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## ABSTRACT

As mandated by the Vocational Education Act of 1976, an evaluation was made of Pennsylvania's vocational guidance program for the 1979-80 through 1981-82 fiscal years. The study objectives were to describe the funded projects, evaluate their impact, and explore local capacity development. The study was guided by evaluation questions in five areas: Federal priorities, Pennsylvania's approach, program activities, program outcomes, and policy recommendations. The methodology relied primarily on analyzing existing data and interviewing state and local project staff. Federal priorities were found to accommodate Pennsylvania's program needs fairly well, but funding allocation procedures to states may give Pennsylvania less than its fair share. Likewise, the Pennsylvania Department of Education's administration of the program was handled well, but the process of setting project priorities for funding greatly restricted the number of districts that could compete for guidance projects. In the three years studied, more than \$4 million was used to fund more than 250 guidance projects affecting a quarter of a million participants in elementary, postsecondary, and corrections environments. Emphases included vocational information, career awareness, employability skills, and assessment/career decision making. Few projects assessed impact empirically, but services were extended to underserved populations and there was some evidence of impact in job and educational placement, career planning, awareness of occupations, self-awareness, and awareness of sex role stereotypes. Recommendations were made regarding funding allocation, project information systems, and state-level guidance program development. (Author/KC)

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FINAL REPORT

ASSESSMENT OF THE IMPACT OF THE BUREAU OF VOCATIONAL EDUCATION'S  
GUIDANCE PROGRAM  
(Contract Number 83-4015)

Keith M. Kershner

RESEARCH FOR BETTER SCHOOLS  
PHILADELPHIA, PENNSYLVANIA

June 30, 1984

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BUREAU OF VOCATIONAL EDUCATION  
RESEARCH COORDINATING UNIT FOR VOCATIONAL EDUCATION

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The evaluation study reported herein was a complicated and extensive project which required efficient use of the resources available. Several staff at Research for Better Schools (RBS) should be recognized for their contribution to its successful completion. Thomas Biester prepared the study proposal and design and served a principal role in all phases of the project. Antonia Neubauer, Beth Woolf, and Eliot Zeitlin were instrumental in conducting site visits and interviews. Eliot Zeitlin also worked on the computerized project information system, along with Margaret Connelly. Russell Dusewicz assisted throughout the project, as he directed a companion study of projects for handicapped populations. A number of staff at the Pennsylvania Department of Education (PDE) also assisted in the conduct of the project. These include Donald Bender, Carroll Curtis, Clarence Dittenhafer, Bruce Shellenberger, John Senier, and Robert Sheppard.

## Abstract

Title: Assessment of the Impact of the Bureau of Vocational Education's Guidance Program

Submitted by: Keith M. Kershner, Research for Better Schools,  
Philadelphia, Pennsylvania

Project Funding: \$14,943

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### Summary:

The Vocational Education Act of 1976 mandated evaluation of all vocational education programs at least once every five years. RBS was selected to study Pennsylvania's vocational guidance program for the 1979-80 through 1981-82 fiscal years. The study objectives were to describe the funded projects, evaluate their impact, and explore local capacity development.

The study was guided by evaluation questions in five areas: federal priorities, Pennsylvania's approach, program activities, program outcomes, and policy recommendations. The methodology relied primarily on analyzing existing data and interviewing state and local project staff. Four data sources were employed: background information at PDE, interviews with PDE staff (6), project files (252), and interviews with LEA staff (27).

Federal priorities were found to accommodate Pennsylvania's program needs fairly well, but funding allocation procedures to states may give Pennsylvania less than its "fair share." Likewise, PDE's administration of the program was handled well, but the process of prioritizing LEAs for funding greatly restricted the number of districts which realistically could compete for guidance projects.

In the three years studied, over \$4,000,000 was utilized to fund more than 250 guidance projects affecting some quarter million participants in elementary, post secondary and corrections environments. Emphases included vocational information, career awareness, employability skills, and assessment/career decision making. Few projects assessed impact empirically, but services were extended to underserved populations and there was some evidence of impact in job and educational placement, career planning, awareness of occupations, self-awareness, and awareness of sex role stereotypes. Recommendations are presented regarding funding allocation, project information systems, and state-level guidance program development.

## Executive Summary

Background. Although the Vocational Education Act of 1976 (P.L. 94-482) made no major changes in the basic goals of vocational education, it substantially changed the mechanisms to further and enforce these goals. In particular, the new legislation changed the methods of distributing funds to meet vocational education needs, provided equity in terms of high need groups, and strengthened evaluation requirements. Especially relevant to the present study, is the mandate to evaluate all vocational education programs at least once every five years. RBS was selected to evaluate Pennsylvania's vocational guidance program for the 1979-80 through 1981-82 fiscal years. The evaluation study was conducted in 1984. The study objectives were to describe the programs, evaluate their impact, and explore the guidance capability developed at the local level. The goal was to provide information to the Pennsylvania Department of Education (PDE) for policy-making purposes.

Until the Vocational Education Act amendments of 1976, vocational guidance programs were voluntary. The 1976 Amendments stipulated a guidance funding base and recommended program emphases. This funding supported guidance system development, but problems continued in the form of unmet needs (Pinson, 1981) and funding allocation procedures (NIE, 1981). In addition to these guidance program implementation problems, difficulties in evaluating state guidance programs were evident (Haney, 1981). These problem areas became both constraints and challenges for the study design.

Methods. The study was guided by a set of questions based on PDE's interests. These were divided into five study components, which also served as the framework for analysis and reporting: federal priorities, Pennsylvania's approach, program activities, program outcomes, and policy recommendations. The study resources and timeline did not permit collection of new impact data, but rather relied on the analysis of existing data and interviewing of project staff.

Four data sources were employed in the study: background information, SEA interviews, project files, and LEA interviews. Extensive background information was collected including state plans, reports, evaluations, and project monitoring summaries. Six SEA staff involved in the guidance program were interviewed. Files were collected for 252 vocational guidance projects. These files were reviewed by the evaluator and project descriptive information was extracted and entered into a microcomputer data base designed specifically for the study. Finally, local project staff were interviewed -- eight projects via site visits and 19 by telephone. This sample was roughly representative of project types and biased toward the more recent projects. An analysis plan related each of the evaluation questions to one or more data sources. Analyses were primarily descriptive.

Results and Conclusions. It was found that federal priorities were reasonably well matched to Pennsylvania's needs, but that federal funding allocation regulations were not in Pennsylvania's best interests. The regulations do not account for differences in program operational costs from state to state, differences in program quality, special needs in states with declining populations, and the dilemma of both high urban poverty and high average income in the same state.

Pennsylvania's approach to administering the guidance program was found to be well-developed and conscientiously applied. However, a major problem was found in the state's Base Ranking System, which establishes a priority value for each LEA in receiving funds. One effect of this system has been to limit funding to a decreasing number of LEAs to the point where fewer than five percent can be served.

In the three years studied, over 250 projects were funded for secondary, post secondary, and corrections guidance activities. The level of support exceeded \$4,000,000. Most projects were at the secondary level, and over half addressed the state goal of understanding career education/career options and placement. The most frequent project components were vocational information, career awareness, employability skills, and assessment/career decision-making. The projects involved over a quarter million participants from elementary school through adult populations.

In terms of impact, guidance services were extended to previously underserved populations -- disadvantaged, post secondary students, adults, and persons in correctional institutions. Also, guidance programs were developed and expanded in career resource centers, reduction of sex stereotyping, and relating job and school environments.

Impact on participants in the study sample was very difficult to document because only one-quarter of the projects used systematic empirical evaluation procedures. Where available, results suggested impact in job and educational placement, career planning, awareness of occupations, self-awareness, and awareness of sex role stereotypes.

Recommendations. Recommendations were formulated based on the evaluation study.

1. Seek recognition of Pennsylvania's needs in the federal funding allocation regulations.
2. Explore the desirability of modifying the Base Ranking System procedures.

3. Review funding allocations among program areas to ensure that they reflect state priorities.
4. Improve descriptive and evaluative information available on guidance projects.
5. Explore means to extend the programmatic development value of the individual guidance projects.

