduction in state staff to legislative changes with much confidence because (a) the nonvocational staff in the same state agencies or divisions also lost staff, and (b) there were no comparable reductions in vocational staff at state postsecondary agencies.

Information updated to include the results of the 1993 Followup Survey continues to show a decline in the vocational staff of secondary state agencies between spring 1990 and spring 1993 (Table 2.1). The average number of state employees engaged fully or largely in administering secondary vocational education declined from 28.6 in 1990 to 24.1 in 1993, a relative decrease of 15.7 percent. Declines in staffing of state vocational administration occurred in 28 of the 42 states for which comparable data exist in both years, meaning that approximately two-thirds of the states have experienced at least some decline. For the median state, staff devoted to administering secondary vocational

Table 2.1
Number of State Administrators of Secondary Vocational Education, 1990 and 1993

Employee Data	1990	1993
Average number of employees in state agency/division where administration of vocational programs is located	57.5	75.1
Average number of employees in state agency/division administering secondary vocational education	28.6	24.1
Median number of employees in state agency/division administering secondary vocational education	25	19.5

NOTE: Data from 42 states.

Sources: 1992 Omnibus Survey of Secondary State Directors; 1993 Followup Survey of Secondary State Directors

education declined from 25 persons in 1990 to 19.5 persons in 1993. Furthermore, these declines occurred at the same time that the average number of overall staff in the same agencies or divisions increased.

To see whether secondary-level state staffing levels are adequate to carry out necessary administrative and leadership activities, we identified two indirect indicators of workload that might show relationships with staff size. First, we observed 1993 staffing levels in relation to federal dollars allocated to secondary education in each state. Second, we observed 1993 staffing levels in each state in relation to the number of secondary-level Perkins grant awards made by that state.

With respect to federal funds, we found that states vary considerably in Perkins dollars per professional staff member at the secondary level (Table 2.2). In 1993, the national average was $694,571 in Perkins grant funds allocated to secondary recipients per employee engaged in secondary vocational administration.[2] The median amount was only $343,363 per employee, however. The substantial difference between mean and median occurs because a relatively small number of states have very large fund-to-staff ratios (which raises the mean), while a substantial number of states spend much smaller amounts per staff member at the secondary level (less than $400,000).

Changes in staffing appear to play a role in increasing the federal dollars allocated per staff member. If we observe separately those states with high and

Table 2.2
Average Perkins Title II-C Funds Allocated to Secondary Education Per Professional Employee Administering Secondary Education, 1993

Perkins II-C Funds Per Professional Employee	Number of States	Number of States with Decline in Staff for Vocational Education, 1990–93	Number of States for Which 1990 Staff Data Are Missing
Less than $200,000	14	2	0
$200,000–$400,000	12	7	2
$400,001–$600,000	3	3	0
$600,001–$800,000	4	2	2
$800,001–$1,000,000	1	1	0
More than $1,000,000	11	10	1

Sources: 1993 Followup Survey of Secondary State Directors; 1992 State Finance Records Collection

low federal dollars per employee in 1993, we find that the states with high dollars per employee were much more likely to have experienced a decline in staff between 1990 and 1993. Of the 10 states showing more than $1 million in 1993 Perkins funds per professional employee for which staffing data are available in both years, all had declines in staff between 1990 and 1993; the median decline in those states was 74 percent. Of the 14 states with less than $200,000 per professional staff person, only two experienced declines in staff during the same period, and the declines were smaller.[3] On the whole, these findings suggest that grant award and monitoring responsibilities of individual staff members are greater in states that had large staff declines than in states that had smaller declines or increases in staff over the period.

To provide a somewhat different gauge of the relationship between staffing and responsibilities or effort, we also observed the relation between staffing and number of awards to secondary recipients. This may be a better indicator of responsibilities than are dollars, because it is a more direct indicator of workload. State officials interact with grantees as entities on most issues, so the number of grantees in relation to staff is a good measure of the effort necessary to implement such Perkins initiatives as academic/vocational integration, standards and measures, or tech prep. Further, we already know that the number

of awards to secondary recipients declined by about 48 percent between the final year of the 1984 Perkins Act (1990–91) and the first year of the 1990 Amendments (1991–92), as consortia were established.[4] This decline is greater than the 15.7 percent decline in state vocational staff overall, suggesting that the relationship between awards and staff may not be as strong as between dollars and staff.

Across most of the states, the range of the grants-per-staff ratio is relatively small (Table 2.3). Twenty-nine of the 43 states for which data are available have five or fewer secondary-level local grantees per professional employee in 1993. Only eight states show more than 10 local grantees per professional employee, and only four of those states have above 15. While not all professional staff are engaged in reviewing local plans, awarding grants, monitoring implementation, or providing technical assistance to grantees, those activities consume a considerable portion of the time of many state vocational administrators.

Table 2.3
Awards to Local Recipients per Professional Employee Administering Secondary Vocational Education and Changes in State Staff, 1990–93

Number of Awards per Professional Staff Member	Number of States	Number of States With 50% or Greater Decline in Staff, 1990–93	Number of States With Less Than 50% Decline in Staff, 1990–93	Number of States With Increase in Staff, 1990–93	Number of States With Change in Staffing Unknown
Less than 1	9	0	2	6	1
1–2.5	8	1	2	5	0
2.6–5	12	3	6	2	1
5.1–10	6	3	2	0	1
10.1–15	4	3	0	0	1
More than 15	4	3	1	0	0

Sources: 1993 Followup Survey of Secondary State Directors and 1992 State Finance Records Collection

States that experienced large staff declines between 1990 and 1993 reported more grants per employee in 1993 than states with small declines, but the differences were not as dramatic as the differences in federal funds per employee shown earlier. Three of 13 states with large staff declines (50 percent or greater) reported more than 15 grantees per professional employee in 1993.[5] The median number of grants per employee was 8.7. In comparison, only one of 13 states with smaller

declines in staff reported more than 15 grantees per professional employee, and the median number of grants per employee for this group of states was 4.0. It should also be noted that 13 states reported increases in staff between 1990 and 1993, and for those states the median number of awards per employee was approximately one.

What stands out in these data, on both federal dollars and local awards in relation to state secondary-level staffing, is a small subset of states that have experienced declines in staffing to the point where it is questionable that they have sufficient staff to implement federal policy. This subset includes three states with declines in staffing of 50 percent or greater that show well over $2.5 million in federal funds per employee, and 42.5, 39.7, and 26 local awards per professional employee in 1993. It also includes one state showing 22.4 local awards per professional staff, but much smaller federal dollars per employee. Since complete data are not available for all states, it is possible that a few more states may fit this description as well.

The data for this analysis may not show all staff engaged in administering vocational programs at the state level. The Followup surveys ask only about personnel in the agency or division responsible for administering vocational education. Some state education departments have cut staff and consolidated or reorganized their operations. Under such circumstances, responsibility for vocational education may be distributed beyond separate "divisions" of vocational education. For example, funds allocation responsibilities may be shifted to a general office responsible for monitoring federal grants. Or, responsibility for implementing standards and measures requirements may be lodged with a department-wide office of evaluation or assessment. Those staff are likely not to be captured in the survey data.[6]

At the **postsecondary** level, staff engaged fully or primarily in administering vocational education increased between 1990 and 1993 (Table 2.4). Combining data from the 1992 and 1993 surveys, we find that an average of 37.3 persons per state administered postsecondary vocational education in 1990, but the number increased to 59.3 by 1993. The percentage increase in average number of staff administering occupational education appears to be almost identical to the percentage increase in overall staff in the agencies in which postsecondary occupational education administration is housed. Median occupational staff sizes are much smaller at the postsecondary than the secondary level, however — 6.4 persons in 1990 and 7.4 persons in 1993. In other words, a few states have very large state-level postsecondary occupational administrative staffs, but in most states the staffs are much smaller.

These findings should be interpreted somewhat cautiously, for several reasons. First, the considerable differences across the states in vocational staff sizes may be due to differences in the ways in which states administer two-year postsecondary education; some states include administrators located at

Table 2.4
Number of State Administrators of Postsecondary Vocational Education, 1990 and 1993

Employee Data	1990	1993
Average number of employees in state agency/division where administration of vocational programs is located	71.5	114.6
Average number of employees in state agency/division administering postsecondary vocational education	37.3	59.3
Number of employees in median state agency/division completing questionnaire	23.5	32.0
Number of employees in median state/agency administering postsecondary vocational education	6.4	7.4

Sources: 1992 Omnibus Survey of Postsecondary State Directors; 1993 Followup Survey of Postsecondary State Directors

individual colleges in their state administrative data while others do not. Further, many states do not have separate state offices for administration of postsecondary vocational programs, meaning that estimates of staff devoted to that activity are likely to be rough. Because of the apparent increase in state staffing as well as the limitations of the postsecondary data, we have not analyzed the relationship between state staffing and federal funds or number of awards.[7]

The reported changes in the number of vocational staff in secondary and postsecondary agencies parallel changes in vocational enrollments. In secondary districts, they are declining, while secondary enrollments in general are increasing. In postsecondary institutions, vocational enrollments are increasing along with all enrollments.

STATE REPORTS ON ADMINISTRATIVE RESPONSIBILITIES

Despite declining staff numbers, state directors of secondary (as well as postsecondary) vocational education report increases in staff time devoted to program oversight and technical assistance activities between 1990 and 1993. These increases have occurred for both state-based functions and initiatives

triggered by the 1990 Act, with Perkins-related activities showing the largest gains. Roughly similar rates of increase in activities are reported at both secondary and postsecondary levels.

In secondary agencies, state officials report increases in the time devoted to a wide range of activities (Table 2.5).[8] The activities examined range from certifying local programs to promoting business/labor partnerships. Of 15 activities listed in the 1993 Followup Survey, the direction of change is positive (i.e., an increase in time is reported) for 12. State officials are most likely to report increases in time devoted to activities directly related to Perkins initiatives. For example, 88 percent of the secondary-level state directors report increasing time devoted to student performance measures and 78 percent report increasing time devoted to coordinating vocational and other educational programs.

Even in the case of the three activities for which the direction of change is toward less state involvement, only a quarter or fewer of the state directors report actual decreases in time spent on those activities. Ironically, while standards and measures development is the item most often cited as an area for increased activity, evaluation of local programs is most often cited as an area of decreased activity. The explanation may be that, in some states, local program evaluations have been put on hold as the states design new performance evaluation systems.

The increases in time devoted to some activities are smaller in states with large declines in staff, but there is no consistent relationship between staff changes and time changes across the activities. For this analysis we divided the states into three groups: those states that showed (a) a decline in staff of 50 percent or greater, (b) a decline of less than 50 percent, and (c) an increase in staff. We then looked at the responses of each of the groups for the activities showing the greatest increase in state staff time.

States with large declines in staff between 1990 and 1993 were less likely than others to report increases in time devoted to coordination of vocational education with other programs and training/technical assistance to localities. (Table 2.6 shows the principal increases. For a fuller presentation of the data, see Appendix Table A-2.1.) States experiencing any decline in staff showed less increase in time devoted to business/labor partnerships. However, the states that reported less than 50 percent decreases in staff actually showed somewhat greater increases in time devoted to most activities than did the group of states with staff increases. The differences across the three groups are not large for most activities, however.[9]

At the **postsecondary** level, all activities except one are reported to be drawing greater attention from state staff, although the number of states reporting increases on many items is somewhat lower than at the secondary level (Table 2.7). Once again, increasing time devoted to development of standards and measures stands out dramatically, with directors in 84 percent of the states

Table 2.5
Percent of State Secondary Vocational Directors Reporting Changes in Time Devoted to Various Activities, 1990–1993

Activity or Responsibility	Increased Time	About the Same Time	Decreased Time
Development of student performance measures	88	12	0
Coordination of vocational education with other education programs	78	12	2
Responsibilities concerning business/labor partnerships	59	29	10
Responsibilities concerning special populations	57	39	2
Training/technical assistance to localities	53	29	18
Distribution/monitoring of federal/state funds (including audits)	51	41	8
Data collection (other than program evaluation)	45	47	6
Professional development	45	43	12
Curriculum development or dissemination	35	37	25
Local program certification/approval	29	53	12
Evaluation of local programs	24	49	27
Responsibilities concerning vocational student organizations	18	65	16
State rules enforcement	16	59	22
Teacher certification	10	67	8
Textbook review /adoption	6	33	18

NOTE: Percentages do not add to 100 across rows because not all states conduct each of the activities.

Source: 1993 Followup Survey of Secondary State Directors

indicating more time devoted to this activity. Increased attention to performance measures has not been accompanied by decreases in actual evaluations of local programs at the postsecondary level, however.

Like secondary directors, postsecondary directors report increases in time devoted to activities directly related to Perkins initiatives. In contrast to secondary directors, however, they are more likely to report increases in other activities as well. The finding about time devoted to performance measures development is dramatic, but it should be noted that the Perkins Act is only one

Table 2.6
Percent of State Secondary Vocational Directors Reporting Increases in Time Devoted to Various Activities in Relation to Changes in State Staff, 1990–1993

Activity or Responsibility	Change in State Staff, 1990–93		
	Decline of 50% or Greater (N=15)	Decline Less Than 50% (N=13)	Increase (N=13)
Development of student performance measures	86.7	92.3	84.6
Coordination of vocational education with other education programs	60.0	92.3	92.3
Responsibilities concerning business/labor partnerships	46.7	46.2	69.2
Responsibilities concerning special populations	60.0	53.8	61.5
Training/technical assistance to localities	40.0	61.5	53.8
Distribution/monitoring of federal/state funds (including audits)	53.3	61.5	46.2

Source: 1993 Followup Survey of Secondary State Directors

of several federal initiatives in standards development for postsecondary occupational programs. Other federal policies aimed at performance evaluation of postsecondary occupational programs may also affect the findings shown here. [10]

As we saw in Volume III, Chapter 2, states devoted considerable time and resources to the development of performance assessment systems in the first years of Perkins implementation. Secondary and postsecondary officials in the vast majority of states indicate that the steps necessary to select measures and set standards have been taken, and that the resulting performance system is beginning to be used. Table 2.8 highlights activities associated with performance assessment and shows a shift over time from development activities (the top of the table) to system implementation and use of results (the bottom of the table). Ninety percent of the secondary state directors indicate that they completed the process of establishing performance standards by 1992–93. At the same time, however, only 39 percent of those directors report that they have evaluated vocational programs using the standards, with 55 percent now in the process of conducting such evaluations.

Table 2.7
Percent of State Postsecondary Vocational Directors Reporting Changes in Time Devoted to Various Activities, 1990–1993

Activity or Responsibility	Increased Time	About the Same Time	Decreased Time
Development of student performance measures	84	12	2
Responsibilities concerning business/labor partnerships	58	38	2
Data collection (other than program evaluation)	56	40	4
Distribution/monitoring of federal/state funds (including audits)	55	41	4
Coordination with state/regional economic planning offices	54	40	2
Training/technical assistance to localities	47	47	4
Responsibilities concerning special populations	44	48	8
Professional development	44	48	4
Evaluation of local programs	37	55	8
Local program certification/approval	24	59	6
Curriculum development or dissemination	18	56	12
State rules enforcement	16	78	2
Responsibilities concerning vocational student organizations	12	50	8
Teacher certification	10	42	4
Textbook review/adoption	2	28	4

NOTE: Percentages do not add to 100 across rows because not all states conduct each of the activities.

Source: 1993 Followup Survey of Postsecondary State Directors

Increasing levels of state activity can also be seen by comparing data on specific Perkins implementation activities from the 1992 and 1993 state surveys. In the area of "all aspects of the industry," where the *Interim Report* showed state-level activity to be lower than for other Perkins initiatives, the contrast is notable. (See Table 2.9. Also see Volume III, Chapter 4.) In 1991–92, only a quarter of the secondary state directors indicated that their offices had issued guidelines on "all aspects" for use in developing local plans, and only 18 percent indicated that their states had adopted definitions of "all aspects." By 1992–93, 49 percent of the directors indicated that their states had issued such guidelines and 39 percent

Table 2.8
Percent of States Conducting Activities to Establish Vocational Performance Systems, 1990–1993

State Activity	Completed Between 1990–1993		In Process, 1993	
	Secondary	Post-secondary	Secondary	Post-secondary
Selected from existing measures	78	78	4	2
Developed new measures	86	88	6	4
Assessed the quality of measure chosen	47	48	29	26
Involved local program administrators in choosing measures	96	94	2	2
Examined existing data to determine performance level	78	64	6	16
Established performance standards	90	78	8	16
Utilized business/industry standards	43	30	12	24
Assessed student performance using standards	35	34	51	52
Evaluated vocational programs using standards	39	36	55	58
Modified programs based on evaluation of results	22	28	51	40
Assessed access of special populations to high quality programs	31	28	51	48
Assessed vocational education in "all aspects of the industry"	19	14	49	46

Source: 1993 Followup Surveys of Secondary and Postsecondary State Directors

indicated that their states had adopted definitions. Increases between the two years in activities related to "all aspects" were slightly greater at the postsecondary than the secondary level. More generally, it appears that states began Perkins implementation by focusing on areas that carried federally prescribed deadlines for implementation, such as establishment of performance systems. They moved on to other requirements, such as implementing "all aspects," somewhat later.

Table 2.9
Percent of States Taking Actions to Implement "All Aspects of the Industry" at Secondary and Postsecondary Levels, 1991–92 and 1992–93

State Action	Action Taken, 1991–92		Action Taken, 1992–93	
	Secondary	Post-secondary	Secondary	Post-secondary
Adopt definition	18	6	39	29
Provide mandatory curriculum frameworks	14	13	14	10
Provide recommended curriculum frameworks	25	15	55	41
Issue guidelines for local plans	25	—	49	—
Provide inservice training for teachers	20	7	29	27
Provide inservice training for counselors	14	4	27	22

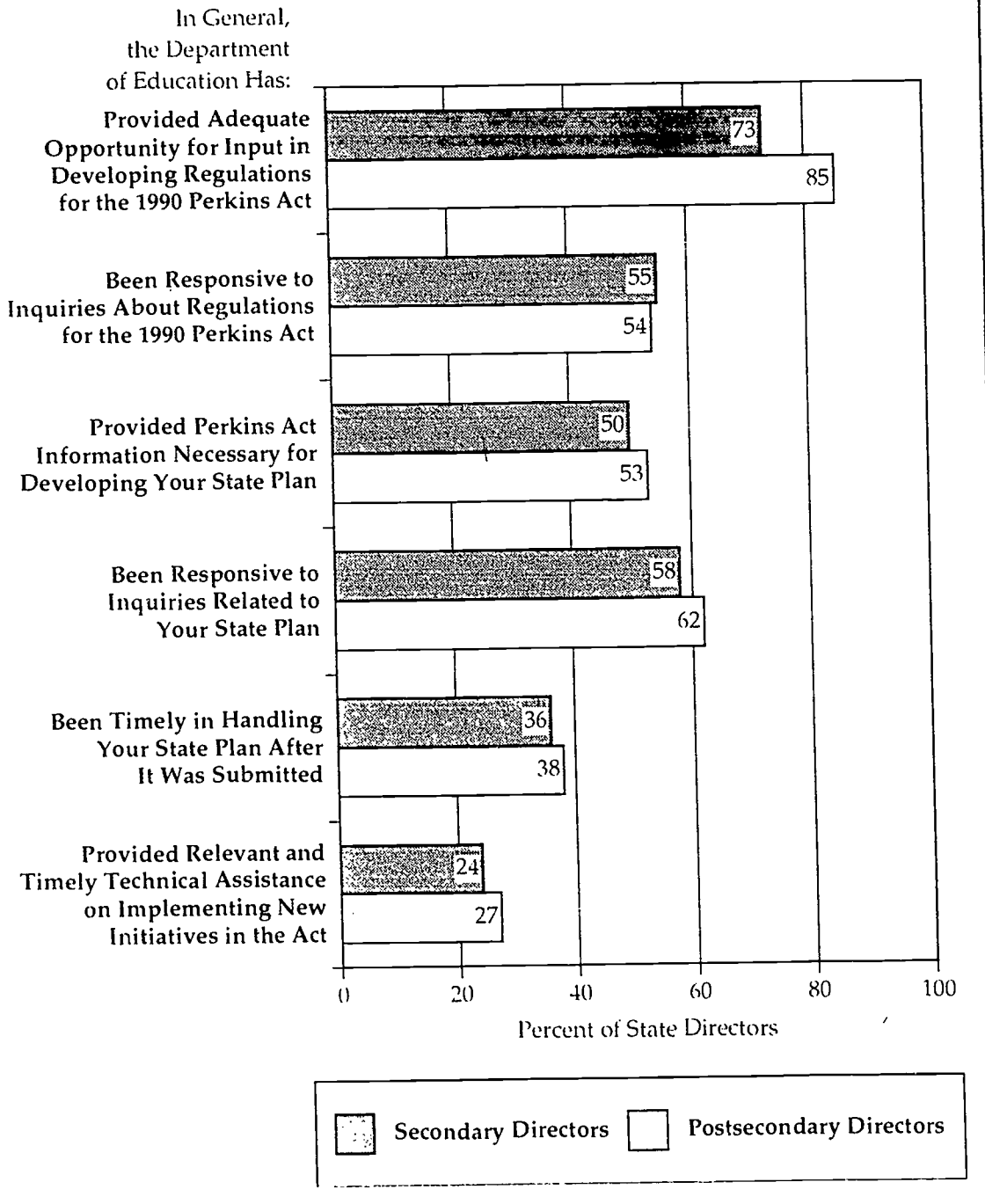
Sources: 1992 Omnibus and 1993 Followup Surveys of Secondary and Postsecondary State Directors

FEDERAL ASSISTANCE IN STATE ADMINISTRATION

State ability to administer federal vocational policy is, in part, a function of the guidance provided to the states by federal authorities. For states to administrator the Perkins Act effectively, there must be clear, consistent direction from the federal level. This direction is provided through regulations and through review and approval of state plans. It is also provided by responses to day-to-day inquiries from states about how to interpret federal law and rules.

The results of the 1992 survey showed that state officials largely viewed federal guidance as positive, but they reported some weaknesses in federal leadership (Figure 2.1). The vast majority of secondary and postsecondary directors agreed that the U.S. Department of Education provided adequate opportunity for input into the development of, and were responsive to inquiries about, federal regulations. However, with respect to approval of state plans (required in order for states to obtain federal funding) and technical assistance on new initiatives in the 1990 Act, the majority of directors at both secondary and postsecondary levels did not view federal action as timely. To understand more about the reasons for state concern, and how assistance might be improved, the National

Figure 2.1
Agreement Rates of State Vocational Education Directors on U.S. Department of Education Assistance in Implementing the 1990 Perkins Act



Source: Omnibus Surveys of Secondary and Postsecondary State Directors

Assessment interviewed federal officials involved in, and reviewed documents pertaining to, rules development and state plan review for the 1990 Perkins Act.

Both rules development and state plan review took far more time than had been legislatively stipulated. The reasons for delays were quite different for the two processes, however. With respect to development of regulations, the initial public input process was conducted in a timely manner, with regional meetings completed within two months of the Act's passage. Negotiated rulemaking required by the legislation was also conducted promptly, but the groups failed to reach consensus on some of the controversial issues with which they were presented, so the process proved to be of limited value to those drafting the regulations. A massive number of comments received in response to the draft regulations (Notice of Proposed Rulemaking) also extended the work of the drafters.

Issuance of the final regulations was delayed largely for bureaucratic reasons. The regulations development process entailed repeated reviews by executive branch offices both inside and outside the Department of Education. There appear to be few limits on how many times regulations can be reexamined, and there is little incentive or pressure within the federal bureaucracy to conduct regulations development in a timely manner. As deadlines are delayed, staffs are likely to change, and new people must learn the issues, further extending the time line. The Perkins legislation called for the issuance of final regulations 240 days after passage of the legislation in September 1990, but the regulations were not issued until August 1992. Delay in the enactment of regulations meant that definitive federal guidance on implementation of the new initiatives of the 1990 Act was not provided to states and localities for almost two years after the enactment of the legislation.

The approval process for state plans was also delayed, primarily because the 1990 Amendments introduced a new dimension into plan review, and Department officials had a difficult time implementing it. Department officials were asked not only to ensure that states had addressed each element required by law, but to review the plans for their quality as well. The 1990 Amendments called for state plans to be approved within 60 days of their submission, but this timetable assumed that evaluation procedures were in place and that states submitted high-quality plans. Defining the dimensions of quality in a plan proved to be quite difficult, and no formal criteria or quality indicators were adopted and provided to states. Instead, the Department carried out a cumbersome plan review process, with multiple reviews of plans and extended negotiations with some states. At the end of October 1991, there were still seven states whose plans had not been approved, although partial funding was released to those states.

Interviewees note a number of ways in which the federal regulations development and state plan review processes could be improved. With respect to

development of regulations, they recommend that the negotiated rulemaking process be reconsidered. The procedure added little to the development of Perkins regulations, and they argue that it seems most appropriate to regulatory agencies where there are essentially opposing parties to an issue and the areas of compromise are clear. Under these circumstances opposing parties might agree to a compromise that avoids costly litigation (e.g., industry and government might agree to certain levels of auto emissions by a certain date). Interviewees also argue that the incentives within the executive branch should be changed to encourage prompt issuance of regulations.

With respect to review of state plans, interviewees recognize the need to develop a clear set of quality indicators that are distributed to states well in advance of their state plan submissions. They now recognize that the quality review process takes considerably greater effort per state than previous state plan reviews and they must adjust accordingly.

LOCAL VIEWS OF STATE PERFORMANCE, 1990–1993

Given federal and state administrative directions, how do localities view the support their states provide to assist them in implementing the 1990 Act? At the secondary level, district vocational administrators provide an alternative perspective on the role of state vocational administration (Table 2.10).[11] They indicate that state support for activities related to the Perkins Act increased considerably between 1990 and 1993. Viewpoints differ, however, based on whether the districts received Perkins funds and among administrators in different regions of the country.

Overall, 70 percent or more of the district vocational administrators reported substantial increases in state support for local activities by 1993, including development of integrated vocational-academic programs, development of tech-prep programs, vocational program assessment, and guidance on providing equal access to vocational programs and services. Only in the area of development of "all aspects of the industry" curricula was increased state support reported by fewer than 70 percent of local officials, but even on this topic 62 percent reported an increase between 1990 and 1993. Administrators in vocational districts generally indicated greater increases in state support than did administrators in regular districts, although both sets of administrators said that state support increased.

These 1993 data from district administrators show a remarkable change in local assessment of state support compared to earlier data. When asked in 1992 to indicate the direction and extent of change in state support for the same set of activities between 1990–91 and 1991–92, far fewer local administrators indicated that state support had increased.[12] For example, only 45 percent of regular district administrators and 62 percent of vocational district administrators indicated that state support for vocational-academic integration increased over

Table 2.10
School Districts' Views of Changes in State Support for Local Activities, 1993

Activity	Percent Saying State Support Increased			Percent Saying State Support Did Not Change		
	Regular/ Vocational Districts	Funded Directly/ Not Funded	Northeast/ Southern Districts[a]	Regular/ Vocational Districts	Funded Directly/ Not Funded	Northeast/ Southern Districts[a]
Development of integrated vocational/ academic programs	74/83	83/44	52/80	24/12	14/51	45/16
Development of "all aspects" curricula	62/75	70/35	41/75	35/23	27/59	55/22
Development of tech prep	79/89	82/59	57/88	19/10	17/35	40/11
Vocational program assessment/ accountability	73/79	79/50	49/89	24/17	18/45	44/9
Guidance on procedures for assuring equal access	70/70	77/59	54/85	26/26	21/38	42/14
State leadership in general	64/59	73/45	47/84	24/21	12/47	37/9

NOTE: Percentages for "regular districts" and "all districts" are the same for all activities. Percentages in rows do not add to 100 because percentages for districts indicating declines in state support have been omitted.

[a] Northeast region administers indicated smaller increases in state support than did administrators in other regions; Southern district data are shown for illustrative purposes.

Source: 1993 Followup Survey of School Districts

that period. In 1993, 74 percent of regular district administrators and 83 percent of vocational district administrators indicated an increase in state support for vocational-academic integration over the three-year period (spring 1990 to spring 1993). In the 1993 survey, 79 percent of administrators in regular districts reported an increase in state support for tech prep between 1990 and 1993, compared with only 58 percent who had reported an increase in state support for tech prep between 1990–91 and 1991–92. These findings indicate that states may have gotten a relatively late start in providing support to localities on issues related to Perkins implementation, but that state support levels are now increasing.[13]

The local responses give further credence to the notion that state administrators of secondary vocational education have been most active on Perkins-related issues. In the 1993 survey, district administrators were more likely to indicate increases in state support for Perkins-related activities than for "state leadership in general" since 1990. Further, administrators in districts that did not receive Perkins support were less likely to indicate increases in state support, not only for Perkins-related issues, but for "state leadership in general" as well.

District administrators in the Northeast are less likely to report increases in levels of state support than administrators in other regions of the country (see Table 2.10). For example, only 52 percent of administrators in the Northeast reported increases in state support for academic-vocational integration, compared to 74 percent of administrators across the country. Since the Northeast contains more states reporting staff declines of 50 percent or greater than does any other region (40% of such states are in the Northeast), this finding may provide some evidence that sharp decreases in state staff affect states' ability to provide services to localities. (The regional difference in vocational staff declines also suggests that regional economics has been a factor in staff declines, as the Northeast has been hard hit by the recent recession.)

As another indicator of changing state roles, district officials indicated a substantial increase between 1991–92 and 1992–93 in the range of topics for which in-service training is available to vocational teachers (Table 2.11). Because in-service training is likely to be sponsored by states, the findings reinforce the notion that state activity related to Perkins implementation accelerated in the second year of implementation. The availability of in-service training on topics related to implementation practically doubled for regular school districts between 1991–92 and 1992–93. Slightly more vocational districts continue to have access to most topics, but the large differences between regular and vocational districts noted in the *Interim Report* are now minimal. The dramatic increase in the availability of Perkins-related in-service training between 1991–92 and 1992–93 once again suggests that while state implementation of federal policy may have started slowly, it is now well underway.

