

DOCUMENT RESUME

ED 354 343

CE 063 055

AUTHOR Stecher, Brian M.; Hanser, Lawrence M.
TITLE Beyond Vocational Education Standards and Measures: Strengthening Local Accountability Systems for Program Improvement.
INSTITUTION National Center for Research in Vocational Education, Berkeley, CA.; Rand Corp., Santa Monica, Calif.
SPONS AGENCY Office of Vocational and Adult Education (ED), Washington, DC.
PUB DATE Dec 92
CONTRACT V051A80004-91A
NOTE 54p.
AVAILABLE FROM NCRVE Materials Distribution Service, 46 Horrabin Hall, Western Illinois University, Macomb, IL 61455 (order no. MDS-292: \$3.75).
PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Accountability; Agency Role; Educational Legislation; Educational Research; Federal Legislation; Government Role; Government School Relationship; Models; *Outcomes of Education; Postsecondary Education; *Program Improvement; *School Districts; Secondary Education; State Departments of Education; State Government; State School District Relationship; *Vocational Education
IDENTIFIERS *Carl D Perkins Voc and Appl Techn Educ Act 1990

ABSTRACT

A significant change in vocational education brought about by the Carl D. Perkins Vocational and Applied Technology Act 1990 amendments was the introduction of outcome-based accountability. Accountability from the local perspective was explored through interviews with local program administrators, staff, students, and employers in secondary and postsecondary vocational education programs in five states. Interviews focused on accountability, program improvement, relationship between programs and their constituents, and possible effects of Perkins Act requirements. A model of the local accountability systems operating in vocational education programs was developed. It illustrated how goals, measures, feedback, influence, and reform interacted to influence program practice and offered guidance for evaluating and strengthening local accountability systems. It was recommended that states take an active role in improving local accountability systems by reviewing and offering guidance to strengthen goals and measures, increase feedback and influence, and improve program planning. Conclusions were as follows: functioning local accountability systems exist; local accountability systems can aid program improvement; states can evaluate and strengthen local accountability systems; neither state nor local education agencies are fully prepared for their new roles; and the Perkins Act may overemphasize externally developed outcome-based standards and measures. (Appendixes include an article on changing responsibilities of local and state education agencies under the act and a 55-item bibliography.) (YLB)

ED354343



National Center for Research in
Vocational Education

University of California, Berkeley

BEYOND
VOCATIONAL EDUCATION
STANDARDS AND MEASURES:
STRENGTHENING LOCAL
ACCOUNTABILITY SYSTEMS
FOR PROGRAM IMPROVEMENT

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Supported by
the Office of Vocational and Adult Education,
U.S. Department of Education

CE063 055

This publication is available from the:

National Center for Research in Vocational Education
Materials Distribution Service
Western Illinois University
46 Horrabin Hall
Macomb, IL 61455

800-637-7652 (Toll Free)

**BEYOND
VOCATIONAL EDUCATION
STANDARDS AND MEASURES:
STRENGTHENING LOCAL
ACCOUNTABILITY SYSTEMS
FOR PROGRAM IMPROVEMENT**

**Brian M. Stecher
Lawrence M. Hanser**

RAND

**National Center for Research in Vocational Education
University of California at Berkeley
1995 University Avenue, Suite 375
Berkeley, CA 94704**

Supported by
The Office of Vocational and Adult Education,
U.S. Department of Education

December, 1992

MDS-292

OE063055

FUNDING INFORMATION

Project Title: National Center for Research in Vocational Education

Grant Number: V051A80004-91A

Act under which
Funds Administered: Carl D. Perkins Vocational Education Act
P. L. 98-524

Source of Grant: Office of Vocational and Adult Education
U.S. Department of Education
Washington, DC 20202

Grantee: The Regents of the University of California
National Center for Research in Vocational Education
1995 University Avenue, Suite 375
Berkeley, CA 94704

Director: Charles S. Benson

Percent of Total Grant
Financed by Federal Money: 100%

Dollar Amount of
Federal Funds for Grant: \$5,918,000

Disclaimer: This publication was prepared pursuant to a grant with the Office of Vocational and Adult Education, U.S. Department of Education. Grantees undertaking such projects under government sponsorship are encouraged to express freely their judgement in professional and technical matters. Points of view of opinions do not, therefore, necessarily represent official U.S. Department of Education position or policy.

Discrimination: Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Title IX of the Education Amendments of 1972 states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance." Therefore, the National Center for Research in Vocational Education project, like every program or activity receiving financial assistance from the U.S. Department of Education, must be operated in compliance with these laws.

PREFACE

The 1990 amendments to the Carl D. Perkins Vocational and Applied Technology Education Act (Perkins II) mandate significant changes in federal vocational education policy. Among these is the introduction of an outcome-based accountability system. The Perkins II model of accountability gives states moderate flexibility to customize standards and measures of performance, assigns the primary responsibility for program improvement to local programs, and attaches no financial rewards or sanctions to performance.

This study, conducted for the National Center for Research in Vocational Education (NCRVE), University of California, Berkeley, examined vocational education accountability at the local level to provide information that might improve the implementation of Perkins II provisions. The study found that local accountability systems already exist in many vocational programs and that they can be tools for program improvement. While these systems should easily accommodate many of the responsibilities envisioned by Perkins II, they may have difficulty with others. The authors suggest ways states and local programs can improve the functioning of local accountability systems, and they recommend changes in federal vocational education policy to further the goals of program improvement that motivated Perkins II.

This study should be of interest to local practitioners who have to adapt to the new accountability requirements and to state policymakers who are charged with implementing them. It should also be of interest to federal policymakers who will be called upon to reauthorize federal vocational education legislation in 1995.

SUMMARY

One of the significant changes in vocational education brought about by the Carl D. Perkins Vocational and Applied Technology Education Act (Perkins II) was the introduction of outcome-based accountability. Perkins II requires states to adopt systems of core standards and measures of performance for judging the success of local programs and guiding program improvement.¹ The primary responsibility for program improvement is assigned to local programs, with states playing an oversight and technical assistance role. The success of this innovation depends upon the relevance of standards and measures to local policymaking, the existing incentives and pressures under which local programs operate, and the support states provide for local improvement.

Unfortunately, little is known about the local program context and the likely interplay between local conditions and Perkins II accountability mandates. The study reported here explores accountability from the local perspective to provide insights into the ways in which local programs define their goals, interact with their constituents, use information, and make program-related decisions. It also attempts to define the role states could play in support of these functions.

Interviews were conducted with local program administrators, staff, students, and employers in secondary and postsecondary vocational education programs in five states. The interviews focused on accountability, program improvement, the relationship between the programs and their constituents, and the possible effects of the Perkins II requirements.

On the basis of these interviews, we developed a model of the local accountability systems currently operating in vocational education programs. The model illustrates how goals, measures, feedback, influence, and reform interact to influence program practice. The model also offers guidance for evaluating and strengthening local accountability systems. Finally, it can be used as a basis for analyzing the interplay between existing local accountability and accountability as envisioned under Perkins II.

We draw five conclusions based on our analysis of federal policies, local accountability systems, and the interactions between them:

1. Most vocational programs have functioning local accountability systems consistent with the model envisioned in Perkins II. Although program staff are unlikely to identify local relationships as an "accountability system," the following elements of accountability are present in most vocational education programs:
 - Program goals and objectives (including outcome objectives, such as program completion and placement).
 - Direct involvement of constituents in program review and design.
 - Program continuation contingent upon performance.

¹In the context of Perkins II, a *measure* is a description of an outcome and a *standard* is a target level of attainment on that measure.

2. Local accountability systems can be effective tools for program improvement if practical obstacles can be overcome. Effective administrators are needed to overcome practical constraints and to create an atmosphere in which:
 - Goals are explicit and widely shared, serving as focal points for program review and reform.
 - Measures are appropriate to reflect goal attainment and provide valid information about program status.
 - Feedback is timely and clear, permitting staff and constituents to judge program success.
 - Constituents' expertise is welcome and their opinions are heeded, leading to collaboration in reform efforts.
 - Compromises can be reached between diverse constituent groups with conflicting goals and needs, reducing tensions and conflict.
 - Contradictory pressures from state and federal policies can be reconciled.
3. States can do much to evaluate and strengthen local accountability systems. Although their direct role in local program improvement is circumscribed in Perkins II, states can provide technical assistance to enhance local accountability systems by:
 - Providing local educational agencies with a vocabulary for talking about accountability and a clear understanding of how an accountability system might function, e.g., identifying the school's constituents, clarifying the role of outcome data and direct experience in forming opinions and stimulating reform, and describing ways constituents might influence program decisions for the better.
 - Conducting critical reviews of local accountability systems, not merely compliance checks of local program outcomes; such reviews might involve questioning staff, students, employers, and community members about their knowledge of program outcomes and their voice in program activities.
 - Sharing information about effective local practices observed within the state and in other states.
 - Promoting consortium-building among local education agencies.
 - Evaluating state regulations and procedures affecting vocational education and aligning state policies to support local accountability.
4. Neither state education agencies (SEAs) nor local education agencies (LEAs) are fully prepared to carry out their responsibilities vis-à-vis accountability under Perkins II. It appears that additional expertise will be needed to meet the new challenges created by the amendments:
 - States will have new oversight responsibilities, including the evaluation and strengthening of local accountability systems.
 - Limits on administrative funds will force states to reevaluate the nature of the services they provide and to become more efficient in providing those services.
 - States will have to establish, review, and adjust their systems of performance standards and measures.
 - Local agencies will have to align their data systems with state standards and measures.
 - Local agencies will have to learn to link program improvement activities to outcome measures.

- Local agencies will be held responsible for a much broader spectrum of program outcomes.
5. Perkins II may overemphasize state-adopted outcome-based standards and measures. The solitary emphasis on outcomes could lead to undesirable consequences, including:
- Increased data requirements that will strain local capacity and may drive out input- and process-based measures that are valuable for program improvement.
 - Pressures to narrow program services, change client selection, and emphasize quantity over quality in order to meet extreme targets.

We recommend three modifications to the federal policy embodied in Perkins II and its associated regulations:

1. Encourage SEAs to monitor and strengthen local accountability systems, not merely program outcomes. Specifically, Congress should incorporate this broader conception of the state's role into federal policies by delineating specific support activities states should engage in.
2. Increase the emphasis on, and support for, accountability-related capacity-building at the state and local levels. Specifically, training should be provided to increase states' capacities to support the use of measures and standards for program improvement and the enhancement of local accountability systems.
3. Broaden the emphasis in Perkins II on outcome measures to include measures useful for program improvement. Specifically, the scope of required measures and standards should be expanded to include program inputs and processes, while an appropriate balance is maintained between measures of outcomes and these other factors.

ACKNOWLEDGMENTS

We wish to express our sincere appreciation to the vocational educators, vocational education students, employers, and concerned community members in California, Florida, Michigan, Ohio, and Oklahoma who talked with us and shared their opinions. Although they are not mentioned by name, their experiences formed the basis for the local accountability model described in this report and for our conclusions about the role of states and local programs. We also wish to thank our colleagues David Finegold and Maryann Jacobi for their helpful comments on the report; their suggestions improved both the logic and the clarity of our presentation. As always, any remaining faults are our own. Finally, Donna White is to be congratulated for negotiating the software maze to complete this manuscript.

CONTENTS

PREFACE	iii
SUMMARY	v
ACKNOWLEDGMENTS	ix
FIGURE AND TABLES	xiii
Section	
1. INTRODUCTION	1
Background and Purpose	1
Summary of the Accountability Provisions in Perkins II	2
Methods	4
Structure of the Report	4
2. LOCAL ACCOUNTABILITY AND PROGRAM IMPROVEMENT	5
Definitions: Accountability and Accountability Systems	5
Local Accountability in Vocational Education	6
Model of a Local Accountability System	7
Accountability Systems and Program Improvement	9
3. EVALUATING AND STRENGTHENING LOCAL ACCOUNTABILITY SYSTEMS	16
Goals	16
Measures	17
Feedback	18
Influence	19
Program Planning and Reform	20
Summary	21
4. CONCLUSIONS AND RECOMMENDATIONS	22
Conclusions	22
Recommendations	27
Appendix: THE CHANGING RESPONSIBILITIES OF LOCAL AND STATE EDUCATION AGENCIES UNDER PERKINS II	31
BIBLIOGRAPHY	41

FIGURE

2.1. Model of a Local Accountability System	7
---	---

TABLES

1.1. State Responsibilities Under Perkins II	3
1.2. Local Responsibilities Under Perkins II	3

1. INTRODUCTION

BACKGROUND AND PURPOSE

The Carl D. Perkins Vocational Education Act (Perkins) authorized federal funding for vocational education between 1985 and 1990. In 1990, the act was amended in significant ways, and its title was changed to the Carl D. Perkins Vocational and Applied Technology Education Act (Perkins II). Among the new provisions of Perkins II are requirements that states establish systems of outcome-based standards for, and measures of, program performance, and that local districts use these standards as a basis for accountability and program improvement.¹ These provisions were to be implemented by September 1992.²

The changes in the act generated considerable attention among practitioners as well as researchers. During the years just prior to the deadline for implementing standards and measures, states devoted considerable effort to selecting indicators and designating minimum performance levels. The National Center for Research in Vocational Education (NCRVE) supported technical assistance to states (Hoachlander et al., 1992) and funded research to describe vocational education governance (McDonnell and Zellman, 1992) and to explore the responses of states and localities to key provisions of the new law (Hoachlander and Rahn, 1992).