This study thus provides a comprehensive description of the vocational guidance program in Pennsylvania over a three-year period. Study recommendations also include procedures for designing an on-going management information system for guidance projects. The results should be helpful in reviewing state policy related to the guidance program.



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## I. BACKGROUND

This section of the report describes the purpose of the study, related research, and the organization of the report itself.

### Purpose of the Study

Although the Vocational Education Act of 1976 (P.L. 94-482) made no major changes in the basic goals of vocational education, it substantially changed the mechanisms to accomplish these goals. In particular, the new legislation changed the method of distributing funds to meet vocational education needs, provided for equity in terms of high need groups (e.g., handicapped, ESL, disadvantaged, sex equity), emphasized improvements in program planning, and strengthened evaluation requirements.

One of the legislative mandates specified that states must set aside 20 percent of their program improvement and supportive services monies for vocational guidance and counseling. Especially relevant to the present study is the mandate that states evaluate all vocational education programs at least every five years. All programs must be evaluated in terms of planning and operational processes, student achievement, student employment success, and the effects of additional services. These evaluations were to be designed to help revise and improve programs administered by the state. In September 1983, PDE issued a request for proposals to evaluate the 1979-1980, 1980-1981, and 1981-1982 vocational guidance programs, and RBS was selected to do the evaluation.

In order to meet the evaluation requirement of P.L. 94-482 the present study examined and analyzed the various vocational guidance programs\* that were sponsored by the Pennsylvania Department of Education from the 1979-1980 through 1981-1982 fiscal years. The study developed an extensive data base to describe these programs and attempted to determine their impact on Pennsylvania schools. In addition, the extent to which effects have transferred to other schools and the ability to continue to provide similar services with diminished resources were examined. This report is the final report on the guidance program evaluation. An Interim Progress Report was submitted previously (April 15, 1984).

### Related Research

Some background on vocational guidance programs and related research is important for understanding the evaluation study. The discussion below highlights vocational guidance needs, the federal program perspective, the allocation of federal guidance funds (a special interest in this study), previous evaluation studies, and the PDE vocational guidance context.

### Vocational Guidance Needs and Programs

Prior to the Vocational Education Act Amendments of 1976 (P.L. 94-482) there was no formal recognition by Congress of the role of vocational guidance in meeting the career development needs of youth and adults. Up to that point, funding for such programs was completely voluntary. Testimony

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\* The study included secondary, post secondary, and corrections education guidance programs. Two other categories of guidance projects - handicapped and disadvantaged - were covered by evaluation studies specific to those areas.

at the hearings on the Reauthorization of the Vocational Education Act Part 7: Vocational Guidance and Counseling (1981) indicated that prior to 1976, voluntary vocational guidance expenditures were less than 3.4 percent of the total state vocational education budgets. On the other hand, national needs assessments indicated that a great deal of additional support and program services in vocational guidance were required (Prediger, Roth, and Noeth, 1973; Harris-Bowlesby, 1975). A similar needs study in Pennsylvania (Cormany, 1975) indicated that improvements in career counseling, career information centers, and placement assistance were regarded as high priorities by secondary school students throughout the state.

P.L. 94-482 recognized the importance of vocational guidance by mandating a set aside funding amount that essentially targeted four percent of the total vocational education funds. As defined in the recent report on vocational education by the Secretary of Education to the Congress (United States Department of Education, 1983), the purpose of vocational guidance is to "provide assistance directly to students to help them realistically choose and obtain future occupations." Stump (1981) defined vocational guidance in terms of four types of activities specified in P.L. 94-482:

- appraisal - assessment of individual abilities, interests, and capabilities
- information - provision of information about jobs, occupations, and opportunities in the world of work
- counseling - services of a counselor working with individual students and groups to assist them in making career decisions
- career planning - development of knowledge, abilities, and talents to make congruent career choices.

He further described the longer-term outcomes of career guidance as lengthening and stabilizing employment, reducing unemployment, providing

for flexibility in changing jobs, and reducing absenteeism, dropouts, and school disruption. The law, itself (Section 125), specified eight priorities for vocational guidance, including initiation and improvement of programs, development of career/educational awareness, placement services, sex equity concerns, services for offenders, services for ESL students, establishment of vocational resource centers, and development of leadership for vocational guidance.

After the passage of P.L. 94-482, states actively began to remedy deficiencies in the system of vocational guidance services. Pinson, in testimony before Congress, noted that programs and services were offered where none existed before. Data for 1979 indicated that states spent almost seven percent of their total vocational education budget on guidance, as opposed to the three percent level in the early 1970s. Pinson, Gysbers, and Drier (1981), in a report on the National Vocational Guidance Survey, indicated that most state priorities focused on improvement and initiation of programs for career awareness, development of leadership, and establishment of resource centers. Funded priorities were generally consonant with state directors' perceptions of the most important needs in their states, although leadership would have been their first priority. By 1981, Stump (1981) reported that more than 30 states had developed the capability to deliver career information by computer. In 1982, some states such as Pennsylvania and Maryland began to focus on placement services. Maryland commissioned RBS to study placement procedures throughout the state, to identify exemplary programs, and to develop a procedural guide for school staff. The 1983 Vocational Education Report to Congress noted that "efforts to achieve more effective guidance continued" in 1982,

including new efforts in multi-organizational collaboration and private sector partnerships.

Although evaluation studies of the effectiveness of vocational guidance were difficult to conduct and somewhat limited, most reported findings were positive (Herr, 1980). Pinson, Gysbers, and Drier (1981) reported positive effects in terms of employment, employability, job transfer skills, attitudes, attendance, career planning, and dropout and delinquency prevention. A recent meta-analysis by the National Center for Research in Vocational Education indicated that a majority of studies reported positive outcomes of various methods of career guidance intervention (Campbell, 1983). Effects include improvements in school involvement and performance, personal and interpersonal working skills, preparation for careers, career planning skills, and career awareness. The 1983 Report to Congress described exemplary practices in Florida, Illinois, and Ohio. The congressionally mandated evaluation of vocational education by the National Institute of Education (1981) is more modest, however, suggesting that evaluation findings are not conclusive.

Despite increased funding, level of services, and apparent impact, there was evidence of many new and continuing problems in delivering an effective vocational guidance system. The National Vocational Guidance Survey (Pinson, 1981) indicated that approximately 65 percent of the sample of state directors of vocational education felt that they could not continue to meet documented student needs given decreasing levels of funding. In a study of the impact of vocational guidance funding in eight states in FY 79, Gushee (1981) reported that, although states were spending more on vocational guidance, most expenditures were directed towards the

hiring of additional counselors. This occurred at a time when many school districts were laying off their counseling staff. Benson and Hoachlander (1981), in the Cal-Berkeley study of distribution of vocational education funds, concluded that "most often, the total (vocational education) budget was used to support existing programs." In other words, federal/state vocational funds were used to substitute for diminishing local funds. This finding is hardly in line with Congressional intent to improve and expand programs. A survey of school counselors (Educational Testing Service, 1980) found that counselors still spent less than 30 percent of their time in vocational guidance, and for the most part, concentrated on educational advising, as was the case prior to P.L. 94-482. Other problems noted included methods for and results of funding allocation, diminishing resources for educational programs, and inadequate evaluation systems.

#### Vocational Guidance Funding Allocation

The 1976 Amendments included several prescriptive requirements for the way states distribute funds to local education agencies and other eligible recipients. Congress had three major goals when specifying these mandates: (1) equalizing the availability of vocational education resources; (2) focusing on high needs recipients and programs; and (3) enabling states to make hard choices for scarce federal funding. Two "application approval priorities" required states to give priority to new programs in economically depressed areas. In addition, mandates specified two "fund distribution factors," namely, the relative financial ability (RFA) of districts and the relative concentration of low income families or high cost students. The mandates allowed for additional state priorities, such as



high unemployment or high dropout rates. States could actually use any number of factors, weights, or scaling procedures. For example, in Missouri, allocation factors include district tax levies, average income, number of AFDC recipients, and rate of unemployment (Missouri State Advisory Council on Vocational Education, 1982). States could use a "two step" or a "one step" process for allocating funds. In the former, there is an initial cutoff with regard to "application approval" priorities, and then "funds distribution factors" are applied. In the one-step process, all variables are included in a single formula.

