The purpose of a research project was to identify approaches for improving the use of evaluation data through better linking of state-level evaluation and planning. The first phase included a review of literature in education and related disciplines and a national survey to elicit information from 55 states and territories concerning evaluation and planning linkages; 43 states responded. Although no single organizational structure category of the 12 organizational structures identified appeared best to accommodate planning and evaluation linkages, a model with separate boards for secondary and postsecondary education and with formal planning procedures or committees represented a deliberate effort to make planning and evaluation a more visible and coordinated process. The second phase involved determination of suggested strategies for improving planning and evaluation linkages. Findings were used to develop interview procedures for case studies in the third phase in a western, midwestern, and eastern state. Focuses were on ways in which planning and evaluation were mutually supportive and factors that encouraged and impeded linking of planning and evaluation. The research identified nine interrelated and mutually important factors as incentives for linking planning and evaluation. Planning's impact on evaluation came primarily through formal assurances or guidelines. Evaluation had its impact on planning in program improvement, staff development, and compliance with federal regulations. (YLB)
A LOOK AT PLANNING AND EVALUATION
LINKAGES ACROSS THE NATION

Donald E. Elson
Deborah C. Strickland
J. Dale Oliver
Virginia Polytechnic Institute and State University

with

Jeff Perry, Research Assistant
Ellen Tomichia, Research Assistant
Virginia Polytechnic Institute and State University

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

September, 1991

MDS-133
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)
FUNDING INFORMATION

Project Title: National Center for Research in Vocational Education
Grant Number: V051A80004-90A
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: $5,675,000
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 or 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 grounds 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.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Methodology</td>
<td>2</td>
</tr>
<tr>
<td>State Surveys</td>
<td>2</td>
</tr>
<tr>
<td>Case Studies</td>
<td>3</td>
</tr>
<tr>
<td><strong>Current Status of Planning and Evaluation Linkages in</strong></td>
<td></td>
</tr>
<tr>
<td>State Departments of Education</td>
<td>5</td>
</tr>
<tr>
<td>Results from a Survey of States</td>
<td>5</td>
</tr>
<tr>
<td>Synthesis of Results</td>
<td>11</td>
</tr>
<tr>
<td>Successful State Planning and Evaluation Efforts</td>
<td>12</td>
</tr>
<tr>
<td>Three Case Studies</td>
<td>12</td>
</tr>
<tr>
<td><strong>Implications For Planning and Evaluation Linkages</strong></td>
<td>18</td>
</tr>
<tr>
<td>Factors Important in the Linking of Planning and Evaluation</td>
<td>19</td>
</tr>
<tr>
<td>Impact of Planning and Evaluation</td>
<td>23</td>
</tr>
<tr>
<td>References</td>
<td>25</td>
</tr>
</tbody>
</table>
INTRODUCTION

Planning and evaluation are typically viewed as two entities, each with its own language, practices, and professional communities. Vocational education is no exception to this phenomenon with planning and evaluation often carried out by different departments or different personnel within an agency (Asche, Strickland, & Elson, 1988).

Federal vocational legislation has placed increasing emphasis on assessment, evaluation, and planning since the 1976 Vocational Education Amendments. States responded by developing a myriad of models, systems, and procedures for the generation, collection, and analysis of labor market, enrollment, programmatic, and follow-up data. Most states have some approach to planning and evaluation. These approaches are widely variable in scope and sophistication, and, usually, the evaluation and planning functions are not symbiotic. Brannon (1985) summarized this evolution in requirements as a shift from a focus on quantity to an increasing focus on quality of vocational programs. Such requirements move beyond simple assessment (counting) and imply the need for a more interactive relationship between planning and evaluation functions. Since most states have some systematic approach to both planning and evaluation in place (Asche, 1985; Edington & Cruikshank, n.d.), one might assume "all is well" in the planning and evaluation arena.

Most planning systems are focused on operations and administrative planning, thus the evaluation systems tend to be compliance oriented (Asche, 1985). Consequently, functional links between comprehensive evaluation and substantive planning do not exist in most states (Strickland & Asche, 1987). Vocational education is not alone in its struggles with linking relevant evaluation to the planning process as indicated by the rapidly growing literature base in the areas of evaluation utilization and innovation/change management. Such linking is particularly critical in vocational education, however, since this field must constantly meet the challenges posed by rapidly changing client populations, technology, funding, and state and federal policy initiatives.