The NCRVE also funded research on the broad issue of accountability in vocational education (Hill et al., 1992). Hill et al. examined the relevance of outcome data to vocational education policymaking at the local, state, and federal levels. They concluded that aggregated outcome data have only limited utility for federal policymaking, and that the goals of vocational education can be served best by strengthening the program improvement capabilities of states and local programs.

Fortunately, the accountability provisions of Perkins II are consistent with these conclusions. The law places greater responsibility for program improvement at the local level, while limiting the role of states to oversight and technical assistance. The law also emphasizes outcome-based accountability as an instrument for program improvement (although it stops short of imposing rewards and sanctions). Variations on the outcome-based accountability model have shown promise in other human-resource programs (Butler, 1988; Dickinson et al., 1988), and expectations are high among vocational educators and policymakers that local programs will become more accountable and will use performance data for program improvement.

However, there is little empirical information about local accountability in vocational programs on which to base these expectations. Previous studies have not examined whether local programs use data for program improvement or how accountable they are to their constituents. To fill this gap, we sought to explore accountability from the local perspective.

¹The word *standard* is used in different ways in educational policymaking; it can mean an educational goal, a curriculum model, or a performance target. We adopt the terminology used by Congress: A *measure* is "a description of an outcome," while a *standard* is "a level or rate of that outcome." Implicit in the adoption of a measure is a goal to achieve the outcome it describes.

²The appendix contains an extensive discussion of the changes in Perkins II that affect accountability.

Thus far, data systems have received the bulk of attention in the flurry of activity to comply with Perkins II. However, our initial contacts with vocational programs revealed that relationships with local constituents affected local decisionmaking as much as or more than the characteristics, or even the existence, of externally imposed standards or measures. Consequently, the purposes of this research were to gain an understanding of how local accountability systems function, including how data are used at the local level, to explore the role states could play in support of local accountability, and to examine the impact of federal legislation (i.e., Perkins II) on local accountability. This information should complement the picture of accountability-writ-large drawn by Hill et al.

Answers to the questions we have addressed are particularly relevant at the present time because statewide standards and measures must be implemented by fall 1992, and states and local programs will have begun to use the standards as tools for program improvement. A better understanding of local accountability systems and their role in program improvement may help state and local practitioners function more effectively. In addition, Perkins II will expire in 1995, and discussions about reauthorization will begin a year or more prior to that date. This is an appropriate time to begin thinking about revisions that might be made to the reauthorization to enhance the effectiveness of vocational education programs.

SUMMARY OF THE ACCOUNTABILITY PROVISIONS IN PERKINS II

Perkins II contains provisions that create new formal, outcome-based accountability systems at the state level. The act prescribes new program accountability and program improvement responsibilities for state and local education agencies (SEAs and LEAs). The key features of this legislation are summarized below; a more complete overview of changes in the roles of states and local providers is presented in the appendix.

States must fulfill three requirements that relate to program accountability and improvement: They must develop state plans, evaluate the statewide efficacy of vocational programs, and provide technical assistance to LEAs (see Table 1.1). From the perspective of accountability, the most important provisions are those that concern evaluating programs. States are required to adopt systems of "core standards and measures of performance" that will serve as the primary monitoring tool for state and local program improvement efforts. The measures implicitly reflect the outcomes against which programs will be judged; the standards serve as benchmarks for successful performance.

After this system of standards and measures is in place, the state will take a secondary position in monitoring local program performance. If local programs fail to make substantial progress³ toward meeting the standards for two years in a row, SEAs must work with LEAs to develop joint improvement plans and must provide technical assistance to help them improve their performance. In addition, states must provide technical assistance to all LEAs in a number of areas, including professional development for teachers, development and dissemination of curricula, and assessment of programs. They are also required to help LEAs implement the statewide standards and measures for program assessment.

LEAs are responsible for developing local plans, providing services, and evaluating and improving programs (see Table 1.2). Perkins II makes it clear that the primary responsibility

³"Substantial progress" is not defined in the legislation; the determination of what constitutes adequate progress appears to be left to the LEA, but this is not clear.

Table 1.1
State Responsibilities Under Perkins II

Develop a state plan
<ul style="list-style-type: none"> • Assess current and projected occupational needs and demands • Seek input from interested parties • Assure compliance with Perkins II
Evaluate vocational programs
<ul style="list-style-type: none"> • Assess ability of state's vocational education system to address state needs • Develop measurable objective criteria on which to base assessment
Provide technical assistance to LEAs
<ul style="list-style-type: none"> • Implement professional development activities for teachers • Develop curricula • Develop performance standards and measures for program evaluation

for accountability rests at the local level by specifying, for the first time, that each local plan must include the evaluation standards that will be used to measure program success, and by assigning specific evaluation responsibilities to local programs. These responsibilities include modifying the state-adopted standards and measures to suit local conditions, conducting annual evaluations based on those standards and measures, and developing program improvement plans when their programs fail to make substantial progress toward meeting the standards.

Overall, Perkins II represents a significant change in accountability at the state and local levels. The three most significant elements are (1) defining accountability in terms of program improvement rather than either implicit or explicit financial rewards or penalties, (2) defining program success in terms of outcomes rather than inputs or processes, and (3) giving LEAs primary responsibility for evaluation and improvement, with SEAs in the oversight role.

Table 1.2
Local Responsibilities Under Perkins II

Develop a local plan
<ul style="list-style-type: none"> • Assess local occupational needs • Address needs of special populations • Coordinate with community-based organizations
Provide services
<ul style="list-style-type: none"> • Serve special populations • Use funds for direct services, not administration
Evaluate program performance and take actions to improve programs
<ul style="list-style-type: none"> • Modify state standards and measures to make them relevant to local conditions • Evaluate programs annually • Develop a program improvement plan if performance or progress is inadequate

METHODS

Because so little is known about local accountability and data systems in vocational education, we were more interested in theory-building than theory-testing. Therefore, we adopted an open-ended approach: We interviewed vocational education program staff, students, and local employers in California, Florida, Michigan, Ohio, and Oklahoma. The selection of states was based on geographic diversity and the presence of one or more strong accountability-related factors, such as a statewide occupational competency system, a set of performance standards, or innovative occupational assessment tools.

Using recommendations from each state's Office of Vocational Education and from other RAND and NCRVE researchers familiar with state activities, we arranged to visit at least two local service providers in each state. Depending on the organization of the state's vocational education system, these providers were either area vocational technical schools, joint vocational school districts, comprehensive high schools, vocational high schools, and/or community colleges.

At each site, we interviewed administrators (e.g., the superintendent, the principal, the vocational coordinator, the program coordinator), instructors, students, employers, and, occasionally, parents. Our interviews focused on accountability, program improvement, the relationship between the program and its constituents, and the Perkins II requirements. On each visit, we spoke with approximately 20 people individually or in small groups. We also collected documents describing each school's goals, programs, assessments, and accomplishments.

Our descriptions of and conclusions about local accountability systems are based on these interviews and documents. Since neither the sample of states nor the sample of schools within states was representative, our findings must be interpreted with caution. They portray conditions in the set of vocational education programs we visited, but because our sample of states was not random, the common accountability elements we observed may not exist elsewhere. We have no reason to believe these schools were unusual in significant ways, however, and we think the model derived from them is appropriate to describe other vocational programs. Although we do not have adequate evidence to support either claim, we were struck by the similarities among the programs we visited. And, more important, our research convinced us that it is possible to develop viable systems of local accountability.

STRUCTURE OF THE REPORT

The remainder of this report is divided into three sections. Section 2 explains what we mean by accountability and accountability systems and presents a model that describes how local accountability systems operate in the districts we visited. Section 3 discusses how states might evaluate and strengthen local accountability systems. Section 4 presents our conclusions and makes specific recommendations for federal actions to enhance the functions of local accountability systems and promote the goals of Perkins II. An appendix details the changing responsibilities of LEAs and SEAs for accountability under Perkins II.

2. LOCAL ACCOUNTABILITY AND PROGRAM IMPROVEMENT

Perkins II places the responsibility for program improvement squarely on the shoulders of local programs. For this policy to be effective, local programs must be able to evaluate their own actions and initiate changes as needed. The act itself offers little direction for program administrators or state vocational educators about how to achieve better programs. It only mandates the development of outcome-based standards and measures of acceptable performance to be used to judge the success of individual programs.

This situation is roughly analogous to trying to improve the health of the population by establishing targets for weight and blood pressure, distributing scales and blood pressure gauges, but not providing any advice about diet or cardiovascular fitness. Would such a policy promote health and fitness? That depends on the health-improvement knowledge and skills people possess and the assistance they receive to build such skills. Similarly, the impact of the Perkins performance standards and measures depends on the existing capacity for program improvement and on the support local programs receive to help them build this capacity.

We investigated whether local programs are adequate to carry out their program improvement role effectively. Because program improvement necessarily entails modifying or deleting ongoing programs and instituting new ones, we asked program administrators to describe how they make such decisions using concrete examples. Our discussions focused on both the formal and informal methods they used to gather information, and where that information originated. We also asked them to describe state and local laws and regulations that affected their actions, and what forms of assistance were available to guide their decisions.

Because student, parent, business, and community support may be important factors in program-related decisions, we asked representatives from these groups to describe their participation in particular programs and their role in the decisionmaking process. For example, we asked students how they decided to enroll in one program or another, and we asked business representatives to describe their relations with the school and its programs.

We begin the section by defining the key terms *accountability* and *accountability systems*. We then present a conceptual model of a local accountability system, developed on the basis of our research and insights gained from reviewing the educational accountability literature. Next we describe how the system can function as a program improvement tool based on our interviews and observations. Finally, we consider limits to the model. In an earlier paper (Stecher and Hanser, 1992), we described practical limitations to local accountability, which are summarized at the end of this section.

DEFINITIONS: ACCOUNTABILITY AND ACCOUNTABILITY SYSTEMS

Throughout this report we refer to accountability, one of the most frequently used terms in the current debate on educational policy. Unfortunately, accountability means different things to different people; Kirst (1990), for example, distinguishes six different approaches to accountability. In this report, accountability is taken to mean *a relationship between two entities that share goals and have the capacity to influence each other's benefits*. In the context

of vocational education, accountability represents a relationship between a service provider (usually a school) and its constituents¹ (students, parents, employers, and the community), in which the following conditions exist:²

1. The constituents expect the school to provide vocational education services (leading to employment, workforce improvement, and economic development).
2. The school accepts these goals as part of its mission.
3. The school derives benefits from achieving the goals.
4. The constituents have some capacity to influence the benefits that accrue to the school.

The nature of the benefits that accrue to schools and the influence exerted by constituents can vary. In the vocational education context, the most common benefits are economic rewards in the form of local tax revenues and continued or increased state and federal funding. The most common avenues for direct constituent influence are advisory committees and elections. Advisory committees help set election policies; elections determine the composition of school boards and, in many states, the amount of local tax support. Constituents also exert indirect control of benefits through their participation as students or employers. In every case of which we are aware, state resources depend directly or indirectly on enrollment and placement levels, which, in turn, depend on student and employer perceptions of the quality of the programs and their graduates.³

An *accountability system* is a collection of formal and informal communication mechanisms, information exchanges, and action paths that foster shared goals and benefits. Such systems include ways for constituents to make their expectations clear to schools and influence the goals schools pursue, methods of sharing information about program performance so practitioners and constituents can monitor the quality of the programs, mechanisms for communicating opinions and judgments between clients and the school to help administrators formulate and improve programs, and procedures for rewarding schools and constituents for good performance and sanctioning them for poor performance. An accountability system is effective if it promotes improved services and greater benefits to constituents and schools.

LOCAL ACCOUNTABILITY IN VOCATIONAL EDUCATION

In the districts that we visited, we found ample evidence that nascent local accountability systems exist and that they can be nurtured to function as tools for program improvement. Two features of vocational education form the basis for these accountability systems: (1) vocational education is outcome-oriented, and (2) it involves constituents in a meaningful way in program planning. Local programs have an outcome orientation by design. The predominant goals imposed by states through regulations or funding mechanisms are student com-

¹We use the term *constituents* broadly to denote all individuals and organizations in the community served by the school. Constituents include those who benefit directly or indirectly from the services provided.

²Adapted from Hill and Bonan (1991).

³Many factors determine the degree of choice employers and students have as consumers of vocational education products and services. In most cases, there are alternative sources of trained employees, and in most urban areas there are multiple providers of training, so employers and students can respond to perceived quality. However, in many areas, choices are limited.

pletion and placement in jobs or further training. In many programs, instructors are directly responsible for placement.