A study by the Lawyers Committee for Civil Rights Under Law (Long, 1981) found that states apply allocation formulas using three methods: (1) percentage reimbursement method; (2) direct allocation method; and (3) project method. The National Vocational Guidance Survey (Pinson, 1981) found that states used the following funding methods:

- Formula only - 22%
- RFP approach - 9%
- Direct assignment - 22%
- Mix of above procedures - 48%

However, although only nine percent of the states used the RFP approach, 52 percent of the state directors indicated that they preferred the RFP method as the primary means for allocating funds.

Several studies of the actual implementation of the allocation formulas found severe problems with the results of the procedures. Benson and Hoachlander (1981) found no direct relationship between funds distribution and the factors specified by Congress. They noted that the degree to which states met federal requirements varied. Findings indicated that

states were "confused" and that "no state used distribution procedures that were free of technical difficulties, arbitrary judgments, and questionable interpretations." In fact, 20 percent of surveyed LEAs did not even apply for vocational education funds because of insufficient resources for proposal preparation or burdensome federal requirements. They also found that a small proportion of funds were actually used for program improvement. In summary, the researchers found the law ambiguous and ineffectively administered.

The Long (1981) study found that states often used the allocation formulas inappropriately, citing misuses regarding the number of factors included and the weighting of factors. The Missouri State Advisory Council (1982) also found problems with the relative weighting of factors. Still, the Long report recommended retaining the formula approach, but suggested that states take into account the size of the vocational education program (i.e., number of students served). The National Vocational Guidance Survey (Pinson, 1981) found that most state directors of vocational education found the formula approach too restrictive. For example, the directors noted that low enrollment districts often had unusual vocational education problems, but were often shortchanged by the formula approach. This study recommended that states be given the option to use either the RFP approach, the formula approach, or the direct grant method.

The final NIE report for the Vocational Education Study (NIE, 1981) summarized the findings of the Long (1981) and Benson and Hoachlander (1981) studies. The NIE conclusion from the research data indicated that different assumptions of the VEA goals implied different means for achieving them. For example, if the primary purpose of federal policy is to

equalize the capacity of local districts to provide vocational education, then the formula funding approach is appropriate. However, if the purpose is to extend and improve programs, then the primary state role is to assure quality and provide support to LEAs. Hence, the RFP process that examines needs and programs/services for serving needs is appropriate. Finally, if the federal purpose is to serve special needs students, then states should use formulas based on student populations.

Further confounding the issues in funds allocation is the fact that financial resources for all educational problems are declining. PDE suggests that this trend will continue. In fact, Benson and Hoachlander (1981) suggested that Pennsylvania, along with a few other states, would be hit particularly hard by federal allocation formulas to states. The formula doesn't recognize declining populations, favors states with younger populations, doesn't take program costs into consideration, and doesn't necessarily allocate funds to states with low income youths. Pennsylvania, in particular, possesses many of these characteristics and, while it is above the national "average" income level, it is below the "median" income level. LEAs in Pennsylvania are also experiencing severe financial problems, often caused by declining tax bases, declining enrollment, and rising costs. For example, Phelps (1982) notes that enrollments at the secondary level are declining, thus reducing the capability of LEAs to generate funds through typical state aid formulas. These trends have important implications regarding the identification of exemplary cost-effective practices to serve the continuing vocational needs of students. Systematic evaluations focusing on policy issues become very important.

## Vocational Guidance Program Evaluation

Following the passage of P.L. 94-482, several educators and researchers conducted studies, developed guides, and produced procedural manuals for assisting states and localities to interpret and implement the mandated evaluation requirements. The Education Commission of the States (1979), Foster (1979), and Datta (1979) described the evaluation roles and responsibilities of various groups and illustrated the relationship between evaluation planning and accountability according to Congressional intent. Orr (1982) described information requirements and data sources for assessing vocational education programs. Several "how to" guides for designing vocational education evaluations were produced (e.g., Cheney-Stern and Phelps, 1980; Evans, 1982; Ghazalah, 1978). These guides suggest good frameworks for developing evaluation designs; illustrate special considerations in evaluating vocational programs (e.g., defining impact); and provide several examples of useful checklists, criteria, and instruments that can be adapted for evaluations that meet mandated requirements. Most of the guides seem to recommend a self-assessment approach to evaluation, emphasizing qualitative data collection supplemented by demographic and fiscal data. Haney (1981) strongly supports these views. Discussions of experimental approaches to evaluation are rare.

Several studies in assessing vocational guidance programs also are reported in the literature (e.g., Morris and Finley, 1982; Gade, 1981; Alaska State Department of Education, 1981; New York State Department of Education, 1982). The latter report described a comprehensive study for evaluating vocational guidance statewide and identifying exemplary program

practices. These sources provide good examples of criteria and instruments for assessing the quality of vocational guidance services.

Several problems in implementing the evaluation requirements of P.L. 94-482 have been reported. Wentling (1981), in a national survey of state directors of vocational education, reported that the practice of evaluation and use of results have fallen far short of expectations. He indicated that many evaluation activities have been compliance-oriented rather than improvement-oriented. In the survey, only one state director reported vocational guidance as a key indicator of program quality.

Other studies, commissioned by the National Institute of Education examined state evaluation systems. These were conducted by Abt Associates (Beuke, 1980), CRC Education and Human Development (Smith and Holt, 1979), and the Huron Institute (Haney, 1981). All described major problems with states' implementation of the evaluation mandates. Haney suggested that, due to the complexity of the vocational education enterprise, the lack of available funds, and the infeasibility of true experimental designs in education, evaluations of vocational education should focus on documenting the nature and extent of vocational programs (i.e., process evaluation). He notes that regardless of how good estimates of program outcomes are, they provide no guidance for program improvement unless coupled with information on program processes. Information on program characteristics, on the other hand, can provide a basis for program improvement. These suggestions seem particularly relevant to the evaluation of vocational guidance programs where definitions of impact are elusive and separation of programmatic components and funding sources is often difficult (Cushee, 1981). The rationale underlying such an evaluation approach is that

process objectives are viewed as "enabling" the accomplishment of desired outcome objectives, as long as there is a logical relationship between the two. Documentation of process objectives can be viewed in light of existing criteria for quality vocational guidance programs.

### PDE Context

Vocational guidance in Pennsylvania has gone through a number of important changes in the past four years. From 1979-81, it was reported by PDE officials that the state had a rather fragmented approach to vocational guidance, offering a variety of programs at the same time. Programs were initiated in areas such as information services, training para-professionals, differentiated staffing, student placement, and shadowing/mentorship programs. Funds were relatively abundant during this time. However, in 1980-81, all guidance staffing in PDE was severely cut back. Federal funds provided the necessary resources to enable vocational guidance activities to continue in PDE's Bureau of Vocational Education, but at substantially reduced levels. Funding for 1981-82 was only about half that of the previous year. Furthermore, the vocational guidance staffing was reduced and the remaining staff were required to function in multiple roles, many of which had little relationship to guidance.

As a result of funding and staff reductions, a decision was made to consolidate the vocational guidance program and only focus on a few priority areas each year. Thus, in 1981-82 and 1982-83, the Bureau's priorities were placement and information services (e.g., projects dealing with establishment of career resource centers and with educational and job placement services). It is in this context that the need for evaluation of the Bureau's vocational guidance program has been established.

## Organization of the Report

In addition to this introduction, the report contains four chapters. The next chapter describes the study methodology including the evaluation questions, data sources, analysis plan, timeline, and limitations of the study. This is followed by a presentation of the findings. Next, study conclusions and recommendations to PDE are discussed. The final chapter describes the plan for disseminating the study results.



## II. METHODS

This chapter presents the evaluation questions which were used to structure the study and the data sources selected to answer the questions. The analysis plan, or the procedures for utilizing data sources, is then described, along with the study timeline. Finally, the limitations of the study are discussed.