The purpose of this research, funded by the National Center for Research in Vocational Education (NCRVE), was to identify approaches for improving the evaluation utilization through better linking of state level evaluation and planning. The objectives were to assess the status of state-level planning/evaluation linkages, determine the incentives and disincentives to such linkages, and to identify linking strategies based on this research. Further, the identified strategies were tested against the realities of state-level vocational
administration through three case studies. The final objective of this research was to develop and field review materials designed specifically to assist state vocational personnel in linking planning and evaluation within their respective states. An inservice program will be conducted during 1991 to introduce the training materials to state directors of vocational education and others involved in the planning and evaluation of educational programs.

METHODOLOGY

State Surveys

The first phase of this research program included a review/synthesis of literature in education and related disciplines such as social changes, public administration, strategic planning, and evaluation (Asche, Strickland, & Elson, 1989). After completion of the review, a national survey was conducted to elicit information from the states and territories concerning evaluation and planning linkages. Particular care was taken to obtain data on activities for both secondary and postsecondary vocational education and on interaction or articulation between these two levels.

The review of literature indicated that there is considerable variance in the ways vocational education is organized and administered within states. Two types of surveys were developed. Based on recent literature and interviews with a number of key federal and state vocational education officials, a preliminary screening survey was designed. The goal of this instrument was to obtain (1) information from state vocational directors regarding the organizational arrangement for administration of secondary and postsecondary vocational education, and (2) the names, addresses, titles and telephone numbers of the individuals responsible for planning and for evaluation at the secondary and postsecondary levels in each state. This instrument was mailed during the first quarter of 1989 to fifty-five states and territories. With one follow-up mailing and telephone contacts, responses were received from fifty-one states/territories for a response rate of ninety-three percent. The data derived from this instrument formed the basis for all further contacts with the states.

The primary data collection instrument was designed to elicit basic information on how planning and evaluation are administratively organized, the procedures employed in
strategic and operational planning, and the mandated and optional evaluation activities conducted in each state or territory. The draft instrument was reviewed by external experts and planning and evaluation personnel from six states. After modification, the areas included in the final instrument were the following:

1. The location of vocational education within the state's organizational structure.
2. The identification of offices to which the persons responsible for planning and evaluation report.
3. A description of how those responsible for planning coordinate with other agencies and departments.
4. A description of long-range planning procedures.
5. A description of evaluation specifications included in the state plan.
6. A description of the way evaluation affects the planning process, both formally and informally.
7. A description of how sources, control, and allocation of funds affects planning and evaluation.
8. The respondent's comments on how planning and/or evaluation could be improved.

The first mailing, one follow-up mailing, and follow-up telephone calls yielded responses from forty-three states for a response rate of seventy-eight percent. Eleven of the responding states did not provide information for both the secondary and postsecondary levels. Since this was a qualitative type of instrument, requiring data from multiple sources within many of the states, this response rate was deemed acceptable. Documentary analysis techniques were used to organize this information.

Case Studies

The second phase of this project involved determination of suggested strategies for improving planning and evaluation linkages. Specific linkage components were identified and assessed along with the suggested strategies. These findings were used to develop interview procedures for the case studies in the third phase of this research. Information obtained through the literature review and survey phase was used to prepare a portfolio of information on each site. Both the preliminary findings and the portfolio information were
used to design a case study approach for gathering the necessary information to either verify the strategies or contribute to refinement or revision of the strategies.

The states chosen for in-depth study by use of on-site interviews were selected on the basis of the review of literature and the state responses to both project questionnaires. Recommendations from selected state directors of vocational education, resource persons in the U. S. Office of Adult and Vocational Education, and the National Council for Vocational Education were considered. An attempt was made to accommodate other factors such as complexity (population and federal funding level), geographic region of the country, and overall approach to administration of vocational education. As a result, three states were selected—a western state, a midwestern state, and an eastern state.

Approximately three days were spent conducting the interviews in each state. Interviews were held with the following: the state director of vocational education, appropriate administrative personnel in the director's office, persons responsible for evaluation and planning for both secondary and postsecondary levels, and other persons within the state's Department of Education and/or community college administration and governing boards. Interviews were also conducted with regional and local personnel responsible for planning and/or evaluation. Both individual and group interviews were held in each state. The interviews were recorded for later transcription and analysis.