Constituent involvement is also deeply embedded in most local vocational education programs. Local programs give voice to employers' concerns through industry and employer advisory committees that contribute to program design and goal-setting. In every LEA visited in this study, there was a network of active employer advisory committees. Also, employers are the judges of last resort, either hiring or not hiring graduates and thereby approving or not approving the results of the program. Employers and industry groups represent only one constituency, but they are the most widely involved in program decisions. Students influence programs primarily through entrance or exit decisions, either enrolling or opting for other activities and, once enrolled, either completing or dropping out. Where local tax levies support vocational education, the local community also has indirect influence over program direction. Through their votes, citizens communicate their satisfaction or dissatisfaction with the performance of the vocational schools in broad terms.

These conditions create an accountability relationship primarily among programs, employers, and students, and secondarily with the broader community. In all the sites we observed, these elements were present. They give voice to constituents' concerns and facilitate the translation of evaluative judgments into actions. On the basis of our observations, we would expect to find local accountability systems of some kind in almost all vocational education programs.

MODEL OF A LOCAL ACCOUNTABILITY SYSTEM

From our visits, we were able to construct a general model of an idealized local accountability system that reflects the conditions and interactions we observed in vocational education programs. This model is illustrated in Figure 2.1. Each of the elements is abstracted from conditions we observed in practice, but in no single site was the model fully realized. The normal flow of activity is clockwise, beginning with the administration; the cycle is continuous and ongoing.

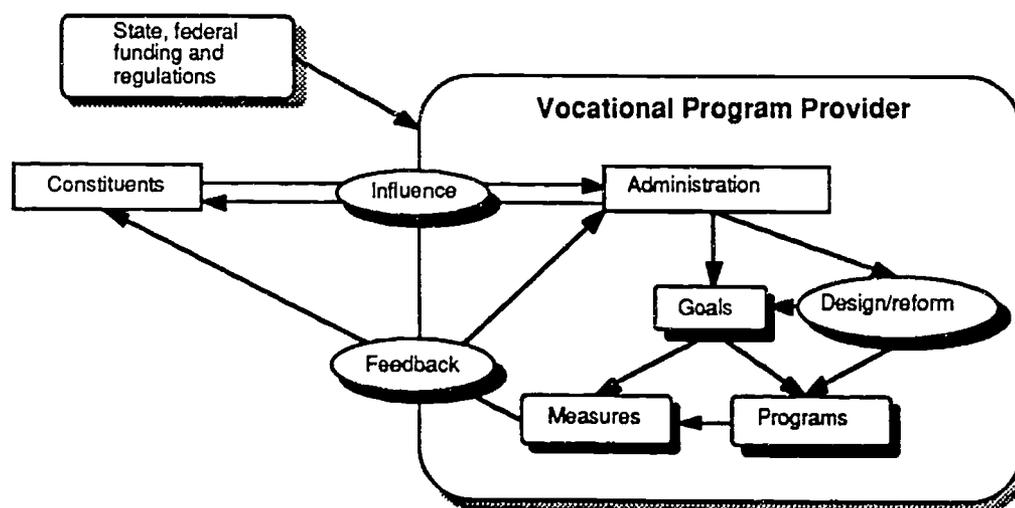


Figure 2.1—Model of a Local Accountability System

We should note at the outset that this model includes one key element that many would consider to be outside the bounds of accountability per se: program reform. Although program reform is separable from accountability, we include it because it is essential to the Perkins II view of accountability. In a sense, its inclusion "completes" the accountability system by bringing it full circle from goal-setting, through feedback and influence, to reform. In our view, a model that stopped short of reflecting how data are used for program improvement would be far less informative and far less useful than our model for analyzing current vocational education accountability. The model we present includes the following components:

- **Vocational program provider.** The key administrative and organizational entity may be a district, a school, or a unit within a school, depending on local conditions. We distinguish between administrative and programmatic functions. The former include such things as planning, supervision, monitoring, and reform. The latter include instruction, assessment, and other classroom-related actions. Program staff may perform one or both of these functions; as instructors they are responsible for program delivery, and as members of department committees they often make planning decisions and perform other administrative functions. Administrators, by comparison, usually perform only administrative functions.
- **Goals.** Organizing principles that define the purpose of the program. In vocational education, goals usually relate to employment-related skills and outcomes, such as occupational knowledge and job placement. However, goals also can be defined in terms of school capabilities (inputs), such as teacher qualifications, curriculum, materials, or accreditation status, and services (processes) such as instruction, tutoring, and services for special populations.
- **Measures.** Methods for quantifying status with respect to goals. Measures usually are numeric summaries of system performance, such as the percentage of teachers with industry-approved certification, the proportion of students receiving free tutoring, or the number of program graduates finding employment in a field related to their course of study.
- **Feedback.** The transfer of information about program status to constituents, program administrators, and staff. The information can include formal reports, as well as impressions gained from direct experience observing, participating in, or reviewing programs.
- **Influence.** The manner in which constituents make their opinions and expectations known to program staff, and the manner in which program staff communicate to constituents. Constituents have two major vehicles for communicating their judgments: They can "vote with their feet," withholding participation if they do not value the services they are receiving, or they can express their needs and opinions through various formal and informal channels. These two responses have been called "exit" and "voice" (Hirshman, 1970).
- **Program design and reform.** The actions taken by administrators to form and reform programs in response to measures, direct feedback about program performance, and constituent influence. Under ideal circumstances, administrators and other school staff have a repertoire of effective strategies they can call upon to address concerns or deficiencies in performance. These skills are used to redesign and reform programs in response to feedback and influence.

- **Constituents.** Members of the community who have an interest in the services provided by the school or the graduates it produces. Constituents include students, their parents and friends, employers, trade associations, and the general business community, as well as the general populace who are affected by economic development.
- **State and federal governments.** Funding and regulatory actions that affect vocational education programs. Both state and federal governments influence local accountability through the rules they place on operations and the level of support they provide. These external conditions affect many aspects of program operations, including the establishment of broad goals for vocational education, the identification of high-demand occupations, and the choice of measures for Perkins II program review. We treat these primarily as fixed constraints within which local programs operate.

ACCOUNTABILITY SYSTEMS AND PROGRAM IMPROVEMENT

How can an accountability system help to improve local programs? As we have described it, accountability is a goal-directed relationship. Both parties agree on desired outcomes and judge and reward system performance on these criteria. The judgments and rewards drive program improvement toward desired goals.

The mechanisms for change can be traced in Figure 2.1. For purposes of description, we begin with a discussion of goals and proceed through the other elements of the system. However, it should be understood that the processes in the model are continuous. Although formal program revision may occur on an annual basis, other interactions are ongoing. There is constant give and take between students, instructors, administrators, and other constituents.

Goals

Goals, whether explicit or implicit, form the basis for program design, evaluation, and reform. Their position in the center of Figure 2.1 is not coincidental. Program design proceeds from goals; measurement and evaluation reflect back upon goals; and program reform may include the reformulation of goals. This centrality of goals and objectives is reflected in much of the literature on program evaluation (Tyler, 1942; Popham, 1975; Rossi and Freeman, 1989).

In program design, the process through which goals are established and translated into action is not always apparent. Local vocational education goals usually are elements of an interlocking set of hierarchical goals that reflect local desires as well as state and federal mandates. This hierarchy begins with goals established at the federal level and continues downward through states and LEAs to individual occupational programs.

Federal goals usually are very broad; for example, the primary purpose of Perkins II is to promote U.S. competitiveness in the world economy by "improving educational programs leading to academic and occupational skill competencies needed to work in a technologically advanced society."⁴ States are required to establish plans that further refine and assign priorities to goals. At the LEA level, the state mandates are translated into more specific opera-

⁴Carl D. Perkins Vocational Education Act, Sec. 2.

tional goals, such as identifying occupational areas in demand in the local economy, developing training programs to prepare students for meaningful careers in those areas, and monitoring the placement of graduates into occupations for which they were trained. At the program level, specific student learning and/or instructional objectives emerge. Instructors use these objectives to develop curricula, select materials, plan lessons, and write tests. In this complicated manner, program planning is based on goals.

Goals also serve an important role in judging the performance of programs. In fact, goal attainment is the basis for many program evaluation models (Popham, 1975). In a local accountability system, goals are the basis for selecting measures of program performance that, in turn, are used to judge program success.⁵ In vocational programs, broad programmatic goals usually are translated into more incremental objectives in the areas of recruitment, enrollment, retention in the program, course completion, internship completion, certification, placement, and retention on the job. These become the criteria against which program success is measured.

Similarly, program reform comes about as the result of information and influence directed toward attainment of goals that are unmet or that have changed. Goals serve as targets for program redesign and reform efforts. Furthermore, if staff or constituents become convinced that program objectives themselves are inappropriate, goals may be reformulated.

To serve these multiple functions, goals should be explicit, clear, measurable, and endorsed by constituents (Stecher and Hanser, 1992). In addition, they should be reviewed and updated regularly. Frequent review insures that the program continues to be responsive to the demands of the workplace and the needs of constituents. Finally, if goals are to be effective guides to program reform, there must be a system for setting priorities among them and for reviewing those priorities over time.

The processes of establishing goals and translating them into actions are carried out by program staff and constituents. Some groups play a primary role, while others play a facilitating role (Metfessel and Michael, 1967). In vocational education, employers, trade associations, and other community members may make important contributions to the setting of program goals as well as to the setting of specific instructional objectives.

Measures

Measures play an important role in an accountability system because they are the chief currency of program performance.⁶ When selected, collected, and reported properly, measures provide a common, trustworthy basis for judging the success of programs. This is crucial for determining whether program reform is needed. Perkins II explicitly directs states and local agencies to monitor program performance in terms of outcomes, and vocational education

⁵Perkins II mandates that states select and use a set of measures of program outcomes. We take as implicit in this requirement the adoption of the underlying goal of producing these outcomes.

⁶The secondary currency is direct experience with the program, which will be elaborated in the discussion of feedback below.

programs across the country are collecting or planning to collect measures of academic-skill improvement, program completion, occupational-skill attainment, and job placement.⁷

Most schools have access to a wealth of data that could be used to monitor progress toward achieving program goals and objectives. Variables that can be measured relatively easily include recruitment, enrollment, course retention, course completion, skill attainment, certification, job placement, and job retention.

One consequence of the strong emphasis on outcomes may be a drawing of attention away from other school factors, including inputs and process variables.⁸ While indicators of outcomes are useful for judging some aspects of overall performance, they are often incomplete indicators of total system performance and they offer limited suggestions for program improvement (recall our earlier example of distributing scales and blood pressure gauges as a means of affecting weight and blood pressure). If measures are defined broadly enough (i.e., if they include measures of content and instructional quality) they can serve two roles in an accountability system: as indicators of outcomes and as guides to improvement (David, 1987).

To be effective elements in an accountability system, measures must be consonant with goals and sufficient to describe them, of adequate technical quality, and clear and easy to understand (Stecher and Hanser, 1992). This does not mean they must be objective (rather than subjective) or quantitative (rather than qualitative). Even subjective judgments summarized through systematic consensual procedures can provide valid information about constituent beliefs, program impact, etc. As accountability tools, measures must provide constituents and program staff with an accurate, common view of goal attainment.

Feedback

Feedback is the mechanism through which constituents and program staff learn about program performance. The information they receive forms the basis for their judgments about program success and their subsequent actions to influence programs. Hence, feedback is an essential element in an accountability system.

There are two sources of feedback: formal measures collected and reported by the program (such as those described above) and impressions and opinions formed through direct or indirect experience. Formal measures are shared with program staff and constituents in many forms, including program summary reports, evaluation reports, tabulations of outcome measures, minutes and recommendations from advisory committee meetings, and community employment projections.

Program administrators control the dissemination of formal feedback and can limit access to information if they choose. For example, employers, students, and parents receive most of their formal feedback about a school's program through official channels, in the form of written summaries and reports. This information varies in breadth, depth, and quality, depend-

⁷As noted above, the outcome-based accountability requirements of Perkins II have led indirectly to the adoption (at least implicitly) of these outcomes as program goals.

⁸In the past, school quality often was judged in terms of inputs (e.g., facilities, teachers, equipment), and that model remains the basis for many school accreditation procedures. We are not suggesting a return to emphasizing process variables, but rather noting that a proper balance must be struck between outcome and process variables.

ing upon the wishes and skills of those producing it. Constituents who serve on an advisory committee usually have access to data more frequently than those who have no official connection with the school.

In addition to this formal feedback, many people (including both program staff and constituents) have direct experience with the school's program. These contacts enable people to form their own opinions about program success. For example, students, instructors, and administrators have extensive personal knowledge of program operations and student performance. Employers who participate on advisory committees or interview program graduates seeking employment form impressions of the program, based on these contacts. Other constituents have indirect contact through comments or stories told by friends or associates, or through reports in newspapers.

Information about goal attainment is critical if constituents and program staff are to be able to make judgments and exercise their influence to bring about program improvement. Consequently, feedback that is relevant to the program's most important goals is critical in an accountability system. Constituents who do not have access to formal reports that summarize objective measures will form impressions on other, conceivably less valid grounds and will exercise their influence in a less than optimum manner.

At first glance, it may appear that more feedback is always better. In fact, enhancing the quality of feedback may be more important than increasing the amount. Evaluation research has identified many factors that make information useful for decisionmaking, such as relevance, timeliness, interpretability, and mode of presentation (Alkin et al., 1979; Alkin et al., 1982; Brown et al., 1978; Braskamp and Brown, 1980). Accountability depends on the communication of information about program performance, and there may be many ways to make such communication more accurate, meaningful, and relevant.