### Study Questions

The study was guided by the set of questions presented in Figure 1. The figure lists five major study components, or areas of focus: federal priorities, PDE approach, PDE funded activities/programs, program outcomes, and future directions/policy recommendations. Several evaluation questions are then stated for each component. The components and questions represent RBS' interpretation of PDE's interests in the evaluation study. All questions were addressed to some extent; the unavailability of information and study resources posed limitations in several cases. The study was ambitious in scope, and findings in some areas could not be complete or conclusive.

Figure L. Evaluation Questions

<u>Study Components</u>	<u>Evaluation Questions</u>
I. Federal Priorities	<ol style="list-style-type: none"><li>1. What is the background and intent of federal priorities?</li><li>2. What is the relationship between explicit federal priorities and demonstrated state needs?</li><li>3. What are the implications of mandated federal funding allocation regulations for Pennsylvania?</li></ol>
<hr/>	
II. PDE Approach	<ol style="list-style-type: none"><li>1. What are the vocational guidance needs of Pennsylvania LEAs (secondary and post-secondary)?</li><li>2. What is the current PDE approach for addressing vocational guidance needs (e.g., stated goals, objectives, and guidelines) and how has it evolved?</li><li>3. How were annual priorities determined and validated?</li><li>4. How does the PDE approach compare with desirable/alternative policies identified in the literature (e.g., national studies, practices of other states, legislative intent, quality criteria)?</li><li>5. What is the PDE method for equitably distributing vocational guidance funds (e.g., guidelines and approaches, communication with LEAs, formula, factors, weights, scaling, selection decisions, criteria)?</li><li>6. What are the implications of alternative funding strategies, in terms of equity, program quality, federal mandates, LEA needs, and implementation?</li></ol>

Figure 1. Continued

<u>Study Component</u>	<u>Evaluation Questions</u>
III. PDE-funded Activities/Programs	<ol style="list-style-type: none"><li>1. What types of projects were supported by PDE during 1979-80 through 1981-82, by project category (i.e., federal priority)?</li><li>2. Who has been affected by the PDE approach to vocational guidance (secondary and postsecondary)?</li><li>3. What are the characteristics of projects that were not funded and what are the resulting implications?</li><li>4. What are the characteristics of funded projects (secondary and postsecondary) and what evidence exists that they represent "best practice" (i.e., quality in terms of programmatic criteria described in the literature)?</li><li>5. What are the tradeoffs involved in meeting federal/state priorities vs. meeting equity/funding allocation mandates vs. sponsorship of high quality programs or program improvements?</li></ol>
<hr/>	
IV. Program Outcomes	<ol style="list-style-type: none"><li>1. What changes in the Pennsylvania vocational guidance system occurred as a result of PDE funded projects (e.g., new initiatives, improvements, or maintenance of status quo)?</li><li>2. What evidence of project impact exists for each project and specific types of projects?</li><li>3. Have the priority vocational guidance needs (short-term and long-term) of Pennsylvania LEAs been met (i.e., for each priority area is need diminished, eliminated, or recurring)?</li></ol>

Figure 1. Continued

Study Questions

Evaluation Questions

4. Have funded projects developed the capacity to continue to meet the priority vocational guidance needs of Pennsylvania schools (e.g., ripple effect, capability to continue despite diminished state reserves)?
- 

V. Future Directions/  
Policy Recommendations

1. What issues or activities require further attention?
2. What recommendations for future PDE policies/practices can be made in terms of:
  - funding
  - leadership
  - delivery of effective vocational guidance services
  - evaluation/quality assurance
  - liaison with LEAs?
3. What criteria should PDE employ in funding future vocational guidance programs to meet state needs?

## Data Sources

Four data sources were selected to provide the information needed to answer the study questions: PDE background information, PDE interviews, project files, and LEA interviews. Each of these sources is described in this section.

### PDE Background Information

Extensive information on vocational education, including guidance, is available from PDE. This data source includes vocational education plans, evaluations, and project summaries. Some of the specific documents obtained and reviewed for study purposes are listed in Figure 2. This information was viewed as important for providing an orientation to vocational guidance in Pennsylvania, as well as providing direct answers to several of the evaluation questions.

### PDE Interviews

PDE staff members who have had key responsibilities related to the guidance program were identified for in-depth interviews. During the course of the study, these PDE staff were interviewed using the guide included as Appendix A. The questions in the guide reflect many of the study questions indicated above. Figure 3 lists the persons interviewed, the interview dates, and the interviewers.

Figure 2. PDE Background Documents

1. Pennsylvania VEA Funds, Estimated Project Expenditure Report (PDE, 1984).
2. Vocational Education Guidelines for the Application of Federal Funds (PDE, 1977, 1978, 1980).
3. Pennsylvania Vocational Education Management Information Report (PDE, 1980, 1981, 1982).
4. 1983 Pennsylvania Vocational Education Hearings Summarization (PDE, 1983).
5. 1983 Pennsylvania Advisory Council on Vocational Education Annual Evaluation Report (PACVE, 1983).
6. Excerpts from PACVE Annual Evaluation Reports for 1979, 1980, 1981, and 1982.
7. Pennsylvania State Plan for Vocational Technical Education Programs 1983-1987 (PDE, 1982).
8. Excerpts from 1980-1981 State Plan (PDE, 1980).
9. Vocational Education Report by the Secretary of Education to the Congress 1982 (USDE, 1983).
10. Project summaries for guidance, secondary, and postsecondary for 1979-80, 1980-81, and 1981-82 (PDE).
11. Vocational Education, State Programs, and Commissioner's Discretionary Programs (Final Regulations for Education Amendments of 1976) Federal Register, Vol. 42, No. 191, P-53822-53891, October 3, 1977.

Figure 3. PDE Interviews

<u>Project Type</u>	<u>PDE Staff</u>	<u>Interview Date</u>	<u>Interviewer</u>
1. Guidance secondary	Bruce Shellenberger	February 15, 1984	Kershner
2. Guidance postsecondary	Robert Sheppard	February 15, 1984	Zeitlin
3. Guidance corrections	Don Bender	June 22, 1984	Zeitlin
4. Guidance base rankings	John Senier	March 7, 1984	Kershner
5. Overall	Carroll Curtis	February 15, 1984	Biester
6. Overall	Clarence Dittenhafer	February 15, 1984	Kershner



## Project Files

For each funded project, PDE maintains a permanent contract file which contains the project proposal, audited expenses, and any correspondence related to the project. The PDE staff who monitor the various projects also keep files which duplicate some of this information. Staff files are discarded after a few years, or when there is a PDE staffing change. In addition, the PDE vocational field offices keep files for their regions (East, Central, and West) which contain project proposals and monitoring reports. These project files are the most comprehensive data source available, since all projects are represented. Project files were thus important for answering questions which required input from all projects, but they were limited to very specific information (e.g., funding level or project objectives), to the exclusion of important areas such as impact on student development.

The three types of files (contract, staff monitor, and field office) were carefully reviewed, and the PDE staff monitor files were selected for use in the study. Using permanent contract files requires scanning all vocational files to find the guidance projects needed; this was done only in cases where monitor files were not available. The decentralized field office files offered no relative advantage over the centralized PDE files, since the monitoring reports, which are kept only in field offices, were found to contain no useful evaluative information.

Project files were assembled for the guidance secondary, post secondary, and corrections projects funded and conducted in the 1979-80, 1980-81, and 1981-82 school years. Table 1 depicts the resulting

Table 1  
Guidance Project Files

Type	# Listed				# Located				% Located			
	79-80	80-81	81-82	Total	79-80	80-81	81-82	Total	79-80	80-81	81-82	Total
Secondary	79	80	35	183	73	79	24	176	92	99	100	96
Post Secondary	25	22	18	65	21	21	17	59	84	96	94	91
Corrections	2	8	8	18	2	7	8	17	100	88	100	94
Total	106	110	50	266	96	107	49	252	91	97	98	95

NOTE: Carryover projects funded in 1978-79 and conducted in 1979-80 have not been included.

accumulation of projects in terms of the numbers of projects listed and the numbers of projects actually located in each category. In all, 252 project files were assembled, representing 95 percent of the projects listed.\*

This vast array of material was processed in two ways to make it useful. First, many of the files were perused to gain familiarity with the projects as they are represented by file information. Then, a project file data base was designed to extract key information from the files for further analysis. The data base specifications appear in Appendix B. In addition to project identification information, the data base included coded data on project expenditures, funded activities, objectives, and participants. The data base was operationalized on a TRS-80 Model II microcomputer.