Interviews were basically open-ended but structured around areas of concern derived from the project's earlier research activities. The central focus of the interviews was on ways in which planning and evaluation were mutually supportive, factors which encouraged linking of planning and evaluation, and factors which impeded such linking at the secondary and postsecondary levels.

Data available from the state survey and the case studies was analyzed and examined against the proposed planning/evaluation linkage strategies. Results from this latter phase of analysis and refinement of the linkage strategies will constitute the substance for development of a guide for use by vocational education planning and evaluation personnel. The guide will be reviewed by planning and evaluation specialists and will be revised as needed.
CURRENT STATUS OF PLANNING AND EVALUATION LINKAGES IN STATE DEPARTMENTS OF EDUCATION

Results from a Survey of States

Organizational Structure

One of the more basic questions of the survey had to do with the actual location of secondary and/or postsecondary vocational administration. While over a dozen organizational structures were identified, five major structures seemed to account for the majority of state administrations. The first structure is characterized by two separate boards (see Figure 1-a)—one primarily for secondary education and one primarily for postsecondary education. In most instances, the secondary board acts as the sole state agency for receiving funds from the Carl D. Perkins Vocational Education Act of 1984. In some states, the federal funds are received by the postsecondary board. Twelve states (twenty-eight percent) responding to the survey evidenced this form of organization.

The second category evidenced two variations of one basic structure. In this structure category, vocational administration ultimately answers only to a state board of education (see Figure 1-b). A separate board or system for postsecondary education is present in the state, but no vocational programs come under the jurisdiction of this board. Under the board of education, the administration of vocational education is housed within the department of education. Responsibility for secondary and postsecondary vocational programs may be combined or separated into two units. This organizational structure was identified for eleven (twenty-six percent) of the survey respondents.

In Figure 1-c, administration of vocational education (both secondary and postsecondary) is housed in a unit or agency separate from the department of secondary education and other agencies answering directly to the state board of education. As in the second category, a separate board or system for postsecondary education is present in the state, but no vocational programs come under the jurisdiction of this board. Five states (twelve percent) reported administrative structures characterized by this category.

The fourth major category appears very similar to the first category. The major difference is the presence of a formal or legislated committee set up to link the planning functions for secondary and postsecondary programs (see Figure 1-d). This structure is becoming an increasingly popular form of vocational administration as several respondents
indicated that progress is being made within their states to move to this structure. While Perkins monies still flow primarily through the secondary agency, substantive input and exchange characterize the allocation and planning of programs at both levels. In some cases, all providers of vocational education (including Job Training Partnership Act [JTPA] and community-based organizations) are involved in the joint planning/evaluation process. Seven states (sixteen percent) were grouped in this category.

The fifth category included four states (nine percent) that reported administrative structures characterized by a separate state board for vocational education (see Figure 1-e). This board governs all vocational programs, both secondary and postsecondary, separate from other boards responsible for either secondary or postsecondary education. The state director for vocational education reports directly to the State Board of Vocational Education (SBVE).

While these major categories collectively comprise most state structures, some states evidenced structure that were more or less individually unique. The remaining four state respondents, consequently, were not included in the major structure categories described above.

Some structures appear to lend themselves more to fiscal as opposed to programmatic interagency relations. For instance, the structure illustrated in Figure 1-a is often characterized by a fiscal approach to planning/evaluation with the flow of funds from the sole state agency to the other board constituting the primary formal contact between secondary and postsecondary vocational education. The remaining structures provide at least a structural linkage between secondary and postsecondary vocational education and suggest more programmatic as opposed to fiscal exchanges. On the other hand, in those structures where vocational administration is housed within larger departments, the integration of vocational planning and evaluation with that for secondary/postsecondary education as a whole becomes an issue. In this latter context, a tendency toward compliance rather than strategic planning is observed.