Influence

Influence is the mechanism through which constituents and program staff act to affect program direction. As noted above, constituents have two forms of influence over programs: voice and exit (Hirshman, 1970). They can voice their opinions through formal channels, such as advisory committees or student associations, or through informal contacts with staff. Such communication can be an effective way of making needs felt, influencing goals, and bringing about program improvements.

Constituents also can withhold their participation or involvement if they do not feel they are well served by the program. In many respects, this is the ultimate constituent sanction. Students can leave the program or give negative recommendations to friends who are considering enrollment. At most schools, word of mouth has a major effect on recruitment, so dissatisfied students can affect future enrollment. Similarly, employers can refuse to serve on committees, accept interns, or hire program graduates.

The immediate effects of these exit actions are minor, but their long-term effects can be severe. A sustained loss of enrollment (student exit) or loss of placements (employer exit) translates directly into a loss of state revenue (although there may be a delay of a year or more before funding levels decline). Thus exit is a powerful, if blunt, instrument for affecting

programs. On the other hand, an occasional exit by an individual student or employer has more limited impact.

Similarly, program staff can exert influence on constituents through actions designed to encourage participation (e.g., informal phone calls and formal award ceremonies) and actions taken to persuade or change opinions. Most practitioners are genuinely motivated to encourage participation and serve the needs of the business community. Furthermore, failure to achieve enrollment and placement targets carries severe sanctions. As a result, most program staff try to maintain positive relationships with employers and the community and reward participation as much as possible.⁹ To a certain extent, program staff also strive to control their communities, both so they can address concerns before those concerns become larger problems and so they can regulate the demands placed upon the program.

Reform

The principal justification for outcome-based accountability is its ability to sustain high-quality programs and promote reform in programs that are not producing desired results. Reform is the way in which the administration responds to influence from constituents and to internal feedback about program success. Incremental changes to course goals, student learning objectives, instructional procedures, the structure of internship programs, etc., frequently occur in response to suggestions from employers or students or in response to formal recommendations from industry advisory committees. Similarly, instructors often make small changes to lessons and tests in response to student concerns voiced directly to them. These are some of the obvious ways constituents' influence leads to program reform on a small scale.

Occasionally major changes, such as the initiation or elimination of a training program, occur. Although less frequent, these changes also are prompted by information and influence, e.g., lowered enrollments, increased demand from employers, and changes in the workplace.

Program reform falls clearly within the scope of administrative control. Change does not occur unless program administrators permit it. In many cases, responsibility is delegated; often it is shared; but ultimately it is up to administrators to take responsibility for reform. The accountability system provides information and motivation for program improvements, but actual reform depends on the effectiveness of the administrators.

State and Federal Regulations and Funding

All the actions described above are influenced in direct and indirect ways by state and federal regulations and funding mechanisms. For example, the potential negative consequences of student or employer exit derive from eventual state sanctions, as well as from the actions of the local constituents themselves. Similarly, state and federal requirements for collecting and reporting data on placements give such measures increased importance, and state re-

⁹State guidelines frequently require that each program have an advisory committee and consult with the committee regularly. In many cases, advisory committees must approve program objectives as a condition of state funding. However, most, if not all, administrators and program staff genuinely desire feedback that helps to improve the program. They may resist change that requires effort, as many people do, but they will overcome their resistance if they believe the change improves the program.

quirements regarding advisory committees increase the value placed on these bodies by program administrators. In many ways, some obvious and some subtle, the external framework for vocational education created through regulations and funding mechanisms colors accountability relationships at the local level.

At the federal level, Perkins II emphasizes outcome measures to the almost complete exclusion of input or process measures. As we noted above, there are drawbacks to this approach from the perspective of program improvement. Although they may satisfy policymakers' needs for monitoring, aggregated outcome measures alone do not satisfy practitioners' needs for information to guide program improvement. Furthermore, by deemphasizing input and process measures, such requirements may even reduce the local capacity to act effectively.

State regulations also can create pressures that reduce local accountability. For example, attendance-based funding can send the wrong message to program staff, focusing their attention on short-term success (filling seats) rather than long-term outcomes (employment of graduates). In contrast, program-based funding¹⁰ provides a more consistent basis for building local capacities, while still allowing states to exercise final control of resources tied to long-term success.

It is clear that one of the purposes of Perkins II is to foster program improvement through local responsibility, yet other actions on the part of policymakers sometimes run counter to the best interests of local accountability.

Limitations

The local accountability system described above is overly simplified in that it disregards potential differences between the perspectives of program staff and constituents. Different actors in the accountability system have different points of view. They may disagree on goals and objectives, and they certainly will assign different priorities to them. In reality, all stakeholders do not act in concert, and they often represent conflicting desires and pressures on program administration.

Each major constituency—students, employers, instructors, and parents—has different needs and voices concerns about different program outcomes and features. Furthermore, other, more diffuse constituencies contribute to the cacophony of voices trying to influence programs. For example, the local community supports the school through taxes and can voice its approval or disapproval at the ballot box. Yet the community has no organized representation and seldom becomes involved in individual programs unless rallied by an issue or problem. Similarly, trade associations or professional organizations can be directly affected by the school's activities and may wish to promote their own point of view. Resolving such conflicts is a test of administrative skill, and it also may be an activity in which technical assistance can be useful.

Similarly, the description of the model should not be interpreted to mean that all programs have effective accountability mechanisms. There are many practical constraints in the cur-

¹⁰In some states, annual funding is awarded in a lump sum, independent of the number of students actually served. If enrollment in a particular program remains low year after year, funding for the program will be terminated. However, daily, weekly, or monthly fluctuations do not affect funding.

rent setting (Stecher and Hanser, 1992). In some cases, goals are sufficiently broad or vague that it is impossible to know whether they have been achieved. Constituents do not always understand or support the goals, and seldom are priorities among goals clearly established. Measures are not always consonant with or sufficient to encompass goals, and their technical quality may not be adequate. Feedback between program staff and constituents may be infrequent or inaccurate. Opportunities for influence are often limited. Organizational reform mechanisms sometimes falter due to regulations, lack of resources, concern with short-term outcomes, or lack of strategies for change. Overcoming these practical limitations is one of the challenges LEAs and SEAs face in trying to implement the broader accountability model envisioned by Perkins II.

3. EVALUATING AND STRENGTHENING LOCAL ACCOUNTABILITY SYSTEMS

Perkins II places new demands on SEAs. In the broad context of developing and maintaining programs that meet statewide vocational education needs, SEAs are responsible for monitoring local program improvement efforts and providing technical assistance to local programs. We believe that from the state's perspective, the most important questions are, How well are local systems operating and what can be done to improve them? That is, are the local accountability systems working effectively to improve local programs, and if not, what can the state do to assist them?

In this section we explore each of the components of local accountability systems from the perspective of state educational administrators assigned the role of monitoring and providing technical assistance. We discuss approaches for evaluating the effectiveness of a local accountability system, and we offer some ideas about how states can act to strengthen local functions. Our suggestions are based on interviews with state and local staff and our analysis of the functioning of local accountability systems. Our interviews revealed many aspects of local accountability that can inform the evaluation and technical assistance process. Additional ideas to enhance local accountability could be drawn from the literature on school improvement through program evaluation, innovation, and school restructuring (Alkin, 1985; Loucks and Hall, 1977; Council of Chief State School Officers, 1989).

Much may be gained from the simple recognition that local accountability systems exist; by giving credibility to local accountability, one may improve it. By acknowledging these functions, delineating them clearly, and sharing the vocabulary of local accountability with program staff and constituents, SEAs can go a long way toward improving such systems. Program staff and constituents can be buoyed by the knowledge that they, rather than external forces, are the masters of their own accountability.

GOALS

Educational goals are elusive, not always explicit, and not easily explicated (Stake and Denny, 1969). Consequently, it may not be possible to identify all the goals that are operating in a particular program context. States should not expect to find accountability systems delineated explicitly, as they are in the idealized model in Figure 2.1. Nor should they try to impose formalized standards for goals and goal-setting, such as annual goal clarification exercises or lengthy documentation of high-level goals and linked objectives. In many cases these efforts would be counterproductive. They are the sort of overly general mandates that produce low-level compliance rather than commitment and use.

Goals should be evaluated in light of their functions. Goals serve principally as organizing mechanisms for program planning, evaluation, and reform. They should be judged less on the basis of content and format and more on the basis of relevance and use. That is, it is less important that the goals be stated in behavioral terms and contain an objective relating to a specific domain—say, administrative efficiency—than that they be endorsed by employers

and used as the basis for choosing measures. Consequently, states should not adopt an overly formalized stance toward reviewing goals.

Instead, states should look for the functional equivalent of shared, measurable, updated goals and objectives. They should seek the answers to questions such as:

- Does the program have goals, and do administrators and staff agree on what they are?
- Do constituents have goals for the program, and do these goals match those of staff?
- Are the goals measurable, i.e., can one determine if they have been achieved?
- Are the goals reasonable in light of local program experience and the experience of programs in other areas or other states?
- Does the program examine its purpose regularly to be sure it is on target?
- Can the program determine whether it is making progress?
- Do stakeholders and local experts have a role in giving direction to the program, i.e., in setting goals?
- Has the program established priorities among its goals?
- When allocating scarce resources, do administrators use program goals to guide decisions?

These questions seem obvious, but understanding goals is not a simple process. As Worthen and Sanders (1973) cautioned,

There is some distinction between what educators propose to pursue, what they see themselves pursuing, and what they in fact do pursue. It is not a matter of deception. Evaluators, educators, all human beings, have enormous difficulties in reporting the sum and sweep of their objectives. We all have goals, and we consciously give priority to some goals over others. But we have few reliable ways to report them to others, or even to reveal them to ourselves (p. 332).

There are many actions states can take to strengthen goals and goal-setting. First, by merely asking LEAs questions about the nature and status of program goals, SEAs alert programs to the clarity or vagueness of their mission. Second, by sharing effective goal statements and goal development activities from other institutions, states can provide useful models. Third, by stressing functions over formality, and allowing programs to develop their own goal-setting mechanisms, SEAs invest participants more deeply in the process and ensure that the results will be more meaningful at the local level. Fourth, by pooling resources to develop core knowledge centrally (e.g., statements of the knowledge, skills, and abilities required for specific occupations), states can relieve local programs of oppressive burdens and yet permit them to tailor descriptions to their local needs.

MEASURES

Measures are essential to accountability. Without methods of tracking program status, one cannot make judgments about program quality or take appropriate action. Fortunately, it is possible to form impressions without quantifying outcomes, so reasonable action can be taken in the absence of aggregated, quantitative information. However, impressions can be subjective, idiosyncratic, and volatile, and they may provide only a precarious basis for action at a programmatic level. Multiple sources of information are to be encouraged, and they should

include explicit quantitative data to portray the accomplishment of goals. In addition, it is worthwhile to have information that is directly relevant to program planning, including data regarding processes and inputs.

Measures serve specific functions, and their adequacy can be determined by exploring how these functions are performed in a particular program. Questions that address the functions measures perform include:¹

- Does the program know whether it is accomplishing its goals?
- What information is available that is relevant to goal attainment?
- How accurate and meaningful is this information?
- Is the information available to those who need to know?
- Do constituents share the impressions of staff?
- Do constituents understand the meaning of the information they receive?
- Are there important goals the program is not measuring and consequently is not considering adequately in planning?
- If the program fails to meet outcome objectives, does it have information to help it make improvements?

There are many ways states can help programs strengthen their measures. First, programs may need assistance in choosing measures effectively. External agents can help local programs ensure that measures relate to goals, are of high quality, and can be interpreted meaningfully. Second, states can provide technical assistance to help programs improve the measures they have and the manner in which they report them. Third, states can encourage selective sharing of measures and measurement approaches. Once a measure or an assessment strategy has proven to be effective, SEAs can share this information with other programs or can provide regional or statewide forums for contact and dissemination. Fourth, states can provide the impetus for groups of programs to pool their expertise in developing, identifying, or implementing measures related to common goals. Finally, states can use state-level resources and expertise to develop, implement, or disseminate measures that may benefit local programs.² Statewide development of occupational competency tests is a good example of this type of activity.

FEEDBACK

To determine whether a program provides effective feedback, states must consult with staff, students, and constituents, and must review the documents and reports that are made available to various groups. The key questions are:

- How do constituents and staff know whether or not the program is effective?

¹Measures should be closely linked to goals; therefore, the questions one asks regarding measures are similar to those regarding goals.

²Alternatively, local districts might be asked to pay a small "tax" into a central fund to provide such supplemental technical services.

- What kind of information about program success do they receive?
- How often is this information made available?
- How useful is the information to them?
- Do constituents and staff have questions about the program that are not answered?

The key to strengthening feedback is to increase access to, and use of, information about program performance, particularly information about goal attainment derived from objective measures. Program administrators control most of these data, so increasing feedback to constituents requires changing administrators' behavior. In some cases, it may be sufficient to educate administrators about alternative strategies for sharing information with constituents. In other cases, administrators may perceive greater access to information as a threat to their position. It is difficult to overcome these perceptions, but administrative staff development illustrating the value of collaboration and the use of staff, student, and constituent input for program improvement may be an effective starting point. Methods for planning, gathering, and disseminating information in more "utilization focused" ways are described in Patton (1978).