#### LEA Interviews

Observations of projects in action and discussions with project personnel were built into the study design as the major source of in-depth information. The initial design called for 3 site visits and 21 telephone interviews. A revised plan increased the interview pool to 31 projects, with up to 8 slated for site visits. The composition of this interview sample is described in Appendix C. In general, projects in the eastern part of the state were given preference for site visits for logistical reasons. More recent projects were given priority over older ones to minimize problems due to project staff turnover.

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\*Some project files were missing because they were in use by PDE officials or because the project had been delayed or withdrawn.

Guides were developed for both telephone personal site visit and telephone interviews, and these appear in Appendix D. Telephone interviews took approximately one hour each, while site visits were given a half-day for interview and observation. Table 2 summarizes the interviews attempted and completed. In all, 87 percent were completed successfully. Four telephone interviews couldn't be completed because relevant project staff were unavailable.

### Analysis Plan

The study questions and data sources described above provided the basic ingredients of the study's analysis plan. Each question was to be answered using the information from one or more data sources as depicted in Figure 4. It was intended that the simplest, most direct, answers be formulated. Extensive statistical analyses were not planned. Most questions could be addressed by synthesizing interview results and/or using simple descriptive analyses of project files.

### Project Timeline

The proposed timeline of project activities began in October 1983 and ended June 1984. Since the project was not actually funded until January 1984, some timeline changes were necessary, as indicated in the Interim Progress Report (April 15, 1985). The revised timeline specified January and February for planning and data collection instrument development, March through May for data collection, and June for analysis and reporting. This schedule was followed in practice, with minor deviations which did not hamper the effectiveness of the study.

Table 2

## LEA Interviews

Type	# Attempted			# Completed			% Completion		
	Site	Telephone	Total	Site	Telephone	Total	Site	Telephone	Total
Secondary	4	13	17	4	11	15	100	85	88
Post Secondary	2	8	10	2	6	8	100	75	80
Corrections	2	2	4	2	2	4	100	100	100
Total	8	23	31	8	19	27	100	83	87

Figure 4. Analysis Plan

Evaluation Questions	Data Sources			
	PDE Background	PDE Interviews	Project Files	LEA Interviews
I. Federal Priorities				
1. background and intent	✓	✓		
2. relation to state needs	✓	✓		
3. funding allocation regulations	✓	✓		
II. PDE Approach				
1. guidance needs	✓		✓	
2. approach to meet needs		✓		
3. annual priorities		✓		
4. alternative approaches		✓		
5. method of distributing funds	✓	✓		
6. alternative funding strategies	✓	✓		
III. PDE-Funded Activities/Programs				
1. types of projects			✓	
2. project participants			✓	
3. characteristics of non-funded projects		✓		
4. characteristics of funded projects			✓	✓
5. need priorities vs. quality programs		✓		
IV. Program Outcomes				
1. changes in guidance system		✓		✓
2. evidence of impact				✓
3. reduction of needs		✓		✓
4. capacity development		✓		✓
V. Future Directions/Policy Recommendations				
1. issues				✓
2. PDE policies and practices				✓
3. funding criteria		✓		✓

### Limitations of the Study

There were several factors which did limit the study's effectiveness and should be kept in mind while considering the findings and recommendations presented in the following two chapters. First, the resources available for conducting the study were quite modest - less than \$15,000. This level of resources constrained the person-time that could be devoted to any project task.

Second, in the face of modest resources, there were a large number of guidance projects - over 250. These were spread across three fiscal years and three project types; thus, nine categories of projects were included in the study. Each category theoretically could have been treated separately, but practicality would not permit it.

Third, the projects were conducted from 1979 to 1982, while the evaluation field work took place in 1984. This time difference undoubtedly affected the validity of the interview responses. Those interviewed may have had difficulty in retrospectively distinguishing the project year under study; or worse, the most appropriate interviewees may have left the school district by the time the evaluation took place.

Finally, in light of the limited study resources, some dependence on already existing data was necessary. PDE was able to supply data which met this need for many of the study questions, but one area was found to be deficient - program outcomes. Outcome, or impact, information was rarely available on individual projects. This limited the analyses and conclusions which could be conducted and drawn in this question area.



### III. ANALYSIS

This chapter presents the results of the evaluation study. The findings are organized around the evaluation questions in Figure 1 (p. 15 above). The questions are grouped in five areas of focus: federal priorities, PDE approach, PDE funded activities/programs, program outcomes, and future directions/policy recommendations. The questions are answered within groups, as concisely and completely as possible given the available data.

#### Federal Priorities

Federal priorities lay the groundwork for the entire vocational guidance program, since the U.S. Department of Education is the source of both the enabling funds and requirements for the guidance projects. Questions on federal level involvement are thus the starting point for any evaluation study.

#### Question 1. What is the background and intent of federal priorities?

The entire vocational education program was authorized by the Vocational Education Act of 1963, as revised by the Education Amendments of 1976. The program is implemented using the final regulations appearing in the Federal Register on October 3, 1977. These regulations were

...designed to assist States to improve planning in the use of all resources for vocational education and to overcome sex discrimination in vocational education. Also, the regulations permit consolidation of programs to provide greater flexibility to the States in conducting vocational education programs.

Specifically with reference to vocational guidance and counseling, the regulations state that the purpose of the

...assistance is to improve the State's vocational education programs by providing support for vocational development guidance and counseling programs, services, and activities.

Further, projects should be supported in accordance with the approved five-year state plan and an annual plan. The fiscal support allocated to guidance projects is to be at least 20 percent of the federal funds available under the Act for Program Improvement (Section 130, also a 20 percent set-aside), or approximately 4 percent of the total.

Federal regulations also specify types of activities that should be supported. Any of the following are recommended for state guidance and counseling programs:

- (a) Initiation, implementation and improvement of high quality vocational guidance and counseling programs and activities;
- (b) Vocational counseling for children, youth and adults, leading to a greater understanding of educational and vocational options;
- (c) Provision of educational and job placement programs and follow-up services for students in vocational education and for individuals preparing for professional occupations or occupations requiring a baccalaureate or higher degree. Follow-up services provided to baccalaureate or higher degree students shall be only for students enrolled on or after October 1, 1977;
- (d) Vocational guidance and counseling training designed to acquaint guidance counselors with (1) the changing work patterns of women, (2) ways of effectively overcoming occupational sex stereotyping, and (3) ways of assisting girls and women in selecting careers solely on their occupational needs and interests, and to develop improved career counseling materials which are free;
- (e) Vocational and educational counseling for youth offenders and adults in correctional institutions;

- (f) Vocational guidance and counseling for persons of limited English-speaking ability;
- (g) Establishment of vocational resource centers to meet the special needs of out-of-school individuals, including individuals seeking second careers, individuals entering the job market late in life, handicapped individuals, individuals from economically depressed communities or areas, and early retirees; and
- (h) Leadership for vocational guidance and exploration programs at the local level.

Finally, the federal regulations place special emphasis on activities which involve giving business people experience in schools and students and teachers experience in business and industry environments.

Question 2. What is the relationship between explicit Federal priorities and demonstrated state needs?

State priorities and needs are designated formally through several sources. Most generally, there is a "work goal" among Pennsylvania's 12 Goals of Quality Education:

WORK. Quality education shall help every student acquire the knowledge, skills, and attitudes necessary to become a self-supporting member of society. Objectives are:

- (a) Develop career awareness.
- (b) Develop personal career planning skills.
- (c) Develop job seeking, job getting, and job keeping skills.
- (d) Develop entry level occupation skills.
- (e) Develop an awareness of the dignity of work.
- (f) Develop current labor market skills to foster economic development.