While no one structure category appears to best accommodate planning and evaluation linkages, the model illustrated in Figure 1-d represents a deliberate effort to make planning and evaluation a more visible and coordinated process. Also, the tendency for some states to restructure in order to (1) effect coordination between secondary and
Figure 1a: Separate secondary/postsecondary boards primarily linked by funding

Figure 1b: Combined administrations under one vocational division

Figure 1c: Separate vocational division, secondary division, and higher education division

Figure 1d: Separate secondary/postsecondary boards with formal planning procedures or committees

Figure 1e: Separate State Board for Vocational Education governs programs
postsecondary sectors, (2) enable regionalization of planning and evaluation procedures, and (3) allow for a more direct flow of planning/evaluation information into the policy or decision making context, suggests that administrative structures may be a tool by which to facilitate more effective planning and evaluation practices.

Responsibility for Planning and Evaluation

The organizational structure for vocational education administration is the primary factor governing the responsibility for planning and evaluation. Specific information involving the network of responsibility for planning and/or evaluation was limited. Planning seems to be independent of evaluation in terms of administrative location and personnel responsible for each function.

Coordination with Other Agencies

In all states reporting, the minimum level of coordination between agencies met the requirements of the Perkins Act. Some of these planning efforts include interagency committees, the State Council for Vocational Education, and a state planning committee.

Long-Range Planning

Long-range planning is perceived by the majority of respondents as that process required by the Perkins Act. Beyond this process, a number of states have attempted to implement a variety of approaches to long-range planning. One common element among these states was the institution of a task force or interagency committee to review the goals of vocational education prior to initiating a long-range or strategic planning process.

Specifications for Program Evaluation

Most state plans or long range plans include specifications for program evaluation. The minimum requirement for evaluation in most state plans was that it would be completed in compliance with federal legislation. Two common elements identified were a five year time span for evaluations (due to the requirements of the Perkins Act) and a team approach to on-site visitations. Thirteen respondents indicated a move toward use of outcome criteria or indicators.
Impact of Evaluation on Planning

Responses relevant to the perceived impact of evaluation on planning generally fell into five categories. Of the forty-three states responding, some indicated that evaluation impacted on planning in more than one category. The five categories are summarized as follows:

1. No impact. At this level there is limited, if any, utilization of evaluation results in the planning process (four states).

2. Local-level planning. Local evaluation is utilized in local planning processes. In some instances, the local evaluation is sent to the state level for inclusion in the state plan. Local planning can be affected by a state evaluation in lieu of a local evaluation. Evaluation is critical to program improvement efforts, most often providing the basis for development of local action plans or funding of improvement initiatives (twenty-seven states).

3. Funding support. Evaluation serves to support funding or refunding of programs, courses, or vocational projects at the local, regional, and state levels (six states).

4. Staff development. Evaluation reports are used to raise the awareness of administrators with regard to various vocational issues. Another aspect of staff development is in the form of sharing strategies for improvement of vocational programs. Experiences across localities are shared or communicated to allow broader application of programs or initiatives (two states).

5. Compliance. Evaluations serve to support compliance with federal and state regulations. Conducting local evaluations satisfies requirements by the state and assures localities of continued operation or funding. Similarly, state level evaluations are required to satisfy Perkins Act regulations (six states).

Source, Control, and Allocation of Funds

Response levels to this particular item in the survey were quite low. Those states that did respond provided widely divergent examples of the effect of funding on planning and evaluation such that these responses had to be considered unique to each state. Consequently, the role of source and allocation of funds in shaping evaluation and planning processes must be pursued in future research efforts.
Improving Planning and Evaluation

Seven common themes for improvement of planning and evaluation were identified by respondents:

1. Provide more staff, time, and money to properly conduct planning and evaluation.
2. Provide guidelines for indicators/measurements of inputs and outcomes.
3. Require better preparation and use of the evaluation results.
4. Implement a regional approach to administration.
5. Improve the needs assessment procedures.
6. Improve data collection procedures and the quality of the collected data.
7. Develop more coordination and cooperation among state agencies and between all levels of administration.

Respondents from nine states noted that improvements in the administrative process, including planning and evaluation, are under development at this time.

Synthesis of Results

Several portions of the survey inquired about the interaction of planning and evaluation activities and/or personnel. Consequently, these items were examined collectively in order to obtain a comprehensive perspective of planning/evaluation linkages. Two general models of planning/evaluation practices were discerned in this phase of analysis. One served to support the more programmatic needs of planning/evaluation; while the other served to support the fiscal needs of planning and evaluation.