Table 2.11
Availability of In-Service Training in Regular and Vocational Districts, 1991–92 and 1992–93 (Percent of Districts)

In-service Topic	1991–92			1992–93		
	All Districts	Regular Districts	Vocational Districts	All Districts	Regular Districts	Vocational Districts
Integration of vocational and academic education	49	48	77	83	83	94
Tech-prep programs	45	44	72	85	85	95
Student assessment, performance evaluation	39	39	48	78	78	85
Serving vocational special needs students	38	38	64	80	80	86
"All aspects of the industry" curriculum	18	17	24	58	58	61

Sources: 1992 Omnibus Survey and 1993 Followup Survey of Public School Districts

CONCLUSION

Survey data showed declines in the number of state staff available to administer secondary vocational education in most states between 1990 and 1993. States with declines in secondary-level state staffing showed larger amounts of federal funds per 1993 professional staff member. Those states also showed more awards to local recipients per staff member, but most states reported relatively low numbers of awards per staff member. However, a small subset of states showed high federal dollars and 20 or more local awards per staff member at the secondary level. Survey data did not show comparable declines in state staffing at the postsecondary level.

Despite the declines in secondary state staff, states reported increases in staff time devoted to a wide array of oversight and technical assistance functions at both secondary and postsecondary levels. Assistance related to the implementation of Perkins initiatives appears to have increased more than other

types of state assistance between 1990 and 1993. Consistent with Perkins Act emphases, the development of performance standards and measures, and the coordination of vocational education with other programs showed especially large increases. States with 50 percent or greater declines in secondary-level staff showed relatively small increases in most activities, however. There is also evidence that state activities related to implementation of some Perkins initiatives, especially those without specific federal deadlines, may have started somewhat late.

Part of the lag in implementation activities may have been due to delays at the federal level. In particular, development of federal regulations for the 1990 Act and review/approval of state plans took longer than expected. Delays in issuing regulations occurred primarily for bureaucratic reasons, while the delay in approval of state plans was largely due to difficulties in carrying out the legislative requirement to review plans for their quality. The federal officials interviewed urge reconsideration of the negotiated rulemaking process, incentives for speedy regulations development, and a formal set of quality indicators for state plans.

We recommend that the federal government consider ways to speed up the regulations review process and that the U.S. Department of Education develop and disseminate criteria for the evaluation of the quality of state plans.

Finally, secondary-level district administrators are relatively positive about the state role in Perkins implementation. They noted that state support for initiatives included in the 1990 Amendments increased considerably between 1990 and 1993. They also indicated that the increase in state support has accelerated recently, reinforcing the finding that levels of state activity are picking up as design activities end and implementation gains momentum. Administrators in districts with federal funding are considerably more positive about state leadership than are those in districts without federal funds. With respect to one specific service that states are likely to help provide, far more district administrators indicated that in-service training was available in their districts for Perkins-related topics in 1993 than was the case in 1992.

ENDNOTES

1 U.S. Department of Education (1994), *National Assessment of Vocational Education: Interim Report to Congress*, Chapter 3. Comparable changes were not identified at the postsecondary level.

2 This figure (average federal dollars per professional employee) cannot be multiplied by the 24.1 average number of employees to derive the average state allocation to secondary recipients. This is because the number of states from which average dollars per employee were determined is considerably smaller than the number of states for which secondary level allocation data are available, and some of the states with the smallest allocations to secondary education are not included in the staff data. The actual average state allocation to secondary education was $9,323,726 in 1993.

3 The declines were 5% and 36%.

4 For more detailed information on this issue, see the *Interim Report*, Chapter 2. Awards to consortia may systematically require more (or less) state staff time than awards to individual districts, but we do not have any information on this issue.

5 These data are for the 43 states for which complete data are available in both 1990 and 1993.

6 Such overall staff cuts and/or reorganizations may also explain some of the increase in nonvocational staff shown in Table 2.1. It may be that these apparent increases in overall staff actually represent consolidations of staff from multiple divisions within an agency.

7 An analysis of federal funds in relation to staff at the postsecondary level would show a much larger number of federal dollars per professional staff member than at the secondary level, however.

8 These findings update and are similar to those reported in the *Interim Report*, which was based on change between 1990 and 1992.

9 An additional analysis used the three groups to look at whether states with declines in staff were less (or more) likely to make their secondary vocational performance systems applicable to all programs or only to those receiving federal support. There does not appear to be any relationship between staff declines/increases and that choice, suggesting that staff declines did not lead states to narrow the purview of at least part of the Perkins Act when the opportunity was presented in the federal regulations.

10 These include federal initiatives under the State Postsecondary Review Entities and the Student Right to Know Act, both of which call upon states to examine the outcomes of postsecondary vocational programs.

11 Comparable questions on state roles were not asked of administrators of postsecondary institutions.

12 1992 data are shown in the National Assessment *Interim Report*, Chapter 3, Table 3.5.

13 At least in the area of performance systems, we have seen that the states were focused on system development (rather than implementation) until 1992–93.

CHAPTER 3

COORDINATING VOCATIONAL EDUCATION AND FEDERAL JOB-TRAINING PROGRAMS

INTRODUCTION

Critics sometimes charge that the federal government often creates new programs without taking into account similar existing programs. In federal employment training programs, says the National Youth Employment Coalition, this lack of coordination causes resources to be spread much too thinly, burdening state and local administrators with "overlap, duplication, and often conflicting mandates, definitions, eligibility and reporting requirements."[1]

Although most analysts agree that coordination between the vocational education and the employment and training systems should be improved, the foremost researchers on the subject find that the extent of the "coordination problem" is still open to dispute.[2] To study this issue, the National Assessment of Vocational Education included in the Omnibus Survey a series of questions related to coordination. In addition, an extensive review of the literature on the coordination of Perkins, JTPA, and other job training programs was conducted for the National Assessment by Bailis and Grubb; this chapter draws heavily on that review.[3] The Assessment also sponsored an analysis of a state-level restructuring that has won many experts' support: the creation of super agencies or supercouncils.[4]

All studies of Job Training Partnership Act (JTPA) coordination agree that coordination between JTPA and other job-training programs has increased over time,[5] although researchers differ on the speed of increase. However, many national policy organizations[6] have recently concluded that integration of services across programs in the human resource development field is inadequate and that a comprehensive work-force development system is needed.[7]

This chapter provides an overview of issues involved with coordination. It examines the general nature of the concern about program overlap and the need for coordination. It reviews statutory requirements for coordination between vocational education programs and other federal job-training efforts. It explores barriers to coordination and reviews coordination efforts at the federal, state, and local levels. It also discusses the effectiveness of various collaborative efforts such as jointly funded model programs, set-aside provisions, state "supercouncils" of several kinds, and "one-stop" centers. It concludes that, as these programs get closer to their intended clients, cooperation is more visible and more effective, especially in several of the model programs.

OVERLAP AND COORDINATION

Programs for employment and vocational training have multiplied in the United States for more than 60 years, and the opportunity for duplication and fragmentation of service delivery has increased along with them. In July 1992, the General Accounting Office reported to the U.S. Senate Committee on Labor and Human Resources that:

- In fiscal year 1991, there were 125 federal education and employment training programs for adults and out-of-school youth.
- These programs were administered by 14 different federal departments and agencies.
- Many of the programs provided similar services to the same target populations. For example, GAO identified 40 programs that provided counseling and assessment to the economically disadvantaged and 34 programs that provided remedial or basic skills training to this same target group.

GAO concluded that "[t]his myriad of programs creates the potential for overlapping services and confusion on the part of local service providers and individuals seeking assistance. Although multiple programs are an acknowledged problem, many barriers exist to effective program coordination or the integration of program services, such as varying target group definitions, differing administrative rules, and competition between programs."[8] The overlap of services and target groups is shown in Table 3.1.

Congress has attempted to address this issue by including provisions for coordination in legislation authorizing the major employment preparation programs. In authorizing the National Assessment of Vocational Education, Congress directed that it consider the issue of coordination of Perkins programs with other federal employment training programs, including the Adult Education Act, the Job Training Partnership Act, the National Apprenticeship Act, the Rehabilitation Act of 1973, and the Wagner-Peyser Act.

OVERVIEW OF PROGRAMS

The major federal employment and vocational training programs all are intended to improve the American workforce. The purposes, eligibility requirements, and essential elements of each of these major programs are summarized in Appendix Table A-3.1.

Table 3.1
Federal Employment and Training Programs for Out-of-School Youth and Adults Not Enrolled in Advanced Degree Programs

Targeted Groups	Counseling & Assessment	Remedial/ Basic Skills Training	Classroom Occupational Training	On-the-Job Training	Job Search Training	Job Placement Training	Job Creation
Economically disadvantaged	40	34	37	23	26	29	27
Youth under 22 years old	37	36	27	17	17	23	6
Physical or mental disabilities	29	21	21	16	16	22	7
Educationally disadvantaged	10	22	9	5	5	8	4
Unemployed or dislocated workers	20	12	18	13	14	15	18
Veterans	15	11	8	7	7	9	4
Ethnic/racial groups and women	18	8	14	10	8	13	8
Migrant or seasonal farm workers	8	9	5	3	4	6	3
Older workers	9	7	8	6	8	8	5

Source: General Accounting Office Briefing for Congress, July 24, 1992

The purpose of the 1990 **Perkins Act** is to improve U.S. competitiveness by focusing on the academic and occupational skill competencies needed to work in a technologically advanced society. Comprehensive high schools, vocational high schools, area vocational/technical centers, community colleges, and public technical institutes actually provide the vocational training under Perkins. The Act targets resources especially on special population students: the economically and educationally disadvantaged; individuals with disabilities; limited English proficient (LEP) students; single parents; and participants in sex equity programs, among others.

Perkins is different from the other Acts reviewed here because most of its funds are targeted on school districts, schools, vocational programs, and postsecondary institutions, rather than on individual clients. There are no student eligibility requirements for participation in Perkins-funded programs. Rather, a disproportionate share of funds is allocated to educational institutions (e.g., districts, community colleges) in which special needs students are concentrated.

Under the Perkins Act, the Office of Vocational and Adult Education in the U.S. Department of Education makes grants to the states for education services and activities. State education agencies administer these programs and must establish a state council to coordinate planning. Usually the council is a State Council of Vocational Education (SCOVE), but as of July 1, 1993, states may use the State Human Resource Investment Council (SHRIC) established under the Job Training Partnership Act for planning and coordination activities.

The **Job Training Partnership Act (JTPA)**, as amended in 1992, provides training and employment services for economically disadvantaged youth and adults. JTPA is perhaps the most complex of the programs, with a number of different titles:

Title II, 8% Set-Aside for Education Coordination, provides funding for states to coordinate education and training services. This program is discussed in more detail in the section on federal coordination.

Title II-A, Adult Training Program, provides for training and services for the disadvantaged and others who face significant barriers to employment. Most participants must be economically disadvantaged, and at least 65 percent of them must have an additional barrier to employment such as being deficient in basic skills or a school dropout.

Title II-B, Summer Youth Employment and Training Program, provides job and training services for economically disadvantaged youth during the summer. Participants are individuals aged 14 through 21 who are economically disadvantaged or who are eligible for free meals under the National School Lunch Act.

Title II-C, Youth Training Program, is designed to improve disadvantaged youths' long-term employability. Participants are normally aged 16 through 21 years, but in-school youth aged 14 and 15 may participate if provided for in the state's job training plan.

Title III, now the *Economic Dislocation and Worker Adjustment Assistance Act*, provides employment and training assistance for dislocated workers.

Title IV authorizes federal programs for Native Americans, migrant and seasonal workers, and veterans.

All JTPA programs are administered by the Employment and Training Administration of the U.S. Department of Labor. JTPA requires no state matching funds, except for a 100 percent matching under the 8 percent set-aside provision of Title II. The state designates a local Service Delivery Area (SDA), determines how the SDA uses the federal grants, and sets goals and objectives which include coordination with other agencies. States must use Private Industry Councils (PICs), with public sector members from Employment Service, welfare agencies, and economic development agencies, to advise on training plans and services. However, the Job Training Reform Amendments to JTPA (September 1992) authorize the voluntary creation of State Human Resources Investment Councils (SHRIC), which may replace the State Job Training Coordinating Council. SHRICs are discussed in more detail in the section on coordination efforts at the state level.

JTPA is administered through local institutions such as community-based organizations, proprietary schools, private firms, and labor unions. Some services, however, are delivered through community colleges, technical institutes, high schools, and vocational schools. Classroom-based vocational training, on-the-job training, and pre-employment training are the services most commonly provided.[9] Other services include assessment, employment counseling, job placement services, remedial and basic education, pre-employment or motivational/work maturity training, and work experience or trial employment. These programs are generally designed to provide short-term training and to find employment for the client as quickly as possible (although some JTPA clients do enroll in associate-degree or certificate programs at postsecondary institutions).

The **Adult Education Act** helps states educate adults who lack basic literacy skills, defined as the ability to read, write, and speak English, to compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and to develop one's knowledge and potential. In addition to helping adults acquire basic literacy skills, Adult Education programs help participants find job training and subsequent employment, complete their education to at least the secondary level, and school their own children in basic literacy skills. Eligible participants are undereducated adults aged 16 and older who are not enrolled in secondary school. Special emphasis is placed on adults whose basic skills are at the fifth-grade level or below.

Under the **National Apprenticeship Act**, enacted in 1937, the Department of Labor brings employers and employees together to encourage establishment of apprenticeship programs. These programs combine classroom instruction and on-the-job training ranging from two to five years to prepare candidates for a highly skilled trade, and award them nationally recognized certification. In general, the program is open to anyone at least 16 years old who is physically able to do the work of the trade, but some trades have additional eligibility requirements such as a high school diploma or passage of an entry examination.

The actual programs are voluntarily operated by employers, employee associations, or management and labor groups, although DOL provides technical training to program sponsors. Costs are shared by the apprentice, who usually receives reduced earnings, and the employer, who pays for training costs. These are traditional apprenticeship programs, often involving labor unions and often found in the construction trades. They are different in important respects from the new youth apprenticeship programs described in Volume III, Chapter 6.

Under the **Rehabilitation Act of 1973**, the Rehabilitation Services Administration, Department of Education supports programs of vocational rehabilitation and independent living for individuals with disabilities in order to maximize their employment, independence, and integration into the workplace and the community. Title I provides vocational rehabilitation services to persons with disabilities so they may engage in gainful employment. Services include vocational counseling, vocational training, assistive devices, interpreter services, reader services, supported employment services, and job placement. State vocational rehabilitation counselors provide some services directly to participants and arrange for other services from providers in the community.

The **Wagner-Peyser Act** establishes an Employment Service (ES) to provide job-placement services without charge to jobseekers and employers. All employers seeking workers and persons legally authorized to work in the United States are eligible, with priority given to veterans, especially veterans with disabilities. States are required to provide job counseling for persons with disabilities, and may provide specialized assistance to youth aged 16 to 22, women, older workers, rural residents, and the economically disadvantaged.

The Employment and Training Administration, Department of Labor, administers a nationwide federal-state network of local ES offices funded through grant agreements with each state. ETA provides general direction, funding, and oversight as well as technical assistance in test development and occupational analysis. Federal law requires states to affiliate with the ES in delivering employment services — such as labor exchanges and job matching programs — to residents.

The agencies that actually provide the services are the State Employment Services or State Job Services through almost 2,000 local Employment Service (or Job Service) offices. ES programs include labor market exchange to assist workers in finding jobs and employers in filling job openings; job counseling, testing, and referral; work test requirements of the state unemployment insurance system; services for handicapped persons; migrant seasonal farm workers' programs; and priority services to veterans.

The **Job Opportunity and Basic Skills** (JOBS) program is a welfare-to-work program that has become a high priority for the federal government, with interdepartmental task forces working to coordinate the efforts of the

Department of Labor, the Department of Education, and the Department of Health and Human Services. Like the Perkins and JTPA programs, JOBS requires a high level of cooperation with education and job training programs at the state and local level. Because both JOBS and JTPA are designed primarily to help find employment for the unemployed, the issues of coordination with vocational education are quite similar. For this reason, the JOBS program is included in this analysis, although Congress did not specify it for inclusion.

JOBS was authorized by the Family Support Act of 1988, a law enacted to provide public assistance applicants and recipients with education, job training, and work activities to help them achieve self-sufficiency. Under the statute, states must establish a JOBS program, and all welfare recipients with children over age three (or over age one at state discretion) must register for it.

JOBS offers a wide range of work-related preparation including basic and remedial education, job skills training, and postsecondary education. States are required to provide: high school education or high school equivalency programs; basic literacy education; English as a second language; job skills training; and job readiness, job development, and job placement activities. States must also provide at least two of the following: group and individual job search, on-the-job training, community work experience, or work supplementation. Child care, transportation, and other support services needed to permit participation must also be provided.

To qualify for enhanced federal funding, states must give priority to four target groups: parents under age 24 who have not completed high school and are not enrolled in high school; recipients who have received AFDC for at least 36 months during the last 60; parents under age 24 with little recent work history; and any member of a family in which the youngest child is within two years of becoming ineligible for AFDC because of age.

The Department of Health and Human Services administers the program. Services are funded by states with federal matching funds. States are given wide discretion in structuring their JOBS programs, determining which mix of services to offer to clients, and designating service providers. The entities providing JOBS services include public schools, community colleges, universities, community-based organizations, state ES offices, vocational/technical schools, and others performing under contract with DOL, JTPA agencies, and private organizations.

COORDINATION REQUIREMENTS IN FEDERAL LAW

All of these programs include provisions for coordination. Virtually all of the job-training statutes require coordination with JTPA and many require coordination with Perkins, as indicated below.

The **Perkins Act** includes a number of coordination requirements related to federal agencies, states, and local education agencies (LEAs). States must conduct joint planning and coordination of their programs with those conducted under the JTPA, the Adult Education Act, Title I of the Elementary and Secondary Education Act of 1965, the Individuals with Disabilities Education Act, and the Rehabilitation Act of 1973, and with apprenticeship programs. The 1990 Perkins Amendments require that each State Council on Vocational Education include representatives from business and industry, labor, and vocational schools and programs, as well as experts on special education or the needs of selected target populations, to oversee and report on the state's coordination efforts. SCOVEs must independently evaluate the state's effectiveness in coordinating its vocational education system with its job-training system, and recommend actions to the State Board for Vocational Education to improve vocational education in the state.

These requirements are almost entirely procedural. They mandate that programs conduct **joint planning** by consulting with one another on how to avoid duplication or refer individuals among programs. However, a 1990 survey of welfare services agency directors found that joint meetings of advisory councils was the coordination method thought the **least** likely to be effective.[10] The **joint delivery** of service, however, goes beyond conferring and consulting. Agencies can subcontract with one another to provide services and can actually develop new ways of delivering education and training services.

JTPA requires that governors issue criteria for coordination to every SDA in the State. A State Job Training Coordination Council is responsible for overseeing and reporting on the state's coordination efforts. Before SDAs can receive JTPA resources, they must submit a Job Training Plan that discusses how they will meet the governor's coordination criteria. The plan must describe measures taken by the state to ensure coordination and avoid duplication between state agencies administering the JOBS program and those administering the programs under Title II of JTPA.

JTPA sets aside 8 percent of a state's Title II-A allocation to fund coordination of vocational education and job training. McDonnell & Zellman[11] found that 80 percent of the states have placed priority for use of the 8 percent set-aside on coordination between JTPA and vocational education.

The **Adult Education Act** requires that the state plan for adult education be reviewed by the JTPA State Job Training Coordinating Council and by the state-level boards or agencies responsible for vocational and postsecondary education. In addition, local providers must coordinate with agencies offering similar services to the same adult population under JTPA and JOBS.

The **National Apprenticeship Act** does not specifically address coordination with vocational education. However, the Departments of Education and Labor

collaborate in determining how vocational education can support apprenticeship programs and by providing technical assistance workshops to state agencies.

The **Rehabilitation Act of 1973** requires that states provide for interagency cooperation among the state agencies administering a number of programs, including JTPA and the Perkins Act.[12] State plans must provide assurances of maximum use of vocational or technical training programs that already exist in the community. States must also have a formal interagency cooperative agreement with schools in order to provide school-to-work transition for students with disabilities.

Wagner-Peyser Act funds can be made available to any program of the Perkins Act or JTPA. The local Employment Service must jointly develop a plan with each appropriate private industry council and chief elected official for the SDA. Each local plan must be submitted to the State Job Training Coordination Council, which certifies that the plans are consistent with the governor's coordination and special services plan under JTPA and that the private industry council and the chief elected official have jointly agreed to the plan.

By law, the **JOBS** programs must be coordinated with JTPA programs and any other relevant employment, training, and education programs available in the state. In addition, the State Job Training Coordinating Council must review the state JOBS plan, and, at the local level, welfare agencies must consult with JTPA's Private Industry Council concerning the types of jobs available or likely to become available in the area, and concerning arrangements and contracts for JOBS programs.

In summary, the purposes, eligibility requirements, administrative requirements, responsible agencies, and delivery systems for these programs are so varied that it is not surprising to find coordination a subject of concern for many researchers, state administrators, and service providers.

BARRIERS TO EFFECTIVE SERVICE DELIVERY

In a 1994 review for the National Assessment, Alt[13] identified several barriers to effective delivery of job-training services: scattered locations for service delivery; different eligibility requirements for clients; various definitions of terms such as *income* and *family income*, *long-term welfare recipient*, and *displaced homemaker*; variations in program timetables; and differences in accounting procedures, reporting requirements, and levels of review by state, regional, and national administrators. These barriers may create unintended overlap among programs, the kind of duplication of services that coordination can minimize.

Overlap Among Programs

Our review of the statutory requirements for the programs assessed in this chapter did find many areas of potential overlap, especially in groups served and services provided. Two tables indicate specifically which target groups (Table 3.2) and services (Table 3.3) are covered by more than one of the programs specified in the Perkins mandate for the National Assessment.

As shown in Table 3.2, most of the programs target a myriad of groups. Perkins and JTPA are the most far-reaching: Perkins and JTPA II-A (Adult Training Program) each targets two different populations (12 groups) and JTPA-C (Youth Training Program) targets 11 groups. Many of the target populations do overlap:

- All but two of the programs target youth.
- All but two of the programs also serve adults.
- The economically disadvantaged, persons with disabilities, and school dropouts are also popular target groups.

With the exception of supported employment (offered only by vocational rehabilitation), all of the different types of services in these programs are offered by more than one program (see Table 3.3). Classroom vocational instruction, remedial and basic education, and job placement and referral are among the services that most commonly overlap. JTPA's services overlap with virtually all of the other programs (supported employment under vocational rehabilitation is the only exception), and JOBS also offers quite a few overlapping services. Perkins offers eight different types of services, many also provided by two or more of the other programs.

When these two comparison tables (Tables 3.2 and 3.3) are considered together, they indicate that these programs often do offer the same services to the same target groups. For example, Perkins overlaps with virtually all of the other programs because Perkins funds can be used for just about any kind of educational service or activity related to vocational programs in secondary or two-year postsecondary institutions. Most vocational programs get some Perkins funds; those with the highest concentrations of special population students receive the most money.

Virtually all of the other programs included in this analysis also provide some services to a given target group that overlap with another program's service delivery.

Table 3.2
Comparison of Target Groups Identified in Each Program

Target Population	Program								
	Perkins	JTPA II-A	JTPA II-B	JTPA II-C	Apprentice-ship	Voc. Rehab.	Wagner	JOBS	Adult Ed.
Youth	X		X	X	X	X	X	X	
Children receiving foster care	X	X							
Adults	X*	X			X	X	X	X	X
Adults needing retraining		X					X		
Economically disadvantaged	X	X	X	X			X		
Welfare recipients		X						X	
Handicapped/ persons with disability	X	X		X		X	X		
Pregnancy or parenting/ single parents	X			X				X	
Women/ participants in sex equity	X	X					X		
Basic skills deficient	X	X		X					X
School drop-outs/not enrolled in secondary school		X		X				X	X
Limited-English proficient	X	X							X
Chapter 1 participants	X			X					
Eligible for free meals	X		X	X					
Runaways				X					
Homeless		X		X					
Offenders/ incarcerated	X	X		X					X
Veterans						X	X		
Older workers							X		
Rural residents							X		

* Including postsecondary students.

Table 3.3
Comparison of Services Provided by Each Program

Service	Program						
	Perkins	JTPA	Apprentice-ship	Voc. Rehab.	Wagner	JOBS	Adult Ed.
Counseling and assessment	X	X		X	X	X	
Remedial/basic education	X	X				X	X
English as a second language	X	X				X	X
High school education or equivalency		X				X	
Pre-employment/ motivational or work maturity/job readiness training		X		X		X	
Classroom vocational instruction	X	X	X	X		X	
On-the-job training		X	X			X	
Customized training		X					
Work experience/trial employment	X	X				X	
Job referral/labor market exchange		X		X	X		
Job placement	X	X		X	X	X	
Support services (child care, transportation, etc.)	X	X		X		X	
Assistive devices/ interpreter or reader services	X	X		X	X		
Supported employment				X			

Differing Definitions and Administrative Rules

Although target groups and services are duplicated across these programs, the administrative requirements rarely are. In 1993 testimony to Congress, the General Accounting Office noted that differing administrative rules, such as planning cycles, accountability, and data collection requirements all serve as significant barriers to coordination.[14] These conflicts do occur in the programs analyzed in this report:

- The fiscal year is the same for all programs (October 1 through September 30) except for Perkins, which uses a fiscal year of July 1 through June 30, and the Apprenticeship Program, which has no fiscal year or program year.
- The program year is usually the school year (July 1 through June 30), except in the Vocational Rehabilitation, JOBS, and JTPA's summer youth program.
- Almost every program has a different planning cycle.
- Most programs require annual reports, but some (Wagner-Peyser and JOBS) require quarterly reports.

GAO found that the 125 employment and training assistance programs it reviewed had varying definitions of the programs' target groups. For example, the definition of "economically disadvantaged" may include any or all of the following factors for program eligibility: level of income, ability to pay, welfare status, and residency in a depressed area.

GAO concluded that these variances served as a significant barrier to coordination because they created confusion among programs that served the same target populations and also barred some programs from serving the same target groups. Finally, GAO found that coordination is hampered by fragmented control of funds. Some programs give control to state administrative agencies while others give control to local administrative agencies or even local service providers. GAO also described coordination among the myriad programs as being difficult because "funding channels resemble a sieve rather than a funnel."[15]

More detailed information about the definitions and administrative rules of each of these programs is summarized in Appendix Table A-3.1.

Summary

In short, the potential for overlap, duplication, and fragmented effort is high at the local level. Virtually all of the programs included in the analysis above provide some services that overlap with other programs. Moreover, differing definitions for eligibility and variations in administrative requirements in areas such as planning, accountability, and data collection all serve as significant potential problems.

GOALS OF COORDINATION

Most policymakers and analysts believe that improving program coordination can help achieve three goals: eliminate duplication; avoid unnecessary competition among providers; and improve effectiveness.

Eliminating Duplication

The concern most often expressed about federal employment preparation programs is that they may be offering essentially the same services to the same individuals. Since each entity offering a potentially duplicate service (e.g., a community-based organization and a community college) has overhead costs, many policymakers fear that tax dollars are not being spent as effectively as possible, thereby reducing the number of individuals benefiting from the programs or the impact of the programs on them.

However, in a literature review conducted for the National Assessment, Bailis and Grubb[16] found that a number of case studies of state and local JTPA coordination with vocational education "failed to find empirical evidence of widespread duplication or waste." According to a 1990 study by the National Center for Research on Vocational Education, state and local officials offer several explanations for the lack of duplication:

> [T]he explanations [the agencies] offer for the absence of duplication include the differences between the types of people served by vocational education and JTPA, since JTPA generally serves adults with less education and less labor market experience than adults in vocational education programs; the differences in the services they provide, since JTPA provides more job search assistance, on-the-job training, placement services, and other support services such as counseling, child care, and transportation than do educational institutions; and the differences between the shorter-term training offered by JTPA and the longer-term training common in vocational education.[17]

These explanations do not address the fact that JTPA also serves some out-of-school youth and does enroll some of its clients in longer-term associate degree programs; however, the bulk of the argument stands.

An earlier NCRVE analysis of case studies in seven states concluded that many complaints about duplication were actually "turf battles" or efforts of one program to demonstrate its own effectiveness by comparison with the wastefulness of another.[18] NCRVE found that "specific cases of alleged duplication usually proved to be two programs that served different groups of individuals, or provided somewhat different services, or were programs that had gone out of existence".[19]

Grubb and associates did find some instances of duplication, however:

> **Equipment and facilities**. For example, a JTPA program may purchase word processing or welding equipment for its program even though a nearby educational institution already has similar equipment that may not be used to its full capacity.
>
> **Assessment**. A client may be referred to different organizations, each of which does its own assessment (e.g., a client may be assessed by an SDA upon recruitment, then by a community-based organization for a job readiness program, and then again by a community college for basic skills training).
>
> **Placement services**. A firm may be routinely contacted by a number of different organizations in the same community concerning job vacancies.
>
> **Administration**. Each program has a number of layers, each with its own administrative staff and costs (e.g., JTPA SDAs typically contract with community-based organizations, community colleges, adult schools, and so on, each of which has its own administrative unit).

Such duplication is often difficult to correct. In the case of duplicative equipment, for example, there may be problems in scheduling classes to meet both programs' needs. In the case of administrative costs, there may also be costs associated with coordination. Grubb and McDonnell[20] even go so far as to assert that some duplication may be constructive:

> Under the right circumstances, such redundancy . . . can also make the overall policy system more flexible and able to generate new alternatives. The challenge is to create conditions that facilitate the beneficial effects of redundancy and avoid its inefficient aspects.

Avoiding Unnecessary Competition

Most advocates of coordination in public programs argue that competition among programs is wasteful and inefficient. For example, if a community-based organization and community college are competing for a JTPA contract, they might refuse to share information or participate in joint planning for fear of giving the opponent an edge in the competition. With cooperation rather than competition, a joint program serving a larger and more varied group of clients might have been possible.

On the other hand, if a provider gets JTPA contracts for a number of years without competing for them, the application process may become pro forma. Competition can generate better programs by stimulating providers' efforts to raise quality or lower costs in order to prevail over competitors.

Grubb and associates point out that competition can be destructive if education and training programs win contracts on the basis of political power, irrational selection processes, custom, or other irrelevant criteria, rather than on the basis of effectiveness or cost. In their research, they found isolated instances of destructive competition, primarily caused by local interest group politics, but no widespread pattern.