Another set of goals specifically for vocational education is adopted by the State Board of Education. The following goals were in effect during the years studied:

- I. Develop, expand or modify quality vocational education so that by 1982 every public secondary student will have had the opportunity to: (1) enter the labor force with a

marketable vocational skills; (2) learn a useful vocational skill; or (3) acquire a basic vocational skill and continue at the postsecondary level.

- II. Promote the expansion, range and diversity of adult and postsecondary occupational education opportunities to facilitate: (1) the entry/reentry of persons into the labor force and; (2) to provide upgrading or retraining for persons already employed/unemployed.
- III. Encourage alternative forms of vocational/occupational education to broaden the options available to students.
- IV. Intensify articulation efforts among programs at middle schools and junior high schools with secondary school and postsecondary vocational/occupational programs.
- V. Support a greater understanding of educational/career options by expanding vocational guidance, counseling, and job placement services and providing occupations experiences for students.
- VI. Foster a concerted effort to achieve equal educational opportunities by eliminating sex, racial/ethnic and linguistic bias, stereotyping, and discrimination.
- VII. Strengthen the development and implementation of comprehensively planned programs to meet the needs of and demands for competent professional vocational teachers, counselors, supervisors, and administrators.
- VIII. Develop and expand vocational education opportunities for the disadvantaged and handicapped.

An additional source for Pennsylvania priorities and needs is the Pennsylvania Advisory Council on Vocational Education. One of the responsibilities of this group as authorized by the Education Amendments of 1976 (Part 104), is to prepare recommendations on vocational education for action by the State Board. These recommendations are presented in an annual report. During the years under study, none of the Council recommendations was specifically aimed at the guidance and counseling program, but one was related to a major guidance function - providing career information. The recommendation urged better "coordinated career

information activities" among the various agencies in the state who have responsibilities in this area. While not specifically mentioned in the Council discussion, the guidance program offers an opportunity to improve and support career information efforts.

Pennsylvania's needs, as depicted by these three sources, would appear to be fairly well related to federal priorities. Figure 5 summarizes the federal and state priorities described thus far. While the priorities do not have a one-to-one match, many similarities do exist and the Federal language is broad enough to permit support of almost any state goal.

Question 3. What are the implications of mandated federal funding allocation regulations for Pennsylvania?

Funding allocation occurs in two senses - federal allocation to states and state allocation to LEAs. The allocation to states is based on a formula which is weighted for the state's population within specified age categories and the per capita income ratio of the state relative to the nation. According to Benson, Hoachlander, and Gareth's (1981) analysis, this approach not only fails to meet the federal intent of effective distribution to those who need it, but also, in so doing, ignores several factors of particular interest to Pennsylvania. The approach fails to consider the differences in program costs from state to state. It also provides no recognition of program quality - ambitious state plans are treated the same as minimal efforts. The special needs of states with declining populations are ignored by the formula. Finally, the northeastern states which have both high urban poverty and high average per capita income are disadvantaged relative to other parts of the country.

Figure 5. Federal and State Priorities

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FEDERAL

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General Features

- improve vocational education planning
- overcome sex discrimination
- permit program consolidation and flexibility
- special emphasis on school-business interaction

Recommended Guidance and Counseling Activities

- high quality programs
  - understanding educational and vocational options
  - job placement and follow-up
  - counselor training related to sex equity
  - programs for youth and adult offenders
  - programs for persons of limited English-speaking ability
  - vocational resource centers
  - leadership for vocational guidance and exploration
- 

STATE\*

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Work Goal

- career awareness and planning
- job seeking, getting, keeping

Vocational Goals

- alternative forms of education
- articulation of curriculum from middle school through postsecondary
- equal educational opportunity
- in-service programs
- services for the handicapped and disadvantaged

Advisory Council Recommendation

- career information activities
- 

\*Vocational skill training goals have been eliminated from this figure since they are not included in the guidance and counseling purview.

Thus, the federal formula which determines Pennsylvania's share of the vocational education funds does not respond to some key state needs and interests.

federal regulations governing the allocation of funds by states to LEAs have the expressed intent of helping states to equalize educational opportunity, to focus on high need recipients and programs, and to make hard choices among competing applicants for scarce federal funds (Long, 1984). The Educational Amendments of 1976 require states to:

- (a) give priority to applicants which propose new programs and which are located in economically depressed areas
- (b) use as distribution factors the relative financial ability of each recipient and the relative concentration of either low-income families or individuals or higher cost students
- (c) respond to additional priorities which are established for individual programs.

While the Amendments themselves do not require states to develop a formula as the means to implement the intent and regulations, the U.S. Department of Education has established this requirement for distribution of federal vocational funds. For Pennsylvania's guidance program, this requirement has been met through the Base Ranking System, which ranks LEAs in order of their priority for receiving funds. The ranking is accomplished using a complex formula which incorporates the statutory requirements listed above and is approved by the U.S. Department of Education. The general implication of this situation is that Pennsylvania must respond to federal priorities using approved methods. Implications of the Base Ranking System are explored specifically in Questions 5 and 6 of the next section.

## PDE Approach

Given the background of federal regulations and priorities and the perceived needs for vocational guidance and counseling services in Pennsylvania, PDE has developed an approach to supporting programs throughout the state. The evaluation questions in this section were designed to describe and analyze this approach as background for a description of the programs funded.

### Question 1. What are the vocational guidance needs of Pennsylvania LEAs?

While no systematic assessment of LEAs is regularly conducted, needs may be inferred from several sources. For example, the recommendations and goals formulated by the Advisory Council for Vocational Education and State Board of Education reflect the needs perceptions of these significant groups. Program needs were listed by these groups in career awareness and planning, job seeking and maintenance, equal opportunity, counselor inservice, services to the handicapped and disadvantages, and career information.

A second reflection of needs is offered by LEA proposals for guidance funds. These needs statements are shaped by the PDE funding guidelines, but they do give some idea of relative emphasis. The top five needs in order of priority were as follows: career information, career awareness and exploration, job placement, employability skills, and assessment and decision-making.



Question 2. What is the current PDE approach for addressing vocational guidance needs and how has it evolved?

- AND -

Question 3. How were annual priorities determined and validated?

The approach is to fund projects annually using guidelines which are based on federal priorities and requirements. In early years, all federal priority project areas were included in the PDE funding guidelines. Later, as the level funding decreased, some federal priorities were eliminated and others emphasized. This selection was based on the project areas requested most by LEAs. The narrowing reflected these local interests and is depicted in Figure 6. In addition to focusing on a decreasing number of priorities, PDE has favored projects which provide awareness or information and can serve larger client groups. The priorities have not been validated in a formal sense.

Question 4. How does the PDE approach compare with desirable/alternative policies identified in the literature?

The only alternative approach identified by PDE staff would be to "stretch" the funding by requiring more local contribution or by slowly withdrawing state support. However, the current approach was viewed as being the best available under current conditions.

Question 5. What is the PDE method for equitably distributing vocational guidance funds?

- AND -

Question 6. What are the implications of alternative funding strategies, in terms of equity, program quality, federal mandates, LEA needs, and implementation?

Figure 6. PDE Annual Priorities

<u>Priority Area</u>	<u>1979-80</u>	<u>1980-81</u>	<u>1981-82</u>
• understanding vocational and education options	✓		
• placement in labor market or postsecondary education	✓		✓
• vocational information services	✓	✓	✓
• sex equity	✓ <sup>1</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>
• vocational guidance leadership	✓ <sup>1</sup>		
• experiential programs	✓ <sup>1</sup>	✓	
• programs for persons of limited English speaking ability	✓ <sup>1</sup>	✓	
• bring business persons into school		✓	✓
• bring counselors into business settings		✓ <sup>2</sup>	✓ <sup>2</sup>
• programs for youth and adult offenders	✓	✓	✓

- 
1. To be addressed through counselor in-service training
  2. Paired as a priority

Each year PDE issues a set of "Vocational Education Guidelines for the Application of federal Funds," with an invitation to all school districts to apply for both entitlement and non-entitlement projects. Among the non-entitlement categories are found the guidance secondary, post-secondary, and corrections programs. Priorities and procedures for application are described in the guidelines for each of these programs. Applicants must have the support of their Local Advisory Council for Vocational Education and must submit a preliminary application to PDE. PDE reviews the preliminary applications and selects those which address federal and state priorities for development into full proposals. The proposals are reviewed for completeness and quality by PDE staff. These general procedures seem to be fair, thorough, and conscientiously applied.