The programmatic model involved data collection and/or self-evaluations by teachers and/or administrators at the local levels. Enrollment or follow-up data most often were aggregated in some form at the state level. This data, along with the self-evaluation data, was used in the on-site visitation phase. The visitation teams could be comprised of teachers or administrators within the locality, or, more likely, of individuals from the state department of education or individuals designated as "peers" from other localities. A number of states accomplished the on-site visit through the accreditation teams set up to determine local schools' eligibility for either state or regional accreditation. Findings or recommendations from these teams were combined with data from the information phase to
provide the formal working report. Based on this report, a plan for improvement or an action plan was developed. Monitoring of this plan was conducted by state staff who typically also provided technical assistance as needed. In most states, funding as necessary—and as available—was provided to support the recommendations outlined in the evaluation report.

While the fiscal model had implications for programs, the emphasis was clearly within the allocation process. In this process, localities make application for various courses, programs, and projects. As part of the application process, an evaluation plan is required. Generally, this plan is developed within guidelines set by the state. It is the responsibility of the applicant to carry out the evaluation as described in their application for funds. A state level panel or agency reviews the application and evaluation plan. Funding for the application is determined and may be rejected if an appropriate evaluation plan is not provided. Refunding of applications depends on supporting evidence from evaluations done in the initial applications.

While there are some modifications of the above models of planning/evaluation interaction, very little middle ground exists between them. It is clear that two perspectives on vocational program planning and evaluation exist: a view directed toward program improvement and a view directed toward program accountability. The interaction of planning and evaluation processes appears to serve as the defining medium for which perspective prevails at a given point in time.

SUCCESSFUL STATE PLANNING AND EVALUATION EFFORTS

Three Case Studies

Western State

"A formal, yet friendly, partnership between public schools and colleges" described the regional planning and evaluation process in a western state according to a local vocational director. The process included all educational institutions from the local school districts to the research university. A state staff member indicated that the planning process was affecting policy direction by setting the tone for policy development.
Over a three-day period, the project staff conducted interviews with individuals from the State Department of Education, State Board of Regents, regional personnel, and local school district personnel. All of those interviewed were enthusiastic about the planning process.

The Department of Education, mandated by State Code, initiated a formal planning cycle in 1984. Following a two year process, the Department developed the *1988-93 Vocational-Technical Education Master Plan* as the second five-year plan in the cycle.

Regionalization was the key word in the plan. There were nine regions. Each region included a community college and/or a four-year college/university and all surrounding public schools. Some regions included an area vocational center. Local education agencies did not submit plans to the state department for approval. Instead, each local education agency and the college/university presented their plans to a thirteen member Regional Vocational-Technical Planning and Coordinating Committee. The Committee included a representative from each type and level of occupational program provider in the region. The Committee developed annually the regional vocational-technical plan. Regional labor market data guided the planning process. Representing the Regional Coordinating Committee, the chief executive officers of the school districts, the area vocational center, and the college or university presented the Regional Plan to the State Board of Education/State Board of Regents Liaison Committee for review and comment. After review, the chief school executive officers of the region presented the plan to the State Board for Vocational Education for approval.

The regional concept of planning reduced unwarranted duplication within the region. Each local provider of an occupational program must justify the program based on labor market data. Labor market data may indicate the need for a new program in the region. The regional plan must include a proposal for the new program. If the completers of an occupational program are not being placed, based on the results of a follow-up survey, the plan must include steps to phase out the program. Nonoccupational programs, such as exploratory or consumer and homemaking programs, are not judged on the basis of placement data.

While planning procedures were well documented, formal evaluation procedures were not spelled out in the Master Plan, except for some mention of Perkins Act requirements. This is not to imply an absence of evaluation in the planning process.
Secondary schools usually participated in the Northwest Region Accreditation program. The State Department of Education was mandated to serve as the sole state agency for vocational education to accredit area vocational centers and colleges. A third-party evaluation conducted by an out-of-state consultant evaluated twenty percent of the vocational programs each year. The consultant used existing data and visited selected vocational programs. State personnel indicated that it was very important to have an "outside" person evaluate the programs. Informal evaluation procedures were very much in evidence at all levels. Continual evaluations took place as a part of local advisory committee deliberations and consultation services provided by state program specialists.