Improving Effectiveness

Eliminating duplication and avoiding competition may improve efficiency. But policymakers have been criticized for focusing too narrowly on efficiency and neglecting the issue of effectiveness.

The former Inspector General of the Department of Health and Human Services criticized the job training system harshly as "highly fragmented, characterized by multiple programs with limited goals offering services that are often duplicative, lacking in accountability, and inattentive to long-term client needs,"[21] and there is general agreement that:

- Clients may spend a great deal of time locating service sites, filling out multiple forms, and taking repetitive tests.
- Service providers may not have access to information that would help them to better serve participants, such as the amount and success of any previous training.
- Programs may not offer needed support services such as case management, child care, and stipends, and providers may not help clients obtain services offered by other programs.

- Service providers may not inform clients about other programs that would be useful to them.

In a review for the National Assessment, Alt discovered that lack of information-sharing especially lowers the effectiveness of job training programs:[22] Some prospective clients are discouraged by the amount of time required simply to gather basic information about their options; job listings are scattered and disorganized; agency staff are unable to track clients' progress or evaluate the effectiveness of programs outside their own areas of responsibility.

Summary

In sum, analysts believe that, despite the potential for overlap, duplication of services to specific clients is not a major problem at the local level, although some redundancy exists in areas such as equipment and facilities, assessment and placement services, and administrative costs. There appears to be no hard evidence of wasteful competition at the local level. Nonetheless, policymakers continue to stress potential problems inherent in a highly fragmented job-training system, and National Assessment reviews indicate that both clients and local agency staff experience considerable difficulty working within this complex system. We found no evidence of any major effort at the federal level to simplify client eligibility, accounting procedures, or other regulations that local administrators perceive as burdensome.

RECENT FEDERAL EFFORTS TO ENCOURAGE COORDINATION

To deal with these problems, recent federal legislation has included provisions to encourage , even require, coordination at the federal, state, and local levels. At the federal level, two approaches stand out: provisions requiring mandatory coordination and the "set-aside" of funds under JTPA specifically for agency cooperation.

Mandatory Coordination Provisions

The recent Perkins amendments include several coordination provisions related to federal agencies:

- A requirement to form an Interdepartmental Task Force on Vocational Education and Related Programs (Task Force). The law specifies that the Task Force consist of the Secretary of Education, the Secretary of Labor, and the Secretary of Health and Human Services. The Task Force's mandate is to:

  (1) examine principal data required for the programs under the Adult Education Act, the Perkins Act, the JTPA, the Rehabilitation Act of 1973, and the Wagner-Peyser Act;

(2) examine possible common objectives, definitions, measures, and standards for such programs; and

(3) consider integration of research and development conducted with federal assistance in the area of vocational education and related areas, including areas of emerging technologies (Section 4).

- A requirement that the National Occupational Information Coordinating Committee (NOICC) include representation from various federal departments and that the associated State Occupational Information Coordinating Committees (SOICCs) include representatives of JTPA, vocational education, and various other agencies (Section 422).

- A requirement that the Department of Education cooperate with NOICC and other federal departments to assure that the vocational education data system established by ED is compatible with JTPA, and with other occupational demand and supply information systems supported by federal funds (Section 421).

After reviewing existing interdepartmental activities, the Office of Vocational and Adult Education determined that most of these mandates were already being implemented in one way or another (see Appendix 3-A). A new Task Force was not convened; NOICC's membership was expanded following a new 1990 interagency agreement; and NOICC has taken the lead to improve the cooperation of Education, Commerce, and Labor with regard to the vocational education data system.

Set-Aside Funds

The major federal policy to encourage cooperation is the use of "set-aside" funds earmarked for that express purpose.

As noted earlier, JTPA's Title II 8 percent set-aside provides funding for coordination of vocational education and job training. It has been cited as "one of the best examples of an incentive strategy."[23]

Critics, however, assert that the effectiveness of the set-aside is limited by a number of factors. Some point to institutional eligibility restrictions as a problem; others worry about financial concerns such as allocation formulas and disbursement methods; yet others argue that the purpose of the provision and the types of coordination it is meant to support are not spelled out clearly in the statute.

Use of Funds. Set-aside funds definitely encourage collaboration and experimentation. Based on its review of several state policies, NCRVE

determined that states and localities use 8 percent set-aside funds for a variety of purposes, most, but not all, related to enhancing coordination between JTPA and vocational education. NCRVE[24] found the most common purposes to be:

(1) funding innovative collaboration;

(2) funding experimental approaches and programs for hard-to-serve populations;

(3) funding welfare-to-work programs;

(4) supporting economic development activities;

(5) covering administrative expenditures and meeting performance standards; and

(6) providing a share of the funds to educational institutions.

Virtually all of these efforts, with the possible exception of administrative expenditures, appear to be well within the discretionary intent of the set-aside provisions. State policies clearly support the larger federal intent of a flexible, innovative program to encourage agency collaboration.

Eligibility. One factor that may make coordination more difficult is the type of institutions to which states offer set-aside funds. For example, if only Service Delivery Areas are eligible, then LEAs and postsecondary institutions will not be as motivated to attempt new coordination efforts. Vocational education providers are eligible to receive JTPA set-aside funds in most states: More than three-fourths of the state directors of secondary vocational education reported that individual LEAs are eligible to receive 8 percent set-aside funds, and almost as many reported that community colleges or other postsecondary institutions are eligible. About one-half of state directors report that individual SDAs are eligible to receive the funds, and one-third report that consortia of SDAs and educational institutions are eligible (see Appendix Table A-3.2).

Actual Allocation. Although various types of institutions are eligible to receive 8 percent set-aside funds, the actual allocation of the funds may look quite different from the distribution of eligible institutions. In the Omnibus Survey, state directors were asked to indicate the percentage of 8 percent set-aside funds allocated to each type of recipient (see Appendix Table A-3.2). The responses indicate that, in the average state, the largest amounts are allocated to SDAs (who may, in turn, contract with other providers). LEAs rank a close second, followed by community colleges, with much smaller amounts going to consortia. Therefore, the most obvious method of forcing joint service delivery — through allocation to consortia — is comparatively rare. Bailis and Grubb interpret these data to indicate that 8 percent set-aside funds are often used "simply to augment

SDA revenues, though they are also used to funnel resources to school districts and community colleges."[25]

Although the average state allocates almost half of its set-aside funds to LEAs, a relatively small proportion of school districts are receiving those funds. As shown in Table 3.4:

- Less than one in ten (approximately 735) regular districts reported receiving set-aside funds in 1991-92, with an average funding level of about $66,500.
- Vocational districts are more likely to receive set-aside funds, but receive a smaller average amount (even though a larger percentage of vocational districts receive such funds, the actual number of vocational districts is smaller than the number of regular districts).

Postsecondary institutions report that they are more likely to receive 8 percent set-aside funds than LEAs are:

- About one in three of the two-year postsecondary institutions (more than 300 institutions) reported that they received set-aside funds in 1991-92.
- The average amount of funds received by those institutions was $77,608.

Table 3.4
Allocation of JTPA Eight Percent Set-Aside Funds

	Regular Secondary Districts	Vocational Districts	Postsecondary Institutions
Percent that received 8 percent funds during 1991–92	7	22	32
Mean amount of 8 percent funds[a]	$66,538	$52,762	$77,608
Mean percent of revenues[a]	0.6	1.5	1.3

[a]Calculations include only those districts that reported receiving some 8% funds during 1991–92.

Sources: Omnibus Surveys of Secondary School Districts (Version A and Vocational)

Disbursement Methods. In 1990, Grubb et. al. found considerable variation in the states' methods of distributing their 8 percent set-aside funds.[26] According to state directors of secondary vocational education, most states closely control allocation of the 8 percent set-aside funds, with 43 percent using the RFP process or some other discretionary means. About one in ten states distributes set-aside funds by formula, and about one-fourth use a combination of formula and discretion (see Appendix Table A-3.3).

Bailis and Grubb conclude that the majority of states "have been using 8 percent set-aside funds in a way that allows them substantial discretion, and thus in theory allows them to craft coherent state policies and use 8 percent set-aside funds in furtherance of such policies."[27]

Clarity of Terms

Analysts have described the federal definitions of "cooperative agreements" and "coordination" as vague and have suggested that, as a result, the states have interpreted these concepts differently and have used the funds in extremely different ways.[28] NCRVE reports that "[w]hile the 8% funds support a variety of innovative programs and many collaborative efforts between vocational programs and JTPA, they are not consistently used for coordination with public education programs."[29] In some instances, the state policy amounts to "little more than giving the funds to educational institutions to provide whatever services they want."[30]

Although there may be some validity to these concerns, it is also true that the federal government is stuck between two difficult alternatives. On the one hand, defining these terms more explicitly might add greater coherence to coordination efforts and make the analyst's task in evaluating coordination easier. On the other, greater specificity would reduce the flexibility of the current set-aside provisions and, undoubtedly, add to state and local complaints about the heavy hand of federal regulation.

Summary

Several activities and initiatives underway at the federal level aim to encourage coordination by states, districts, and institutions. The most promising federal approach appears to be the JTPA 8 percent set-aside, widely thought to be a very useful incentive to encourage flexible collaboration at the local level, despite state differences in the allocation and permissible uses of these funds.

COORDINATION AT THE STATE LEVEL

Most of the Perkins Act's coordination requirements relate to the states. Furthermore, states generally go beyond the federal coordination requirements

in their state-level coordination activities and also establish policies and practices that influence local coordination.

States usually conduct coordination initiatives through state-specific agencies such as the SCOVEs and State Job Training Coordination Councils, but "super agencies" with authority over all vocational education and job-training programs are becoming more common. In an analysis conducted for the National Assessment, Alt found that "[i]n recent years, many states have created supercouncils in order to address growing fragmentation of service delivery and duplication of efforts. Generally, these councils bring together representatives from the business and education communities and from state government, including the heads of agencies that oversee human resources-related programs. In most cases they have been assigned the functions of existing advisory and oversight councils, consolidating most or all of these councils' resources."[31]

Alt found that the business community believes that such bodies will benefit the nation:

> National policy organizations such as the National Alliance of Business continue to believe that states and local communities need to build strong *workforce investment systems*. These systems should be developed jointly by the public and private sectors; they should include the whole range of education and training providers; and they should respond directly to the needs of both employers and workers. Moreover, training needs to be closely coordinated with local economic conditions and industrial bases; it must incorporate occupational standards and competencies defined by industry groups . . . Training system planners should also work cooperatively with agencies and community-based organizations that promote economic development.[32]

Development of Supercouncils

Policymakers first addressed the need for a single state coordinating council in the late 1980s and early 1990s, when both the Perkins and JTPA laws were being reauthorized.[33] The Job Training Reform Amendments enacted in September 1992 authorized the voluntary creation of state human resource investment councils (SHRICs) to improve coordination among federal human resource development programs, to advise governors on human investment needs, and to recommend strategies to meet those needs. In order for a state to shift funds from existing oversight councils to the SHRIC, its membership must include state agencies responsible for administering applicable federal human resource programs; local public education agencies; postsecondary institutions; secondary or postsecondary vocational institutions; community-based organizations; business and industry; and organized labor. Optional members for the SHRIC include representatives from local welfare agencies, public housing agencies,

local governmental bodies, the state legislature, any state or local program that receives funds from an applicable federal human resource program; and experts on "special education and career development needs of hard-to-serve individuals."[34]

The SHRICs' mandatory responsibilities are to:

(1) review methods of coordinating services, funds, and resources under federal human resource programs and to advise the governor;

(2) advise the governor on the adoption of state and local measures and standards for federal human resource programs as well as to coordinate these measures and standards across programs; and

(3) carry out the duties and functions of existing councils that oversee human resource development programs.

SHRICs may also make recommendations for developing and coordinating a human resource system; and develop, monitor, and evaluate strategic plans.[35]

Developmental Aspects. The SHRICs are designed to consolidate advisory bodies that monitor programs under JTPA, the 1990 Perkins Act, the National and Community Service Act of 1990, the Adult Education Act, the Wagner-Peyser Act, JOBS, and the Food Stamp Act's employment training component. If the heads of relevant state agencies and oversight councils agree with the state's governor that they should be included, the SHRICs bring together their representatives to work on issues. SHRICs have access to the services, personnel, facilities, and information of any state or local public agencies, provided these agencies give their consent. The only programs that may not be included are those authorized by the Rehabilitation Act of 1973.

The 1993 Followup Survey found that few states have established SHRICs (Appendix Table A-3.4):

- Eight states, or 16 percent of the states responding, had a SHRIC at the time of the survey (spring 1993).
- Six additional states planned to have one before the end of 1993.
- Only six states reported that they have a SHRIC with Perkins programs under their jurisdiction.

In some states, State Councils on Vocational Education have resisted the formation of a SHRIC that would absorb the state council's responsibilities, funds, and staff. Some SCOVE staff express fear that, if it were to become part of

a SHRIC, the state council could not continue to serve as "an independent critic of vocational education providers and administrators,"[36] or to serve their specific target populations. In some cases, these may be legitimate concerns. However, too often agency administrators are fighting what they perceive as a threat to their power because the changes might diminish their budget, personnel strength, access to the governor, or independence from direct oversight.

In many states, an administrative body performs many of the same functions as SHRICs but does not meet the JTPA definition. Increasingly, states are embracing the concept of a supercouncil — one agency with authority over all vocational education and job-training programs in the state. By the end of 1993, almost half of the states had such an agency:

- In 1992, 13 secondary vocational education state agencies and 9 postsecondary agencies reported in the Omnibus Survey that they participate in a super agency of some kind.

- In 1993, 22 secondary vocational education state agencies either had a SHRIC or another type of super agency "that coordinates services such as those funded by Perkins, JTPA, etc.," and 15 postsecondary agencies reported participating in a super agency that coordinates "the operations of different Federally-funded education and training programs with each other, or with related state programs." (See Table 3.5.)

Whether a supercouncil fits the legislative definition of a SHRIC probably makes little difference. Alt found a number of positive actions taken by "quasi-supercouncil bodies or by groups of staff people working independently of a supercouncil." For example, Massachusetts, Connecticut, New Jersey, Maryland, and Iowa took steps toward greater integration of services before a supercouncil was created.[37]

In almost all (20) of the supercouncils reported by the secondary state directors, the state agency responsible for vocational education was represented on the council (at both the secondary and postsecondary levels). Secondary-level members were represented on 17 of the councils and postsecondary members on 13. Table A-3.5 in the appendix shows the representation of the various groups and individuals.

Alt found that states with a supercouncil "generally started by establishing a commission or task force to investigate the existing workforce development system and to conduct an overall needs assessment. This investigatory body was then authorized as a council, either by executive order, state law, or both (with the law enacted to ensure continuity)."[38] About 30 states have some type of state advisory board to coordinate employment, vocational education, and occupational training policy and planning, according to 1993 data from the U.S.

Table 3.5
States w: : Statewide Human Resource Councils, Other Supercouncil, or Super Agency for Coordinating Education and Training Programs

Year	Secondary State Agencies		Postsecondary State Agencies	
	Percentage	Number	Percentage	Number
1992 — Has SHRIC, other supercouncil, or super agency	24	13	19	9
1993 — Has super agency of some kind	43	22	30	15

Sources: Omnibus and Followup Surveys of Secondary and Postsecondary State Agencies

Department of Labor, the National Governors' Association, and the National Alliance of Business (see Appendix Table A-3.6). These sources found that about 20 state agencies embody some of the elements of SHRICs and have similar functions and goals but do not meet the legal definitions. Fourteen states reported to DOL that they had decided not to create a supercouncil, while 25 were still undecided.

Supercouncil Activities. The supercouncils have assumed a wide range of tasks. Alt identified several common supercouncil responsibilities and a number of specific actions particular states have taken in regards to each responsibility.[39] For example:

Strategic statewide planning and reviewing plans of state and local job training/ education programs

Statewide coordinated planning has often been inadequate or even nonexistent. Most supercouncils first try to reach consensus on broad goals, outline the goals in writing, specify objectives or action strategies, and assign tasks to staff or departments. MPR Associates found that every state council it contacted had produced at least one report outlining the supercouncil's goals and objectives.

Oregon, which has developed a comprehensive set of goals covering quality-of-life issues as well as economic ones over the last several years, has taken strategic planning seriously. The state goals, called Benchmarks, express both long-term

goals and shorter term objectives as measurable outcomes. The Oregon Workforce Quality Council is responsible for reaching these goals, which apply not only to education and training but also to environmental quality, health care, social equity, public safety, and transportation. Many of those related to education build upon the work of the National Education Goals Panel and the Secretary's Commission on Achieving Necessary Skills.

Leveraging funds from different sources, developing and/or approving budgets, and setting funding priorities

Before supercouncils, human resource development programs were scattered widely among the states' agencies and it was difficult and time-consuming to estimate the total amount of funds spent for these services. As a result, policymakers often made funding decisions based on incomplete or misleading data.

In Massachusetts, the MASSJobs Council annually surveys the Regional Employment Boards, which are local counterparts of the council, and other relevant agencies. The survey reveals where workforce development funds are being spent. In New Jersey, the supercouncil recently added a member from the Office of Management and Budget to receive continuing information on funding sources and restrictions.

Oregon supports its Workforce Quality Council and many education and job training activities with funds from the state lottery. Twenty work force development programs in Oregon received $8 million in lottery funds in 1991, with an additional $2.3 million allocated from general funds for tech-prep development. The Council has the authority to approve or reject the annual budgets and operating plans of the individual agencies that oversee education and training before they are submitted to the governor.

Program development and administration

Some state councils have effected dramatic changes by creating strong local boards to contribute ideas and implement new policies. In 1988 Massachusetts pioneered this effort by expanding the functions of the existing PICs to create 16 Regional Employment Boards (REBs), each chaired by a private industry member. Technical assistance and training activities so far have included two annual conferences of REB members and a retreat for REB chairpersons. Funds available for REBs to develop new programs that are more responsive to the public's needs have been increased. In 1992–93 each REB designed a Workforce Development Policy Blueprint, essentially a combined assessment of local training needs and the capacity for meeting those needs.

Other state councils are actively trying to reduce duplication and overlap of services. For example, Ohio's supercouncil, formed in 1993, is beginning to

reduce the barriers potential clients face by cross-training staff in other providers' services, increasing clients' accessibility to services, and eliminating duplication of intake information and assessments.

Iowa, by contrast, has begun planning an integrated management information system. The first phase, to be completed this fiscal year, involves establishing electronic links between existing data systems used by six different departments' program managers (from Economic Development, Education, Elder Affairs, Employment Services, Human Rights, and Human Services). In Phase Two, slated for next year, a common client-intake procedure will be supported by a single computerized form and compatible work stations. In the third year, the fully integrated information system will enable administrators to track clients' progress among programs, to provide comprehensive case management, and to assess the performance of participants.

Other councils concentrate on defining needed student competencies and rethinking assessment. The New Jersey Employment and Training Commission is overseeing the development of competencies for vocational curricula. The method gathers workers from various fields for a half-day meeting to discuss what they do in their jobs. Teachers then incorporate these ideas into curricula, with competency standards spelled out in detail. To date, competencies have been developed for about 100 fields, and the new curricula are gradually being implemented in schools across the state.

In Connecticut, the state Departments of Education, Labor, and Income Maintenance have agreed on a common competencies appraisal test, which measures employment skills (such as basic reading, math, work maturity) and life skills (knowledge of occupations, government, health, and so on).

Ohio's council is examining the need for different performance standards for different programs. For example, performance standards may lead one program to push job seekers quickly into minimum-wage, dead-end jobs, while a different set of standards might encourage longer-term training leading to better jobs. It may be necessary to redefine program goals and performance standards. Ohio's council, formed last October, is just beginning to address this and other tasks.

Some councils concentrate on improving communication between the education and business communities. Several initiatives are underway in Wisconsin to strengthen the ties between schools and workplaces. The Wisconsin Executive Cabinet for a Quality Workforce recently established the Office of Workforce Excellence in the Department of Industry, Labor, and Human Relations, and has won grants from the U.S. Department of Education for school-to-work demonstration projects and from the U.S. Department of Labor for youth apprenticeship programs.

Effectiveness of Supercouncils. If federal programs continue to advocate them, we must ask how effective supercouncils have been so far: Have they reduced service fragmentation and duplication? Have they actually improved the quality of vocational education and job training services? By consolidating councils or agencies, have the supercouncils reduced costs?

State agencies often prepare reports on the supercouncil for the official or legislative body that oversees the council. Not surprisingly, most of them offer positive assessments. However, Bailis and Grubb found that surveys of program officials on the level of coordination or the existence of given practices generally lacked objective standards against which to measure the observations. They found neither objective evaluation of supercouncils by outside analysts nor analyses of similar state government reorganizations.[40] Although state-level administrators claim success in improving collaboration among agencies, there is little evidence to support their conclusions.

Alt's 1994 analysis[41] on the status of supercouncils reached similar conclusions:

> In the year since the Bailis and Grubb review, little has changed in the literature on supercouncils. Most staff people contacted for this paper ventured that it is premature to attempt to assess the effectiveness of these councils, especially since many were formed only within the last six months or year. No internal agency studies or published materials were available that measured effectiveness, either qualitatively or quantitatively, even for those councils that have existed for a couple of years. One supercouncil director mentioned that her staff had not yet had enough time to plan how they would measure effectiveness in the future.

State-Level Coordination in Secondary Education

Although vocational education agencies must coordinate with multiple employment-related state agencies, it appears that the JTPA and Perkins requirements have been relatively successful in encouraging them to communicate with one another. In the Omnibus Surveys conducted for the National Assessment, only a few state directors of secondary vocational education reported that their agency had *no* interactions with most of the job-training programs, particularly JTPA and Adult Basic Education (see Appendix Table A-3.7):

- Only 7 percent of the state directors of secondary vocational education reported no interaction with JTPA.
- Only 6 percent reported no interaction with Adult Basic Education.

Regardless of the type of coordination activity, JTPA and Adult Basic Education are consistently the programs with which vocational education agencies consult most frequently. On the other hand, one-fifth or more of state secondary directors report no interaction with the following: JOBS, Vocational Rehabilitation, the State Employment Service, the National Occupational Information Coordinating Committee, and the state economic development agency.

Coordination tends to involve planning activities rather than financial commitments. The Omnibus Survey asked state directors whether they participated in specific coordination activities(see Appendix Table A-3.7). The four planning activities — regular meetings, joint membership on planning committees, the sharing of state plans, and joint planning — are the most common forms of coordination; the least frequent type of coordination is joint funding of programs.

But state-level coordination activities are not limited to these five types of arrangements. The majority of state directors reported that their agency does have formal or informal mechanisms for coordination other than those indicated above. About half reported that they utilize other planning activities, targeting of funds, decisions about what services to provide, and decisions about priorities among target groups to coordinate the operations of different education and training programs (see Appendix Table A-3.8.). In addition, most secondary state agencies encourage flexible programs, and half of them fund coordinated assessment, remediation, and/or counseling centers.

State-Level Coordination in Postsecondary Education

Most postsecondary state agencies do have some coordination with other agencies, but some states still do not coordinate with all possible agencies (see Appendix Table A-3.7):

- The highest level of state-level cooperation exists between postsecondary agencies and Economic Development (only 6% reported no interaction).
- Interaction with JTPA's State Job Training Coordinating Councils also is relatively high (9% reported no interaction).
- Coordination with JOBS was the least common — one-fourth of the postsecondary state agencies reported no interaction with JOBS — perhaps because many adults on public assistance are not prepared to enroll in postsecondary programs.

As at the secondary level, most coordination at the postsecondary level is in the form of information sharing and joint planning (see Appendix Table A-3.7):

- Roughly one-half of the postsecondary state directors reported regular meetings and joint membership on committees with all of the programs itemized in the survey.

- Between 19 and 40 percent of the state agencies reported joint funding with other programs, the least common form of interaction.

Other, possibly more substantive activities are common, but far from universal. About one-third of the state agencies reported that they did not have any formal or informal arrangements for coordination other than the meeting, planning, and joint funding arrangements discussed above (see Appendix Table A-3.8).

Funding Policies. State funding policies influence coordination between vocational education and job-training programs. In many states, the state funding of community colleges is a function of enrollment — the more students enrolled, the higher the funding. This means that community colleges in these states have a powerful incentive to cooperate with JTPA because, in addition to any funds they receive from the sponsoring program, they receive additional revenue for each JTPA or JOBS client they enroll. The same may apply to technical institutes and area vocational schools, as the majority of states confirm:

- Seventy-eight percent reported that JTPA clients qualify for regular state aid.

- Eighty-one percent reported that JOBS clients qualify for regular state aid.

Traditional postsecondary program offerings, calendars, and class schedules often do not meet the needs of JTPA and JOBS clients. For example, most postsecondary institutions do not routinely offer support services such as day care and open-entry/open-exit programs. Community colleges and technical institutes that have flexible programs and schedules, remediation, and other support services can more readily work with federal job-training programs.

Most postsecondary state agencies do fund or otherwise encourage flexible programs including short courses, open-entry/open-exit courses, and other nontraditional formats. The proportion of state agencies reporting that they use these policies to encourage cooperation increased from 1992 to 1993. In 1993, 82 percent indicated that they encourage flexible programs, compared to 71 percent in 1992. In 1992, 50 percent reported that the state funds assessment, remediation, and counseling centers at postsecondary institutions; that proportion rose to 70 percent in 1993. (See Appendix Table A-3.9).

Summary

In response to calls from the employment preparation community for an overarching coordinating body at the state level, recent federal legislation has allowed the voluntary creation of SHRICs. As yet, few states have elected to establish the type of supercouncil outlined by law, and even fewer have established SHRICs that include the state's Perkins program. However, almost half of the states have some form of supercouncil that supersedes the various state agencies with vocational education and job training responsibilities and has authority over all such programs. Although states often extol their supercouncils' success in improving collaboration among agencies, there is little evidence to verify their conclusions.

Perkins and JTPA requirements have been successful in promoting coordination at the state level — most state vocational education agencies, both secondary and postsecondary, reported that they are involved in coordination activities with other employment preparation agencies. Information-sharing and joint planning are most common. Other, possibly more substantive activities are not common, but state funding policies can and do serve as fiscal incentives for vocational education institutions to coordinate with JTPA and other job-training programs. Most postsecondary state agencies reported that they facilitate coordination by funding flexible programs including short courses, open-entry/open-exit courses, and other nontraditional formats. In short, the vast majority of states are sharing information about programs and engaging in joint planning.

COORDINATION AT THE LOCAL LEVEL

The Perkins Act includes only one coordination requirement that falls on local education agencies:

> Local plans must describe procedures to coordinate vocational education with JTPA "in order to avoid duplication and to expand the range of and accessibility to vocational education services."[42]

However, this single requirement can be a most effective one. Many researchers have concluded that local efforts and activities are "the primary forces that support or discourage coordination among vocational education and job training programs."[43]

Many Models of Coordination

Coordination at the local level takes a wide variety of forms. Researchers[44] have conducted several case studies and some patterns have emerged. Grubb et al.[45] identify eight approaches to coordination among vocational education, JTPA, and welfare-to-work programs:

Subcontracting with providers. Most often, JTPA and JOBS subcontract with providers of vocational education. For example, an SDA may contract with the local community college to enroll 125 JTPA students in the college's associate business degree program. According to the National Alliance of Business, 95 percent of SDAs have some financial agreement with a provider of vocational education.[46]

Services for high school students. JTPA and high schools sometimes coordinate to enhance services to high school students, especially those at risk of dropping out. The most common enhancement is summer employment, but some programs also offer remediation, counseling, and reduced class sizes. With the clients still enrolled in high school, JTPA funding is combined with regular support through the school system.

Providing support services. Less common is the practice of using JTPA to provide support services in colleges and technical institutes. These services — child care, transportation, counseling, assessment, remediation, stipends — are routinely provided by SDAs when they send their clients to vocational education institutions.

But expenditures for support services under Title II-A are limited to 5 percent of those funds. A recent study found that only four out of the fifteen SDAs studied provided extensive services and one-third provided very few support services.[47]

Customized training. Another form of coordination can occur when educational institutions provide customized training that includes JTPA or JOBS clients. Such courses are typically short and so lend themselves to coordination with JTPA. However, most institutions do not normally include JTPA or JOBS clients in these courses, because the customized courses usually enroll only employees of the firm sponsoring the program. In addition, customized programs are "business-oriented" (i.e., toward the need of the firms) rather than "client-oriented" (i.e., toward the needs of the poor or unemployed).

Pooling funds for specific purposes and institutions. In some communities, there is systematic allocation of funds for particular services to specific institutions. For example, the community college may provide all health-service training, a community-based organization may provide all clerical training, and an area technical and vocational center may provide all woodworking training. Less frequently, the primary provider may contract, on a one-by-one basis, with other providers to enroll individuals in programs determined by the primary provider to be best suited to their needs and interests.

Community college administration of JTPA. In a few states, community colleges administer JTPA. The community college generally subcontracts with other providers for certain services such as child care or job placement. But this approach is also relatively rare; only 14 percent (or 128 institutions) of the public

two-year postsecondary institutions surveyed by the National Assessment reported that they are the local administrative entity for JTPA. In addition, this approach is believed to have little impact on the kinds of services provided.[48]

Regional decision-making. A recently introduced model of coordination involves the consolidation of regional decision-making power over multiple sources of funding. A local entity may receive funds from a variety of federal and state programs and decide how the money will be distributed. Such entities differ from regional coordination boards in that they have the authority to administer funds and choose service providers, rather than merely serving in an advisory role. Proponents of this approach assert that it enables local providers to create programs that meet the special needs of specific populations.

A New-Model: One-Stop Centers

The eighth model identified by Grubb et al. is a relatively new institution thought to have great promise: the "one-stop" center.

Several federal initiatives, including the Bush Administration's Training 2000 Act and the Clinton Administration's proposed jobs investment strategy in the fiscal year 1995 budget, contemplate one-stop centers that would provide a single client point of entry into the employment and training system. Federal seed money, accompanied by waivers of federal requirements where necessary, would help states plan and implement programs that streamline access to the full range of employment and training services.[49]

"One-stop" is used to refer to everything from information centers to fully integrated employment and education delivery systems. "Co-location" is distinguished from one-stop service. Co-location refers to the location of various employment-related entities in close proximity, sometimes in the same building. While co-location can encourage coordination of services, it is not the same as establishing one-stop centers that provide a client with one intake counselor for all programs, share common data systems, and maintain a staff that is knowledgeable about all local job training and employment opportunities.