INFLUENCE

By exerting influence on one another, staff and constituents put "teeth" into the accountability system. Constituents voice their concerns and reactions to information and their impressions about program performance, or they discontinue their participation and exit the arena. Staff make constituents aware of their own concerns and the constraints under which the program operates. To judge the effectiveness of these two types of influence, one needs answers to questions such as:

- How satisfied are constituents with the program?
- How satisfied do program staff think constituents are with the program?
- Do constituents have avenues for making their opinions known to staff?
- If constituents are dissatisfied, what do they do?
- In what ways are constituents involved in program review and planning?
- Which constituents do program staff consult most often?
- Has the program ever changed because of input from constituents?
- What positive and negative consequences are associated with constituent exit?
- How real do program staff perceive these consequences to be?
- How do program staff make their concerns known to constituents?
- Do program staff try to manage constituents' reactions?
- Do constituents feel program staff are responsive to their concerns?

One way in which influence can be strengthened is by changing the structural features of program funding or governance. For example, linking state funding to enrollments, completion rates, and/or placement rates is a common method for strengthening the consequences of constituent exit. In a more subtle way, some states require programs to have their curricula

approved by industry advisory committees annually in order to receive state funding. This institutionalizes one avenue through which constituents can have a direct effect on program design. States can also adopt rules and funding mechanisms that grant greater power to constituents.

There are other ways states can intervene to increase the level of collaboration between programs and constituents. Cooperation may be absent because neither administrators nor constituents have a framework for collaborative change that they can use to structure their interaction; both parties may be skeptical about the motives and actions of the other. In some instances, the parties have assumed adversarial roles in the past that are difficult to overcome. Education is the key to changing this situation and increasing the responsiveness of each party to the concerns of the other. Staff development, particularly staff development that shares models of successful cooperation at the local level, is a good starting place.

PROGRAM PLANNING AND REFORM

Our model of an accountability system includes the capacity for program reform as an essential element. Although some would conceive of reform as a response to accountability, we include it in the model because Perkins II so clearly justifies accountability in terms of program improvement. Without a mechanism for change, the finest goals, the best information system, and the most influential constituents will have little impact. Forces can be aligned to push for change, but actual improvement will depend on the willingness and support of the administration. The kinds of questions that might be asked to judge a program's capacity for reform include the following:

- How are new programs initiated?
- Under what circumstances are programs discontinued?
- What have administrators done in the past to improve programs?
- What would program administrators do if they learned a program was having problems (e.g., enrollment was low, a high proportion of students were not completing the program, the placement rate for the program was low, staff morale was low)?
- Do individual programs conduct internal reviews, and if so, how are they conducted?
- What role do instructors and department administrators play in curriculum review and reform?
- How do programs use input from employers and industry representatives?
- If students are dissatisfied with a class or a program, what happens?

Traditionally, program planning and reform activities fall within the domain of administrative action. But administrators may have a limited repertoire of options, which reduces their ability to respond to deficiencies that arise. As noted earlier, an overemphasis on output can contribute to this difficulty, because output data provide few clues for program improvement. It is important to temper enthusiasm for outcome measures with the recognition that understanding processes and inputs is necessary for institutional reform.

There are several ways states can promote more effective program planning and reform. SEAs can identify effective administrators and share their skills with those in need of assis-

tance. Superintendents, principals, and/or department heads who have developed useful strategies for program improvement or successfully confronted difficult program challenges are among the state's most valuable resources. It is possible to encourage collaboration between these individuals and others in need of such skills. Second, SEAs can establish networks to promote educational change by building communities of teachers and administrators with common concerns (Lieberman and McLaughlin, 1992). Such networks can be fostered through meetings, newsletters, or electronic bulletin boards supported by the state. Third, states can engage in more traditional staff development activities focused on the role of performance measures, other local data, and constituent input in program improvement.

SUMMARY

In considering their monitoring and technical assistance role, state offices of vocational education need to be aware of the structure and functions of local accountability systems, which offer great potential for improvement of vocational programs. States can take an active role in improving local accountability systems by reviewing and offering guidance to strengthen goals and measures, to increase feedback and influence, and to improve program planning. There are many instances in which it might be advantageous to promote greater sharing and consortium-building among local programs. State vocational educators also need to be cognizant of the constraints imposed by state regulations and the influence exerted by state policies. Their goal should be to align all these pressures in support of local accountability.

4. CONCLUSIONS AND RECOMMENDATIONS

This study was undertaken prior to the deadline for states to implement the standards and measures provisions of Perkins II. At that time, there was widespread concern about these provisions and about the impact of outcome-based performance standards on SEAs and LEAs. This study examined the use of measures and data systems at the local level and explored the possible effects of Perkins II on local accountability. Because of the nature of the problem we chose to address and the methods we used, our results are qualitative rather than quantitative. We did not set out to conduct a census of how SEAs and LEAs were reacting to Perkins II,¹ but rather to understand how local information and decisionmaking systems (specifically, accountability systems) operate, and to gain a sense of what effects Perkins II might have on them. It was toward that end that we structured our field interviews and analyzed the legislative history and regulations governing Perkins II.

In an earlier publication (Stecher and Hanser, 1992), we described a model of local accountability in detail, examined the way it would operate under ideal circumstances, and discussed the limitations we observed in local accountability systems in practice in various sites across the country. The focus of this report is quite different; we have not attempted to duplicate or repeat our earlier work, but rather have extended it. Thus, we first summarized the provisions of Perkins II that define the roles of states and local programs vis-à-vis local accountability and program improvement. Next we revised our earlier model and considered the ways in which local accountability systems could function as program improvement tools to fulfill the demands of Perkins II. Finally we reviewed the role of states vis-à-vis Perkins II accountability and suggested approaches states might use to foster local accountability systems.

In our judgment, local accountability systems are the linchpin of Perkins II—local program improvement hinges upon their success or failure.² Furthermore, the states are clearly charged with being what we might describe as *meta-evaluators*—responsible for evaluating how well local *systems* perform rather than for how well local *programs* perform. Because these responsibilities are new, for both the states and the local systems, we have presented our analysis of how states can monitor and strengthen system performance.

Finally, we have come to several conclusions with regard to the effects of Perkins II and have developed a set of recommendations that we believe would strengthen the larger vocational education system that Congress and the states have been building.

CONCLUSIONS

We draw five conclusions based on our analysis of federal policies, local accountability systems, and the interactions between them. The first three conclusions highlight the existence, use, and improvement of local accountability systems compatible with Perkins II:

¹See for example, McDonnell and Zellman (1992).

²Although tremendous resources have been devoted to developing measures and standards, and those elements may therefore be considered to have paramount importance, they are but components of an accountability system, the whole of which must function effectively for program improvement to occur.

1. Most vocational programs have functioning local accountability systems consistent with the model envisioned by Perkins II.
2. Local accountability systems can be effective tools for program improvement if practical obstacles can be overcome.
3. States can do much to evaluate and strengthen local accountability systems.

The final two conclusions focus on the direct effects of Perkins II on local vocational education systems:

4. Neither SEAs nor LEAs are fully prepared to carry out their responsibilities vis-à-vis accountability under Perkins II.
5. Perkins II may overemphasize outcome-based standards and measures, lessening the use of input- and process-based measures that are valuable for program improvement.

Functioning Local Accountability Systems Exist

Both the nature of vocational education itself and the manner in which it traditionally has been implemented create fertile conditions for local accountability (Stecher and Hanser, 1992).³ There is ample evidence of functioning accountability systems in local vocational programs. Those programs have goals and objectives (usually in terms of enrollment, completion, and job placement), require the direct involvement of constituents in program review and design (usually employers and/or trade associations), and are subject to rewards and/or sanctions based upon performance (usually in the form of program growth or discontinuation). As a result, constituents maintain influence over programs and work to promote the needs of the local community.

Although the existing local accountability relationships we observed are not as elaborate or refined as the abstract model presented in Figure 2.1, they perform the key functions of an accountability system and are generally consistent with the philosophy embodied in Perkins II. The law emphasizes the use of data for program improvement and places primary responsibility for reform at the local level, and at each of the sites we visited, decisions to launch, discontinue, or modify programs were initially reached at the local level before any state intervention was contemplated.⁴ State guidelines and the threat of intervention may have created an atmosphere that fostered quick local action. To the best of our knowledge, local decisions are made on the basis of enrollments, placements, or a demonstrated local training need. Thus, the major elements of accountability are already operative at the local level, consistent with Perkins II.

Local Accountability Systems Can Aid Program Improvement

Evidence from the sites we visited suggests that many of the Perkins II accountability provisions can promote local program improvement. The model presented in Figure 2.1 and the

³Stecher and Hanser (1992) describe local accountability systems in generic terms and discuss some of the practical limitations that reduce the effectiveness of these systems.

⁴Most states maintain formal approval or veto authority, but decisions are effectively made at the local level.

discussion in Section 2 illustrate how this might be accomplished. Goals that are explicit and widely shared serve as focal points for program review and reform. Measures that are adequate to reflect goal attainment provide useful information about program status. Feedback that is timely and clear permits staff and constituents to judge program success. Administrators who welcome constituents' expertise and respect their opinions build a solid foundation for collaborative program reform. Skilled leaders can reduce other obstacles to program improvement, such as tensions between constituent groups with conflicting goals and needs and contradictory pressures from federal and state regulations.

Research suggests that the most potent factors leading to local program improvement are increased local autonomy and increased stakeholder involvement in all aspects of program design and reform (David, 1987; Leviton and Hughes, 1981; van den Berg, 1992). Researchers studying effective secondary schools have found that good site-based management reflects local independence rather than compliance with procedural requirements (Hill and Bonan, 1991). Similarly, studies of school innovation emphasize the need for local adaptation of reforms rather than strict adherence to models (Berman and McLaughlin, 1978). Effective policies are those that foster schools as strategic organizations, managing and guiding themselves, not merely as "executing organizations" carrying out the policies of others (van den Berg, 1992). The "local" character of the accountability systems we observed permits a high level of direct staff and constituent involvement, conditions amenable to effective program improvement. The Perkins II model of accountability is consistent with this research in its emphasis on local responsibility for program improvement. Overall, it would seem that a local accountability system has the potential to be an effective instrument of educational improvement.

SEAs Can Evaluate and Strengthen Local Accountability Systems

Perkins II limits states' roles in the accountability process. SEAs' primary responsibility is to establish a system of standards and measures and provide technical assistance to LEAs, who perform the program improvement function. Only in the event of continued poor results on the part of LEAs do states become directly involved in program planning.

Nevertheless, it is clear that states can use their oversight and technical assistance roles to good advantage by focusing on the entire local accountability system rather than merely on local outcomes. SEAs that understand how local accountability systems function can play a role in accountability system improvement, which should lead, in turn, to better local programs. This enlarged state role involves both evaluation and action. SEAs can conduct critical reviews and offer suggestions for improvement of all components of the accountability system. Effective questioning can go a long way toward improving local accountability systems. Once good questions have been asked, local programs may engage themselves in solutions; certainly that is in keeping with the spirit of Perkins II. In addition, SEAs can share information about effective local practices observed within the state and in other states, can promote consortium-building among local education agencies, and can align state policies with federal regulation in support of local accountability.

Neither SEAs nor LEAs Are Fully Prepared for Their New Roles

Perkins II assigns new roles to SEAs and LEAs which create challenges for both types of organization. The initial challenge SEAs must face is a shift in the balance between their traditional functions of oversight and improvement (OERI State Accountability Study Group, 1988). In the past, SEAs were directly responsible for program improvement, and they were given resources to use flexibly to support LEAs. Under Perkins II, their responsibilities have shifted toward oversight, and their resources have been reduced.⁵ Whether SEAs now have the wherewithal to provide the necessary oversight remains to be seen.

Moreover, the nature of the oversight role has changed. SEAs have always monitored program performance to some extent, but they have little or no experience in overseeing local accountability systems. Few SEAs have the knowledge to evaluate local accountability systems or the experience to help LEAs strengthen those systems. This limitation is important because these are the systems through which program improvements will come about. SEAs have much to learn about local program improvement if they are to fulfill their support function in the accountability context created by Perkins II. Furthermore, the combination of reduced budgets and changing requirements makes it increasingly difficult for SEAs to respond to local needs.⁶

LEAs face equally great challenges in fulfilling their roles under Perkins II. Local policymakers must now assume the primary responsibility for achieving outcome standards, diagnosing program deficiencies, developing remedies, and putting them into action. Although LEAs were responsible for programmatic functions in the past, they were not held to strict standards. Many states had enrollment requirements, a few had fixed standards for placement, and almost none had standards for student achievement, skill acquisition, and the other kinds of measures required by Perkins II. Consequently, local programs have little or no experience in being directly accountable for a broad spectrum of outcomes. Initially, they will need assistance in aligning their programs and data systems with the statewide measures; later they will need assistance in using the information these measures provide as guides to program improvement.