In the largest program area - secondary - the Base Ranking System plays a large role in the selection process, and thus is a significant factor in distribution of funds. Each school district in Pennsylvania receives a number of rating points which permit a rank ordering of all districts from that with the highest points to the one with the lowest. Since funds are scarce, only the higher ranked districts have a chance at the non-entitlement money.

The implications of the Base Ranking System merit further attention in relation to the question of equitable distribution of funds. The formula itself is depicted in Figure 7. It emphasizes property value and low income factors in assigning points based on the number of standard deviations an LEA is from the state mean on each formula element.

The formula, indeed, serves federal priorities, but may not meet state needs. It is quite complex, thus resisting understanding by applicants and

Figure 7. Base Ranking System Formula

$$\begin{aligned}
 \text{Rating Points} &= \left( \frac{\text{real estate value}}{\text{population}} \times .40 \right) + \left( \frac{\frac{\text{AFDC recipients}}{\text{population}} + \frac{\text{Title I eligible}}{\text{population}}}{2} \times .40 \right) + \\
 \text{for any LEA} & \left( \frac{\left( \frac{\text{real estate value}}{\text{average daily membership}} \right)}{\left( \frac{\text{state real estate value}}{\text{state average daily membership}} \right)} \times .20 \right)
 \end{aligned}$$

/OR/

$$\text{RPj} = (\text{RATPj} \times .40)^* + (\text{LIFj} \times .40)^* + (\text{EDAj} \times .20)^*$$

\* -5 sd = 10, 5 sd = 0

\*\* -5 sd = 0, 5 sd = 10

revision by PDE. It also is seen by PDE as too restrictive, making funding mechanical and minimizing the value of quality review. PDE officials expressed the concern that many high quality programs could not be funded because the applicants were not high enough in the base rankings.

In order to explore these concerns, several analyses of project records were undertaken. Table 3 shows the numbers of projects funded within groups of base ranks. For example, in 1980-81, 21 of the 50 highest ranked districts received guidance project funds. This table demonstrates a significant trend relating to equity. In 1980-81, almost half of the 50 highest need districts were able to get projects funded and there was some spread of funded projects down the ranks. By 1981-82, only one-quarter of the highest need districts could be funded and there were very few projects funded outside of the two highest categories.

Table 4 looks at the distribution of projects in terms of the dollar funds awarded in base rank groups. The shift is even more dramatic in these figures. Between 1980-81 and 1981-82, the percent of the funding going to the 50 highest-ranked districts more than doubled from 36.7 percent to 76.0 percent. This shift left few resources for districts outside of the top 50.

This sharp reduction in the distribution of funds to districts is accounted for by two factors which are illustrated in Table 5. First, there was a reduction of total funds available - a drop of 36.0 percent in the three years from 1979-80 to 1981-82. During the same time, there was a reduction of 79.1 percent in the number of projects funded, thus far out distancing the reduction in funds. This discrepancy is due to a substantial increase in the average project size - from \$13,978 to \$42,842,

Table 3

## Distribution of Projects by Base Ranks\*

Base Ranks \ Projects	1980-81		1981-82	
	Number	Percent	Number	Percent
1 - 50	21	26.6	13	54.2
51 - 100	12	15.2	4	16.7
101 - 150	25	31.7	2	8.3
151 - 200	11	13.9	2	8.3
201 - 250	3	3.8	2	8.3
251 - 300	5	6.3	1	4.2
301 - 350	2	2.5	0	0.0
351 - 603	0	0.0	0	0.0
Total	79	100.0	24	100.0

\* Guidance secondary projects only.

Table 4

## Distribution of Funds by Base Ranks\*

Base Ranks \ Projects	1980-81		1981-82	
	Funds	Percent	Funds	Percent
1 - 50	\$559,986	36.7	\$781,081	76.0
51 - 100	136,954	9.0	90,983	8.8
101 - 150	530,233	34.7	47,190	4.6
151 - 200	137,479	9.0	41,400	4.0
201 - 250	50,882	3.3	48,929	4.8
251 - 300	89,828	5.9	18,619	1.8
301 - 350	27,088	1.4	0	0.0
351 - 603	0	0.0	0	0.0
Total	\$1,527,45	100.0	\$1,028,202	100.0

\* Guidance secondary projects only.

Table 5

## Project Distributional Characteristics

Characteristic	Project Year		
	1979-80	1980-81	1981-82
Total Funding	\$1,607,433	\$1,527,450	\$1,028,202
Number of Projects	115	79	24
Average Project Funding	\$ 13,978	\$ 19,335	\$ 42,842
Allocation to Largest District	3.3%	18.6%	49.5%



which, in turn, is due primarily to the projects awarded to the state's largest school district. In sum, the number of districts who are able to be funded for guidance projects has been severely restricted due to both a reduction in overall funds available and the amount of funding devoted to a single district - Philadelphia - which is always in the top 10 in the Base Ranking System.

This would not appear to be an ideal situation since it prevents the needs of most LEAs in the state from being addressed by excluding them from funding. Over time, many LEAs will become sufficiently discouraged to give up developing proposals, which may affect the quality of the proposal pool and, consequently, the quality of the project mix as a state vocational guidance program. This funding outcome does not run afoul of the primary federal mandates, but eventually it will hinder the federal emphasis on encouraging new programs.

So, the guidance funding process is a reasonable one in design, but over the years it has had the unintended effect of constraining the number of Pennsylvania LEAs who can participate. This effect is related to use of the Base Ranking System. The state is restricted in its latitude for dealing with this situation by federal regulations, but some improvement seems possible. Suggestions are presented below in the Conclusions and Recommendations chapter.

## PDE Funded Activities/Programs

With the background of federal mandates and PDE procedures for funding projects, this section describes the projects supported during the 1979-80 through 1981-82 period. Projects are described in terms of the characteristics included in the computerized data base, such as samples affected, activities involved, and priorities addressed. The projects not selected for funding are also discussed.

### Question 1. What types of projects were supported by PDE during 1979-80 through 1981-82, by project category?

The projects included in the evaluation were divided into three funding categories: secondary, post secondary, and corrections. As indicated in Table 6, the guidance secondary projects were the most numerous - 176, or almost 70 percent of the 252 projects studied. The 59 post secondary projects accounted for 23 percent of the supported projects and the 17 corrections education efforts filled in the final 7 percent. The percentage of funding allocated to each of these categories was similar - 74 percent, 17 percent, and 9 percent, respectively. Over the three years studied, there was a large reduction in the funds available and an even larger drop in the number of projects which could be supported (as average project size increased.) The secondary guidance category was the hardest hit, as post secondary and corrections grew in funds in spite of the overall decline.

Table 7 describes the funded projects in terms of their location. Over the three years, the largest share in number of projects went to western Pennsylvania, with the central and eastern regions following in

Table 6  
Overview of Projects

Projects Type	1979-80		1980-81		1981-82		Total	
	#	\$	#	\$	#	\$	#	\$
Secondary	73	1,716,498	79	1,550,635	24	992,891	176	4,260,824
Post-Secondary	21	301,671	21	349,500	17	356,907	59	1,008,078
Corrections	2	162,368	7	173,159	8	191,295	17	526,822
Total	96	2,180,537	107	2,073,294	49	1,541,093	252	5,794,924

Table 7

## Projects in State Regions

Regions \ Projects	1979-80		1980-81		1981-82		Total	
	#	%	#	%	#	%	#	%
East	21	21.0	24	22.4	21	42.9	66	26.2
Central	39	39.0	38	35.5	9	18.4	82	32.5
West	40	40.0	45	42.1	19	38.7	104	41.3
Total	100	100.0	107	100.0	49	100.0	252	100.0

order. The 1981-82 year brought a switch, wherein the eastern region got the largest share. This change was substantially affected by the Philadelphia district drawing 5 of the 24 secondary projects funded in that year.