One-stop centers, which truly integrate assessment, training, and job placement, result from a concerted effort on the part of service providers to reduce the fragmentation of programs and facilitate cooperation among employment service agencies.

One-stop centers generally combine funding from several sources and help individuals eligible under different programs to obtain vocational education or job training. In analyzing the proposed one-stop centers, one commentator remarked: "These are not multiple sources of vocational education and training, but multiple sources of funding which can be used in part for those functions."[50]

Although these centers are not universal, they are on the increase:

- In 1992, one-third of the state postsecondary vocational education directors reported that they fund one-stop education and training centers.

- However, by 1993, the percentage of postsecondary agencies funding one-stop centers had risen to one-half (see Appendix Table A-3.9).

One-stop centers, coordination of services, and co-location efforts have been used with apparent success in several model programs (see Appendix 3-B).

Case studies indicate that one-stop centers can provide ease of access to a full range of programs. In 1992, the National Youth Employment Coalition and the William T. Grant Foundation Commission on Youth and America's Future stressed that one-stop centers are most successful when they provide comprehensive services at one location with the support of a professional case manager who stays with the client through training and into employment — helping the client with family problems, health issues, day care needs, and vocational career interest.[51]

Although federal assistance may be needed to establish these centers, most people involved in job training see federal mandates on the structure of one-stop service as unresponsive to local needs and counterproductive to ongoing efforts.[52] They believe that one-stop service must be flexible enough to respond to changing economic climates, to deal with loss of manufacturing jobs, to provide workers for new industries, and to address the needs of urban populations of unemployed youth with few skills or immigrants needing language training. However, some service providers believe that coordination requires enforcement by federal leadership because of the difficulty involved in gaining cooperation among employment training, education, and social services providers.[53]

Local Coordination in Regular School Districts

As previously shown, JTPA is the agency with which state education agencies most frequently coordinate. Even though JTPA services are usually designed for adults, JTPA does have a substantial program for secondary students, particularly those considered to be "at risk." Since many special-population students fall into this category, coordination with these services is of interest to Perkins policy makers. Most regular school districts have JTPA-related programs, but tend to serve relatively small numbers of JTPA students:

- An estimated 5,700 districts (58% of the regular districts in the Omnibus Survey) reported that their students received services funded by JTPA during 1991-92.

- In districts with JTPA services, the mean number of JTPA students served was 41, which represented 3.8 percent of total enrollment, and 13 percent of the vocational education enrollment (see Appendix Table A-3.10).

JTPA Services. The services JTPA offers in secondary school districts indicate how students in traditional educational institutions may benefit when coordination occurs. Summer employment is the most common JTPA service (see Appendix Table A-3.11), provided by 84 percent of the districts with JTPA services. Work experience was provided in 44 percent of these districts, and counseling and remediation were each provided in about one-third of the districts.

Program Planning. In general, JTPA and vocational education work together in planning JTPA services and in selecting students to receive them:

- Joint planning was reported in more than two-thirds (69 percent) of the regular school districts.

- Almost as many (64 percent) districts responded that joint selection of students is used. (See Appendix Table A-3.12)

Funding. The Omnibus Survey data on funding patterns suggests that although the amount of JTPA funding received by the average regular secondary district (including any 8% set-aside funds) seems small at first glance, it is fairly substantial when put into perspective (Table 3.6):

- The average for all regular school districts, including those that do not receive any JTPA funds, is approximately $20,000.

- The average amount among school districts that actually receive JTPA funds, however, is more than $100,000, and represents about 1 percent of the district's total revenues.

- In school districts that receive both JTPA and Perkins funds, the JTPA funds are equal to about two-thirds of the Perkins funds (more than $150,000).

Coordination with JTPA substantially benefits regular secondary school districts. However, only one-fifth of these districts with JTPA programs spent any of their own funds on them. According to Bailis and Grubb,[54] this finding "confirms evidence from elsewhere[55] that programs within secondary schools are initiated

Table 3.6
Funding of JTPA Programs in Regular Districts

	Regular Secondary Districts
Percent of districts reporting students funded by JTPA	58
Mean amount of JTPA funds for all districts	$19,866
Mean amount of JTPA funds for JTPA districts	$108,124
Mean percent of district revenues for JTPA districts	1.3
Mean amount of Perkins funds for JTPA/Perkins districts	$155,812
Mean percent of district revenues for JTPA/Perkins districts	1.6
Percent of JTPA districts using district funds for JTPA services	20

Source: Omnibus Survey of Secondary School Districts, Version A

and dominated by JTPA funding, rather than being collaborative in the sense of joint funding."

Local Coordination in Vocational Districts

Collaboration between vocational districts and JTPA is more common than for regular districts, but is still far from universal. Nearly three-fourths (71 percent) of vocational districts report that they have JTPA programs, compared to 58 percent of regular districts (see Appendix Table A-3.10).

As would be expected, the JTPA services offered by vocational districts are a larger part of the districts' overall program than in regular districts. However, they are small in comparison to the vocational districts' overall enrollment. Vocational districts with JTPA serve a mean number of 64 JTPA students (5.8 percent of total enrollment compared to 41 students or 3.8 percent of enrollment for regular districts). (See Appendix Table A-3.10.)

JTPA Services. In most other respects the patterns in regular and vocational districts are similar. Summer employment is the most common service JTPA provides in secondary vocational districts, even though it is less common here than in regular districts (64 percent of vocational districts with JTPA services

compared to 84 percent of regular districts with JTPA services). All other types of services listed, however, are offered more frequently by vocational districts than by regular districts (see Appendix Table A-3.11):

Program Planning. Most JTPA programs in both regular and vocational districts are planned jointly by JTPA and school administrators. This coordination of services, presumably designed to ensure that the JTPA services are an integral part of students' overall vocational program, occurs in more than half of the vocational districts that offer JTPA services (see Appendix Table A-3.12).

- Sixty-nine percent of vocational districts report joint planning.
- Sixty percent report joint selection of students.

Funding. Survey data on funding also indicate that JTPA programs play a larger role in vocational districts than in regular school districts (Table 3.7):

- The average amount for all vocational school districts, including those that do not receive any JTPA funds, is more than twice that for regular school districts.
- The average amount received by vocational districts that receive JTPA funds is slightly less than $115,000, and represents about 3 percent of the district's total revenues.

Adult Participation in Secondary Programs

As might be expected, secondary districts are more likely to coordinate with JTPA if they enroll adult students. Using Omnibus Survey data, Bailis and Grubb[56] found that regular districts that operate schools exclusively for secondary students are less likely than districts with adult students to have JTPA programs:

> The proportions [of districts] providing funds for JTPA clients was 20 percent for districts with high school students only, 37 percent for those with a balance of high school and adult students, and 44 percent among those with mostly adult students.

The same pattern appears for vocational districts. According to Bailis and Grubb:

> Among vocational districts with high school students only, 57 percent report some students supported by JTPA, compared to 76 percent of districts with both secondary and postsecondary students and 79 percent of districts with mostly adults. . . . These results indicate that the use of vocational districts by JTPA is less

Table 3.7
Funding of JTPA Programs in Vocational Districts

	Vocational Districts
Percent of districts reporting students funded by JTPA	71
Mean amount of JTPA funds for all districts	$52,492
Mean amount of JTPA funds for JTPA districts	$113,484
Mean percent of district revenues for JTPA districts	2.9
Mean amount of Perkins funds for JTPA/Perkins districts	$242,970
Mean percent of district revenues for JTPA/Perkins districts	4.4
Percent of JTPA districts using district funds for JTPA services	38

Source: Omnibus Surveys of Vocational School Districts

> to support secondary students — though there is clearly some of that — than to fund programs for adults enrolled in area vocational schools and technical institutes.[57]

Joint funding is more common in vocational districts than in regular districts. The proportion of vocational districts providing their own funding for JTPA students is 38 percent, compared to 20 percent in regular districts (see Tables 3.6 and 3.7).

Bailis and Grubb conclude that districts with more adult students are better able to cooperate with JTPA. However, it also may be that these districts simply have more students eligible for JTPA services.

Local Coordination in Postsecondary Institutions

Postsecondary institutions providing vocational education would seem to be more likely than secondary institutions to collaborate with JTPA and other job training programs because they serve adults and have more flexibility to serve nontraditional students than do high schools. In fact, the expectation holds up. Collaborative planning is common, especially with Private Industry Councils and remedial education efforts. (See Appendix Table A-3.13.) Only about 13 percent

of two-year postsecondary institutions do not coordinate with any local employment-related entities.

Postsecondary Institutions and Barriers. The Omnibus Survey indicates that either good progress has been made in reducing barriers to cooperation, or perhaps the complaints about such barriers have been exaggerated. About half (49%) of the two-year public postsecondary institutions surveyed responded that no factors have inhibited providing joint services with JTPA; the same proportion reported that no factors inhibited providing services jointly with JOBS (see Appendix Table A-3.14.) Barriers were cited for JOBS less frequently than for JTPA. Most often, respondents on JOBS indicated there were "other" barriers to coordination, not specified on the survey's list. But the barriers selected from the survey's list do shed light on the perceptions of postsecondary institutions, which usually cited barriers associated with resources:

- By far the most commonly cited JTPA barrier was burdensome paperwork or reporting requirements, cited by almost half of those respondents who listed at least one JTPA barrier. Burdensome paperwork was cited less frequently (15 percent) as a JOBS barrier.

- Lack of time or resources for coordination was cited as a JTPA barrier by one-third and as a JOBS barrier by about one-quarter.

- Inadequate resources from JTPA/JOBS and lack of state or institutional resources for JTPA/JOBS clients were frequently cited as barriers to cooperation with both programs.

Different purposes and goals was also high on the list for both JTPA and JOBS (26 and 14%, respectively).

About one-fourth of the institutions indicating there were barriers to coordination with JTPA cited difficulty in meeting JTPA performance standards. Apparently, most institutions have become familiar with performance standards and have adjusted to the requirements. Forty percent of all two-year public postsecondary institutions have experience with performance-based contracts for classroom instruction, and more than half (62%) of the institutions that provide classroom training to JTPA students did so under performance-based contracts:

- Thirty-six percent reported that all of their JTPA classroom instruction contracts were performance-based.

- An additional 26 percent reported that at least some classroom instruction was performance-based.

- Thirty-eight percent reported that no such contracts were performance-based.

JTPA/JOBS Services. As discussed above, the most common form of postsecondary coordination is for JTPA and JOBS to subcontract with community colleges and technical institutes to provide various services. In fact, this practice is quite common for JTPA, but much less frequent for JOBS (see Table 3.8):

- More than three-quarters (82%) of the two-year public postsecondary institutions surveyed provide services to JTPA.
- One-third (32%) provide services to JOBS clients.

Despite the extent of collaborative planning, the enrollment contributed by JTPA and JOBS to postsecondary vocational educational institutes is relatively small compared to overall enrollments (based on "head counts," not full-time equivalency). Institutions with a JTPA program reported that the average number of JTPA students enrolled was 141, or 7 percent of total enrollment (see Table 3.8).

Table 3.8
Enrollment of JTPA and JOBS Programs in Two-Year Public Postsecondary Institutions

	JTPA	JOBS
Percent of all institutions reporting students funded by program	82	32
Mean number of students receiving services funded by program[a]	141	121
Mean percent of institution enrollment[a]	7	3

[a] Calculations include only those institutions that reported at least one JTPA/JOBS student during 1991–92.

Source: Omnibus Survey of Postsecondary Institutions

Institutions with JOBS programs tend to have slightly higher overall enrollments (6,300 compared to 5,200 for the average institution with JTPA services, and 5,800 for all two-year institutions). However, JOBS enrollments are lower, both in absolute numbers and as a proportion of total enrollment.

The most common service provided to both JTPA and JOBS clients (see Appendix Table A-3.15) at two-year public postsecondary institutions is classroom instruction:

- Eighty-six percent of institutions with JTPA services provide classroom instruction under contract with JTPA.
- Seventy-one percent of institutions with JOBS students provide classroom instruction to the JOBS clients.

Most of this classroom instruction for JTPA and JOBS clients is provided in regular classrooms, but over half of the JTPA and JOBS clients receive at least some of their classroom instruction in special classes.

Postsecondary institutions under contract to JTPA also commonly provide other ancillary services. Most of these institutions reported that they provide counseling and assessment to over half of the JTPA and JOBS students (between 61 and 64 percent). Job placement and job clubs or job search assistance were also fairly common, while on-the-job training contracts were relatively rare.

One benefit of coordination between postsecondary institutions and federal job-training programs is the opportunity for clients to enroll in longer and more intensive vocational education programs than are the norm in JTPA and JOBS. About one-half of postsecondary institutions enroll JTPA students in associate degree programs and nearly two-thirds enroll them in certificate programs. The corresponding figures for JOBS students are 47 percent and 43 percent, respectively (see Appendix Table A-3.16).

Bailis and Grubb caution against regarding these results as overly positive. They assert that "without longitudinal information about whether these individuals actually complete credentials, it is hard to know how important it is simply to be enrolled in programs that could lead to associate degrees or certificates, since the rate of completion in community colleges and technical institutes is so low."[58]

Customized Training. Customized training programs, designed to meet the needs of individual firms, are widespread, with 81 percent of two-year public postsecondary institutions providing them (see Appendix Table A-3.17). Although it has been argued that "customized training does not in general expand the options for individuals in these federal programs,"[59] 23 percent of the postsecondary institutions with customized programs reported that they normally include JTPA or JOBS clients in the training.

Funding. Funding patterns also suggest the effectiveness of coordination between postsecondary vocational educational institutions and job-training programs. For postsecondary institutions receiving JTPA funds, the average

JTPA contribution to the overall budget is about the same as for secondary institutions — JTPA represents about 3 percent of revenues.

The contributions of JTPA and Perkins to the average public two-year public postsecondary institution are virtually the same (Table 3.9). On average, a postsecondary institution that receives both Perkins and JTPA funds receives:

- $282,103 in JTPA funds.
- $282,960 in Perkins funds.

JOBS, however, is funded at a much lower level for the institutions that receive both JOBS funds and Perkins funds:

- On average, these institutions (which tend to be larger than institutions without JOBS programs) receive approximately $190,000 in JOBS funds, or 1 percent of their total revenues.
- Perkins funds average over $300,000, or 3 percent of total revenues.

Table 3.9
Funding of JTPA and JOBS Programs in Two-Year Postsecondary Institutions

	JTPA	JOBS
Percent of all institutions reported students funded by program	82	32
Mean amount of program funds in institutions receiving both program funds and Perkins funds	$282,103	$190,586
Mean percent of institution revenues	2.9	1.2
Mean amount of Perkins funds in institutions receiving both program funds and Perkins funds	$282,960	$305,848
Mean percent of institution revenues	3.3	2.6

Source: Omnibus Survey of Postsecondary Institutions

The Omnibus Survey also asked postsecondary institutions to report the amount of funding from various sources supporting JTPA and JOBS clients in classroom instruction. As Bailis and Grubb point out in their analysis, these amounts "are almost certainly estimates, since community colleges and technical institutes

generally do not have program-based budgets which would allow them to disentangle the funding for specific programs."[60] Nonetheless, as shown in Figure 3.1, the results are revealing:

- Among those community colleges and technical institutes that do serve JTPA and JOBS clients, the largest single source of funds for the classroom instruction of these clients is the JTPA or JOBS program; but

- For JTPA programs, much of the resources for classroom instruction come from the educational institutions themselves, largely in the form of regular state aid (but also from other aid, including Perkins funds). For JOBS, however, this is not the case.

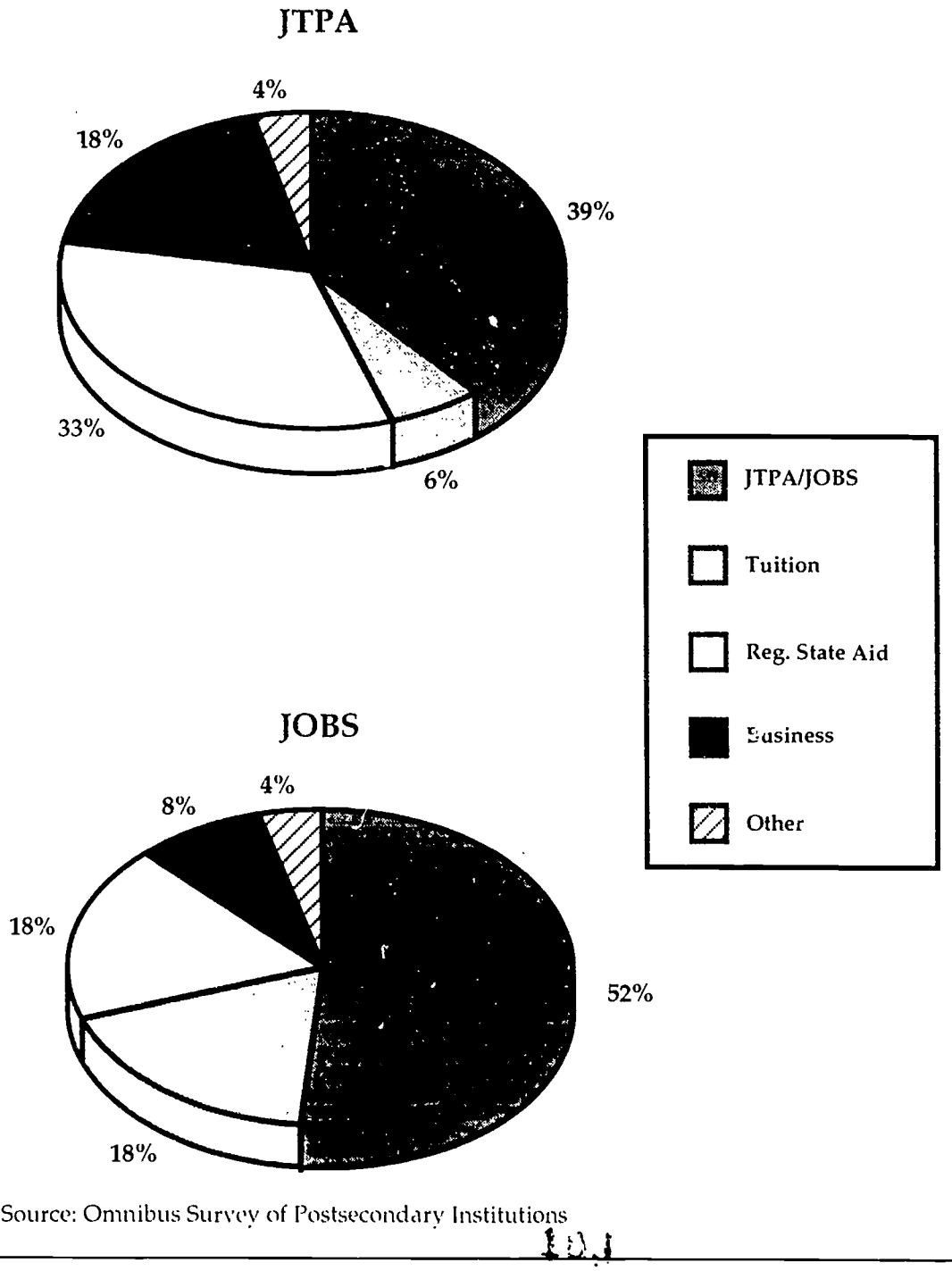
According to Bailis and Grubb, these data illustrate that "JTPA programs [at the postsecondary level] are not wholly federal programs, as they are often viewed; they are in fact federal-state partnerships because of the relatively large amounts of state funding which they receive when JTPA and vocational programs collaborate."[61]

A strong motive for referring JTPA and JOBS clients to public postsecondary institutions is cost-shifting, and because their funding is driven by enrollment figures, educational institutions have a special incentive to encourage such referrals. While Alt found that these practices may help avoid unnecessary costs and duplication of efforts, they also have a negative aspect: "JTPA and JOBS administrators often have little knowledge about the content of the education institutions' programs and fail to set policy requiring specific course content. Thus, coordination at the superficial level of referrals may go directly against ensuring that clients obtain the services they need and that the services they do get are of high quality."[62]

Remediation Programs. We have focused on the status of coordination between two-year postsecondary institutions and JTPA and JOBS because JTPA is the federal job training program that most often engages in joint planning with vocational education institutions, and JOBS is a relatively new program that requires a high level of cooperation with other employment training programs. However, other providers of remediation, especially adult education programs, also coordinate with two-year postsecondary institutions.

About one-fourth (27 percent) of two-year public postsecondary institutions reported that they do not coordinate with providers of remedial education or adult basic education other than JTPA or JOBS (see Appendix Table A-3.18). The coordination that does take place in these institutions is mostly in the form of referrals to or from other programs. Joint service delivery is not very common; only 26 percent provide remediation jointly with other programs.

Figure 3.1
Resources for Postsecondary Joint Classroom Instruction Programs With JTPA/JOBS



Source: Omnibus Survey of Postsecondary Institutions

Summary

We found that coordination between vocational education and job training programs is occurring at the local level in a wide variety of forms. The most innovative form recently advocated by federal policy — one-stop centers — is supported by one-half of all state postsecondary agencies. Case studies indicate that they can provide ease of access and a full range of programs.

Most secondary school districts, both regular and vocational, provide JTPA services (particularly summer employment) to a relatively small number of students. The vocational education and JTPA programs are usually jointly planned and students are jointly selected, but few districts supplement the JTPA funds with their own district funds. Cooperation and joint funding with JTPA are more common in vocational districts than in regular districts. Although JTPA services are a larger part of the vocational districts' overall program than regular districts', they are small in relation to the vocational districts' overall enrollment.

Most public two-year postsecondary institutions coordinate continuously with JTPA and remedial education programs. Coordination with the welfare-to-work program, JOBS, is less frequent. The enrollment contributed by these two programs is not trivial, but is relatively small compared to overall postsecondary vocational educational enrollments. Most institutions have JTPA or JOBS students enrolled in associate-degree or certificate programs, but remedial programs are almost as common.

About half of the postsecondary institutions reported no barriers to the joint provision of services to JTPA or JOBS clients. Among the other half, lack of time and resources were most often perceived as barriers to coordination.

Joint funding of JTPA programs is more common at the postsecondary than the secondary level, with half of the funds for JTPA programs coming from institutional sources, largely in the form of regular state aid but also from other sources, including Perkins funds. The contribution made by JTPA to the average institution's overall budget is about 3 percent of revenues, and Perkins contributes at about the same level.

Coordination at the local level appears to be occurring more often than not, often in imaginative ways. Although, once again, evidence of its effectiveness is lacking, the results appear on the surface to be positive.

BUREAUCRATIC AND POLITICAL REALITIES

Broad policy concerns such as the need for greater coherence in job-training programs can be developed and enunciated by policymakers, but they have to be worked out and implemented amidst the hard realities of agency budgets, bureaucratic priorities, and political realities.

For example, the National Commission for Employment Policy concluded after a two-year study of coordination that the Food Stamp Employment and Training Program, JTPA, JOBS, and "other relevant job training programs" should be merged into one agency.[63] Several researchers, however, have argued against such large-scale restructuring based on the amount of time, energy, and political capital that it would take to pass legislation, and the possibility that massive reorganization designed to increase some linkages might actually weaken ties with other programs. For example, the National Commission's proposal might improve coordination among the programs cited, but it might do so at the cost of less coordination with the AFDC and Food Stamp programs. Bailis and Grubb also worry about the large amounts of political capital that must be spent to achieve large-scale changes from the status quo, and point to an additional consideration: "It is far from certain that radical changes in structures will lead to the attainment of desired ends."[64]

Essential First Steps

There is widespread agreement that leadership from federal and state officials is essential to improved coordination.

Federal mandates and incentives. The literature review conducted for the National Assessment notes that, "[T]he existing mandates in vocational education and job training legislation have had measurable — if not dramatic — impact in terms of getting people together and hence laying the groundwork for future efforts to coordinate in more systematic fashions."[65] Bailis and Grubb also found a growing consensus that incentives such as the JTPA 8 percent set-aside funds are the most effective. In short, both mandates and incentives can be helpful.

Moreover, coordination appears to have been most successful when encouraged by rewards, instead of coerced by penalties. For example, in states that grant community colleges additional revenue based on enrollment, each JTPA student an institution enrolls provides a fiscal incentive to cooperate with JTPA.

State policy and leadership. State policy and leadership are critical. Jennings[66] and Alt[67] recently noted that leadership from the governor and legislature are needed to make major system changes such as the creation of supercouncils or other efforts to improve coordination. According to Alt:

> The governor has viewed better workforce preparation as a top priority, appointing members, pushing for legislation and funding, and overseeing progress. When cabinet-level officials are required to represent their departments on a council, especially when that council reports to the governor or lieutenant governor, others working on the projects are likely to take the tasks more seriously.

While agreeing on the importance of legislation and funding, the National Alliance of Business[68] also stresses that supercouncils function best with an independent staff, strong local counterparts, and business involvement.

Predictable Problems

Even with these first steps in place, several problems can be predicted: concerns about costs and funding, local community needs, worry about paperwork, and opposition to performance standards.

Costs and funding issues. Inadequate resources and restrictions on their use are often cited as barriers. But Grubb notes they can also serve as inducements to cooperation because agencies with dwindling resources must join forces to serve clients.[69] Funding mechanisms such as cost-shifting and the availability of funds set aside for coordination (like JTPA's 8% set-aside funds) can also serve as inducements to encourage cooperation.

Local community needs. A "one approach fits all" mentality will not produce the results policymakers seek. Communities differ in size, complexity, local politics, history and culture. Because communication may be simpler, and costs lower, when fewer institutions need to coordinate, cooperation may be easier in small communities than in large cities. In rural areas, community colleges or area technical and vocational centers are often the only providers of education and training, thereby forcing cooperation among employment preparation programs. Larger communities, on the other hand, may comprise several distinct submarkets and may be more likely to have politically powerful providers.[70]

Local politics and personal relationships inevitably enter the picture. For example, some providers may place an SDA under considerable political pressure to direct JTPA resources their way.[71] On the other hand, "the ethos that all groups should be given a piece of the funding pie" also exists.[72]

Performance standards. Many educational institutions have, in the past, expressed concern about performance standards in job-training programs. Based on the case studies it conducted, NCRVE reported that "[w]hen educational institutions have shied away from performance contracts, JTPA administrators have criticized them for being unwilling to take risks and to be held accountable for performance. However, the case studies demonstrate that performance-based contracts do not have to be a major barrier to coordination."[73]

NCRVE further observed that "educational institutions have had to make changes in order to meet performance requirements such as increasing their job placement efforts. But with time and experience, educational institutions can adapt to the demands of JTPA."

CONCLUSION

Amidst the mass of data and information provided by the National Assessment's Omnibus Surveys and literature reviews, it is easy to lose sight of the big picture and hard to separate the forest from the trees. This research, however, supports several broad, policy-relevant conclusions.

Need for Coordination

The first is self-evident: Policymakers' concerns about potential fragmentation and duplication cannot be dismissed. The inherent difficulties in managing 125 separate programs are real, not imaginary; the barriers to effective service delivery can be formidable. However, these problems should not be overstated. With so many distinct programs offering so many services to so many similar populations, some overlap is inevitable. Within limits, this duplication can be helpful: No program is 100 percent effective, and several potential sources of assistance at the local level can help ensure that fewer eligible students (youth and adults) fall between the cracks.

Nonetheless, in the current fiscal environment, neither federal, state, nor local governments can afford to maintain a host of uncoordinated programs, many duplicating the work of others. Coordination, collaboration, and cooperative planning can enhance the cost-effective delivery of programs and help ensure that as many clients as possible receive the services to which they are entitled and which they need

Leadership Required

The second is drawn from the analysis in this chapter: Coordination requires hard and determined effort from public officials at each level of government. The history and traditions of distinct programs — each eager to protect its bureaucratic turf amidst budget battles — implies that increased collaboration will not become a day-to-day reality simply by wishing for it. Public officials at the federal, state, and local levels will have to insist on cooperation and oversee its implementation.

Cooperation at Different Levels of Administration

Third, despite the difficulties of coordination, it appears clear that, as these job-training programs get closer to the local level and their intended clients, cooperation becomes more visible and seems to be more effective.

Federal. At the federal level, with the exception of the 8 percent set-aside provisions, coordination requirements have not gone much beyond encouraging agencies to develop cooperative agreements and joint planning of one kind or another. These requirements have, however, had the benefit of requiring separate

agencies to at least deal with each other. Enactment in 1994 of a joint school-to-work program, to be operated by the Department of Education and the Department of Labor, is likely to encourage more meaningful collaboration.

On a policy level, much more than lip service to collaboration could be accomplished, through, for example, authority to create jointly funded model programs. Just on an administrative level, coordination would be greatly enhanced by the simple step of agreeing on a common set of administrative requirements to govern the major programs. Agreement on eligibility definitions, fiscal years, reporting requirements, and planning periods would greatly simplify the daily work of officials at all levels of government in trying to work together.

State. The dynamic at the state level is quite different. State agencies also face the challenge of moving beyond verbal and written agreements to genuine collaboration. Nevertheless, federal encouragement of SHRICs combined with the movement of state governments toward supercouncils of one kind or another opens the possibilities for genuine improvement. Although the appearance of these supercouncils is so recent that it is too early to assess their value definitively, at least anecdotally several of them have made a difference.

Local. Cooperation at the federal and state levels, while desirable, would be of limited value if it were not matched by similar collaboration locally, in the communities actually providing services. In fact, the Omnibus Surveys and literature reviews indicate extensive interplay between various programs and providers — JTPA, vocational education, JOBS, community-based agencies, community colleges, regular school districts and vocational districts.

There can be little doubt that the set-aside provisions of JTPA and the Perkins' requirement that vocational education programs coordinate their activities with JTPA have encouraged a variety of effective and innovative collaborative activities at the local level.

Similarly, one-stop centers appear to be a promising innovation at the local level. From the client's point of view, they provide a single point of entry into an extremely complex system. For agency staff, they make tracking the progress of clients, and assessing the utility of related services, much easier. It seems clear that federal encouragement of these facilities is useful as long as this encouragement is combined with flexible authority so that localities can create the kind of one-stop center best suited to local needs.

It may be the case that broad policy concerns about the need for collaboration do not fully reflect the reality of how services are fashioned and delivered at the point of client contact. That is to say that, with or without policy encouragement, local officials have several incentives to collaborate. They have limited budgets. They have many clients. Despite turf protection, the most energetic local officials

are likely, at least informally, to try to do as much as possible for as many clients as they can.