Local programs also have limited experience in promoting the active involvement of constituents that is crucial to the type of accountability system described here. Most programs have industry advisory committees that play some role in program development, but few invite the broad participation of constituents or cede to constituents the degree of power and involvement required by the local accountability model proposed here. To make local accountability work, LEAs may need to develop new capabilities and may need a great deal of advice. It is not clear where they can find useful insights into these processes, for SEAs may be as naive as they are.

⁵"It is the Committee's clear intent that the primary use of the federal dollar should be that of direct services. In the Committee's view the five percent limitation on administration with the required match achieves that objective" (*U.S. Code Congressional and Administrative News*, 1991, p. 1197).

⁶Reported by state directors at the 1992 annual meeting of the National Association of State Directors of Vocational and Technical Education Consortium.

Perkins II May Overemphasize Externally Developed Outcome-Based Standards and Measures

Although Perkins II does much to strengthen the role of local programs as agents of reform, it also calls for some approaches that may reduce the effectiveness of local programs and the systems that support them. Some of the provisions that are designed to increase attention to program performance and to promote greater local responsibility for program improvement may be at odds with current understanding of effective school reform. For example, outcomes may be a reasonable basis for monitoring program performance, but they are a poor basis for guiding program improvement. Information about the causes of failure to meet goals is far more useful for school reform than information about effects (King and Pechman, 1984). It is important to have information about features that affect performance (e.g., instructional content and quality) as a basis for developing program improvement strategies.

Perkins II's requirements for data collection and its strong emphasis on outcome measures are likely to drive out supplemental measures like those mentioned above and may narrow the scope of information available to practitioners and constituents. This conclusion is based on evidence that outcome-based accountability has had deleterious effects on education. In particular, test-based accountability led to narrowed curriculum, reduced time devoted to nonmeasured content, and inappropriate preparation (Koretz et al., 1991; Rottenberg and Smith, 1990; Cannell, 1987). Similarly, outcome-based accountability in the Job Training Partnership Act (JTPA) led to changes in selection procedures and narrowing of services (King, 1988). It is not too great a leap to suggest that an outcome-based system of standards and measures will create similar pressures on vocational education, i.e., will cause a reduction in attention to and resources for information about nonoutcome elements of vocational programs. This is precisely the information that will be most important if reforms are needed.

More generally, the vision of program improvement through outcome-based accountability presumes that both individuals and organizations act in a rational manner, given the incentives and pressures in their environment. Extensive research on school improvement and school reform suggests that neither presumption is valid (David, 1987; Fullan, 1982; Huberman and Miles, 1984; van den Berg, 1992; Weich, 1976; Weiss, 1980). For example, a rationally behaving school administration would use relevant data to improve program design and decisionmaking. Yet educational organizations do not appear to behave in this manner. Data are seldom a catalyst for change (David, 1987), and mandated data-collection in particular has had limited impact on program reform (Alkin et al., 1979; David, 1981). When mandates prompt data-collection, schools tend to use data only to "signal" their compliance, not as the basis for informed program improvement (Zucker, 1981). And vocational educators, like their counterparts in general education, have limited experience with the use of data to manage or improve programs (Hoachlander et al., 1992).

The strong emphasis in Perkins II on uniform outcome-based standards and measures within a state⁷ can also pose a problem because states are not uniform from a programmatic point of

⁷It is important to note that Perkins II permits LEAs to make exceptions to statewide standards based on local conditions, provided those exceptions conform to the assessment criteria in the state plan. However, this provision is not widely discussed. At the 1992 annual meeting of the National Association of State Directors of Vocational and Technical Education Consortium, one of the authors asked a group of state directors whether local programs knew of this provision of the act. One answered, "Shhh!" and a second replied, "I'm sorry I didn't hear the question." The

view: Community and population characteristics can vary from locale to locale, socioeconomic differences between neighborhoods can be great, and state labor markets can be extremely heterogeneous. Under these circumstances, local schools need to be able to adapt the goals they set for themselves, the programs they offer, the manner in which they provide instruction, and the nature of their placement assistance and follow-up services. Although uniform standards and measures do not constrain schools to offer the same programs in the same ways, they may discourage diversity.

In fact, the preference for uniform standards and measures sends the wrong signals regarding diversity on a number of different levels. The preference for uniform measures will drive the adoption of uniform goals. Given limited LEA resources for program design, data-collection, and reporting, the Perkins II requirements for common measures are likely to diminish the stature of unique local goals. At a more subtle level, systems of common standards suggest that programs should be similar rather than different. The goals and measures that will now receive reduced emphasis are precisely the ones that give programs their unique local flavor.⁸ These are a few of the potentially negative consequences of statewide standards and measures that need to be monitored carefully as states implement the requirements of Perkins II.

A related concern is that Perkins II is somewhat contradictory with respect to local responsibility and efficacy. Except in special circumstances, local programs are being required to adopt external definitions, standards, and directions at the same time that they are being required to take on greater responsibility. Perkins II "empowers" LEAs with responsibility for program design and improvement, but it usurps some of their powers. It is not clear how SEAs and LEAs will respond to these conflicting signals. Perhaps SEAs and LEAs are so conditioned to respecting the letter of the federal law that they will find nothing troubling in adapting to these small counterpressures, but the issue is worthy of some continuing attention.

RECOMMENDATIONS

Implementation of Perkins II should result in many positive consequences for vocational education at the state and local levels. However, ample room for improvement exists. We recommend three modifications to the federal policy embodied in Perkins II and its associated regulations:

1. Encourage SEAs to monitor and strengthen local accountability systems, not merely program outcomes.
2. Increase the emphasis on, and support for, accountability-related capacity-building at state and local levels.
3. Broaden the emphasis in Perkins II on outcome measures to include measures useful for program improvement.

others nodded in agreement. Until the new standards and measures are implemented and one or two annual review cycles are completed, we will not know how often such exceptions are taken or what reactions SEAs will have.

⁸And, as was discussed above, they are the goals and measures that provide the kinds of information needed for program improvement.

SEAs Should Monitor and Strengthen Local Accountability Systems

Current federal vocational education legislation emphasizes outcome standards and assigns SEAs the responsibility for monitoring program performance according to these standards. One goal of Perkins II is to use local accountability as a program improvement tool. If this model of vocational education is to be effective, local programs will have to become self-improving organizations. This is an essential feature of the Perkins II strategy.

Unfortunately, SEAs have little experience in evaluating accountability systems or fostering a program's capacity for self-improvement. The regulations direct SEAs to intervene if LEAs fail to make progress toward meeting standards and to help the LEAs develop plans for improvement. To do this, SEAs need to be able to reflect critically on local actions, including program goals, the links between curriculum and workplace needs, instructional practices, and student and employer satisfaction. SEAs must evaluate the local accountability systems if they are to develop plans for program improvement. By monitoring the components of local accountability systems on a regular basis, SEAs will gain insights into strategies they can use when programs fail to achieve their goals. This broader conception of the state's oversight role should be incorporated into federal policies, possibly by delineating specific accountability-related support activities in which states should engage.

Emphasize Capacity-Building

As noted above, Perkins II creates new roles for SEAs and LEAs. The changes are not trivial, and both groups need preparation to carry out the new functions assigned to them. For example, states could not implement the Perkins II requirements for statewide standards and measures without considerable assistance. The NCRVE has developed training materials (Hoachlander et al., 1992) and conducted workshops to help states implement systems of standards and measures.⁹

Similar capacity-building activities are needed to help states meet the needs of LEAs and develop expertise in promoting local accountability. In the short term, SEAs are confronting increasing demands for technical assistance with decreasing levels of discretionary funds. Some are evolving strategies that appear to be effective in many situations (e.g., establishing local school consortia to pool resources or share expertise); others are struggling to cope. A few states have already embarked on long-term educational reform programs that embody many of the decentralized features of Perkins II. For example, Georgia, Indiana, and Pennsylvania have developed management systems and evaluation models that establish links between outcomes and local services (Curtis, 1991; Hull, 1987; Jordan and Lyons, 1990). And Alaska has implemented a program review process that relies on local vocational advisory councils (Kirts, 1988). However, most states have not undertaken such reforms, and their SEAs will need assistance as the Perkins II accountability cycles occur.

At the LEA level, Perkins II multiplies the number of institutions responsible for program review and evaluation. This in turn multiplies the number of people who need expertise in asking questions; selecting, collecting, and analyzing data; interpreting data; and using in-

⁹Workshops on performance measures and standards for vocational education were held in March 1992. Handouts of overhead slides and other materials used in the workshops as well as videotapes of the sessions are available from the NCRVE, Materials Distribution Service, Western Illinois University.

formation for program decisions. These requirements will create a secondary level of demand on states that many will be unable to fill. The federal response should take the form of increased capacity-building at the state level. Specifically, additional training should be provided to increase states' capability to support the use of measures and standards for program improvement and the enhancement of local accountability systems.

Broaden Measures to Include Those Relevant for Program Improvement

Some of the conditions of Perkins II restrict the scope of action of local programs in ways that may reduce their capacity for program improvement. One change that might foster better programs would be to broaden the scope of the measures that are part of the state system. A related change would be to encourage local variation in selecting measures to report to states.

The change that is likely to offer the greatest payoff in terms of program improvement is a reduction of the solitary emphasis on measures of program outcomes. Admittedly, the emphasis on outcome-based accountability is one of the most important provisions of Perkins II. It redirects attention to the real purposes of the legislation, which may lead to better outcomes for students. However, in making this change, the authors of the legislation overlooked one of the most important functions of measures—their use as guides for program improvement. To be useful for program improvement, a data system must include information on features of the program that are subject to policy intervention (Kirst, 1990). Outcome measures do not provide this information.

The legislation should be changed to acknowledge the value of information about program inputs and processes and to encourage the incorporation of such information into the accountability process. Measures of the content and quality of instruction are a critical basis for effective program reform. These measures include variables such as teacher qualifications, student and employer satisfaction, pupil-to-teacher ratios, and student course-taking patterns. Outcome measures should be required, but unless there is explicit recognition of the value of other types of data, alternative measures will be squeezed out of most systems.

Finally, we recommend permitting local programs greater latitude in selecting alternative measures to report to states. When programs choose measures that are meaningful at the local level, they increase the chance that the information can be translated into program improvement. This choice also increases the involvement of local program staff and constituents in the evaluation and review process, which may have a positive effect on reform efforts.

Appendix

THE CHANGING RESPONSIBILITIES OF LOCAL AND STATE EDUCATION AGENCIES UNDER PERKINS II

The 1990 amendments to the Carl D. Perkins Vocational Education Act (Perkins II) place many new and increasingly detailed demands upon SEAs and LEAs. Thorough assessments of those changes are available elsewhere.¹ Here, we focus on the legislative intent underlying Perkins II and those portions of the Act that relate directly to the roles of SEAs and LEAs as agents of accountability for vocational education.

LEGISLATIVE INTENT OF PERKINS II

According to the legislative history of Perkins II, the 1990 amendments were designed to achieve five goals: "Targeting the money to those who need federal help the most, stressing a linkage between secondary and postsecondary education, integrating academic and vocational education, making sure that vocational education programs are state-of-the-art, and an adherence to the concept that vocational education is not simply job training, but vocational education and training."²

Congress recognized that it could leverage the proportionately small amounts of federal money offered under Perkins II to achieve these policy goals; although federal funding accounts for only a small portion of total spending on vocational education, Congress noted that "it is without question the engine that pulls the train."³ Local programs also acknowledge the importance of federal vocational education funds. In our visits to schools, we found that Perkins money paid for services that schools would otherwise go without, such as learning resource centers.

Research has shown that the intent of previous vocational education legislation was "frittered away," with the average grant being only \$5,000.⁴ Thus, one of the primary intentions of Perkins II was to ensure that the bulk of funds will be driven down to the local level in amounts large enough to be significant. Only a small percentage is available to the states, and that amount is allocated only to provide those services that Congress deems appropriate.⁵

Congress fully intends to use Perkins II to affect the role of SEAs in vocational education: "The provisions with respect to the responsibilities of the State represent another dramatic departure from current law—one the Committee believes will strengthen and expand the role the State now plays in vocational education."⁶ Perkins II "offers the State a new role and

¹American Vocational Association, Inc. (1990); Hoachlander et al. (1992).

²*U.S. Code Congressional and Administrative News* (1991), pp. 1182ff.

³*Ibid.*, p. 1187.

⁴National Assessment of Vocational Education, July 1989. The Carl D. Perkins Vocational Education Act, Secs. 231 to 234, specifies minimum grant amounts that will be made to LEAs.

⁵The activities to be performed by the states are more clearly spelled out in 34 CFR Part 400 et al. (1992).

⁶*U.S. Code Congressional and Administrative News* (1991), p. 1193.

new powers in monitoring and evaluating what goes on at the local level and in providing leadership in tying programs to the State's economic expansion. . . . In addition, . . . the State plays a critical role in curriculum development, in teacher, administrator, and counselor training, and in the training of community-based organizational personnel."⁷

But it is not just the state's role that Congress sought to modify; Perkins II also was intended to affect the role of LEAs. "For the first time, [it] drives funds directly to the local educational agency, the area vocational school, or the intermediate educational agency charged with vocational education delivery. . . . [It] places a strong emphasis on programs which integrate academic and vocational training, and on program improvement as ongoing efforts to deliver state-of-the-art vocational education and training to all students."⁸

Congress intends to ensure that, at the local level, schools serve the "economically disadvantaged, individuals with disabilities, limited-English-proficient students and [also use the federal funds] for programs to achieve sex equity."⁹ The means by which Congress hopes to accomplish these goals are especially important because they have an impact on the entire vocational education system.