The major limitations to full implementation of the Master Plan, expressed by respondents, centered around two factors. The first was "turf." In some regions there was less than full cooperation/coordination between vocational services and between educational agencies. The second factor, closely related to the first, was the lack of leadership in those regions. With time and assistance from the State Department of Education, full implementation of the Master Plan will be possible.

An associate superintendent from the Department of Education indicated that the planning and evaluation process resulted in improved vocational education. First, it was having a dynamic impact by emphasizing the worth and value of individuals who were not college bound. Second, there was a positive, cooperative working relationship between all educational agencies. Third, the Master Plan resulted in a state and regional focus on vocational education.

Midwestern State

Those interviewed in the midwestern state viewed planning and evaluation as two factors within the same phenomenon. The project team interviewed university faculty, State Department of Education personnel, State Board of Community College personnel, regional system directors, and local vocational directors.

The midwestern state has a much higher population density and thus, more public schools and community colleges than the western state just described. Regionalization was an important part of this state's planning and evaluation process.

Education for Employment (EFE) began with a comprehensive policy study mandated by the State Board of Education in 1982. The overall goal of EFE was the
revitalization of vocational education. One of the conclusions from the study laid the foundation for a regional system of high schools and area vocational centers, and, in turn, created an "alliance" with their respective community colleges. The boundaries for the regions were not drawn in common with the thirty-nine community college regions. The result was the establishment, authorized by State Code, of sixty-one regional systems by the State Board of Education. According to comments from both secondary and postsecondary interviewees, this lack of common boundaries hindered the development and implementation of vocational education policy.

In most regional systems, the board of control included the superintendents of the local high school districts. The local community college dean was a voting member on only four regional system boards. Each region had a full-time director. A local school district wanting either state or federal funds must participate in a regional system. Coordination with other vocational education providers such as JTPA was required, but representatives from such groups did not serve on the board.

The regional systems resulted in a substantial strengthening of the link between secondary schools and between secondary and postsecondary vocational education. Some regions are developing long range plans based on the current state quality indicators. Strategies were also developed by the regional groups to carry out the plans.

Focus group sessions were one strategy used by the State Department of Education to keep in touch with what was happening at the local level. These sessions were held throughout the state to receive input concerning which direction vocational education should be taking in the state.

The state had an extensive evaluation procedure in place for many years. With the advent of EFE, a new procedure was being developed which relied on the microcomputer for a major part of the data analysis activities. More emphasis was placed on quality indicators rather than on process oriented factors. The quality indicators, or "vital signs," included labor market justification, enrollment, placement and continuing education, employer satisfaction, student satisfaction, general employability skills, and cost.

One interviewee expressed some reservation with this system. This individual believed that the system was too traditional in its approach to evaluation for the 1990s and
that the emphasis should be on the performance of the students—what they know, what they can do—and not on the satisfaction of the students and employers.

As in the western state, labor market information served as one of the quality indicators. One individual noted his reluctance to rely on labor market information to judge a program. Labor market information may be missing what is happening in industry. He gave the example of welding programs and facilities being closed because of negative labor market information, yet, several different occupations need welding as part of the total training package. Follow-up of former students was a vital component of evaluation. Determination of the labor market advantage of a former vocational student was critical.

This state had a mandated planning process, as did the western state. Evaluation in the formal sense was not used extensively at the time of the interview. Once the new evaluation system is on line, formal evaluations are expected to be used at both the secondary and postsecondary levels. Informal evaluations were evident at all levels based on the comments given in the interviews.

Eastern State

The eastern state is a large, heavily populated state with diverse populations and large urban areas. The State Department of Education has historically exerted strong control over education, prescribing curricula for elementary and secondary schools. The governance of vocational education was not distinct from academic programs at the highest levels in the state hierarchy. Secondary vocational and academic programs were closely linked together since they both fall under the direction of the Office of Elementary and Secondary Education. The 1988 reorganization of the State Department of Education resulted in the creation of an Office of Continuing Education, within the Office of Higher and Continuing Education, to serve adult populations. Thus, postsecondary vocational education was subject to the same standards as other postsecondary programs.

Many of the vocational education programs were in the two-year colleges. Although there were linkages between vocational and academic programs within secondary and postsecondary education, formal articulation did not exist between secondary and postsecondary agencies.