Recommendations

The evidence suggests that coordination between vocational education and job training programs is worthwhile and emphasis on improved collaboration should be continued.

Since there are limits to what the federal government can accomplish, federal policymakers might best enhance coordination if they improved coordination among federal programs; simplified client eligibility, accounting, planning, reporting, and other regulations; and provided greater flexibility to state and local entities.

States should be encouraged to use funding policy as an incentive for local institutions to coordinate programs. The increase in state supercouncils, one-stop centers, and co-location appears to be a positive trend. A focus on the potential benefits of coordination, rather than on eliminating perceived barriers, might better persuade institutions to coordinate with job training programs.

Although lack of resources is considered by most institutions to be the largest barrier to local coordination, policymakers should carefully consider the most cost-effective ways of improving coordination. Coordination set-asides for special initiatives such as one-stop centers might be an effective way to provide resources, but controls are needed to assure that set-aside funds are spent according to Congressional intent.

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54 Bailis & Grubb (1993).

55 Grubb et al. (1991), p. 8.

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CHAPTER APPENDICES

CHAPTER 2 APPENDIX

Table A-2.1
Percent of State Secondary Vocational Directors Reporting Changes in Time Devoted to Various Activities in Relation to Changes in State Staff, 1990-1993

Activity or Responsibility	Increased Time	About the Same Time	Decreased Time
States with staff decline of 50 percent or greater, 1990-1993 (n=15)			
Coordination of vocational education with other education programs	60	26.7	6.7
Training/technical assistance to localities	40	33.3	26.7
Distribution/monitoring of federal/state funds (including audits)	53.3	33.3	13.3
Development of student performance measures	86.7	13.3	0
Responsibilities concerning special populations	60	40	0
Responsibilities concerning business/labor partnerships	46.7	26.7	20
States with staff decline less than 50 percent, 1990-1993 (n=13)			
Coordination of vocational education with other education programs	92.3	0	7.7
Training/technical assistance to localities	61.5	23.1	15.4
Distribution/monitoring of federal/state funds (including audits)	61.5	38.5	0
Development of student performance measures	92.3	7.7	0
Responsibilities concerning special populations	53.8	46.2	0
Responsibilities concerning business/labor partnerships	46.2	46.2	7.7
States with staff increase, 1990-1993 (n=13)			
Coordination of vocational education with other education programs	92.3	7.7	0
Training/technical assistance to localities	53.8	46.2	0
Distribution/monitoring of federal/state funds (including audits)	46.2	38.5	15.4
Development of student performance measures	84.6	15.4	0
Responsibilities concerning special populations	61.5	30.8	7.7
Responsibilities concerning business/labor partnerships	69.2	30.8	0

NOTE: Percentages do not add to 100 across rows because not all states conduct each of the activities.

Source: 1993 Followup Survey of Secondary State Directors

CHAPTER 3 APPENDIX

Appendix 3-A

Perkins Amendments Coordination Provisions and Responses

Interdepartmental Task Force on Vocational Education and Related Programs. After enactment of the Perkins amendments, the Department of Education's Office of Vocational and Adult Education (OVAE) reviewed existing interdepartmental activities and determined that all of the mandates specified in the legislation were already being implemented. Given the staffing shortage of the office, therefore, OVAE elected not to convene a new task force. The interdepartmental activities addressing this mandate were:

- An interdepartmental conference (Making the Connection: Coordinating Education and Training for a Skilled Workforce) sponsored by OVAE, HHS, and DOL for state leaders. Representatives from adult education, vocational education, DOL job-training programs, and HHS job-training programs spoke about "commonalities and differences among programs and coordination challenges and opportunities"[1]

- A conference jointly sponsored by OVAE and ED's Office for Special and Rehabilitative Services (OSERS) designed to improve coordination and build "effective linkages between educational programs that serve Americans with disabilities"[2]

- Ongoing coordination with HHS in accordance with the JOBS legislation.

- A number of ED ongoing groups with the purpose of fostering coordination (e.g., the Coordination Committee for Research in Vocational Education and Adult Education, which is composed of representatives of several ED agencies and meets bimonthly to coordinate efforts).

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1 U.S. Department of Education, Office of Vocational and Adult Education (1991). *Making the Connection: Coordinating Education and Training for a Skilled Workforce*, Conference proceedings, July 8-10, 1991.

2 U.S. Department of Education, Office of Vocational and Adult Education and Office of Special Education and Rehabilitative Services. *Building Effective Program Linkages -- To Establish a Coordinated System of Lifelong Learning for Adults With Disabilities*, Conference proceedings, undated.

- Membership on NOICC, whose primary purpose is to increase coordination among programs at the Departments of Education, Labor, Commerce, Agriculture, and Defense.

National Occupational Information Coordinating Committee. Following a new interagency agreement in 1990, NOICC's membership now includes: ED's Assistant Secretary for Vocational and Adult Education, ED's Administrator for the National Center for Education Statistics, ED's Commissioner of the Rehabilitation Services Administration, ED's Director of the Office of Bilingual Education and Minority Language Affairs, DOL's Commissioner of Labor Statistics, DOL's Assistant Secretary for Employment and Training, the Department of Agriculture's Undersecretary for Small Community and Rural Development, the Department of Commerce's Assistant Secretary for Economic Development, and the Department of Defense's Assistant Secretary for Force Management and Personnel.

Vocational Education Data System. Perkins also requires that ED cooperate with the Secretary of Commerce, the Secretary of Labor, and NOICC with respect to vocational education data systems. NOICC has taken the lead on this initiative. Its interagency agreement establishes the improvement of "coordination and communication concerning the use of education and employment data" among the various agencies as its first purpose. The second stated purpose is to "develop and implement . . . an occupational information system to meet the common occupational information needs of vocational education, and employment and training programs at the national, state, and local level."[3] Both NCES and OVAE have been working with NOICC to develop a master crosswalk between all of the various systems.

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[3] *Interagency Agreement of the National Occupational Information Coordinating Committee.* Signed by participating members between March 19, 1990, and June 4, 1990.

Appendix 3-B

Model One-Stop Centers, Coordination of Services, and Co-Location

- The Youth Employment Center in Cambridge, Massachusetts, uses staff from six youth employment agencies and school personnel in a centrally located local high school where all programs could be accessed.[1] Youth are guided through the referral process by someone who has assessed the youth's needs and is familiar with the eligibility criteria and existing capacity of the programs. Those familiar with the program say its success is due to its use of all community resources, including those that receive funds from sources outside the JTPA network. The Youth Employment Center was designed to maintain flexibility of diverse community resources, which a federally mandated program might hinder.

- In Iowa, the Work Force Development Council is working to create one-stop service centers and local boards to run them. The centers will offer outreach, intake and eligibility assessment; occupational and career counseling, job placement and labor market information, and referral to other service providers. Programs sponsored by JTPA, ES, Promise Jobs (a state program), and Vocational Rehabilitation are expected to co-locate in pilot centers during the current fiscal year. Plans also call for local community colleges and community action agencies to work closely with these centers. Where practical, the Work Force Investment Program projects, Iowa Conservation Corps, displaced homemaker programs, and others will also work with the centers.

  To support this streamlining, staff from the state's Department of Economic Development/Workforce Development Division (which oversees JTPA and state-funded job training programs) and the Department of Employment Services/Field Operation have been consolidated at the state level and plans call for the co-location of relevant federal offices in the future. Further in the future, several state human resource offices may join in this co-location. Closer physical access and simplified electronic access will allow staff to work more effectively together.

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1 Baker, S. (1992), Job training 2000: A local critique, in *Making Sense of Federal Job Training Policy: 24 Expert Recommendations to Create a Comprehensive and Unified Federal Job Training System*, (pp. 21-22), National Youth Employment Coalition and William T. Grant Foundation Commission on Youth and America's Future.

- Iowa also is planning an integrated management information system that "will eventually allow client tracking across all relevant programs, eliminate duplicative information-gathering from individual clients, and provide comprehensive information to clients on available services." The project first will establish "electronic links between existing data systems" and then will develop "a common client intake procedure [which] will be supported by a single computerized form and compatible work stations. Data collected with this system will be stored in a new common database but will also be accessible by currently used systems . [T]he fully integrated information system will enable administrators to track clients' progress among programs, to provide comprehensive case management, and to assess the performance of participants." Initially, JTPA, JOBS, and ES will be included in the system.[2]

- Under New York's GATEWAY (Gaining Access to the Emerging Workforce for Adults and Youth), state and local government agencies and service providers integrate their programs to focus on the individual client.[3] This was accomplished by simplifying paperwork, joint contracting, information sharing, and widespread marketing of programs. GATEWAY has been credited with making the structure of service delivery more client-focused and strengthening partnerships among local programs. In the future, the GATEWAY system will allow New York to integrate intake, assessment, counseling, training referral, support services, job placement, and followup services. New York already has instituted GATEWAY in four counties and has plans to expand into other locations.

- Jobs New Jersey (JNJ) was instituted in 1989 to fulfill a state mission to integrate the state's ES and JTPA offices into a system of "seamless service."[4] The New Jersey Division of Vocational Rehabilitation Services was added later the same year. Under the direction of a coordinator who was familiar with the programs and knew how to publicize them, one

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2 Alt (1994), p. 22.

3 Lundine, S. (1992), Job Training 2000: a step in the right direction, *Making Sense of Federal Job Training Policy.*

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project—Cumberland/Salem—used a common data system, coordinated testing, moved the Career Information Delivery System from the ES office into the local high school teen center, coordinated employer marketing programs, and held regional staff meetings to discuss program needs and activities. Credit for a successful model is given to staff who saw the need to provide better service and were willing to work toward common goals.

- All public ES, Unemployment Insurance, and job training services in North Dakota are delivered from Job Service local offices using a one-stop system of employment and training programs. An intake unit takes applications for work, unemployment insurance, and job training programs. The placement unit takes job orders and maintains job contacts with employers. An assessment unit handles JTPA activities, counseling, Job Corps recruitment and screening. The outcomes of this intake/placement/assessment model include streamlined service delivery to clients, decreased waiting time, more efficient use of staff, and employer contact with the same placement interviewer over time.

- California has implemented a variety of cooperative ventures. Its most successful has been based on industry-focused services.[5] The Aerospace Network is a joint venture of the Employment Development Department, aerospace employers, JTPA, Private Industry Councils, vocational education, and training agencies. The main purpose of the Network is "to provide the capacity to effectively respond to the cyclical nature of employment trends in the defense industry — finding workers for vacant jobs and jobs for displaced workers."[6] Based on its success with the aerospace industry, the model has been expanded to other industries: electronics, hospitality, and finance and banking.

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5 Little, A.R. (1990). Model offices in model communities. *Perspective: Essays and Reviews of Issues in Employment Security and Employment and Training Programs, 6*, 107-113.

6 Little (1990), p. 110.

Table A-3.1
Comparison of Legislative Requirements for Essential Elements of Employment Training Programs

FEATURE	CARL D. PERKINS VOCATIONAL AND APPLIED TECHNOLOGY ACT	REHABILITATION ACT OF 1973
Purpose	To make the United States more competitive in the world economy by full development of academic and occupational skills of all segments of the population. The purpose is to be achieved by improving educational programs that lead to academic and occupational skill competencies needed to work in a technologically advanced society.	To develop and implement, through research, training, services, and guarantee of equal opportunity, comprehensive and coordinated programs of vocational rehabilitation and independent living for individuals with disabilities in order to maximize their employment, independence, and integration into the work place and the community. Title I provides vocational rehabilitation (VR) services to persons with disabilities, consistent with their strengths, resources, priorities, concerns, abilities, and capabilities, so that such persons may prepare for and engage in gainful employment.
Administrative Auspices	Office of Vocational and Adult Education, U.S. Department of Education (ED). Grants are made to state education through secondary, post-secondary, and adult vocational education programs, services and activities.	Rehabilitation Services Administration, U.S. Department of Education
Fiscal Year	7/1 - 6/30	10/1 - 9/30
Program Year	7/1 - 6/30	10/1 - 9/30
Planning Cycle	Plans are due to ED every two years, with annual revisions as necessary at the option of the state. The planning period must be the same as under the Job Training Partnership Act.	Planning cycle may be any time interval that allows the state to coordinate its vocational rehabilitation plans with plans required under other legislation, as long as the cycle does not exceed three years.
Reporting Requirements	Annual report for ED due 9/30. (Continued)	Annual report including details about clients served and types of services provided, including types of rehabilitation technology services provided. (Continued)

(Continued)

Table A-3.1 (continued)
Comparison of Legislative Requirements for Essential Elements of Employment Training Programs

FEATURE	CARL D. PERKINS VOCATIONAL AND APPLIED TECHNOLOGY ACT (Continued)	REHABILITATION ACT OF 1973 (Continued)
Eligibility	Eligible fund recipients include most Local Education Agencies (LEAs) and community colleges with vocational programs, as well as public postsecondary technical institutes. Area vocational schools may receive Perkins funds by participating in consortia with LEAs. The intrastate allocation of Perkins funds is governed by a formula that provides a dispro-portionately large share of funds to recipients with high concentrations of special population students, including the economically and the educationally disadvantaged; individuals with disabilities; limited English proficient students and participants in sex equity program among others.	To be eligible for VR services, an individual must: (1) have a physical or mental impairment that is a substantial impediment to employment; (2) be able to benefit in terms of employment from VR services; and (3) require VR services to prepare for, enter, engage in, or retain gainful employment. All eligible individuals receive the eligibility assessment, vocational counseling, referral services, and job placement services at no cost to the individual. However, individuals may be required to pay for other services, based on financial ability. Priority must be given to persons with the most severe disabilities.
Primary Service Providers	Comprehensive high schools, vocational high schools, and vocational/technical centers.	A state VR counselor provides some services directly to the eligible individual and arranges for and/or purchases other services from providers in the community.
Primary Service Delivery System	State education agencies	State vocational rehabilitation services agencies administer the programs.
Primary Decision-Making Entity	State board of education	State vocational rehabilitation services

(Continued)

Table A-3.1 (continued)
Comparison of Legislative Requirements for Essential Elements of Employment Training Programs

FEATURE	ADULT EDUCATION ACT	NATIONAL APPRENTICESHIP ACT
Purpose	To assist states to improve education opportunities for adults who lack basic literacy skills. Literacy is defined as an individual's ability to read, write, and speak English, compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and develop one's knowledge and potential. Adult education programs should: (1) enable the acquisition of basic literacy to allow participants to function independently; (2) provide instruction to enable job training and subsequent employment; (3) enable adults to continue their education to at least the secondary level; and (4) improve participants' ability to have a positive effect on the literacy of their children.	To encourage and promote the establishment of apprenticeship programs. Apprenticeship programs are a combination of classroom instruction and on-the-job training in which workers learn skilled occupation an d earn a nationally recognized credential. Although DOL provides technical assistance to program sponsors, the actual programs are voluntarily operated by employers, employee associations or management and labor groups.
Administrative Auspices	Office of Vocational and Adult Education, U.S. Department of Education (ED). Basic grants are allocated by formula to the state education agency which administers funds at the local level to eligible entities.	Bureau of Apprenticeship and Training, U.S. Department of Labor
Fiscal Year	10/1 - 9/30	None
Program Year	7/1 - 6/30	None
Planning Cycle	Four-year plan was submitted to ED by states for 1989-93. Revision due 4/92 for extension to 1995.	None
Reporting Requirements	Annual report of enrollment statistics, federal, state, and local expenditures and programs toward state goals. (Continued)	None (Continued)

(Continued)

Table A-3.1 (continued)
Comparison of Legislative Requirements for Essential Elements of Employment Training Programs

FEATURE	ADULT EDUCATION ACT (Continued)	NATIONAL APPRENTICESHIP ACT (Continued)
Eligibility	Undereducated adults age 16 and older who are not enrolled in secondary school. Special emphasis is placed on educationally disadvantaged adults: adults whose basic skills are at the fifth grade level or lower.	Apprenticeship programs are open to anyone at least 16 years of age who is physically able to do the work of the trade. Some trades have additional eligibility requirements such as entry examinations or high school diploma.
Primary Service Providers	Local educational agencies, correctional education agencies, community-based organizations, public or private nonprofit agencies, postsecondary educational institutions, and other institutions with the ability to provide literacy services.	Employers, employer associations, management, labor groups. Classroom training is provided in the program sponsor's training facility or a local technical school or junior college.
Primary Service Delivery System	State education agencies allocate funds to eligible entities at the local level.	On-the-job training and classroom instruction ranging from 2 to 5 years to prepare the candidate for a trade. The training results in a certification. Apprenticeship is a formal program in which the apprentice and his or her employer enter into a formal agreement which specifies the obligations of each party. The Federal government does not fund apprenticeship training. Its role is setting standards, promoting programs, and certifying achievement. Apprenticeship programs are private sector programs. Costs are shared by parties to the agreement. The apprentice usually receives reduce earnings while the employer bears the training costs.
Primary Decision-Making Entity	State education agencies	Private sector employers and trainees

(Continued)

Table A-3.1 (continued)
Comparison of Legislative Requirements for Essential Elements of Employment Training Programs

FEATURE	WAGNER-PEYSER (Continued)	JOB OPPORTUNITY AND BASIC SKILLS (JOBS) TRAINING PROGRAMS (FAMILY SUPPORT ACT) (Continued)
Purpose	To place persons in employment by providing placement related services without charge to job seekers and to employers. Activities include: (1) work test requirements of the state Unemployment Insurance (UI) system; (2) services for handicapped persons; (3) migrant seasonal farm workers programs; (4) priority services to veterans; (5) alien labor certification; (6) Target Jobs Tax Credit (TJTC) certification; (7) Trade Act programs; and (8) state and local labor market information.	To provide applicants and recipients of Aid of Families with Dependent Children (AFDC) with education, job training, and work activities that will help them avoid long-term welfare dependence and achieve self-sufficiency. Services must include (1) high school or equivalent; (2) basic and remedial education; (3) English as a Second Language; (4) skills training; (5) job readiness; (6) job development and job placement; and (7) at least two of the following: group and individual job search, on-the-job training, community work experience or other approved work experience, or work supplementation. Child care and other supportive services needed to permit participation must also be provided.
Administrative Auspices	Employment and Training Administration (ETA), U.S. Department of Labor (DOL). nationwide federal-state network of 2000 local Employment Service (ES) Offices funded through grant agreements between ETA and each state.	Administration for Children and Families (ACF), U.S. Department of Health and Human Services (DHHS). State IV-A agencies, Indian Tribes, and Alaska Native organizations.
Fiscal Year	10/1 - 9/30	10/1 - 9/30
Program Year	7/1 - 6/30	State program year, or federal fiscal year.
Planning Cycle	ES operates an annual planning process. Preliminary planning estimates are provided to the states no later than 3/15.	Plans must be submitted at least every two years. Plans must be submitted to the Governor for review and approval; to the State Job Training Coordination Council (SJTCC) and the state education agency for review and comment at least 60 days before submittal to DHHS.
Reporting Requirements	Quarterly reports are prepared by states and submitted to DOL. Reports contain information on client demographics, services provided, and number of job listings received. (Continued)	Financial and statistical program reports including quarterly program participation, child care assistance, and aid to never-married minor parents, quarterly financial reports, annual report of target groups expenditures, and Tribal JOBS quarterly Report. (Continued)

(Continued)

Table A-3.1 (continued)
Comparison of Legislative Requirements for Essential Elements of Employment Training Programs

FEATURE	WAGNER-PEYSER (Continued)	JOB OPPORTUNITY AND BASIC SKILLS (JOBS) TRAINING PROGRAMS (FAMILY SUPPORT ACT) (Continued)
Eligibility	All employers seeking workers and persons legally authorized to work in the United States who are seeking employment. Priority given to veterans, with disabled veterans receiving preference. States are required to provide job counseling for persons with disabilities. States may provide specialized assistance to youth ages 16 to 22, women, older workers, persons with disabilities, rural residents, and the economically disadvantaged.	Where state resources permit, all non-exempt AFDC recipients must participate in the JOBS program if they reside in a subdivision covered by JOBS and are guaranteed child care under 45 CFR Part 255. Exempt recipients are: (1) the ill, elderly, or incapacitated; (2) caretakers of ill family members; (3) primary caretakers of children under age 3 (or under age 3 but not less than 1 at sate option); (4) employed 30 hours or more a week; (5) in at least the second trimester of pregnancy; (6) children under age 16, or children attending school full-time; (7)residents of a remote area where the program is unavailable; or (8) VISTA volunteers. Exempt AFDC recipients may participate on a voluntary basis.
Primary Service Providers	Local Employment Service offices	Public schools, community colleges, universities, community based organizations, state employment service, vocational/technical schools, and services provided by contract with Department of Labor, Job Training Partnership agencies, and private organizations.
Primary Service Delivery System	State employment security agencies	State Department of Human Services or Departments of Social Services determine which services are needed and arrange for delivery with a variety of service providers.
Primary Decision-Making Entity	State employment security agencies	State Departments of Human Services or Department of Social Services

(Continued)

Table A-3.1 (continued)
Comparison of Legislative Requirements for Essential Elements of Employment Training Programs

FEATURE	JOB TRAINING PARTNERSHIP ACT Title II-A Adult Training Program	JOB TRAINING PARTNERSHIP ACT Title II-B Summary Youth Employment and Training Program
Purpose	To prepare adults for participation in the labor force by increasing their occupational and educational skills, resulting in improved long-term employability, increased employment and earnings, and reduced welfare dependency.	To enhance basic educational skills of youth; to encourage school completion or enrollment in supplementary or alternative school programs; to provide eligible youth with exposure to the world of work; and to enhance the citizenship skills of youth.
Administrative Auspices	Employment and Training Administration, U.S. Department of Labor	Employment and Training Administration, U.S. Department of Labor
Fiscal Year	10/1 - 9/30	10/1 - 9/30
Program Year	7/1 - 6/30	5/1 - 9/15
Planning Cycle	East state prepares an annual statement of goals and objectives for job training and a placement programs. Also, each state submits a biennial coordination and special services plan to ETA for approval. The proposed plans are published for review not fewer than 120 days prior to July 1. The state submits a final plan to DOL for approval not fewer than 60 days before July 1.	Each state prepares an annual statement of goals and objectives for job training and placement programs. Also, each state submits a biennial coordination and special services plan to ETA for approval. The proposed plans are published for review not fewer than 120 days prior to July 1. The state submits a final plan to DOL for approval not fewer than 60 days before July 1.
Reporting Requirements	Program reports are submitted annually to DOL. Financial reports are submitted quarterly and annually. (Continued)	Program report includes the number and characteristics of participants and level of funding. The report is due 45 days after 9/30. (Continued)

(Continued)

Table A-3.1 (continued)
Comparison of Legislative Requirements for Essential Elements of Employment Training Programs

FEATURE	JOB TRAINING PARTNERSHIP ACT Title II-A Adult Training Program (Continued)	JOB TRAINING PARTNERSHIP ACT Title II-B Summary Youth Employment and Training Program (Continued)
Eligibility	Economically disadvantaged individuals, age 22 or older. Not less than 65% of the participants must also have one or more additional barrier to employment. These are: basic skills deficient, school dropouts, recipient of cash welfare payments (including JOBS program), offenders, persons with disability, or homeless. Ten percent of participants need not be economically disadvantaged to be eligible if they have one or more barriers to employment.	Individuals age 14 through 21 who are economically disadvantaged or who have met the eligibility requirements for free meals under the National School Lunch Act during the most recent school year.
Primary Service Providers	Community-based organizations, proprietary schools, private firms, and labor unions	Community-based organizations, proprietary schools, private firms, and labor unions.
Primary Service Delivery System	Service delivery areas established by the states.	Service delivery areas established by the states.
Primary Decision-Making Entity	Local service delivery areas determine which services to provide and who will provide them. Federal government specifies eligibility requirements and performance standards.	Local service delivery areas determine which services to provide and who will provide them. Federal government specifies eligibility requirements and performance standards.

(Continued)

Table A-3.1 (continued)
Comparison of Legislative Requirements for Essential Elements of Employment Training Programs

FEATURE	JOB TRAINING PARTNERSHIP ACT Title II-C Youth Training Program
Purpose	To improve the long-term employability of youth; enhance the educational, occupational and citizenship skills of youth; encourage school completion or enrollment in alternative school programs; increase the employment and earnings of youth; reduce welfare dependency; and assist youth in addressing problems that impair their ability to make successful transitions from school to work, apprenticeships, the military, or postsecondary education and training.
Administrative Auspices	Employment and Training Administration, U.S. Department of Labor
Fiscal Year	10/1 - 9/30
Program Year	5/1 - 9/15
Planning Cycle	Each state prepares an annual statement of goals and objectives for job training and placement programs. Also, each state submits a biennial coordination and special services plan to ETA for approval. The proposed plans are published for review not fewer than 120 days prior to July 1. The state submits a final plan to DOL for approval not fewer than 60 days before July 1.
Reporting Requirements	Program reports are submitted annually to DOL. Financial reports are submitted quarterly and annually.

(Continued)

(Continued)

Table A-3.1 (continued)
Comparison of Legislative Requirements for Essential Elements of Employment Training Programs

FEATURE	JOB TRAINING PARTNERSHIP ACT Title II-C Youth Training Program (Continued)
Eligibility	Individuals age 16 through 21 who are economically disadvantaged are participating in a compensatory education program under Chapter 1 of the Elementary and Secondary Education Act of 1965; or are eligible for free meals under the National School Lunch Act during the most recent school year. May serve 14-15 year old in-school youth if provided for in the job training plan. Not less than 50% of the youth participating must be out-of-school. Not less than 65% of participants, whether in-school or out-of-school, must have an additional barrier to employment. These barriers include basic skills deficiency, pregnancy or parenting, disability, homelessness, runaway, or offenders. A barrier for in-school youth is educational attainment of one or more grade levels below the grade appropriate to their age. For out-of-school youth the additional barrier is high-school dropout status.
Primary Service Providers	Community-based organizations, proprietary schools, private firms, and labor unions.
Primary Service Delivery System	Service delivery areas established by the states.
Primary Decision-Making Entity	Local service delivery areas determine which services to provide and who will provide them. Federal government specifies eligibility requirements and performance standards.

Table A-3.2
Secondary State Agency Distribution of JTPA 8% Set-Aside Funds

Entity	Percent of States Reporting that Entity is Eligible to Receive 8-Percent Funds	Mean Percent of Funds Distributed to Entity by State in Which Entity is Eligible[a]
Individual local education authorities (LEAs)	77	40
Community Colleges or other postsecondary institutions	73	36
JTPA service delivery areas (SDAs)	53	46
Consortia of SDAs and educational institutions	37	16
Other	51	34

[a]States reporting that the entity was eligible but that no funds were allocated to the entity in 1991-92 are included in the calculation of the mean. Percentages total more than 100 because some funds are passed through one entity to another — e.g., from SDAs to community colleges.

Source: Omnibus Secondary State Survey

Table A-3.3
Secondary State Agency Allocation Methods for JTPA 8% Set-Aside Funds

Allocation Method	Percent of Secondary State Agencies
Formula	13
RFP or other discretionary mean	43
Combination of formula and discretion	26
Other	19

NOTE: Percentages do not add to 100 because of rounding.

Source: Omnibus Secondary State Survey

Table A-3.4
States With a State Human Resource Investment Council (SHRIC), 1993

Has or Will Have a State Human Resources Investment Council	Percent of Secondary State Agencies	Number of Secondary State Agencies[a]
Yes, have one now	16	8
No, but will have one	12	6
No, do not and will not have one	71	36
Don't know	?	1

[a]Of the 14 states having a SHRIC, 6 states (40%) reported having Perkins programs under SHRIC jurisdiction.

NOTE: Percentages do not add to 100 because of rounding.

Source: 1993 Followup Survey for State Directors of Secondary Vocational Education

Table A-3.5
Persons and Organizations Represented on State Human Resource Investment Council or Other Supercouncil, 1993

Organization	Number Represented on Supercouncil	
	Secondary	Postsecondary
State Board Members (Education)	10	9
State Agency Responsible for Vocational/Occupational Education	20	20
SCOVE Members	17	13
District Administrators	10	9
Public Schools/Community Colleges/Technical Institute Administrators	15	17
Public Schools/Community Colleges/Technical Institute Teachers/Faculty	6	7
Local Area Council Members	10	7

Source: 1993 Followup for State Directors of Secondary Vocational Education

Table A-3.6
Summary of States' Progress in Forming State Human Resource Investment Councils and Work Force Development Councils, 1993[a]

Source	SHRIC Exists	SHRIC Expected in 1994-95	Work Force Development Council (or Elements) Exists
U.S. Dept. of Labor[b]	Colorado, Indiana Iowa[c], Michigan North Carolina, Ohio, South Dakota, Texas [total of 8]	Maryland Oregon	Alabama, California Maryland, Massachusetts, Missouri, Montana Nevada, New Hampshire New Jersey, New York Oregon, Rhode Island S. Carolina, S. Dakota, West Virginia, Washington, Wyoming, Utah, Vermont [total of 19]
National Governors' Association	Indiana, Maryland, Massachusetts, Michigan North Carolina, Ohio, Texas [total of 7]		Connecticut, Maine, Missouri, New Jersey[d] New York, Tennessee, Vermont, Washington, Wisconsin, Oregon, Rhode Island [total of 11]
National Alliance of Business	Indiana, Iowa, Ohio, Texas, Vermont [total of 5]		Connecticut, Maine, Oregon, Maryland, Massachusetts, New Jersey, New York, North Carolina, Rhode Island, Washington, Wisconsin [total of 11]

[a]Different sources have categorized states differently as to whether they have a council and, if so, whether it qualifies as a SHRIC.

[b]Some states are counted in more than one category by the Department of Labor; eight of those in the "undecided" category had also established some elements of a supercouncil, for example.

[c]Discussions indicate that Iowa is moving toward establishing a SHRIC (December 1993 and January 1994). A 1993 document confirms that the Work Force Development Council "constitutes an evolutionary step" but is not yet a SHRIC (Iowa Department of Economic Development et al.).

[d]Of these councils, NGA reports that New Jersey, Oregon, and Rhode Island have councils that are quite similar to SHRICs in structure and functions.

Sources: U.S. Department of Labor 1993; National Governors' Association 1993; National Alliance of Business 1993.