Perkins II embodies a "three-pronged assault" to achieve Congressional goals: "(1) driving money directly to the local level; (2) requiring that each recipient of dollars provide the supplementary services necessary to ensure full and equitable participation in programs; and (3) adding new requirements for monitoring of services at the local level and at the State level."¹⁰ The details of how Perkins II implements this "three-pronged assault" and the subsequent effects on local accountability systems are described below.

PERKINS II AND THE ROLE OF SEAS

Perkins II places new or increased accountability-related requirements on the states in three major areas: (1) developing state plans, (2) evaluating local programs, and (3) providing technical assistance to LEAs.¹¹

Developing a State Plan

Perkins II requires that states develop a comprehensive plan covering an initial period of three years and subsequent periods of two years. The state plan represents the core of each state's responsibilities under Perkins II and is based on an assessment conducted by the state board. The basic role of the states in this regard has not changed from Perkins to Perkins II, except insofar as the details of the needs assessment and the requirements for

⁷Ibid., p. 1194.

⁸Ibid., p. 1190.

⁹Although this had been the intent of previous legislation, Congress noted that the letter but not the spirit of the law had been followed.

¹⁰Ibid., p. 1201.

¹¹These requirements are contained primarily in Sections 113 to 118 (state plan, state plan approval, state and local standards and measures, state assessment and evaluation, program evaluation and improvement, and criteria for services and activities for individuals who are members of special populations).

intrastate coordination have been broadened and more fully expounded. These plans are relevant to accountability because they represent the states' initial attempts to specify skills to be transmitted that may later form the basis for assessment and standards of performance.

Previously, Perkins required states to assess current and projected occupational needs and demands of employers within the state and the needs of students and adults (including the special needs of the handicapped, disadvantaged, single parents, criminal offenders, etc.) to achieve the skills essential for meeting state occupational and skill requirements.¹² States were also required to assess the quality of vocational education (i.e., pertinence, responsiveness, technical quality) and to determine the capacity of LEAs to deliver services to meet identified needs.

Perkins II specifies the required contents of the states' needs assessment in greater detail. The assessment must now include an analysis of vocational education programs' capabilities to provide students, "to the extent practicable,"¹³ with:

(i) strong experience in and understanding of all aspects of the industry the students are preparing to enter (*including planning, management, finances, technical and production skills, underlying principles of technology, labor and community issues, and health, safety, and environmental issues*) [emphasis added]; and

(ii) strong development and use of problem-solving skills and basic and advanced academic skills (*including skills in the areas of mathematics, reading, writing, science, and social studies*) [emphasis added] in a technological setting.¹⁴

States are required to formulate a plan that includes a description of the procedures and results of the needs assessment and of the progress made in achieving the goals specified in previous plans; provides numerous assurances that the state will comply with the provisions of Perkins II; and describes the estimated distribution of funds within the state.¹⁵

Although the state board bears responsibility for developing the plan, it is to do so in consultation with the state council¹⁶ after conducting public hearings at which interested parties can present their views and recommendations.

The state board is also responsible for including in the plan a description of the funds that will be reserved for adult education, postsecondary education, tech-prep education, and secondary education. The state board is to consult with representative state agencies in developing this portion of the plan, but it bears final responsibility. State agencies may file written objections that the board must consider and may choose to address; the Secretary of Education will take these objections and responses into account in reviewing the state plan.

¹²Carl D. Perkins Vocational Education Act, Sec. 113(a)(3).

¹³The phrase "to the extent practicable" was not in the original House version (H.R. 7) but was inserted by the Senate during conference on the bill.

¹⁴Perkins II, Sec. 113(a)(3)(B)(i) and (ii). The regulations describing how this assessment is to be carried out are given in §403.203 of 34 CFR Part 400 et al.

¹⁵These requirements are fully specified in Sec. 113 of Perkins II and §403.30-34 of 34 CFR Part 400 et al.

¹⁶The membership and responsibilities of the State Council on Vocational Education are specified in Sec. 112.

Thus, an important role for the states is that of developing objective criteria for assessing statewide vocational education and training needs and plans for addressing them. In doing so, the states are required to consult widely with various constituent groups.

Evaluating Vocational Programs

Although the primary responsibility for evaluating local programs rests with the LEAs,¹⁷ the states are given substantial responsibility for evaluating the efficacy of vocational programs vis-à-vis statewide needs, as well as for monitoring local program performance. This responsibility includes needs assessment, a system of performance standards and measures, and a model for joint program improvement.

As noted above, the first responsibility of the state in evaluating vocational programs derives from its role in conducting a statewide needs assessment. Not only does this assessment focus on the needs of the state for vocational education and training, it also includes an assessment of the ability of the state's system of vocational education and training to address those needs.¹⁸ Prior to conducting this assessment, the state board must develop, in consultation with a number of representative organizations, "measurable objective criteria" on which to base its assessment.¹⁹

The second responsibility of the state, and perhaps one of its most difficult and important, is to "develop and implement a statewide system of core standards and measures of performance for secondary and postsecondary vocational education programs."²⁰ These standards and measures are extremely important because they represent the benchmark against which LEAs will measure themselves.²¹

The third responsibility of the state is to enter into a joint improvement plan with those recipients who for two consecutive years fail to make substantial progress in meeting or exceeding the standards described above. After one year of failing to make substantial progress, the local recipient must develop and implement its own local improvement plan. A year later, if the local recipient still fails to make substantial progress, the state enters into a joint plan with the LEA.

Although these requirements are quite explicit, they allow greater flexibility than is at first apparent. Perkins II includes a provision that "eligible recipients may make local modifications to such systems based on economic, geographic, or demographic factors, or the characteristics of the population to be served."²² Also, the legislation *does not specify that the standards must be met*, only that recipients must make "substantial progress in meeting the standards and measures."²³ And finally, the responsibility for judging whether modifications

¹⁷Perkins II, Sec. 117(a).

¹⁸Ibid., Sec. 116(a)(6), (8), and (9).

¹⁹Ibid., Sec. 116(a).

²⁰Ibid., Sec. 115(a).

²¹The development of this system of core standards and measures has received substantial emphasis in a series of workshops and publications developed by the NCRVE. For example, see NCRVE, 1992; Hoachlander et al. (1992).

²²Perkins II, Sec. 115(a).

²³Ibid., Sec. 117(b).

are appropriate and whether substantial progress is being made appears to be left to the LEAs, in the absence of additional state legislation or regulation.

These provisions represent the culmination of a lengthy evolution in federal policy—from process-oriented to outcome-oriented program management. The emphasis on accountability itself is not entirely new in vocational education. As early as 1963, states were required to develop state vocational education plans. In 1968, the federal vocational education law stated that “due consideration will be given to the results of periodic evaluations of state and local vocational education programs, services, and activities.”²⁴ The 1976 amendments to the vocational education law required the submission of a formal accountability report, and Perkins required “assurances that the state will develop measures for the effectiveness of programs assisted under this chapter in meeting the needs identified in the state plan.”²⁵ Although the federal government has been increasingly directive in mandating assessments and specifying the contents of those assessments,²⁶ Perkins II does not extend so far as to specify either sanctions or rewards associated with achieving or failing to achieve standards of performance. In this sense, Perkins II provides a framework for self-improvement that stands in contrast to strict accountability.²⁷

Providing Technical Assistance to LEAs

States regularly provide a wide variety of technical assistance to LEAs, but the shifting responsibilities of SEAs and LEAs under Perkins II make state assistance to LEAs even more critical. Scattered throughout the act are references to the technical assistance the states must provide to LEAs,²⁸ but perhaps the most explicit concerns the state's leadership role. Perkins II specifies three distinct activities that states are to engage in:

professional development activities for vocational teachers and academic teachers working with vocational education students, . . . including inservice and preservice training . . . with . . . emphasis on . . . minority teachers;

development, dissemination, and field testing of curricula;

assessment of programs . . . including the development of performance standards and measures . . . and program improvement and accountability.”²⁹

Of these three activities, developing performance standards and measures represents the most dramatic addition to SEA technical assistance activities. In addition to developing per-

²⁴Vocational Education Amendments of 1968, Sec. 123(a)(6)(A).

²⁵Perkins, Sec. 113(b)(9)(A).

²⁶See Hoachlander et al. (1992) for additional discussion of this shift in federal focus.

²⁷David (1987) distinguishes between the use of performance indicators for accountability in a system of externally applied pressures for change and their use in a self-improvement process. David claims that for indicators to contribute to local improvement, they must be locally defined.

²⁸E.g., Sec. 111(b)(1)(G) requires the states to provide “technical assistance and advice to local educational agencies, postsecondary institutions, and other interested parties in the state, in expanding vocational opportunities for women.” Sec. 118(d)(2) requires states to provide technical assistance to ensure that members of special populations (defined in 34 CFR Part 400 § 400.4) are “able to directly participate in State and local decisions that influence the character of programs under this Act affecting their interests.”

²⁹Perkins II, Sec. 201(b).

formance standards and measures, states are also required to help LEAs implement them. States must evaluate their vocational education and training programs and enter into joint planning activities with local recipients that fail to make substantial progress in meeting standards for two consecutive years. In these circumstances, Perkins II also requires the state and local joint plan to describe "the technical assistance and program activities the state will provide to enhance the performance of the eligible recipient."³⁰ The intervention of the state at this point is not meant to be "punitive in nature, but rather to encourage an infusion of resources from the State on programs that are in need of assistance and improvement."³¹ As these examples illustrate, performance-based accountability carries with it large technical assistance responsibilities for states.

FORMAL REQUIREMENTS OF PERKINS II FOR LOCAL PROGRAMS

Congress recognizes the significance of LEAs for the success of vocational education. This is clear from the legislative history of Perkins II: "For the first time in federal vocational education history this landmark legislation sends all secondary education money directly to local school districts or to area vocational schools serving such districts."³² LEAs are vested with three major responsibilities: to provide service, to develop a local plan, and to evaluate performance and program improvement.³³

Provision of Services

Congress provides a broad description of the role of LEAs: "the local provider is to serve the economically disadvantaged, individuals with disabilities, limited-English-proficient students and for programs to achieve sex equity [sic]."³⁴ The details of the programs that are to be provided by LEAs are spelled out in Perkins II.³⁵ For example, services may include remedial courses, apprenticeship programs, supplementary services designed to meet the needs of special populations, and programs that integrate academic and vocational education.³⁶

Moreover, under Perkins II, Congress has limited the funds that can be spent for administrative tasks and has specified the minimum level of funds that must be distributed to LEAs. Together these actions ensure that the bulk of federal funds will be spent on providing direct services:

The Committee recognizes that effective administration of vocational education programs can only be accomplished with fiscal support, but it is the Committee's clear intent that the primary

³⁰Ibid., Sec. 117(c)(1).

³¹*U.S. Code Congressional and Administrative News* (1991), p. 1204.

³²Ibid., p. 1183.

³³The primary responsibilities of LEAs are specified in TITLE I—VOCATIONAL ASSISTANCE TO THE STATES, and TITLE II—BASIC STATE GRANTS FOR VOCATIONAL EDUCATION of Perkins II. LEAs have additional responsibilities for special programs (TITLE III) that we do not address in this report because of their more highly specialized nature.

³⁴Op. cit., p. 1201.

³⁵See for example, Secs. 235(b) and (c) of Perkins II.

³⁶Regulations governing the activities supported under TITLE II are included in 34 CFR Part 400, Subpart E.

use of the federal dollar should be that of direct services. In the Committee's view, the five percent limitation on administration with the required match achieves that objective.³⁷

Congress intends that federal funds be used to provide direct services. However, it is not clear that SEAs or LEAs have sufficient resources to undertake the roles assigned to them under Perkins II.

Development of a Local Plan

The second major responsibility of the LEAs is to develop a local plan³⁸ based on a comprehensive assessment of the needs of special populations.³⁹ The local plan must also describe the coordination of these programs with those supported under other related legislation, such as the JTPA. The local plan underlies the services that are the primary focus of LEAs.⁴⁰

The requirement for LEAs to develop a local plan is not new. However, Perkins previously allowed the states greater latitude in defining the contents of local plans. In Perkins II, the state board still retains latitude in determining the requirements for the contents of local plans, but these requirements have been substantially expanded to include, for example, a description of program evaluation standards and a description of how the proposed programs will integrate academic and occupational disciplines.

Several of these details have a direct bearing on accountability and serve to convey the clear federal intent that responsibility be driven down to the local level. For example, the local plan must take into account the occupational needs of the area it serves; must coordinate programs with local community-based organizations, in consultation with parents and students of special populations; and must describe the evaluation standards it will use to measure the progress of its programs. Each of these requirements can be mapped directly onto the model of local accountability described in Section 2.