The mission of vocational education was clearly stated in 1984 after the completion of an extensive and inter-leaf two-year review of occupational and practical arts programs.
Nearly two hundred representatives from business and industry, social sciences, students, teachers, and administrators met to determine the purposes and programs for occupational and practical arts education through the remainder of the century. Those findings set a clear mission and new direction for vocational education. The key areas identified by this review have driven subsequent local and regional evaluation and planning activities.

Evaluation and assessment of needs formed the basis for planning. Local plans were developed from several sources including evaluation reports, recommendations of the local advisory council, sex equity action plans, labor market demand, student interest, and demographic changes. The state handbook described the plans as blueprints for linking state and federal resources.

The program improvement process built upon the evaluation process. It stemmed from the idea that, once the evaluation identified local needs, agencies would be able to develop plans to improve vocational programs. The program improvement process evolved into skills for program improvement. It was discovered that what people needed most were skills to enable them to work with other people in their agencies to address the evaluation needs.

The structure of the state vocational organization focused on function with service areas combined to achieve a more comprehensive perspective. A state-level individual described the structure as follows:

We shifted from individual plans to cooperative planning last year where we asked agencies to put together service area planning groups that would look at a particular geographic area and then assess the needs of the area and have a number of members participating in establishing priorities for services a student would get.

Connections between evaluation and planning existed both formally and informally. Plans submitted for state approval must include evaluation reports which facilitate the linking of planning and evaluation. State personnel believed the inclusion of evaluation data had positive effects on vocational education. In particular, it helped vocational educators obtain legislation for vocational education act dollars. The Perkins Act limited the availability of funds for equipment and, therefore, agencies became more dependent on state money. Since the evaluation data was included in the annual plans, the supervisors and others who reviewed annual plans were able to see exactly what was needed and what was planned. One interviewee noted the importance of linking planning and evaluation:
We've tried to link them [planning and evaluation] very closely over the years. We've included the evaluation report in the plan. There's a needs assessment section in the plan that requires them to use the evaluation data as well as other information.

Access to evaluation material was seen as a positive benefit to vocational programs. A specific example was given by one state department official:

We were able to use the data from the evaluation to present to the board and then [we had] even better evidence that we needed to move....We were able to restructure our whole guidance and placement service there; hire social workers, civil service placement people, and new counselors; and just redirect the whole thing.

In addition to formal written requirements that made evaluations part of local plans, the assignment of responsibilities among state personnel linked evaluation and planning in a different way. Overall, planning and evaluation were conducted by a professional staff who were well trained in the areas of planning, evaluation, and research. Often individuals performed more than one of these functions. Although the impact of holding responsibility for both functions was not easily measured, awareness of the functions and procedures involved in both processes strengthened the commitment to linking them.

IMPLICATIONS FOR PLANNING AND EVALUATION LINKAGES

The original plan for this project called for the development of one or more models for linking planning and evaluation in vocational education. It became evident as the research activities progressed that there is considerable variance in the ways vocational education is organized and administered within the states. The organizational structure is a primary factor in governing the agency and the personnel responsible for planning and evaluation. In many cases, planning is completely independent of evaluation in terms of the administration and the personnel responsible. Other factors which are widely divergent from state to state are the source, control, and allocation of funds to conduct planning and evaluation activities. It was evident in reviewing the existing literature and the analyses of the survey responses and interview transcripts that there is no single pattern that fosters
linkages between planning and evaluation. Therefore, the idea of developing a theoretical model(s) was abandoned.

**Factors Important in the Linking of Planning and Evaluation**

The results of this work suggest that linkages occur in different ways within different state structures. However, through the survey and case study visits, nine factors were discerned as incentives for linking planning and evaluation. These factors are illustrated in Figure 2. In particular, two characteristics are demonstrated through this illustration: the interrelatedness of the factors and the mutual importance of each factor. For instance, leadership is frequently necessary for development of a clear policy or mission, yet, in some cases, the development of a clear statement of vocational education's mission was the catalyst needed to allow for strong leadership. The two factors are interrelated, and, depending on the context, both are important as initiators of effective linkage. The remainder of this section further elaborates on the interaction of these factors as observed in the surveys and case studies.