Table A-3.7
Interactions of State Agencies (Percent)

Type of Interaction	Programs							
	State Job Training Coord. Council (JTPA)	Adult Basic Education	Appren-ticeship Programs	Vocational Rehabili-tation (Rehab. Act of 1973)	State Employ-ment Service	NOICC	Economic Develop-ment	AFDC JOBS Program
Secondary Agencies								
No interactions	7	6	15	21	20	18	20	24
Regular meetings of subcommittees, staff	69	67	62	42	50	60	50	47
Joint membership on committees, subcommittees	73	69	46	55	50	65	39	51
Joint funding of state programs	40	44	24	26	20	32	24	35
Sharing state plans	76	60	24	24	33	33	35	38
Postsecondary Agencies								
Joint planning	64	62	44	33	46	52	49	47
No interactions	9	13	17	19	17	17	6	28
Regular meetings of subcommittees, staff	60	54	46	47	45	60	57	51
Joint membership on committees, subcommittees	72	59	52	49	55	53	62	47
Joint funding of state programs	40	32	19	21	19	19	40	30
Sharing state plans	66	51	26	28	30	34	51	32
Joint planning	51	49	36	38	49	43	53	38

Sources: Omnibus Surveys of State Secondary and Postsecondary Directors

Table A-3.8
Other Formal/Informal Arrangements for Coordination Reported by Secondary State Agencies, 1992

Mechanism Used	Percent of Secondary State Agencies	Percent of Postsecondary State Agencies
None	11	34
Other planning activities	46	43
A superagency of some kind	24	19
Targeting of funds	44	32
Decisions about what services to provide	58	38
Decisions about priorities among target groups	49	40

Sources: Omnibus Surveys of Secondary and Postsecondary State Directors

Table A-3.9
Other Postsecondary State Agency Policies Intended to Encourage Cooperation, 1992 and 1993

	Percent of Postsecondary State Agencies	
Policy Used	1992	1993
None	23	NA
Encouragement of flexible programs	71	82
Funding of assessment/remediation/counseling centers	50	70
Funding of "one-stop" education and training centers	33	50

Sources: Omnibus Surveys of Secondary and Postsecondary State Directors and the 1993 Followup

Table A-3.10
Enrollment of JTPA Programs in Comprehensive and Vocational Districts

	Regular Districts	Vocational Districts
Percent of all districts reporting students funded by JTPA	58	71
Mean number of students in JTPA districts receiving services funded by JTPA[a]	41	64
Mean percent of district enrollment in JTPA districts[b]	3.8	5.8

[a] Includes only districts reporting at least one student who received services funded by JTPA during 1991-92 enrolled in the district.

[b] Includes only districts that reported at least one JTPA student during 1991-92 and provided all data needed to calculate total enrollment.

Sources: Omnibus Surveys of Regular Districts, Version A, and Vocational Districts

Table A-3.11
JTPA Services Provided by Regular and Vocational Districts
(Percent)

	Regular Districts		Vocational Districts	
Percent reporting students receiving services funded by JTPA	All Districts	Districts w/JTPA Services	All Districts	Districts w/JTPA Services
Summer employment	44	84	43	64
Work experience	24	44	36	53
Counseling	18	34	40	59
Remediation/Tutoring	16	31	32	48
Other	7	12	21	32

Sources: Omnibus Surveys of Regular Districts, Version A, and Vocational Districts

Table A-3.12
Use of Sole or Joint Methods to Plan JTPA Services and Select Students (Percent)

	Regular Districts	Vocational Districts
How Services or Programs Were Planned		
By school administrators	8	11
By JPTA administrators	20	16
Jointly by JPTA administrators and school administrators	69	69
Other method	3	4
How Students Were Selected		
By school administrators	8	2
By JPTA administrators	24	30
Jointly by JPTA administrators and school administrators	64	60
Other method	4	9

Sources: Omnibus Surveys of Regular Districts, Version A, and Vocational Districts

Table A-3.13
Two-Year Postsecondary Institutions Reporting Participation With Planning Entities for Other Employment Preparation Programs

Entity	Percent of Institutions Reporting Participation
None reported	13
The local Private Industry Council (PIC)	68
A planning group for the welfare-to-work (JOBS) program	45
A local planning council related to adult basic education or remedial education, or a literacy council	72
Any other local planning or coordination group involving vocational education, job training, or other employment-related services	63

Source: Omnibus Survey of Postsecondary Institutions

Table A-3.14
Type of Barriers Reported by Two-Year Public Postsecondary Institutions Who Reported Some Kind of Barrier to Cooperation (Percent)

Factor	Percent of Postsecondary Institutions with Program	
	JTPA	JOBS
No factors have inhibited providing services jointly	49	49
Of those who reported factors preventing or limiting their institution from providing joint services:		
Different purposes and goals	26	14
Incompatible schedules for courses/classes	19	9
Incompatible planning cycles, fiscal years, or geographical area	14	5
Difficulty in meeting JTPA/JOBS performance standards	26	5
Lack of cooperation from JTPA/JOBS staff	20	7
Inadequate resources from JTPA/JOBS	32	18
Burdensome paperwork or reporting requirements	47	15
Political barriers/resistance	24	10
JTPA/JOBS clients poorly prepared	25	13
Lack of state or institutional resources for JTPA/JOBS clients	22	19
Lack of time or resources for coordination	33	27
Other	18	47

Source: Omnibus Survey of Postsecondary Institutions

Table A-3.15
Types of Services Provided to JTPA or JOBS Clients by Postsecondary Institutions Providing Instruction or Service Funded by JTPA or JOBS (Percent)

Service	JTPA		JOBS	
	All Institutions	Institutions with JTPA Services	All Institutions	Institutions with JOBS Services
Support Services				
Assessment	45	62	16	61
Counseling	46	64	16	61
Job placement	37	52	9	34
Job clubs or job search assistance	24	34	7	26
Instruction				
On-the-job training contracts	9	13	2	6
Classroom instruction	66	86	21	71
	Institutions Providing JTPA Classroom Instruction		Institutions Providing JOBS Classroom Instruction	
Regular classes	94		85	
Special classes	56		64	

Source: Omnibus Survey of Postsecondary Institutions

Table A-3.16
Postsecondary Institution Programs With JTPA or JOBS Clients Enrolled

Program	Percent of Postsecondary Institutions With Program	
	JTPA	JOBS
Vocational associate degree programs	53	47
Vocational credit certificate programs	62	43
Short-term or non-credit vocational programs	39	27
Remedial or developmental education	45	54
English as a Second Language (ESL)	8	16
Other	12	16

Source: Omnibus Survey of Postsecondary Institutions

Table A-3.17
Customized Training Provided by Postsecondary Institutions

Percent of all institutions that provide customized training for specific firms	81
Mean number of students receiving customized training in Fall 1991-92[a]	606
Percent of institutions providing customized training that normally include JTPA and JOBS clients	23
Mean number of JTPA clients included in customized training[b]	105
Mean number of JOBS clients included in customized training[b]	41

[a] Included only institutions that reported at least one student in customized training provided by the institution in fall 1991-92.

[b] Includes only institutions that reported at least one JTPA/JOBS student in customized training provided by the institution in fall 1991-92.

Source: Omnibus Survey of Postsecondary Institutions

Table A-3.18
Coordination With Other Service Providers for Remedial Education or Adult Basic Education

Extent of Coordination	Percent of Public Two-Year Postsecondary Institutions
Does not coordinate with other providers of remedial education or adult basic education	27
Provides remediation for students referred from other programs	51
Refers students to other remedial education or adult basic education programs	45
Jointly provides remediation with other programs	26
Other coordination	7

Source: Omnibus Survey of Postsecondary Institutions

TECHNICAL APPENDIX

TECHNICAL APPENDIX

This appendix describes the methodology used for the major data collection efforts contributing to this Final Report of the National Assessment of Vocational Education. For each effort, we summarize the issues addressed, sampling, data collection procedures, and, where appropriate, survey response rates and statistical reliability. The time period in which all data were collected is also provided.

We first review survey efforts, beginning with the National Assessment's Omnibus Survey and 1993 Followup Survey. Other surveys discussed are the National Assessment of Vocational Education Teacher Survey and Employer Survey, the National Alliance for Partnerships in Equity's State Sex Equity Administrator Survey, the Correctional Education Survey, and the Survey of Vocational Student Organizations. We also discuss a series of surveys by the National Center for Education Statistics — the 1982, 1987, 1990, and 1992 student transcript studies; the National Postsecondary Student Aid Study; and the Schools and Staffing Survey.

We also review the State Finance Record Collection of Perkins Act funding data and three case study efforts — the Community Case Studies and the Funding Case Studies, both based on Omnibus Survey samples, and the Native American Tribal Case Studies. In addition to these data collection efforts, the Final Report includes information from commissioned literature reviews and published research articles. These are cited in the reference list at the end of the report and are not discussed here.

Many sections of this Technical Appendix were taken verbatim, or almost verbatim, from the references listed in the section and/or at the end of this appendix. We gratefully acknowledge the work of those authors.

THE OMNIBUS SURVEY[1]

The Omnibus Survey was developed by National Assessment staff, with input from the National Center for Research in Vocational Education, to collect information on vocational education conditions and the implementation of the 1990 Perkins Act (see Table T.1). The survey consists of seven paper-and-pencil questionnaires:

- Survey of State Directors of Secondary Vocational Education
- Survey of State Directors of Postsecondary Occupational/ Technical Education
- Survey of Public Secondary School Districts (Version A)
- Survey of Public Secondary School Districts (Version B)

Table T.1
Content of the National Assessment of Vocational Education Omnibus Survey

	SD	PD	DA	DB	DV	SS	PS
Administrative responsibilities/ institution type	X	X	X	X	X	X	X
Enrollments	X	X	X	X	X	X	X
Staffing	X	X	X	X	X	X	X
General funding	X	X	X	X	X		X
Distribution or use of Perkins funds	X	X	X	X	X		X
Steps taken to integrate academic and vocational education	X	X		X	X	X	X
Steps taken to implement "all aspects of the industry"	X	X		X	X	X	X
Steps taken to develop tech-prep	X	X		X	X		X
Steps taken to develop and implement vocational performance standards and measures	X	X		X	X		X
School-to-work programs	X	X				X	X
Coordination with JTPA	X	X	X		X		X
Effects of education reform on vocational education	X			X	X		
Services for special population students — current and changes			X			X	X

SD = Survey of State Directors of Secondary Vocational Education
PD = Survey of State Directors of Postsecondary Occupational/Technical Education
DA = Survey of Public Secondary School Districts, Version A
DB = Survey of Public Secondary School Districts, Version B
DV = Survey of Vocational School Districts
SS = Survey of Public Secondary Schools
PS = Survey of Two-Year Public Postsecondary Institutions

- Survey of Public Vocational School Districts
- Survey of Public Secondary Schools
- Survey of Two-Year Public Postsecondary Institutions

The respondents for the three district surveys were the district director of vocational education; for the secondary school survey, the school principal (who in many cases forwarded the survey to the school's vocational education department head); and for the postsecondary institution survey, the institution's president (who typically forwarded the survey to the dean for occupational/technical education).

Sample Selection

All eligible respondents were surveyed (i.e., we conducted a census survey) for four of the Omnibus Surveys: the two surveys of state directors of vocational education, the survey of vocational districts, and the survey of public two-year postsecondary institutions. (All survey sample sizes are listed in Table T.2.)

Table T.2
Survey Sample Size and Response Rates for the 1992 Omnibus Surveys

Survey	Survey Sample Size	Response Rate (Percent)
Survey of State Directors of Secondary Vocational Education	57[a]	91
Survey of State Directors of Postsecondary Occupational/Technical Education	57[a]	87
Survey of Secondary School Districts, Version A	899	86
Survey of Secondary School Districts, Version B	898	84
Survey of Public Vocational School Districts	361[a]	71
Survey of Public Secondary Schools	3,130	69
Survey of Two-Year Public Postsecondary Institutions	1,251[a]	79

[a] Census of all eligible respondents.

Source: Chaney (1993)

The National Association of State Directors of Vocational and Technical Education provided lists of all secondary and postsecondary state directors for the state director surveys. The lists included 57 secondary and 57 postsecondary state directors, covering the 50 states, the District of Columbia, and the six U.S. territories that receive Perkins Act funds.

The U.S. Department of Education's Integrated Postsecondary Data System (IPEDS), a universe listing of all such institutions, provided the sampling frame for public two-year postsecondary institutions. The Omnibus postsecondary survey sample included all 1,251 public two-year postsecondary institutions listed on the IPEDS.

The Quality Education Data (QED) listing of schools and school districts, supplemented by the U.S. Department of Education's Common Core of Data (CCD), provided the sampling frame for selecting public secondary districts and schools. This combination allowed for more complete universe coverage, and provided all variables needed for sample stratification. All 361 vocational districts on the sampling frame were selected for the Omnibus Vocational District Survey.

Regular districts and schools were sampled after first limiting the sample to public districts and schools with 11th and 12th grades, then separating vocational schools from regular schools. Schools were considered to be regular unless they provided only vocational education, and districts were considered regular if at least one school was regular. All 661 schools within the 361 vocational districts were sampled with certainty, and all 469 vocational schools within the sampled regular districts were sampled with certainty, for a total sample of 1,130 of the 1,477 vocational schools in the country.

The 11,263 regular secondary districts were sampled with probability proportionate to a measure of size (based on the aggregate square root of enrollments in grades 11 and 12) within each of three strata: urban, suburban, and rural districts. Because of the small number of regular urban districts, all 465 such districts were sampled with certainty. A sample of 666 districts was selected from the pool of 4,054 suburban districts, and 666 districts were selected from the 6,744 rural districts. The resulting sample was randomly split in half, with half of the districts receiving one questionnaire (Version A), and the other half receiving a (partially) different questionnaire (Version B).

In a second stage, at least one regular high school was selected from each sampled district, with a probability based on the square root of enrollments in grades 11 and 12. Of the 15,421 regular secondary schools, 2,000 were selected, with 668 from urban districts, 666 from suburban districts, and 666 from rural districts.

Data Collection

The surveys were administered from March to October, 1992. Thus, most surveys were completed at the end of the first year of implementation of the 1990 Perkins Act, with a very few completed at the beginning of the second year of implementation.

The data collection involved multiple (mass and individual) mail-outs, followed by extensive telephone efforts to retrieve data. Final response rates exceeded 70 percent for all surveys except the secondary school survey, which had a response rate of 69 percent (Table T.2). A major reason for this lower response rate for secondary schools was that data retrieval extended into the summer, at which point many school respondents could not be reached.

Weighting and Reliability of Estimates

The census surveys did not require weighting, as all cases were selected with certainty. This includes the two state administrator surveys, the vocational district survey, and the two-year public postsecondary institution survey. The remaining surveys were weighted as described below.

Basic Sampling Weights

The basic sampling weights for regular districts and schools (the only entities needing weighting) were the reciprocals of their overall selection probabilities. Because the sample of regular districts was split in two, with each half receiving a different questionnaire, additional weights were created for estimating national totals for those questions where only a half-sample was available.

Nonresponse Adjustments

The validity of survey estimates depends on the degree to which nonrespondents are systematically different from those who responded. To determine the potential for nonresponse bias, information on the sampling frames was used to determine which classification groups were least likely to respond to the surveys.

For both vocational districts and postsecondary institutions, large districts/institutions were somewhat more likely to respond than those with small enrollments. Since district/institution size is related to Perkins funding, there may be some tendency for unfunded districts and institutions to be under-represented, and for those policies that are associated with Perkins funding to be overrepresented in unadjusted data.

Vocational districts also had lower response rates (71%) than regular districts (85%). However, given the relatively small number of vocational districts and

students in those districts, a higher response rate among vocational districts would have had little effect on the overall totals.

Nonresponse biases on the regular district and school samples were minimized through adjustments to the sampling weights. This adjustment is particularly important when response rates are relatively low, as they were for the school survey (which had a response rate of 69%).

The basic sampling weights were adjusted for nonresponse by dividing the districts into 45 separate classes, based on the level of urbanization (rural, suburban, urban), region, and district size. The basic sampling weights were then multiplied by the ratio of the sum of the basic sampling weights across all districts or schools to the sum of the district or school weights for the responding districts or schools. The questionnaire-specific weights used for items asked only of half-samples of regular districts were similarly adjusted for nonresponse.

Standard Error Estimation

The jackknife replication procedure was used to estimate standard errors for estimates from the regular district and school surveys. In jackknife replication, a specified number of systematic subsamples is generated from the full sample, and these are used to define a series of jackknife replicates by dropping one subsample at a time from the full sample. Each jackknife replicate is then re-weighted using the weighting procedures developed for the full sample. The mean square error of the replicate estimates around the full sample estimate provides an estimate of the variance of the statistic. Replicate weights were calculated for regular districts (including separate weights for the two half-samples) and for secondary schools.

It would have been prohibitively costly and time-consuming to calculate jackknife-replicate standard errors for every school and district estimate presented in the Final Report. Instead, we used the standard errors listed in Tables T.3 through T.6 as guides for determining confidence intervals. Based on this procedure, only percentage differences of 5 or greater are considered meaningfully different. Where the text explicitly refers to statistically significant Omnibus Survey findings, these are based on statistical tests using the jackknife standard error estimates, or on the results of multiple regression procedures, for which jackknife standard error estimates cannot be calculated. The latter tests are likely to have a liberal bias (i.e., report as statistically significant some findings that are not).

Data Quality Issues

Nonresponse on individual questionnaire items is another potential source of bias. For those items on which nonresponse was a significant problem, we either did not analyze the item, or limited the way in which it was used. The most

Table T.3
Selected Standard Errors Representing Data from All Regular Secondary School Districts

District characteristic	Percent reporting large increase in services for special populations from 1990-91 to 1991-92		Percent reporting state leadership in general in 1991-92 provided adequate support for vocational education		Percent that submitted their own local plan to receive 1991-92 Perkins funds		Mean percent of secondary students enrolled in vocational programs who are expected to be completers	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
Total	11.9	1.1	55.5	2.0	31.7	1.2	55.0	1.5
Enrollment size								
Small	9.1	1.7	55.8	2.6	20.0	1.5	53.3	2.3
Medium	14.5	1.7	55.6	3.1	53.3	2.3	58.9	1.7
Large	28.4	2.5	53.0	2.2	81.9	2.3	54.7	1.7
Perkins funding status								
Funded in 1991-92	14.3	1.3	55.8	2.3	45.2	1.7	56.1	1.9
Not funded in 1991-92	7.5	2.0	50.7	4.2	9.9	2.0	55.5	3.3
Level of urbanization								
Rural	8.6	1.7	57.7	2.6	29.1	1.6	54.8	2.3
Suburban	15.5	2.2	51.7	3.1	31.0	2.0	54.7	2.4
Urban	27.2	0.0	56.5	0.0	76.6	0.0	59.2	0.0

Source: Chaney (1993)

Table T.4
Selected Standard Errors for Data Collected Only for Version A Secondary School Districts

District characteristic	Percent with disabled students in vocational programs that provide tutoring or other individual attention to all disabled students		Percent reporting that funding vocational teachers trained to instruct special needs students is no problem		Percent with Limited English Proficient students enrolled in vocational programs		Percent with business and industry having major involvement in providing internships or co-ops	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
Total	23.0	3.1	45.3	4.9	24.3	2.4	29.3	2.4
Enrollment size								
Small	23.9	5.2	51.2	8.7	16.3	3.3	20.4	2.8
Medium	23.6	4.2	35.0	4.7	36.2	5.9	48.3	3.6
Large	14.7	4.4	23.6	7.0	74.6	5.6	60.2	4.1
Perkins funding status								
Funded in 1991-92	25.0	3.6	43.0	3.9	29.6	2.9	34.4	3.9
Not funded in 1991-92	22.1	8.3	51.0	9.2	18.1	6.4	18.8	3.9
Level of urbanization								
Rural	25.0	4.7	46.7	7.6	15.9	8.1	24.8	2.8
Suburban	21.2	5.0	44.7	5.0	32.6	5.7	33.0	6.6
Urban	16.0	3.2	31.3	3.0	68.8	3.9	59.4	4.6

Source: Chaney (1993)

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Table T.5
Selected Standard Errors for Data Collected Only for Version B Secondary School Districts

District characteristic	Percent that started integrating curricula across vocational and academic courses before 1991-92		Percent currently collecting measures of school retention rates		Percent that started modifying curricula for tech-prep before 1991-92		Percent that increased proportion of academic credits required for graduation in past 5 years	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
Total	41.5	3.6	75.1	4.6	22.6	2.3	78.0	2.4
Enrollment size								
Small	41.3	4.1	75.4	5.4	17.2	3.7	77.2	3.4
Medium	41.4	5.0	73.6	4.8	30.5	3.7	80.4	3.0
Large	43.6	8.9	78.7	3.9	30.4	3.7	77.2	3.9
Perkins funding status								
Funded in 1991-92	41.9	5.2	78.5	7.3	23.9	2.6	77.0	3.3
Not funded in 1991-92	42.4	6.7	69.0	5.7	18.0	5.8	80.3	9.6
Level of urbanization								
Rural	42.2	3.9	73.8	4.8	19.7	3.4	77.8	4.6
Suburban	39.6	7.9	77.2	5.6	26.3	6.1	78.1	4.4
Urban	46.9	4.3	76.4	3.4	28.7	3.8	80.4	3.3

Source: Chaney (1993)

Table T.6
Selected Standard Errors for Data Collected from Secondary Schools

School characteristic	Percent reporting change of 5% or less in vocational education enrollment from 1987-88 through 1991-92		Percent reporting moderate increase in assistance that district provides on guidance on assuring equal access		Percent entering into tech-prep program before 1991-92		Percent reporting that maintaining vocational enrollments is a serious problem	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
Total	44.4	1.7	35.5	1.1	28.3	1.3	15.9	1.0
Type of school								
Regular	45.6	1.8	34.7	1.2	25.9	1.4	14.9	1.1
Vocational	18.6	1.4	45.1	1.8	54.9	2.2	26.0	1.4
Enrollment size								
Small	53.9	3.0	31.2	2.6	21.1	2.1	10.0	1.4
Medium	38.7	2.2	39.5	2.5	28.0	2.6	14.1	1.9
Large	34.1	2.5	38.6	2.0	39.0	1.8	26.1	1.7
Perkins funding status								
Funded in 1991-92	42.4	2.0	37.1	1.3	32.4	1.7	16.6	1.1
Not funded in 1991-92	47.1	4.1	31.4	4.3	18.3	3.5	14.9	3.4
Level of urbanization								
Rural	51.8	2.4	33.9	2.1	21.6	1.9	9.4	1.4
Suburban	38.6	2.5	36.1	1.8	30.7	3.0	19.7	2.1
Urban	35.6	2.8	37.9	2.2	39.1	2.5	25.8	1.7

Source: Chaney (1993)

critical items for which this was an issue were those asking about Perkins funding. These items had a low response rate and, where data were provided, were often of questionable reliability. We handled this problem in two ways. First, these data were generally used in a recoded 0–1 format (denoting whether or not any funding was received) rather than in dollar amounts. This recoded yes-no variable is more reliable than the specific dollar figures. Alternative questionnaire items also were used to determine funding status for the recoded variable, which lowered this variable's nonresponse rate.

Second, to provide more reliable data on Perkins funding amounts, states' Perkins finance records were collected (as described below). These records data were used for most analyses involving dollar amounts (primarily the analyses in Chapters 1 and 2 of Volume V).

Further information on the methodology for the Omnibus Surveys is provided in Chaney (1993).

1993 FOLLOWUP SURVEY

We conducted a telephone followup to the Omnibus Survey in the summer of 1993. The Followup Survey collected school year 1992-1993 data, providing information on state and local efforts during the second year of the implementation of the 1990 Perkins Act. This survey included a subset of four Omnibus Survey respondent groups: state directors of secondary and postsecondary vocational education agencies, public secondary school districts, and public two-year postsecondary institutions. (Secondary schools were not followed up.)

Sample Selection

The two state components of the Followup Survey continued to be censuses, in which all eligible members of the sampling frame were selected with certainty (although, unlike the 1992 Omnibus Survey, U.S. territories were not included). Thus, 51 secondary and 51 postsecondary state directors of vocational education were surveyed.

Both responding and nonresponding districts and institutions from the Omnibus Survey were included in the Followup Survey samples; districts and institutions that had proven to be ineligible were dropped. The inclusion of nonrespondents from Omnibus Survey samples helped to reduce nonresponse bias for the Followup Survey's cross-sectional estimates. A total of 566 regular secondary districts were sampled from the original Omnibus sample of 1,797 eligible districts, using probability proportionate to a measure of size (based on the square root of enrollments in grades 9-12), while also stratifying for level of urbanization, Census region, and 1991-92 Perkins funding status.[2] The Followup sample of vocational districts included all 257 vocational districts that responded

to the Omnibus Survey, along with 60 of the 104 Omnibus nonrespondents. Of the nonrespondents, all vocational districts with enrollments of 1,000 or more were sampled, and smaller districts were sampled with a ratio of roughly one-half.

Among postsecondary institutions, 281 institutions were sampled from the Omnibus sample of 1,251 eligible postsecondary institutions, with probability proportionate to the square root of enrollment, and also stratifying for Census region, institution status, and 1991-92 Perkins funding status.

Data Collection

The data collection included mailing of survey materials, telephone contacts to collect the data, and data retrieval followup.

Survey Mailout

Original survey materials were mailed beginning June 10, 1993. These materials included a questionnaire, a cover letter signed by the Department of Education project officer, and a card with definitions of terms used in the questionnaire. The intent was to complete all responses by telephone interview, so no return envelope was included. Recipients were instructed to call the toll-free information line if they wished to appoint someone else to complete the survey.

Telephone Data Collection

Telephone data collection for the surveys began approximately two weeks after each was mailed. The telephone interviewer followed a script to verify that the survey had been received; if it had, the interviewer tried to conduct the interview at that time. If it was not a convenient time for the respondent, the interviewer made an appointment to call back. If someone else was to act as the respondent, the new respondent was contacted. In the event the respondent had not received the survey, new materials were mailed, and the interviewer set up an appointment to collect the questionnaire responses two weeks later.

Data Retrieval Followup

As questionnaires were completed, all response information was entered into the survey management system. Questionnaire responses were manually edited and coded, and additional followup was conducted to resolve questions or problems. Data retrieval calls began August 5, 1993.

Final Response Rates

The final response rates for both state surveys (State Directors of Vocational Education and State Directors of Postsecondary Occupational/Technical Education) were 100 percent. For the surveys in which sampling was conducted, the final response rates were 95 percent for postsecondary institutions, 92 percent

for regular public secondary school districts, and 93 percent for vocational school districts. The Followup response rates were higher than the earlier Omnibus Survey rates for several reasons. Not only were the respondents more familiar with the surveys, but the Followup Surveys were much shorter and required less reporting of hard data, such as enrollment numbers, so they were easier for the respondents to complete. Only four (1.4%) of the postsecondary institutions refused to participate, with another ten (3.6%) unable to comply by the end of the data collection period. The refusal rate for the regular and vocational secondary districts was about the same (1.5%), and 54 (6.1%) did not complete the survey before data collection was terminated.

Weighting

Because the two state surveys were census surveys, no weighting was performed. The sampling weights for regular and vocational districts, and for postsecondary institutions were the reciprocals of their overall selection probabilities.

The basic sampling weights for regular and vocational districts were adjusted for nonresponse by dividing the two types of districts into separate classes, based on the level of urbanization (rural, suburban, urban), region, and district size class, and multiplying the basic sampling weights by the ratio of the aggregate district weight to the aggregate district weight for the responding districts. Adjusted weights for nonresponse for postsecondary institutions were derived in a similar manner, after dividing postsecondary institutions into separate classes based on region, institution status, and institution size class.

Reliability of Survey Estimates

Nonresponse on individual items within a given questionnaire can also result in bias in the survey estimates. Generally, because of the simplified questionnaires used in the Followup Survey, and the use of telephone interviewers to collect the data, item nonresponse was low and does not seriously affect the reliability of the estimates.

Jackknife replication was used to generate standard error estimates. Replicate weights were calculated for the regular districts, vocational districts, and postsecondary institutions. (Jackknife replication is discussed above, in the Omnibus Survey section.)

As was true for the Omnibus Survey data, budget and time constraints prevented the estimation of jackknife standard errors for all point estimates used in this report. Instead, estimates of statistical significance were approximated, based on the standard errors shown in Tables T-7 through T-9.

Further information on the Followup Survey is available in Chaney (1994).

Table T.7
Selected Standard Errors for Followup Survey Data from Regular Secondary School Districts

District characteristic	Percent reporting that the 1990 Perkins Act had a positive effect on promoting the integration of vocational and academic curricula		Percent reporting an increase in state leadership in general from 1990 to 1993		Percent whose tech-prep involves the active recruitment of special population students[a]		Percent receiving Perkins program improvement funds directly in 1992–93		Mean percent of tech-prep students who are female[a]	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
Total	78.5	2.8	64.4	2.4	69.5	4.2	32.3	2.4	36.3	1.8
Enrollment size										
Less than 2,500	74.0	4.0	65.0	3.6	69.8	5.7	22.3	2.9	34.0	2.6
2,500–9,999	87.1	3.1	64.0	4.1	68.0	5.5	50.3	4.5	38.1	2.6
10,000 or more	97.4	2.1	59.3	5.3	73.5	5.5	80.4	4.0	43.7	1.5
Perkins funding status										
Funded directly	90.4	2.5	72.6	4.0	72.4	4.7	—	—	39.7	2.2
Through consortia	81.7	4.5	65.3	3.9	71 4	6.3	—	—	33.6	2.2
Not funded	44.0	8.0	45.5	7.0	36.0	14.7	—	—	39.4	10.2
Region										
Northeast	63.2	7.3	46.9	7.0	66.5	9.4	33.7	5.5	36.4	6.3
Central	73.1	5.1	59.6	4.4	65.4	7.2	14.7	2.6	30.8	2.3
South	92.7	2.9	84.6	3.6	72.8	6.4	48.8	5.9	38.5	2.4
West	85.0	6.8	61.3	9.0	75.7	7.3	48.1	7.0	46.0	3.0
Level of urbanization										
Rural	79.8	3.8	69.2	3.6	69.5	6.2	29.2	3.3	37.8	2.2
Suburban	74.7	4.4	56.2	4.3	68.4	6.6	33.0	3.1	34.0	2.8
Urban	92.4	3.2	66.4	6.1	75.1	4.7	70.7	4.9	38.2	2.1

[a] Percentages are based on the 46% of regular districts with tech-prep programs.