Evaluation of Performance and Program Improvement

The third major responsibility of the LEAs is performance evaluation and program improvement. This is an entirely new and important requirement initiated in Perkins II, and it underscores Congress' intent that accountability have a strong local component. There are four references to the responsibility of the LEAs in this regard in Perkins II; some have been mentioned previously, but all are listed here. The first of these simply requires that LEAs, in their local plan, "describe the program evaluation standards the applicant will use to measure its progress."⁴¹ Second, although the state is mandated to develop a system of standards and measures of performance, Perkins II provides for the final decision to be made at the

³⁷*U.S. Code Congressional and Administrative News* (1991), p. 1197.

³⁸Perkins and Perkins II specify these requirements under the heading "Local Application." However, we refer to it as the "local plan," because the local application is primarily a description of programs and services that the LEA intends to provide, along with a description of how those programs will be administered and evaluated. "Plan" seems to us to convey more readily the intent and content of the local "application."

³⁹*Op. cit.*, p. 1203.

⁴⁰See Perkins II, Sec. 240, and 34 CFR Part 400 §403.190, for a description of what must be included in local plans.

⁴¹Perkins II, Sec. 240(6).

local level by allowing LEAs to make local modifications based on economic, geographic, or demographic factors.⁴² Third, LEAs are required to undertake an annual evaluation of programs conducted with assistance from Perkins II.⁴³ Fourth, if after one year, an LEA determines that it is not making substantial progress in meeting the standards and measures described above, it must develop a program improvement plan.⁴⁴

The initial responsibility for judging whether an LEA is making "substantial progress" in meeting the standards and measures lies clearly with the LEAs. "If . . . a recipient determines, through its annual evaluation, that it is not making substantial progress in meeting the standards and measures . . . the recipient shall develop a plan for program improvement for the succeeding school year."⁴⁵ Yet LEAs do not have unconditional responsibility for accountability. Once an LEA has determined that progress toward achieving standards is not being made and has undertaken to implement a local improvement plan, future judgments as to whether substantial progress is being made are left to the state. According to the regulations:

If, one year after an eligible recipient has implemented its program improvement plan described in §403.192, the state finds that the eligible recipient has not made sufficient progress in meeting the standards and measures developed as required by §§403.201 and 403.202, the state shall work jointly with the recipient and with teachers, parents, and students concerned with or affected by the program, to develop a joint plan for program improvement.⁴⁶

However, it would appear that LEAs can forestall any state intrusion. The potential exists for LEAs to modify state standards and measures to make them more lenient, and then to judge whether they continue to make substantial progress toward accomplishing them. Such a strategy would effectively preclude the need for developing a program improvement plan, would limit state interference in local administration, and would maintain local control over vocational programs.⁴⁷

SUMMARY OF LEGISLATIVE EFFECTS ON THE PRACTICE OF LOCAL ACCOUNTABILITY

In our judgment, the most important features of Perkins II, from the standpoint of local accountability in vocational education, are the provisions that:

- a. Place the primary responsibility for program evaluation and improvement squarely on the shoulders of local programs, while circumscribing the role of SEAs to monitoring and technical assistance.
- b. Define program success in terms of outcomes, and mandate that each state adopt its own common set of outcome-based standards and measures to judge program performance.

⁴²Ibid., Sec. 115(a).

⁴³Ibid., Sec. 117(a).

⁴⁴Ibid., Sec. 117(b).

⁴⁵34 CFR Part 400 § 403.192.

⁴⁶34 CFR Part 400 § 403.204.

⁴⁷This appears to be a technical loophole whose impact will not be known until the system has been in operation for a year or more. Conversations with state directors suggest that few LEAs are aware of this option at present.

It is also noteworthy that Perkins II defines accountability in terms of professional responsibility for program improvement, without implicit financial rewards or punishments. Taken together, these provisions place a greater burden on LEAs than they have carried in the past, while at the same time curtailing the potential for SEAs to provide assistance.

BIBLIOGRAPHY

- Alkin, M. C. (1985). *A guide for evaluation decision makers*. Beverly Hills, CA: Sage.
- Alkin, M. C., Daillak, R. H, and White, P. (1979). *Using evaluations: Does evaluation make a difference?* Beverly Hills, CA: Sage.
- Alkin, M. C., Stecher, B. M., and Geiger, F. L. (1982). *Title I evaluation: Utility and factors affecting use*. Northridge, CA: Educational Evaluation Associates.
- American Vocational Association, Inc. (1990). *The AVA guide to the Carl D. Perkins Vocational and Applied Technology Education Act of 1990*.
- Berman, P. and McLaughlin, M. W. (1978, May). *Federal programs supporting educational change, Vol. VIII: Implementing and sustaining innovations*. R-1589/8-HEW. Santa Monica, CA: RAND.
- Braskamp, L. A. and Brown, R. D. (1980). *New directions for program evaluation: Utilization of evaluation information*. San Francisco, CA: Jossey-Bass.
- Brown, R. D., Braskamp, L. A., and Newman, D. L. (1978). Evaluator credibility as a function of report style: Do jargon and data make a difference? *Evaluation Quarterly*, 2(2), 331-341.
- Butler, E. P. (1988, October). *The search for a bottom line in vocational training: What lessons are offered by the Job Training Partnership Act?* Berkeley, CA: MPR Associates, Inc.
- Cannell, J. J. (1987). Nationally normed elementary achievement testing in America's public schools: How all 50 states are above the national average. *Educational Measurement: Issues and Practice*, 7(2), 5-9.
- Council of Chief State School Officers. (1989). *Success for all in a new century: A report by the Council of Chief State School Officers on restructuring education*. Washington, DC: Council of Chief State School Officers.
- Curtis, C. A. (1991, December). *Managing local plans: A guide to accountability for the Carl D. Perkins Vocational and Applied Technology Education Act of 1990*. Harrisburg, PA: Pennsylvania Department of Education.
- David, J. L. (1981). Local uses of Title I evaluations. *Educational Evaluation and Policy Analysis*, 3(1), 27-39.
- David, J. L. (1987, October). *Improving education with locally developed indicators*. RR-004. New Brunswick, NJ: Center for Policy Research in Education, Rutgers.
- DeStefano, L. (1992, Summer). Evaluating effectiveness: A comparison of federal expectations and local capabilities for evaluation among federally funded model demonstration programs. *Educational Evaluation and Policy Analysis*, 14(2), 157-168.
- Dickinson, R. W., Kogan, D. J., Drury, D. A., Franks, M. S., Schlichtmann, L., and Vencill, M. (1988). *Evaluation of the effects of JTPA performance standards on clients, services, and*

- costs. NCEP Research Report No. 88-15. Washington, DC: National Commission for Employment Policy.
- Fullan, M. (1982). *The meaning of educational change*. New York: Teachers College Press.
- Grubb, N. and Lazerson, M. (November 1975). Rally 'round the workplace: Continuities and fallacies in career education, *Harvard Educational Review*, 45(4), 451-474.
- Hill, P. T. and Bonan, J. (1991). *Decentralization and accountability in public education*, R-4037-MCF. Santa Monica, CA: RAND.
- Hill, P. T., Harvey, J., and Praskac, A. (1992). *Pandora's box: Accountability and performance standards in vocational education*. R-4271-NCRVE/UCB. Santa Monica, CA: RAND.
- Hirshman, A. O. (1970). *Exit, voice and loyalty: Responses to decline in firms, organizations and states*. Cambridge, MA: Harvard University Press.
- Hoachlander, E. G., and Rahn, M. L. (1992). *Performance measures and standards for vocational education: 1991 survey results*. Berkeley, CA: National Center for Research in Vocational Education, University of California.
- Hoachlander, E. G. Levesque, K., and Rahn, M. L. (1992, July). *Accountability for vocational education: A practitioners' guide*. Berkeley, CA: National Center for Research in Vocational Education, University of California.
- Huberman, A. M. and Miles, M. B. (1984). *Innovation up close: How school improvement works*. New York: Plenum.
- Hull, W. L. (1987). *Comprehensive model for planning and evaluating secondary vocational education programs in Georgia*. Columbus, OH: Ohio State University National Center for Research in Vocational Education.
- Jordan, K. F. and Lyons, T. S. (1990). *Development of an effectiveness criteria model for evaluating vocational education*. Paper presented at the annual meeting of the American Educational Research Association, Boston.
- Kantor, H. A. (1988). *Learning to earn: School, work and vocational reform in California, 1880-1930*, Madison, WI: University of Wisconsin Press.
- King, J. A. and Pechman, E. M. (1984). Pinning a wave to a shore: Conceptualizing evaluation use in school systems. *Educational Evaluation and Policy Analysis*, 6, 241-251.
- King, C. T. (1988, August). *Cross-cutting performance management issues in human resource programs*. Research Report 88-12. Washington, DC: National Commission for Employment Policy.
- Kirst, M. W. (1990, July). *Accountability: Implications for state and local policy makers*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Kirts, C. A. (1988). *Using the local vocational advisory council to perform program assessment: A case study*. Final report of the Fairbanks Vocational Education Assessment Project, Fairbanks, AK: Fairbanks Northstar Brown School District.

- Kliebard, H. M. (1986). *The struggle for the American curriculum, 1880-1920*, Boston, MA: Routledge and Kegan Paul.
- Koretz, D. M., Linn, R. L., Dunbar, S. B., and Shepherd, L. A. (1991). *The effects of high stakes testing on achievement: Preliminary findings about generalization across tests*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- Lazerson, M., and Grubb, N. (Eds.). (1974). *American education and vocationalism: A documentary history, 1870-1970*. New York: Teachers College Press.
- Leviton, L. C. and Hughes, E.F.X. (1981, August). Research on the utilization of evaluations: A review and synthesis. *Evaluation Review*, 5(4), 525-548.
- Lieberman, A. and McLaughlin, M. W. (1992, May). Networks for educational change: Powerful and problematic. *Phi Delta Kappan*, 73(9), 673-677.
- Loucks, S. F. and Hall, G. E. (1977). Assessing and facilitating the implementation of innovations: A new approach. *Educational Technology*, 17(2), 18-21.
- McDonnell, L. and Elmore, R. F. (1987, November). *Alternative policy instruments*. JNE-03. Santa Monica, CA: RAND.
- McDonnell, L. and Zellman, G. (1992). *Education and training for work in the fifty states: A compendium of state policies*. N-3560-NCRVE/UCB. Santa Monica, CA: RAND.
- Metfessel, N. S. and Michael, W. B. (1967). A paradigm involving multiple criterion measures for the evaluation of the effectiveness of school programs. *Educational Evaluation and Psychological Measurement*, 27, 931-943. Reprinted in B. R. Worthen and J. R. Sanders. (1973). *Educational evaluation: Theory and practice*. Belmont, CA: Wadsworth Publishing.
- National Center for Research in Vocational Education. (1992, March). "Workshops on Performance Measures and Standards for Vocational Education," University of California, Berkeley.
- OERI State Accountability Study Group. (1988, September). *Creating responsible and responsive accountability systems*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Patton, M. Q. (1978). *Utilization-focused evaluation*. Beverly Hills, CA: Sage.
- Popham, W. J. (1975). *Educational evaluation*. Englewood Cliffs, NJ: Prentice Hall.
- Rossi, P. H. and Freeman, H. E. (1989). *Evaluation: A systematic approach*. Newbury Park, CA: Sage.
- Rottenberg, C. and Smith, M. L. (1990). *Unintended effects of external testing in elementary schools*. Paper presented at the annual meeting of the American Educational Research Association, Boston.
- Stake, R. E. and Denny, T. (1969). Needed concepts and techniques for utilizing more fully the potential of evaluation. *NSEE 68th yearbook, Part II*. National Society for the Study of Education, 370-390. Reprinted in B. R. Worthen and J. R. Sanders. (1973). *Educational evaluation: Theory and practice*. Belmont, CA: Wadsworth Publishing.

- Stecher, B. and Hanser, L. W. (1992). *Local accountability in vocational education: A theoretical model and its limitations in practice*. N-6016-NCRVE/UCB, Santa Monica, CA: RAND.
- "34 CFR Part 400 et al., State Vocational and Applied Technology Education Programs and National Discretionary Programs of Vocational Education; Final Rule." (1992, August). *Federal Register*, 57(158).
- Tyler, R. W. (1942). General statement on evaluation. *Journal of Educational Research*, 35, 492-501.
- U.S. Code Congressional and Administrative News*. (1991). 101st Congress, Second Session 1990, Volume 5, St. Paul, MN: West Publishing Co.
- van den Berg, R. (1992, June). Transformational education policy: Schools as strategic organizations. *Knowledge*, 3(4), 440-459.
- Weich, K. E. (1976). Educational organizations as loosely-coupled systems. *Administrative Sciences Quarterly*, 21, 1-19.
- Weiss, C. H. (1980). Knowledge creep and decision accretion. *Knowledge: Creation, diffusion, utilization*, 1, 381-404.
- Worthen, B. R. and Sanders, J. R. (1973). *Educational evaluation: Theory and practice*. Belmont, CA: Wadsworth Publishing.
- Zucker, L. G. (1981). Institutional structure and organizational process: The role of evaluation units in schools. In A. Bank and R. C. Williams (Eds.), *Evaluation in school districts: Organizational perspectives*. Los Angeles: University of California, Center for the Study of Evaluation.