The factors of in-state regionalization and interagency cooperation lend themselves very well to facilitating linkages between planning and evaluation. It is suggested that regional boundaries be based on community college service areas. Regionalization includes public schools, community colleges, and other providers of vocational education and should result in articulation between all levels of program deliverers. The involvement of all local providers allows them to buy into the process and thus have a commitment to it.

Implementing regionalization and cooperation may cause concern for local officials. As one local administrator noted there were

feelings of turf protection or there were some underlying motives at the college; ...they want something from us, or they're in trouble right now and they can use us, but, as soon as they are out of trouble, they're going to drop us.

This official noted, however, that regionalization "was a godsend because it brought together independent school districts and a college into a very formal and friendly partnership in wanting to do things together."
In all of the three states selected for on-site interviews, planning was done on a regional basis, yet mandates differed from state to state. As each case study illustrated, there was no single pattern that fostered linkages between planning and evaluation. However, to achieve regionalization and interagency cooperation requires a clear policy direction or mission and a commitment to that mission by all involved, especially state departments of education. In two of the states, a mandate from the state board of education initiated the process. Moreover, leadership appears to be a major aspect in initiating action on the above factors. It is critical that the leaders be professionally trained in the processes of planning and evaluation.

When present, coordination of programs between secondary and postsecondary vocational education was a tremendous asset to linkage of planning and evaluation, and, when absent, it was a definite limitation. In some cases, this coordination began with development of a data system and joint planning activities. On the other hand, changes in educational policies spurred increased articulation between secondary and postsecondary delivery systems. Increased activities in this area seemed to have renewed an interest in development of usable and accessible data systems and joint planning/evaluation activities. Planning must look to evaluation for information and, in this sense, directs the evaluation process.

Finally, one element contributing to effective linkage—an emphasis on comprehensive vocational education—came more from on-site observation than from the survey results. Vocational education has several program areas of instruction which can exhibit varying levels of strength, activity, and cooperation. Attempts to regard vocational education from a more comprehensive perspective have the advantage of being able to detect means for renewed programs and delivery systems for all of vocational education.

There are several disincentives that will hinder attempts at linking planning and evaluation within an educational system. All of the incentives discussed earlier need not be present, but their absence tends to inhibit the linking process. In addition, the following factors serve as disincentives to the linkage process:

- Tradition and maintaining the status quo.
- Difficulty in taking risks in administrative planning.
- Problems in understanding the complete benefits of linking planning and evaluation.
Figure 2: Factors Which Facilitate and Accommodate Use of Planning and Evaluation
• Demographic differences across a state's geography.
• Time needed to build trust between agencies, businesses, and individuals.
• Lack of similar evaluation procedures, philosophies, and context of secondary and postsecondary educational procedures.

Impact of Planning and Evaluation

Overall, the evidence of planning's impact on evaluation suggests a decidedly detached relationship. Impact comes primarily through formal assurances or guidelines. Local evaluations are required through funding/refunding requirements, and state evaluations are required to satisfy Perkins regulations. These requirements are included in state plans, but the need or purpose these evaluations should serve vis a vis planning program development or improvement is virtually nonexistent. A direct impact of planning on evaluation has to do with the more recent requirement through state/local plans to analyze supply/demand and enrollment data. While these activities may be construed simply as accountability tactics, there is some focus on goals being set for evaluating programs—goals which have implications for future planning and evaluation activities.

Evaluation had its impact on planning typically through an interactive state/local system. This involved either local evaluations fed into the development of a state plan, or a state evaluation fed into development of local plans. Evaluation was critical in program improvement efforts, most often providing the basis for development of local action plans or funding of improvement initiatives. By the same token, evaluation served to support funding or refunding of programs, courses, or vocational projects.

Another area of impact for evaluation focused on staff development. Evaluation reports were used to raise the awareness of administrators with regard to various vocational issues (e.g., delivery of programs, articulation of secondary/postsecondary programs, and placement of program completers). Another aspect of staff development came in the form of sharing strategies for improvement of vocational programs. Experiences across localities were shared or communicated to allow broader application of programs or initiatives as applicable.
Evaluations also served to support compliance with federal regulations. Conducting local evaluations satisfied requirements by the state and assured localities of continued operation or funding. Also, state level evaluation reports were required to satisfy Perkins regulations and assure compliance with federal legislation.
REFERENCES