Source: 1993 Followup Survey of Public Secondary School Districts

Table T.8
Selected Standard Errors for Followup Survey Data from Vocational School Districts

District characteristic	Percent reporting the 1990 Perkins Act had a positive effect on promoting the integration of vocational and academic curricula		Percent reporting an increase in state leadership in general from 1990 to 1993		Percent whose tech-prep involves the active recruitment of special population students[a]		Percent receiving Perkins program improvement funds directly in 1992–93		Mean percent of tech-prep students who are female[a]	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
Total	91.7	1.1	59.4	2.0	71.5	2.1	52.4	2.0	35.6	0.9
Perkins funding status										
Funded directly	95.3	0.3	71.2	1.1	70.6	1.9	—	—	36.2	0.9
Through consortia	92.8	1.7	46.5	2.7	74.3	4.0	—	—	39.7	1.3
Not funded	67.3	7.5	46.6	6.8	65.3	8.0	—	—	31.2	4.9
Region										
Northeast	94.7	1.9	44.6	3.3	75.0	3.1	41.3	2.8	35.3	1.3
Central	93.0	1.6	66.0	2.3	69.7	4.1	64.4	3.1	33.1	1.6
South	83.1	3.8	72.5	3.7	77.2	1.7	51.1	3.8	40.3	0.3
West	86.3	3.2	72.7	8.4	73.3	4.0	46.3	9.3	42.1	1.6

[a] Percentages are based on the 79% of vocational districts with tech-prep programs.

Source: 1993 Followup Survey of Public Secondary School Districts

Table T.9
Selected Standard Errors for Followup Survey Data from Postsecondary Institutions

District characteristic	Percent reporting that the 1990 Perkins Act had a positive effect on promoting the integration of vocational and academic curricula		Percent receiving Perkins program improvement funds directly in 1992–93		Percent reporting having a serious or moderate problem in attracting qualified occupational/ technical students		Mean percent of tech-prep students who are female[a]		Total number provided instruction in formal, registered apprenticeship programs in 1992–93[b]	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
Total	75.1	3.1	86.7	3.0	52.9	3.7	43.1	2.2	56,416.3	8,737.1
Institution type										
Comprehensive	77.6	3.0	93.0	2.6	53.0	4.1	47.0	2.3	43,345.5	8,767.0
Vocational-tech institute	69.2	13.8	79.3	15.0	59.4	13.0	29.5	7.6	8,805.5	3,662.4
Other	69.7	13.3	67.4	13.0	47.2	13.2	31.0	12.3	4,265.3	2.601.0
Postsecondary enrollment										
Less than 2,000	69.3	6.9	77.2	7.3	49.4	8.4	37.1	6.3	6,519.4	3,005.2
2,000–4,999	77.1	5.3	92.5	3.2	50.9	6.3	46.3	3.5	3,794.7	1,899.9
5,000 or more	80.1	3.2	92.9	4.9	58.9	5.1	45.8	2.6	46,102.3	8,822.8
Region										
Northeast	87.0	7.0	89.2	8.9	49.8	13.0	42.9	10.3	3,092.2	2,111.2
Central	75.5	4.6	84.0	6.5	65.6	6.8	39.3	4.1	20,529.7	4,555.6
South	70.6	6.1	83.1	6.1	48.7	5.4	42.0	3.7	14,295.3	4,509.8
West	76.6	6.0	96.0	4.1	48.0	7.5	50.0	6.9	18,499.1	5,625.6

[a] Percentages are based on the 83% of postsecondary institutions with tech-prep programs.

b Totals are based on the 25% of postsecondary institutions with formal, registered programs.

Source: 1993 Followup Survey of Postsecondary Institutions

NATIONAL ASSESSMENT OF VOCATIONAL EDUCATION TEACHER SURVEY

The National Assessment contracted with the National Center for Education Statistics (NCES) to develop and conduct a survey of vocational and academic public secondary school teachers.

The Teacher Survey collected data on the educational and occupational backgrounds of teachers, the nature of instruction in vocational classes, and teachers' perceptions of vocational education problems, using a two-page paper-and-pencil mail questionnaire. A copy of the survey instrument and an overview of survey findings are included in Heaviside, Carey, and Farris (1993).

Sample Selection

The Omnibus Survey sample of 3,130 public secondary schools serving grades 11 and 12 was used as the sampling frame for the Teacher Survey. A two-stage sampling process was used to select teachers from this sampling frame.

In the first stage, a stratified sample of 395 secondary schools was drawn. Schools in the sampling frame were stratified by type of district and type of school (regular or vocational). Within each major stratum, schools were sorted by size and region (Northeast, Central, Southeast, and West). The allocation of the sample to the major strata was made in a manner that was expected to be reasonably efficient for national estimates, as well as for estimates for major subclasses. Schools within a stratum were sampled with probabilities proportionate to the estimated number of teachers in the school.

Teacher Sampling

In the second sampling stage, teachers were sampled from schools. To construct the teacher sampling frame, the 395 selected schools were asked to provide, in spring 1992, a list of all vocational and academic teachers in specified instructional areas. Teachers were defined by the subject area they teach most often. Eligible academic teachers were those teaching mathematics, science, English, social studies, and languages in the 9th to 12th grades. Eligible vocational teachers were those who teach **occupationally related** vocational education courses in the 9th to 12th grades.

Full- and part-time teachers were included in the teacher sampling frame, but itinerant teachers, substitute teachers, and teachers of special education, physical education, music, art, and non-occupational vocational education were excluded. A list of 15,000 secondary teachers was compiled from this procedure, and a final sample of 2,376 teachers was drawn, including 1,464 vocational and 912 academic teachers. Teachers were selected so as to permit separate estimates by major subclasses, including type of teacher (vocational or academic) and type of school (vocational or regular).

Data Collection

The Teacher Survey was administered from October 1992 to January 1993. The survey administration consisted of one mail-out and telephone followups.

During data collection, 305 teachers were found to be ineligible (no longer at the school or otherwise not eligible), leaving 2,071 eligible teachers in the sample. Responses were obtained from 1,924 of these teachers. The final response rate was 91 percent (98% for schools multiplied by 93% for teachers). Item nonresponse was less than 2 percent on every item.

Weighting and Reliability of Estimates

The data were weighted to adjust for the variable probabilities of selection and for differential nonresponse. A final poststratification adjustment was made so that the weighted teacher counts equaled the corresponding Common Core of Data (CCD) frame counts within cells defined by school size, urbanization status, and region.

Estimates of standard errors were computed using jackknife replication. To construct the replicates, 30 stratified subsamples of the full sample were created and then dropped one at a time to define 30 jackknife replicates. The standard error of these replicates provides the jackknife standard error estimate.

As was done for the Omnibus Survey, selected jackknife standard errors were computed, and used to establish confidence intervals for general analysis purposes. Based on this procedure, the confidence interval for these data was set at ± 5 percent.

EMPLOYER SURVEY

The Employer Survey was a national-level telephone survey conducted from the spring through summer, 1993, to obtain measures of the extent of employer involvement in and satisfaction with vocational education programs. Information for this section is from the methodology report by Martindale et al.(1994).

Sample Selection

The sampling frame for the Employer Survey was constructed from the 1992 Dun & Bradstreet DUNS Market Identifiers (DMI) file. The DMI file contains over 8 million business establishments of all types. It is the only widely accessible list of establishments that includes a measure of size (number of employees) and industrial classification (by four-digit SIC code[3]). Use of the DMI file provided a cost-effective way of identifying and sampling a diverse cross-section of employers.

The level of employers' vocational education involvement varies by industry and size of establishment. For example, analysis of the High School and Beyond (HSB) and National Educational Longitudinal Survey (NELS) data sets indicates that vocational education involvement is relatively high in manufacturing industries such as food products, textiles/leather products, and transportation equipment, and in certain nonmanufacturing industries such as wholesale trade of durable goods, auto repair, and personal/health services. On the other hand, business services, educational services, and membership organizations (among others) tend to have very little involvement with vocational education. Therefore, three groups of establishments representing different levels of vocational education involvement were developed for sample selection purposes. The three industry groupings covered high and low vocational involvement plus a medium level that includes agriculture, construction, printing, wholesale trade of nondurable goods, hotels and lodging, eating and drinking places, finance and real estate, legal and social services, and similar employers.

In each of the three industry groups, establishments were stratified by eight size classes, producing a total of 24 sampling cells. The following types of establishments were excluded from the sampling frame: those with fewer than ten employees, establishments in public administration, educational services, membership organizations, private household employers, and those not classifiable. Table T.10 summarizes the population counts in the restricted DMI universe file for sampling.

Table T.10
DMI Population Counts of Eligible Establishments for Employer Survey, by Size Class and Vocational Education Involvement

DMI Employment Size Class	Vocational Education Involvement			Total
	High	Medium	Low	
Size unknown	75,050	230,568	64,135	369,753
10 to 19	148,826	516,557	105,857	771,240
20 to 49	87,773	287,773	57,958	433,504
50 to 99	35,926	93,949	19,398	149,309
100 to 249	25,717	45,462	15,183	86,362
250 to 499	6,421	12,333	4,268	23,022
500 to 999	2,975	5,066	1,473	9,514
1,000 +	2,685	3,076	756	6,517
Total	385,373	1,194,784	269,028	1,849,221

Source: 1992 Dun & Bradstreet DUNS Market Identifiers (DMI) file

The total sample of establishments was allocated to the 24 sampling cells in a manner designed to obtain about 800 completed interviews with small (10-49 employees) establishments, 1,400 completed interviews with medium-size (50-499 employees) establishments, and 800 completed interviews with large (500+ employees) establishments. In each of the three major size classes, the samples were allocated to the detailed size classes in rough proportion to the number of employees in the size class. The sampling rates used to select establishments varied by size class, with larger establishments having greater chances of selection than smaller ones. Establishments in the "high" vocational education stratum were selected at about twice the corresponding rates of those in the "medium" and "low" vocational education strata. Table T.11 summarizes the distribution of the initially selected sample of 6,050 establishments by the 24 sampling strata.

Table T.11
Number of Establishments Selected for the Employer Survey, by Size Class and Vocational Education Involvement

DMI Employment Size Class	Vocational Education Involvement			Total
	High	Medium	Low	
Size unknown	64	109	34	207
10 to 19	227	314	102	643
20 to 49	291	476	125	892
50 to 99	358	467	124	949
100 to 249	512	452	186	1,150
250 to 499	255	244	106	605
500 to 999	298	252	100	650
1,000 +	533	305	116	954
Total	2,538	2,619	893	6,050

Source: Martindale; Chu, Ward, & Kraft, 1994.

The final sample contained about 500 fewer establishments than were in the 6,050 initial survey sample. Most of the loss occurred as a result of the high volatility of this sector — establishments close, move, or merge at relatively high rates. Some establishments were lost for other reasons (e.g., duplicates, multiple establishments within a firm). The final survey sample contained 5,479 establishments.

Data Collection

Original survey materials were mailed beginning on April 13, 1993. These materials included the questionnaire, a cover letter signed by the Department of Education Project Officer, a card with definitions of terms used in the questionnaire, and a postage-paid business reply card on which the respondent was to indicate whom to contact to complete the telephone survey and a convenient time for survey completion. It was intended that all responses be completed by telephone interview, so no return envelope was included.

Telephone interviews started in May, 1993. Some establishments never received or had misplaced their questionnaires and required more than one remail, each requiring a new round of followup calls. Of the 5,479 cases mailed, 3,846 requested a first remail. Of those, 1,067 requested a second, third, or more remails; 70 "special cases," such as mailing to headquarters or mailing for multiple sampled locations to one address, were remailed. Conservatively, 4,983 remails were done.

Because of the large sample size, a relatively high refusal rate (25%), and the unusual number of remails, an extraordinary number of telephone calls was required. Interviewers often had to reschedule appointments several times to complete the survey by telephone. Because of the complexity of the questionnaire, completion of the telephone interview often required more than one session. The data collection period was extended several times in an attempt to achieve an acceptable response rate. Data collection was suspended August 31, 1993.

After completed questionnaires were edited, additional followup was conducted to resolve questions or problems with the survey responses. Approximately 76 percent (2,122) of the completed questionnaires required some form of data retrieval. The inherent difficulty of the questionnaire led to both respondent and interviewer error. Because of the large volume of data retrieval cases, not all data retrieval problems were resolved.

Final Response Rates

The survey resulted in 2,795 completed interviews. After the exclusion of ineligible cases, the final response rate was 54.8 percent. This unusually low response rate was the result of many of the factors discussed above.

Weighting and Estimation

In order to reflect population levels, sample weights based on the overall selection probabilities were calculated for each responding establishment in the sample. The selection probabilities varied widely by size, class, and establishment SIC. The reciprocals of the selection probabilities are referred to as

the "base weight," and produce unbiased estimates if there is no nonresponse in the survey.

The first step in the weighting process was to assign a base weight to each of the 6,050 establishments in the sample. The base weights were equal to the reciprocal of the probabilities of selection and depended on the SIC code and size class of the establishment.

To compensate for losses in the sample due to nonresponse, ratio adjustment factors were calculated within classes defined by Census region, SIC group, and size class. These adjustment factors were then applied to the base weights to obtain the final weights for estimation. Even with the use of the adjusted weights, the potential for significant biases in the sample-based estimates is high due to the high degree of nonresponse. Consequently, weighted results from the Employer Survey should be interpreted with caution since they may not be generalizable to the DMI population from which the samples were drawn.

STATE VOCATIONAL SEX EQUITY ADMINISTRATOR SURVEY

The State Vocational Sex Equity Administrator Survey was developed by the National Alliance for Partnerships in Equity, in conjunction with the Vocational Education Equity Council. National Assessment staff provided input to ensure that issues of interest to the assessment were included.

The survey covered issues related to the roles and responsibilities of state sex equity administrators; the distribution of Perkins funds for programs for sex equity, single parents, single pregnant women, and displaced homemakers; and the perceived effects of the Perkins Act on state and local efforts. The survey consisted of a paper-and-pencil mail questionnaire administered to all state sex equity administrators.

Sample Selection

The sample was a census of all state vocational sex equity administrators. A list of administrators was constructed by merging lists from the National Displaced Homemaker Network and the National Alliance for Partnerships in Equity. The final list included administrators from all 50 states, the District of Columbia, Guam and Puerto Rico. Since ten states had two administrators, 63 administrators were included on the final list. (The survey administration revealed an additional three states with two administrators, but these three administrators were not surveyed.)

Data Collection

Surveys were administered in spring 1992, the end of the first year of 1990 Perkins Act implementation. The data collection included two survey mail-outs

and telephone followups. A total of 53 surveys were completed, for a response rate of 84 percent. However, in two states that have two administrators, these administrators collaborated and returned one survey for both; if this is taken into account, the response rate increases to 87 percent.

Weighting and Reliability of Estimates

Since the sample was a census, the data did not need to be weighted for sampling error, and did not require standard error estimates. The data were not adjusted for nonresponse.

Followup Survey

To obtain the most recent data possible on key items from the Sex Equity Administrator Survey, some items were administered to attendees of the National Alliance for Partnerships in Equity annual conference in March 1993. These survey items were completed by 30 administrators attending a conference session discussing the National Assessment of Vocational Education. Since this sample could be biased, the data from this followup should be interpreted with caution.

CORRECTIONAL EDUCATION SURVEY

To collect information on the use of Perkins funds set aside for criminal offenders, the National Assessment cooperated with the National Center for Education Statistics (NCES) to add a series of Perkins funding questions to their newly developed survey of state correctional education agencies and jails.

The Correctional Education Survey included three mail questionnaires sent to the following institutions:

- Survey of State Adult Correctional Education Agencies was sent to the 51 state agencies responsible for providing education to inmates of adult correctional facilities.

- Survey of State Juvenile Correctional Education Agencies was sent to the 51 state agencies responsible for providing education to inmates of juvenile facilities.

- Survey of Correctional Education at Jails was sent to the 100 largest of the 3,000 jail facilities in the nation. Surveys had to be sent to individual facilities because no state has centralized data on education programs offered by jails.

Perkins-funded programs are especially rare in jails; for this reason, the National Assessment of Vocational Education did not include the jail survey in the analyses used in this report, and that survey is not discussed here.

The surveys collected 1991-92 information on the types of educational programs offered at correctional institutions; the number of inmates who took part in these programs; staffing and financial resources used to provide education (including vocational education); and the funding sources used to provide correctional education.

The questionnaires were pilot tested at nine sites in May 1992, before the National Assessment survey questions had been added. The surveys were then modified, and National Assessment questions added. These questions were reviewed by state correctional education agency directors in 3-4 states prior to their inclusion in the final survey instruments.

To address concerns that the surveys were too long, the instruments were reformatted into "short" and "long" versions. The long version is 50 percent longer than the short version, but both versions collect data on a set of core questions needed for the National Assessment.

Surveys were sent to respondents in March 1993, and were returned through June 1993. Reminder postcards were sent to all sites one week after initial survey mailout, and telephone calls were made one week later to determine if the survey forms had been received and if the respondent had any questions. A second copy of the survey was sent and additional phone calls made as necessary.

Response Rates

The overall response rate to the Survey of State Adult Correctional Education Agencies was 84 percent (76% for the long version, 92% for the short version). The overall response rate to the Survey of State Juvenile Correctional Education Agencies was 75 percent (72% for the long version, 77% for the short version).

Agencies that did not respond to the surveys tended to be from smaller states. These smaller states often did not keep centralized data and needed to contact individual facilities (usually two or three in a state) to collect information. In contrast, most larger states had already collected the data needed to complete the survey at a central office.

NCES used the Correctional Education Survey as a pretest to determine what information on correctional education is available from surveyed respondents. Further information on these surveys and the field test results is available in Sherman and O'Leary (1993).

VOCATIONAL STUDENT ORGANIZATION SURVEY

The Vocational Student Organization (VSO) Survey obtained information about VSO structure, membership, activities, funding, and factors that motivate or inhibit minority participation. It surveyed approximately 2,000 secondary and postsecondary chapter advisors from the ten existing VSOs:

- Business Professionals of America (BPA)
- Distributive Education Clubs of America (DECA)
- Future Business Leaders of America — Phi Beta Lambda (FBLA-PBL)
- Future Business Leaders of America (FBLA)
- National Young Farmer Education Association (NYFEA)
- Future Homemakers of America/Home Economics Related Occupations (FHA/HERO)
- Health Occupations Students of America (HOSA)
- Technology Student Association (TSA)
- Vocational Industrial Clubs of America (VICA)
- National Postsecondary Agricultural Student Organization (PAS)

Respondents for the VSO Survey were the faculty advisors of local VSO chapters. For chapters having more than one advisor, the survey instructions specified that one advisor respond for the entire chapter. The VSO survey is described in further detail in Tao and Richard (1993).

Sample Selection

Chapter lists from the VSO national offices provided the information needed for sampling and mailing the surveys. The VSO sample was selected from all secondary and postsecondary chapters of the ten national VSOs that were located in the 50 states and the District of Columbia in the 1991-92 school year. The total population was approximately 31,100 chapters. The data files did not distinguish public from non-public schools; therefore, both are in the sample.

The sampling design stratified the entire population of VSO chapters by two factors: ten VSOs and three educational levels (secondary, postsecondary, and adult). However, only the National Young Farmers Education Association (NYFEA) has adult/continuing education chapters, and some VSOs have chapters only at the secondary or postsecondary level. Therefore, the final sampling frame included eight types of VSO chapters at the secondary level, six at the postsecondary level, and NYFEA chapters at the adult/continuing education level.

The sample design also excluded chapters that only serve students below the 11th grade, and chapters that are only for members no longer enrolled in a secondary or postsecondary school (e.g., alumni and associate chapters); the one

exception was the NYFEA. Chapters located in Puerto Rico and the Virgin Islands and those with Army/Air Force Post Office (APO) addresses were also excluded; these chapters seem to have organizational structures quite different from other chapters in the same VSOs.

Examination of chapter data provided by VSO national offices revealed great variations across VSOs in the number of chapters, number of members in typical chapters, and the total membership nationwide. Such extreme diversity required careful attention to two conflicting needs: (a) to include a certain minimum number of chapters from even the smallest VSOs to ensure having sufficient data to describe them accurately; and (b) at the same time, to avoid under-representation of very large VSOs. Funding constraints also limited the secondary sample to 2,000 VSO chapters, and the postsecondary sample to less than 2,000 chapters.

To balance these needs, key features of the final sample design were as follows:

- Sample chapters at the secondary level were allocated by assigning a minimum of 180 chapters to each of eight VSOs with secondary chapters (total of 180 x 8 = 1,440), and proportionately distributing the remaining 560 chapters according to the number of chapters in each VSO.

- Among seven VSOs that have postsecondary or adult chapters, four VSOs have fewer chapters than the 250 minimum sample size chosen for this level. For these VSOs, all chapters were included in the study (i.e., resulting in a census survey design). Finally, a systematic sample of 250 chapters was selected from each of three VSOs with more than 250 postsecondary chapters. The total postsecondary sample (including 250 NYFEA adult education chapters) was 1,282.

Table T.12 presents the survey population, stratified by VSOs and educational level, with numbers of chapters that were selected according to the rules stated above. The table also shows the percentages of chapters in each stratum represented by the sampled chapters.

Mail Survey

Two versions of the VSO Survey were used, one for VICA chapters and the other for all other chapters. For all non-VICA VSOs, survey respondents were the faculty advisors of the sampled chapters. Since VICA chapters may include many subsections with different advisors representing different occupational areas (e.g., health, cosmetology, trade occupations), VICA surveys were mailed to the principals of sampled schools with a request that each principal assign one VICA advisor to respond for all VICA sections in that school. The survey instrument for VICA was modified to reflect this difference in chapter structures.

Table T.12
Final Survey Sample for Vocational Student Organization Survey

Vocational Student Organization	No. of Chapters in Sample Frame[a]	No. of Students in Final Sample Frame	No. of Chapters in Sample	Percent of VSO Chapters Studied
Secondary				
Business Professionals of America (BPA)	2,360	N/A[b]	221	9
Distributive Education Clubs of America (DECA)	3,789	122,160	245	6
Future Business Leaders of America (FBLA)	5,379	213,773	273	5
National FFA Organization (FFA)	7,118	418,879	303	4
Future Homemakers of America/ Home Economics Related Occupations (FHA/HERO)	8,693	228,933	329	4
Health Occupations Students of America (HOSA)	1,101	35,211	201	18
Technology Student Association (TSA)	639	N/A[b]	191	30
Vocational Industrial Clubs of America (VICA)	3,297	207,666	237	7
Total	32,376		2,000	6
Postsecondary				
Business Professionals of America (BPA)	105	2,054	105	100
Distributive Education Clubs of America (DECA)	183	4,561	183	100
Future Business Leaders of America-Phi Beta Lambda (FBLA-PBL)	365	N/A[b]	250	68
Health Occupations Students of America (HOSA)	200	5,876	200	100
National Postsecondary Agricultural Student Organization (PAS)	44	1,011	44	100
National Young Farmer Education Association (NYFEA)	740	N/A[b]	250	34
Vocational Industrial Clubs of America (VICA)	310	14,601	250	81
Total	1,947		1,282	66

[a] Includes all chapters listed by VSO National Offices minus "ineligible" chapters such as elementary and intermediate schools and universities that were deleted prior to sampling.

[b] Not available either from VSO chapter rosters or survey data.

Source: Adapted from Tao & Richard (1993), p. 15

The first survey mailing was completed during the last week of January 1993. The first and second followup mailings and mailgrams as a final followup were sent in the end of February, the end of March, and mid-April, respectively.

Survey Response Rates

A total of 2,000 surveys were mailed to secondary chapters, and 1,282 to postsecondary chapters. The percentages of usable forms received from all eligible chapters were 74 percent for the secondary and 70 percent for the postsecondary levels.

Sample Weights and Standard Errors of Estimates

Two sets of weights were constructed to correct for the sample design. One set of weights, based on the proportion of chapters in a VSO that returned completed surveys, was applied to all data dealing with VSO chapter characteristics, such as funding sources and levels, services provided, and benefits to members of chapters across VSOs. Another set of weights, based on the proportion of student members represented by respondent chapters, was applied to all analyses dealing with student enrollment counts (in VSO chapters, vocational education programs, and host schools).

Sample weights were calculated for all VSO chapters, including the four postsecondary VSOs from which all chapters were surveyed; the latter were included because response rates for these chapters were below 80 percent.

Because the sample design was relatively simple, relying primarily on systematic sampling within stratification groups, standard errors were not adjusted beyond the use of weighted data to calculate these estimates.

School Minority Categories

Our assessment of minority VSO participation included an examination of participation rates among schools serving different concentrations of minority students. For these analyses, we calculated the percentage of students in each responding school who are non-white (i.e., we subtracted the percentage of students who are white from 100). Due to missing data on schools' ethnic breakdowns, this calculation reduced the size of the analysis sample by nearly 50 percent. The remaining schools were then classified into low, medium and high minority categories, as follows: (1) low minority if fewer than 10% of students are non-white (includes 38% of secondary schools and 39% of postsecondary schools); (2) medium minority if 10-25% of students are non-white (includes 33% of secondary and 31% of postsecondary schools); and (3) high minority if more than 25% of students are non-white (includes 28% of secondary and 30% of postsecondary schools).

NATIONAL CENTER FOR EDUCATION STATISTICS (NCES) STUDIES

In this section, we provide a brief overview of the NCES transcript and survey studies used in this report, and of how these data were modified or adapted for use in the National Assessment. These descriptions are drawn largely from Davis and Sonnenberg (1993).

High School Transcript Studies

High school transcript studies provide records of students' coursetaking that can be used to examine the nature and extent of vocational coursetaking. These studies also include basic background information on students, which can be linked to transcript records to examine coursetaking patterns for different types of students (e.g., males versus females, students with different high school grades).

Since 1980, the U.S. Department of Education has conducted four high school transcript studies of public school students. The first was part of the High School and Beyond (HSB) first followup survey in 1982. About 15,000 transcripts were collected from school records for HSB sophomore cohort students who were seniors in 1982. The second transcript study was the 1987 High School Transcript Study. This study surveyed approximately 34,000 seniors who had participated (as 11th graders) in the 1986 National Assessment of Educational Progress (NAEP). The 1990 High School Transcript Study is the third transcript study; it includes 23,000 transcripts for students who participated in the 1990 NAEP as 12th graders. The most recent transcript study comes from the 1992 National Education Longitudinal Study (NELS), which includes 11,677 transcripts for 12th-grade students from the base-year 1988 NELS 8th grade cohort.

Details on the methodology for each of these transcript studies are provided in the following reports:

- Ingels et al. (1993) for the NELS follow-up study (transcript study documentation is not yet available).
- Legum et al. (1993) and Caldwell et al. (1993) for the 1990 NAEP transcript study.
- Thorne et al. (1989) for the 1987 NAEP transcript study.
- Jones et al. (1983) for the 1982 HSB transcript study.

The National Assessment used the 1992 transcript study to examine recent patterns of participation in vocational education, and compared these with data from the earlier transcript studies to examine trends in vocational participation. For these analyses, the samples were restricted to public school students who

had graduated in 1982, 1987, 1990, or 1992 and for whom complete transcripts were available. This resulted in final sample sizes of 9,510 for the 1982 HSB; 24,426 for the 1987 NAEP; 16,456 for the 1990 NAEP; and 11,677 for the 1992 NELS.

Every effort was made to ensure that samples were comparably defined across years. However, differences in the sampling and variables used in these studies limit comparisons of certain student subgroups. For example, economically disadvantaged students can be identified on the 1982 HSB and 1992 NELS transcript studies, but not in the 1987 or 1990 studies.

Classification of Courses[4]

Courses in all four transcript studies were coded using the classification of secondary school course (CSSC) codes, which are based on course titles and catalog descriptions. In each study, course files were linked to student background information and, in the NAEP studies, to student assessment scores.

After conversion to CSSC codes, all transcript course records data were coded using the Secondary School Taxonomy. This taxonomy consolidates individual course titles into more general and comparable course categories. The taxonomy was developed as part of the last National Assessment to facilitate the analysis of the 1982 HSB transcript data; it has been used for numerous NCES studies and is well accepted for research purposes.[5]

The Secondary School Taxonomy categorizes the secondary curriculum first into three branches: academic, vocational, and personal/other. The academic curriculum is then divided into six subject areas (mathematics, science, English, social studies, fine arts, and foreign languages).

The vocational curriculum is divided into three curricular areas — consumer and homemaking education, general labor market preparation, and specific labor market preparation. Consumer and homemaking courses provide training and skills that are often necessary for activities outside of the paid labor force (e.g., child development, family health, foods and nutrition). Classes that impart basic skills that can be applied in a variety of personal or occupational settings are categorized under general labor market preparation. These courses include beginning typing, industrial arts, work experience and career exploration, business math, and business English. Specific labor market preparation includes introductory, advanced, and elective courses in seven occupationally related vocational areas: agriculture, business, marketing and distribution, health, occupational home economics, trade and industry, and technical and communications.

The personal/other curriculum is further divided into four categories: general skills, health (nonvocational), religion, and military science. General skills include courses such as physical education and driver education.

Defining Special Population Students

Each transcript study includes a set of questionnaires for students, teachers, and schools, and a student assessment. These additional data sources were used along with the transcript data to classify students (i.e., the high school graduate samples) into Perkins-specified special population categories. Table T.13 lists the definitions used for these classification categories.

National Postsecondary Student Aid Study

The National Postsecondary Student Aid Study (NPSAS) is a nationwide study of students enrolled in less-than-two-year postsecondary institutions, community and junior colleges, four-year colleges, and major universities located in the United States and Puerto Rico. Undergraduate, graduate, and first-professional students, both those who receive financial aid and those who do not receive aid, participate in the NPSAS.

The NPSAS was originally developed to provide information on financial aid programs and their effects, but is also useful for other purposes, such as determining the nature and extent of participation in postsecondary education. It collects information on student demographics, family income, education expenses, employment, education program and aspirations, parental demographic characteristics, parental support, and how students and their families meet the costs of postsecondary education. A major advantage of the NPSAS is that it includes data from proprietary institutions, which are often excluded from other postsecondary data collection efforts.

The first NPSAS was conducted during the 1986–87 school year. Data were gathered from institutional records on about 60,000 students at 1,100 postsecondary institutions. About 43,000 of these students and 13,000 parents also completed questionnaires.

The second NPSAS was conducted in 1989–90. This study collected information from institutional records on about 69,000 students at 1,130 postsecondary institutions. About 51,400 students and 16,000 parents also completed computer-assisted telephone interviews.

The National Assessment of Vocational Education used the undergraduate samples of both the 1986–87 and the 1989–90 NPSAS to examine recent patterns of participation in postsecondary vocational education, and changes in participation over time.

Most of the data collected in the 1986–87 and 1989–90 NPSAS are comparable, but differences in the sampling for the two studies impose limits on over-time comparisons. In the 1986–87 NPSAS, school records and student interviews were

Table T.13
Definitions for Special Population Students in Transcript Studies

Special Population Group	1982 HSB	1987 NAEP	1990 NAEP	1992 NELS
Disabled students				
Students who had an Individualized Education Plan (IEP), as indicated in the transcript files		X	X	
Students who had enrolled in a special education program, as indicated in the transcript files				X
Educationally disadvantaged students				
Students in the lowest test quartile, based on a composite math and reading test score	X			X
Students whose grade point average based on transcript records was "C" or below	X	X	X	X
Students whose transcripts indicated they had earned credits in remedial education courses	X	X	X	X
Economically disadvantaged students				
Students in the bottom quartile on a composite measure constructed from family income, mothers' education, fathers' education, fathers' occupation, and (in 1982) a list of home items; in 1992, the list was deleted and mothers' occupation was added	X			X
Limited English proficient students				
Students defined as limited English proficient by their teachers in grade eight				X

NOTE: Transcript studies with no "X" in a special population category did not contain comparable measures for defining that student group.

collected in the fall of 1986. The 1989–90 sample was initially drawn in the fall of 1989, but it was periodically refreshed during the year. As a result, students who were not enrolled in the fall but enrolled later in the school year were also included in the 1989–90 sample. However, these data include a variable that enables users to restrict the sample to students enrolled in the fall, permitting comparisons with the 1986–87 NPSAS sample. In this report, we used the full-year 1989–90 sample when examining recent enrollments, and the fall-only 1989–90 sample when examining changes from 1986–87 to 1989–90.

The National Assessment samples include 34,544 undergraduates in the 1986–87 sample, 46,788 undergraduates in the full-year 1989–90 sample, and 40,324 undergraduates in the fall-only 1989–90 sample. These data were analyzed using STRATTAB, a proprietary program developed by MPR Associates; this program uses a Taylor series approximation technique to estimate standard errors for statistics derived from complex sampling designs.

Details on the methodology for the 1989–90 NPSAS are available in Shephard and Malizio (1992), and in Tuma (1993). The 1986-87 NPSAS is described in Smith, Garcia, and Malitz (1990).

Schools and Staffing Survey

The Schools and Staffing Survey (SASS) was designed to provide information on the characteristics of secondary school teachers and administrators and their workplaces. The SASS is a comprehensive data base of information on public and private K-12 education derived from four survey instruments: the Teacher Demand and Shortage Questionnaire, School Questionnaire, School Administrator Questionnaire, and Teacher Questionnaire.

The SASS was administered for the first time in 1987–88 and for the second time in 1990–91; a third administration is underway for school year 1993–94.

Schools are the primary sampling units for the SASS, with a sample of teachers selected from each school. Public school districts are included in the sample when one or more of their schools is selected. The 1990–91 SASS, like the 1987–88 SASS, drew a probability sample of approximately 12,800 schools (9,300 public and 3,500 private), 65,000 teachers (52,000 public and 13,000 private), and 5,500 public school districts.

We used only the public sector questionnaires from the 1990–91 SASS for the National Assessment's analyses of teacher characteristics and teacher shortages. The 1990–91 Teacher Demand and Shortage Survey was used to examine potential shortages of vocational teachers, and the 1990–91 Public School Teacher Survey was used to examine vocational teachers' demographic characteristics and educational backgrounds.

The 1990–91 public school sample was selected from the 1988–89 Common Core of Data universe list maintained by NCES. All public schools in the file were stratified by the 50 states and the District of Columbia, and then by three grade levels (elementary, secondary, and combined). A special sample of schools serving large numbers of American Indian or Alaskan Native students was also drawn to provide national estimates of their schools, teachers, and principals. Due to confidentiality restrictions, the supplemental sample of American Indian and Alaskan Native institutions was not included in our analyses.

Teachers were sampled from within selected schools, with an average of three to nine teachers sampled per school (depending on school type). The samples were drawn from lists of teachers supplied by the selected schools. The SASS data were collected from December 1990 to June 1991, using two survey mail-outs and telephone followups.

Defining Teachers

The teacher sample used for our analysis was restricted to public school teachers in grades 9–12. From this sample, special education teachers were identified as those reporting that 50 percent or more of their courses are special education. Vocational teachers were then defined as those reporting that 50 percent or more of their courses are in vocational education. Vocational courses were defined using the categories listed on the SASS Public School Teacher Questionnaire, which includes agriculture, business and marketing, industrial arts, health occupations, vocational and nonvocational home economics, trade and industry, technical, accounting/bookkeeping, shorthand, typing, career education, and "other" vocational education. In contrast to the vocational teachers in the National Assessment of Vocational Education Teacher Survey, the vocational teachers in this sample include those teaching non-occupational vocational courses. All remaining teachers were identified as non-vocational, non-special-education teachers (academic teachers).

In cases where course load responses were not provided, teachers' reports of the subject they teach most often were used to classify teachers as special education, vocational, or academic. It is important to note that teachers who primarily provide vocational training to special education students, but who consider themselves special education rather than vocational education teachers, are not included in the sample of vocational teachers.

Data Limitations

While the SASS provides a reliable, nationally representative sample of vocational and non-vocational teachers, it has two major drawbacks for our purposes. First, the SASS does not include data on whether teachers have non-teaching work experience in a field related to their teaching position, which is an important aspect of vocational teachers' qualifications. Second, the SASS does not consistently distinguish between occupational and non-occupational

vocational teachers (the latter group includes consumer home economics and industrial arts teachers). These limitations were avoided in the National Assessment of Vocational Education Teacher Survey (discussed above).

The methodology for the SASS is described in more detail in Choy et al. (1993, Appendix C) and in Kaufman and Huang (1993).

National Study of Postsecondary Faculty

The National Study of Postsecondary Faculty (NSOPF) is a new survey designed to collect comprehensive data on institutional policies and practices affecting faculty in postsecondary education institutions, and on the demographics, professional backgrounds, and working conditions of these faculty.

The NSOPF was administered for the first time in the 1987-88 academic year, and for the second time in 1992-93. The National Assessment used the 1987-88 faculty component of the NSOPF to examine the qualifications of postsecondary vocational faculty in two-year institutions. (The 1992-93 data were not available in time for our use.)

Three survey components are included in the 1987-88 NSOPF: (a) an Institutional Survey providing institution-level data on faculty counts, tenure rules, and offered benefits, from a stratified random sample of 480 institutions; (b) a Department Chair Survey of 3,029 department chairpersons (or their equivalent) from within participating institutions; and (c) a Faculty Survey of 11,013 faculty members from within participating institutions.

The universe for the NSOPF consists of all postsecondary institutions meeting the following criteria: The institution is nonproprietary; is accredited by an agency recognized by the U.S. Department of Education; and grants a two-year (associate) or higher degree. In 1987-88, this included 3,159 institutions. It is important to note that the NSOPF does not include proprietary institutions; faculty in these institutions may have different qualifications than those in public and private institutions.

COMMUNITY CASE STUDIES

The Community Case Studies provide a more in-depth view of the issues covered by the Omnibus Survey. These case studies included 20 selected communities across the country, with a community defined as an area containing one local secondary education agency; at least one comprehensive high school; at least one area vocational school or district-supported vocational high school; and at least one two-year public postsecondary institution within reasonable commuting distance. This definition proved adequate for urban areas, but sometimes had to be loosened to provide sample sites in suburban and rural areas.

Sample Selection

From the Omnibus Survey school and district samples (discussed above), 20 sites where at least one institution responded to the surveys were selected as Community Case Study sites. The original sample selection provided for 40 sites — 20 main sites, each with an alternate site matched on the dimensions listed below. In the final sample, one site declined to participate and one site could not participate for other reasons; both were replaced with their alternate sites.

Sites were selected so that:

- All four U.S. regions would be represented, with at least two sites in each region; the largest or second largest district in each region would be selected with certainty.
- At least ten states would be represented, including at least two of the five smallest states.
- After the four largest urban areas were selected, the remaining sites would represent a balance of urban, suburban, and rural areas.
- Sites would be selected to reflect wide variation in area poverty, unemployment, the secondary/postsecondary Perkins funding split, general industrial composition, and minority population composition.
- Selected sites would include nonrecipients as well as recipients of 1990 Perkins funding.

These criteria were generally met. The final sample included sites from 18 states, ranging from scattered rural areas to some of the country's most densely populated urban areas. Secondary district enrollments at the visited sites ranged from 180 students to 247,000 students. The minority population in the communities ranged from nearly nonexistent to over 80 percent, and the local economies ranged from severely depressed to robust. A wide variety of local and state educational approaches and philosophies were represented as well. All but one of the visited communities had some type of secondary vocational school, and every site had a two-year public postsecondary school (usually a community college).

The selected sites (given pseudonyms to protect their anonymity) are briefly described below. They are listed roughly in order from smallest to largest, based on secondary district enrollments.

- **Farmville**. This is the smallest case study district, with fewer than 200 students attending one high school. It is in a rural agricultural community

in a south central state, with one comprehensive high school, one distant area vocational school (not visited), and a postsecondary institution in transition from a vocational school to a technical college.

• **Dry Gulch**. This is a rural community in a southwestern state. The majority of the population is first- or second-generation Hispanic. The secondary district has a single high school and a postsecondary institution located about 45 miles away. The local area vocational school was not visited.

• **Rolling Woods**. This community is located in a rural depressed area of an eastern state, within an hour's drive of a major metropolitan area. The site includes a state-run area vocational school, which serves 14 school districts in three counties, and a community college, which serves two of the three counties. The secondary district at this site was not visited.

• **Garden Park**. This site is a one-high-school community in the least populated section of a rapidly growing eastern population corridor. The population is over 80 percent white. The site visit included the high school, one of two area vocational schools (serving five county schools), and a community college.

• **Green Glade**. A sparsely populated area in a sparsely populated northeastern state, this community has a majority white population. The site visit included the secondary district's single high school, one of two area vocational-technical centers, and three community colleges.

• **Louisville**. This majority-white community is in a depressed area of an eastern state that was once a prosperous industrial area. The site visit included the district's one high school (which the state had designated economically depressed), the area vocational school, and the community college, which is located directly across the street from the vocational school.

• **Southern Pines**. This community is composed of a small town district and a surrounding county district in a southern state. The community is about 70 percent white and 30 percent black. The site visit included the district's single high school, as well as the vocational center in the town. A local community college, serving a seven-county area, was also visited.

• **Mountain View**. This is a rapidly growing suburban area in a northwestern state. The majority of the population is white and upper-middle class. The site visit included the only high school in the district, a consortium-based area vocational school serving students from this and, primarily, another district, and the local community college.

• **High Plains**. Located in the mountains of the west, this majority white community is the most populous in its state. This site visit included one of three district high schools and the local community college, the only postsecondary institution in the county. The community has no area vocational school within commuting distance.

• **Riverdale**. This community is a small, majority white city in a central-midwestern state. The site visit included one of two district high schools, an area vocational school serving students from 20 schools in 11 districts, and a vocational-technical college serving seven counties.

• **Central Crossing**. This is a small, majority white city in the same state as Riverdale. This site visit included one of two district high schools, an area vocational school serving 10 schools in seven districts, and a local technical college.

• **Flatlands**. This community is in a southwestern state. Its area vocational school is regarded as one of the best in the nation. In addition to that school, the site visit included a one-high-school district, and a large community college.

• **River Station**. This majority black community is in a medium-size city in the central United States, where formerly blue collar jobs are being replaced by service jobs. Five of seven district secondary schools are magnet schools. The site visit included the district's vocational/ cooperative school and the local community college.

• **Magnolia**. This community is a majority-white suburb of a large southern city. The visit included one of 16 district regular high schools as well as one of its three vocational schools, and a technical college, one of three local two-year institutions.

• **Harbor View**. This community is a major city in the northeast, with a lower minority population than some major cities. The visit included one of the district's 12 regular high schools, its one occupational high school, and two local postsecondary institutions.

• **West Pacific**. This is a large district in a western state. Its population is 76 percent white and 24 percent minority, primarily Hispanic and Asian. Four of the district's approximately 20 high schools were visited, as were multiple facilities run by the local three-campus community college.

• **Western Desert**. This is a large community in a western state, with a majority white population and a burgeoning economy. The site visit included one of about 20 district comprehensive high schools, both of the

district's vocational schools, and one of three campuses of the local community college.

- **Big Sky**. This is a large, majority white urban community in a southwestern state. The school district is about 40 percent black and 40 percent Hispanic. The visit included four of approximately 34 high schools, and the occupational magnet school. One of six branches of the local community college was also visited.

- **Lake View**. This is a major urban center in the central part of the country, with several ethnically distinct communities. The city is majority black. The site visit included five of about 65 high schools, including one vocational school and others that specialize in particular vocational areas such as business and agriculture.

- **Portside**. This community is a major eastern urban center, with a mix of minority and ethnic populations, including many recent immigrants. Of its more than 100 high schools, the site visit included a business high school, a vocational/cooperative education high school, and a comprehensive magnet school. The visit also included a technical college, a college with two-year and four-year programs, and an adult learning center.

The goal of the site selection process was to pick sites that collectively provide sufficient variation in local communities so that most major types of situations with respect to the implementation and effects of the Perkins Act and funding for vocational education would be visited. However, the selected sites are not representative in a statistical sense of any areas, districts, schools, vocational programs, or students.

Data Collection

The case study site visits were conducted from November 1992 to March 1993, the second year of implementation of the 1990 Perkins Act. Immediately before data collection began, all interviewers attended a three-day training session that included training for both the Community Case Studies and the Funding Case Studies (discussed below).

Two interviewers participated in each site visit, with each visit lasting from one to two weeks. Each site visit included interviews with as many of the following individuals as possible: district superintendent, director of vocational education, finance officer, and directors of programs for special population students (disabled, disadvantaged, limited English proficient); principal or dean and other school administrative staff, teaching staff, counselors, and students at regular high schools, vocational high schools, and postsecondary institutions; parents of high school students; and business and community representatives. Teacher and

student interviews included both academic and vocational teachers and students. Group interviews were used for teachers, students, parents, and business and community representatives.

Not every type of respondent could be interviewed at each site. Parents were a particularly difficult group; many refused to be interviewed, or failed to appear for scheduled interviews.

Site visits also included tours of institutions' facilities and observations in vocational classrooms whenever possible.

Verification of Omnibus Survey Data

The case study researchers also verified many Omnibus Survey responses by comparing completed Omnibus Survey forms to data obtained during the site visits. This verification process provided further evidence of the limited reliability of the Omnibus Survey funding questions. Other survey questions were found to be of acceptable reliability.

Further information on the Community Case Studies is available in Milne, Martindale, & Michie (1993).

FUNDING CASE STUDIES

The 1990 Perkins Act significantly changed the way local basic grant funds are allocated and used. The funding case studies were designed to collect in-depth information on the effects of these changes on local school districts. For these case studies, eight sites were selected from the Omnibus Survey regular district sample, including four sites with large increases in Perkins funding and four with large decreases. The Funding Case Studies were restricted to the secondary level because of time and cost limitations.

Sample Selection

The Funding Case Study sample was selected primarily on the basis of changes in districts' Perkins funding from 1990–91 to 1991–92. Changes in Perkins funding were determined by comparing 1991–92 Perkins basic grant allocations (Title II Part C) with the 1990–91 funds that were combined to form these basic grants — program improvement funds and the disabled, disadvantaged, and adult set-aside funds (Title II Part B and sections of Part A). Ideally, data for these comparisons would have been obtained from the State Records Data Collection; however, these data were not available at the time the sample needed to be drawn. Instead, we used funding data from the Omnibus Survey, with follow-up telephone calls to verify the Omnibus Survey funding information before final sites were selected.

Sampling began by rank ordering respondents to the Omnibus regular school district questionnaires by the size of their Perkins funds gain or loss. Districts with gains or losses of less than $100,000 were excluded from consideration. The following steps were then taken to select the final sample:

- To ensure that the sample would reflect variation in district size and locale (urban, suburban, rural), districts were classified by the size of their gains or losses into the following categories:

  Gain Categories: More than $1 million; $500,000 to $1 million; $250,000 to $499,999; $100,000 to $249,999.

  Loss Categories: More than $1 million; $200,000 to $1 million; $100,000 to $199,999.

  The loss categories were broader than the gain categories because there was less variability in the size of Perkins funding losses than gains. For example, only 21 Omnibus sample districts experienced losses greater than $100,000 and only three had losses greater than $500,000.

- In addition to absolute dollar shifts in funding, the relative impact of fiscal changes is an important factor. For example, a loss of $200,000 is likely to have a greater impact on a district's vocational programs when that sum represents a 50 percent funding cut than when it represents a 10 percent cut. Thus, within each gain and loss category, districts were selected in which the dollar change in funding also represented a relatively large **percentage change** in Perkins funds.

- From these districts, sites were selected to represent a variety of different funding change patterns. Funding patterns selected for inclusion were: a district that received Perkins funding in 1991–92 but not in 1990–91; a district that had an increase in Perkins funding while the total educational budget declined; a district with a decrease in Perkins funding when the total educational budget remained stable; and a district with decreases in both Perkins funding and total educational funding.

- Finally, main and back-up sites were selected to ensure adequate geographic diversity across the country, and to avoid overlap with the Community Case Study sites.

The final sites selected for case studies, while not statistically representative of the nation, reflect a range of school districts. Four of the eight sites were large cities: one in the northeast, one in the south, one in the midwest, and one in the west. Two other sites were suburban county school districts, one served the

Table T.14
Changes in Basic Grants Received by Case Study Sites, 1990–91 to 1991-92

	1990–91 "Basic Grant"	1991–92 Basic Grant	Difference	Percent Change
Increased Funding Sites				
Site A — Big city	$292,205	$1,353,265	$1,061,060	363.1
Site B — Big city	636,433	1,281,132	644,699	101.3
Site C — Big city	263,277	1,377,834	1,114,557	423.3
Site D — Suburb	113,869	243,140	129,271	113.5
Decreased Funding Sites				
Site E — Big city	2,309,000	1,302,000	-1,007,000	-43.6
Site F — Rural	163,587	53,984	-109,603	-67.0
Site G — Suburb	230,965	31,931	-199,034	-86.2
Site H — Suburb	914,272	764,375	-149,897	-16.4

Source: Omnibus District Surveys

suburban area near a medium-sized city, and one was predominantly rural. Table T.14 lists the funding characteristics of the selected sites.

Data Collection

The Funding Case Studies were conducted concurrently with the Community Case Studies, from November 1992 to March 1993. Immediately before data collection began, all interviewers participated in a three-day training session that included training for both the Funding Case Studies and the Community Case Studies.

Teams of two researchers visited each site for approximately five days. Prior to each site visit, district central office personnel were contacted and told what documents the site visitors would need to review. On site, the researchers began each visit by reviewing budget and enrollment records, and transcribing relevant funding information onto a standard data collection form. Interviews were then conducted with as many of the following individuals as possible at each site: superintendent, district director of vocational education, finance officer, district coordinators of special population programs, school principals, department

heads, counselors, and teachers. Students were interviewed informally in conjunction with classroom visits.

The interviews focused on determining shifts in services, staff, and students, and other impacts of funding changes. Specific issues covered included not only quantitative changes, but also respondents' impressions of the process surrounding these changes. Topics included: persons (at state, district, and school levels) involved in the changes; preparation for the changes in the form of pre-service or in-service training; support structures provided for personnel experiencing re-assignment; pressures brought to bear on unchanged funding sources (general revenues as well as other targeted funds) and responses to those pressures; and adaptation to lost (or gained) administrative and support personnel.

The Funding Case Studies are summarized in Hoachlander et al. (1993).

NATIVE AMERICAN TRIBAL CASE STUDIES

Section 103 of the 1990 Perkins Act provides funds for 38 tribally run vocational education programs. The National Assessment used case studies to collect information on these programs.

Funding for the National Assessment permitted case study analysis of five Native American Perkins-funded vocational education programs. Sites were selected to represent the diversity of Perkins programs to the greatest extent possible. Each selected site is either a single representative or one of two representatives of potentially important program variables, such as location, urbanicity, and educational level. As in most case study analyses, probability sampling techniques were not used to select sites, and the case studies cannot be viewed as statistically representative of other programs in those categories.

Sample Selection

To assist in selecting case studies, portions of each Perkins Tribal Vocational Education Program grantee's funding application, provided by the U.S. Department of Education's Office of Vocational and Adult Education, were used to classify the programs according to the variables listed in Table T.15. Five sites were then selected to reflect as much diversity as possible in terms of the selection variables. The greatest emphasis was given to educational level of the program, geographic region, urbanicity, and single or multiple tribe participation.

Data Collection

To initiate each site visit, a member of the research staff contacted the director or coordinator of the Perkins program to set a date for the visit. Only one program

Table T.15
Classification Variables for Native American Tribal Case Study Selection

Educational Level[a]	
Secondary	Program enrolls students 19 years old or under in a secondary-level curriculum.
Postsecondary	Program involves at least one postsecondary institution.
Adult	Program involves retraining of adults 18 years old or over in vocational and/or academic subjects.
Dropout	Program targets high school-aged dropouts.
Tribal Participation[a]	
Single tribe	Program participants are members of only one tribe.
Multiple tribe	Program participants are members of more than one tribe (even though only one tribe may have direct administrative responsibility).
Region[a]	
West	
East	
South	
Midwest	
Urbanicity[a]	
Isolated	Program serves tribal members who can reach a significant urban area only by driving several hours or more.
Rural	Program serves a tribal community located in a nonurban, generally agricultural labor market.
Suburban	Program serves a tribal population living within regular commuting distance of a significant urban area.
Urban	Program serves a tribal population living primarily within a city of at least 50,000.
Targets Special Populations	
Yes	
No	
Skills	
Single	Program focuses on one vocational field.
Multiple	Program includes more than one vocational area.
Employment Targets	
Tribal	Tribal corporations and reservation industry.
Local	Industry that is outside the reservation but local.
Other	Other, usually unspecified, and/or combination of reservation and outside jobs.

[a] Program characteristics used for site selection.

Source: Hudis (1993)

that was originally selected for a visit did not participate, because of an irresolvable scheduling conflict. It was replaced by another program similar in terms of region, urbanicity, and educational level.

Site visits lasted four to five days for teams consisting of two site visitors. Each team included one Native American who was highly knowledgeable about cultural issues, including factors that might affect cooperation by tribal representatives or influence the quality of interview data.

The goal of the site visits was to determine issues affecting delivery of vocational education, attitudes about the Perkins program, and involvement in the program by a wide array of stakeholders. With that goal in mind, each site visit team scheduled interviews with tribal leaders, educational program administrators, academic and vocational teachers, counselors, students, and employer representatives. All interviewers used a preset schedule of interview questions. Follow-up questioning and observations were also used to explore unique aspects of each program.

Most individual interviews lasted about one hour, with one or both visitors interviewing each respondent in his or her office or classroom. Researchers also conducted group interviews with students and with some teachers. At all locations, the site visitors spent several hours with the directors of the Perkins-funded vocational programs and visited as many vocational classes as possible.

Further information on the tribal case studies is available in Hudis (1993).

STATE RECORDS DATA COLLECTION

As mentioned above, the data on Perkins funding amounts obtained from the Omnibus Survey were problematic. Since these data are of critical importance in addressing a number of Congressional concerns regarding the Perkins Act, the National Assessment sought another, more reliable source of funding information.

The National Center for Research in Vocational Education (NCRVE) provided this source. In 1992, the NCRVE, in cooperation with the National Association of State Directors of Vocational and Technical Education and the National Assessment of Vocational Education, collected administrative record data on local Perkins funding allocations directly from state agencies.

To collect these funding data, the NCRVE sent a letter to each state director of vocational education requesting a copy of their secondary and postsecondary Perkins funding allocations, and the formula or rules used to make allocations under the 1990 Perkins Act. State directors in all 50 states, the District of Columbia, and the six U.S. territories that receive Perkins funds were contacted,

using a list supplied by the National Association of State Directors of Vocational and Technical Education.

Each state director was asked to provide records data on funding allocations made under the 1984 and 1990 Perkins Acts. These included allocations for 1990–91 Perkins Title II Part A funds (disadvantaged, disabled, and adult set-asides, and sex equity and single parent funds), Title II Part B funds (for program improvement), and Title III consumer and homemaking funds; and for 1991–92 and 1992–1993 allocations, Title II Part B funds (sex equity and single parent funds), Title II Part C funds (basic local grants), and Title III funds for consumer and homemaking and for tech prep.

Data collection began with the initial letters to state directors in March 1993 and ended with final telephone followups in October 1993. The telephone followups were used to convert non-response cases and to clarify inconsistent or incomplete data.

Data were collected in whatever form the states could provide, and were then edited and entered into an electronic data base. All allocations made to institutions or organizations other than local public schools, school districts, or postsecondary institutions were deleted from the data base. Since excluded recipients typically received funding under only the 1984 Perkins Act, deleting these organizations underestimates the impact of the 1990 Perkins formula in targeting resources on educational institutions.

For some analyses, the 1990–91 Title II set-asides and program improvement funds were combined and labeled "basic grants," comparable to the later years' Title II Part C basic grant funds.

A total of 47 states provided funding information, with complete basic grant information provided by 45 states.[6] Washington state was unable to supply complete 1991–92 secondary allocations, and Virginia was unable to supply postsecondary allocations. Some additional states were unable to provide complete information on Perkins funds awarded through competitive grants.

The records data appear to be, in general, more reliable than the Omnibus Survey funding data. The state records data provide the main source of funding information for Chapters 1 and 2 of Volume V in this report. Other chapters use the more reliable forms of Omnibus Survey funding data (as explained above).

Further information on the State Records Data collection is available in Klein et al. (1993).

ENDNOTES

1 The discussion of the Omnibus Survey draws heavily from the Methodology Appendix in Chaney (1993).

2 In the Omnibus Survey, the regular districts were divided into two groups, with one group receiving Version A of the questionnaire and the other group receiving Version B. The Followup Survey included only one district questionnaire, and the sample includes both groups of districts from the Omnibus Survey.

3 Standard Industrial Classification (SIC) is the statistical classification standard underlying all establishment-based federal economic statistics classified by industry. See Office of Management and Budget, *Standard Industrial Classification Manual, 1987.*

4 This description is drawn from Hoachlander (1992).

5 For a detailed description of this taxonomy, see Gifford, Hoachlander, and Tuma (1989).

6 Alaska, New Hampshire, Wyoming, and the District of Columbia did not provide information. None of the territories responded to the initial letter, and no further contact was made with these territories.

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LIST OF ACRONYMS

AACJC	American Association of Community and Junior Colleges
ABE	Adult Basic Education
ACT	American College Testing Program
AFDC	Aid for Families With Dependent Children
AVS	Area Vocational School
BIA	Bureau of Indian Affairs (U.S. Department of the Interior)
BPA	Business Professionals of America
BPS	Beginning Postsecondary Study
CAM	Certificate of Advanced Mastery
CATI	Computer-Assisted Telephone Interview
CBO	Community-based organization
CCD	Common Core of Data
CIM	Certificate of Initial Mastery
CORD	Center For Occupational Research and Development
CUR	Course Utilization Rate
DECA	Distributive Education Clubs of America
DOL	(U.S.) Department of Labor
ED	(U.S.) Department of Education
ESEA	Elementary and Secondary Education Act
ESL	English as a Second Language
ETA	Employment and Training Administration
FBLA-PBL	Future Business Leaders of America - Phi Beta Lambda

FBP	Federal Bureau of Prisons
FFA	Future Farmers of America
FHA/HERO	Future Homemakers of America/Home Economics Related Occupations
FLIT	Functional Literacy Project
GAO	General Accounting Office
GED	General Education Development
GPA	Grade Point Average
HHS	(U.S.) Department of Health and Human Services
HOSA	Health Occupation Students of America
HSB	High School and Beyond
IDEA	Individuals With Disabilities Education Act
IEP	Individualized Education Plan
IHS	Indian Health Service
IPEDS	Integrated Postsecondary Education Data System
JOBS	Job Opportunity and Basic Skills (Family Support Act of 1988)
JTPA	Job Training Partnership Act
LEA	Local Education Agency
LEP	Limited English Proficient
MDRC	Manpower Demonstration Research Corporation
NAB	National Alliance of Business
NABE	National Association for Bilingual Education
NAEP	National Assessment of Educational Progress

NAVE	National Assessment of Vocational Education
NCCVSO	National Coordinating Council for Vocational Student Organizations
NCES	National Center for Education Statistics
NCRVE	National Center for Research in Vocational Education
NELS	National Education Longitudinal Study
NGA	National Governors' Association
NLS72	National Longitudinal Study of the High School Class of 1972
NLSY	National Longitudinal Study of Youth
NLTS	National Longitudinal Transition Study
NOCTI	National Occupational Competency Testing Institute
NPSAS	National Postsecondary Student Aid Study
NYFEA	National Young Farmer Education Association
OERI	Office of Educational Research and Improvement
OVAE	Office of Vocational and Adult Education
PAS	National Postsecondary Agricultural Student Organization
PIC	Private Industry Council
PT	Principles of Technology
QED	Quality Education Data
RFP	Request for Proposal
SASS	Schools and Staffing Survey
SAT	Scholastic Aptitude Test

SCANS	Secretary's Commission on Achieving Necessary Skills
SCOVE	State Council of Vocational Education
SDA	Service Delivery Area
SES	Socioeconomic Status
SHRIC	State Human Resource Investment Council
SIPP	Survey of Income and Program Participation
SREB	Southern Regional Education Board
T&I	Trade and Industry
TIE	Training, Industries, and Education
TSA	Technology Student Association
VICA	Vocational Industrial Clubs of America
VSO	Vocational Student Organization

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