Table 8 shows the extent to which new projects were funded each year. During the three study years, the mix of new to continuing projects was roughly half and half, but the trend is away from this balance. By the 1981-82 year, more than 60 percent of the projects were continuations.

Two analyses were used to relate funded projects to vocational goals addressed by each project and the major components\* or objectives of each project. Table 9 lines up the projects and goals. As can be seen, the three top goals account for three-quarters of the goal designations: understanding education and career options/placement, equal educational opportunity, and disadvantaged and handicapped populations. Some projects may not have listed all of the relevant goals, but these, especially the first two, do seem to be of very high priority in the field. There was a little more spread across goals in 1981-82 relative to the earlier years.

Table 10 shows a similar focusing on priorities, with the top five components accounting for three-quarters of the component designations. They were vocational information, career awareness, placement, employability skills, and assessment and career decision-making. The focusing evidenced by project goals and components is consistent with state goals and federal priorities.

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\*The component designations were made by PDE project monitors and categorized by the evaluators.

Table 8

## Project Continuation

Projects Status	1979-80		1980-81		1981-82		Total	
	#	%	#	%	#	%	#	%
New	48	50.0	48	45.3	18	36.7	114	45.4
Continuation	48	50.0	58	54.7	31	63.3	137	54.6
Total	96	100.0	106	100.0	49	100.0	251*	100.0

\* One project had indeterminate status.

Table 9

## Projects and State Vocational Goals

Goals	1979-80		1980-81		1981-82		Total	
	#	%	#	%	#	%	#	%
V. Understanding education and career options/ placement	88	57.5	93	52.8	36	36.3	217	50.7
VI. Equal educational opportunities	20	13.1	31	17.6	15	15.2	66	15.4
VIII. Disadvantaged and handicapped population	11	7.2	13	7.4	17	17.2	41	9.6
I. Vocational skill development	10	6.5	14	8.0	6	6.1	30	7.0
II. Adult and post secondary	9	5.9	9	5.1	10	10.1	28	6.6
III. Alternative programs	8	5.2	11	6.3	9	9.1	28	6.6
IV. Articulation across levels	4	2.6	3	1.7	3	3.0	10	2.3
VII. Professional inservice programs	3	2.0	2	1.1	3	3.0	8	1.8
TOTAL	153	100.0	176	100.0	99	100.0	428*	100.0

\* Most projects had more than one goal.

Table 10  
Project Components

Projects Components	1979-80		1980-81		1981-82		Total	
	#	%	#	%	#	%	#	%
Vocational Information	69	24.8	71	20.0	20	11.5	160	19.8
Career Awareness	53	19.1	66	18.6	26	14.9	145	18.0
Placement	46	16.5	45	12.7	20	11.5	111	13.8
Employability Skills	31	11.1	38	10.7	23	13.2	92	11.4
Assessment and Career Decision Making	18	6.5	38	10.7	27	15.5	83	10.3
Community Relations	18	6.5	24	6.8	12	6.9	54	6.7
Guidance Leadership	1	0.4	16	4.5	1	0.6	18	2.2
Corrections Education	2	0.7	7	2.0	8	4.6	17	2.1
Remedial Skills	2	0.7	0	0.0	14	8.1	16	2.0
In Service	6	2.2	3	0.8	4	2.3	13	1.6
Other	32	11.5	47	13.2	19	10.9	98	12.1
Total	278	100.0	355	100.0	174	100.0	807*	100.0

\* Most projects had several components.



Question 2. Who has been affected by the PDE approach to vocational guidance?

Some information on program beneficiaries has been presented in answer to earlier questions. For example, Pennsylvania educational agencies were funded to conduct over 250 vocational guidance projects during the three year period evaluated. The agencies included secondary schools, post secondary institutions, and correctional institutions. The western part of the state received most of the projects, followed by the central and eastern portions; although, in terms of dollar support, the trend was for eastern Pennsylvania to benefit the most.

Table 11 presents information on the number of program participants. Overall, more than a quarter million individual youth and adults received services supported by vocational guidance funds. The large majority of participants were in the secondary project category, but substantial numbers also were affected in post secondary and corrections environments. It should be noted that a number of the secondary category programs affected non-secondary populations because they were K-12, 6-12 programs or otherwise integrated guidance services across levels.

The format used on the project proposal form (DEBE-131) does not permit reliable analysis in further depth. This form leads most proposers to indicate the numbers of beneficiaries in "Other," unspecified categories rather than using the predefined categories which would aid in project evaluation. However, it can be said that there were some beneficiaries in the following occupational fields: agriculture, distributive education, health, home economics, industrial arts, business education, technical education, and trades and industrial. Suggestions for improving the

Table 11

## Project Participants

Participants Projects	1979-80		1980-81		1981-82		Total	
	#	%	#	%	#	%	#	%
Secondary	68,146	85.7	115,161	91.8	43,877	79.7	227,184	87.4
Post Secondary	9,518	12.0	8,394	6.7	8,632	15.8	26,594	10.2
Corrections	1,832	2.3	1,827	1.5	2,469	4.5	6,138	2.4
Total	79,496	100.0	125,392	100.0	55,028	100.0	259,916	100.0

information collected on these projects are presented below in the Conclusions and Recommendations chapter.

Question 3. What are the characteristics of projects that were not funded and what are the resulting implications?

- AND -

Question 4. What are the characteristics of funded projects and what evidence exists that they represent "best practice?"

The numbers of secondary project proposals submitted and approved are indicated in Table 12. Over the years, more than half of the projects submitted were approved by PDE. However, the rate has declined over time from 60.5 percent to 31.2 percent, which reflects the precipitous drop in the number of projects which could be supported. The proposal pool declined 60 percent, but the number of projects funded dropped almost 80 percent.

The global factors distinguishing funded from non-funded projects were reported to be the base rank of the submitting educational agency and the fit of the project with state and federal priorities. Proposal quality was not seen as a determining factor. Education agencies with high base ranks who submitted acceptable proposals in priority areas were funded.

Funded projects most frequently had components in the following priority areas: vocational information, career awareness, placement, employability skills, and assessment and career decision-making skills. Many funded projects supported counseling staff who worked with student groups in classrooms or one-to-one. Career information was frequently provided through career resource centers which offered materials and assistance related to job and training opportunities. Career

Table 12

## Funded and Non-Funded Secondary Proposals

Proposals \ Year	1979-80	1980-81	1981-82	Total
# Submitted	190	140	77	407
# Approved	115	79	24	218
# Rejected	75	61	53	189
% Approved	60.5	56.4	31.2	53.6
% Rejected	39.5	43.6	68.8	46.4

decision-making activities often included aptitude and interest testing, career availability information, and personal career goal development. Placement-related activities included development of employability skills (e.g., resume writing, interviewing, job habits), as well as job development, job information systems, and follow-up.

While no formal analysis was performed comparing the funded project activities and the recommendations of the "experts," the projects did appear to utilize the strategies and materials which are current in the field. Further, project staff generally were well-informed in their field and demonstrated a reasonable approach in developing project plans. This approach often contained the following elements:

- analyze client needs based on observation and experience
- select activities using published resources, local advisors (university, intermediate unit), and staff ideas
- develop activities through trial and error.

Project staff usually belonged to a professional organization and often participated in conference or other professional development activities. They expressed the need for more exchange of information among projects addressing similar goals.

Question 5. What are the trade-offs involved in meeting federal/state priorities vs. meeting equity/funding allocation mandates vs. sponsorship of high quality programs or program improvements?

There did not appear to be a conflict between federal/state priorities and program quality per se. The federal priorities were sufficiently broad so as not to be a significant constraining factor. PDE did focus on a reduced list of priorities, and in one year allocated 65 percent of the

secondary program funding to job placement. The PDE focus may have eliminated some high quality potential projects from funding, but Tables 9 and 10 do not show a narrowing of project relevance to either state goals or project components as an effect of the narrowing. This suggests that good projects adjust to fit priorities without giving up some breadth of objectives and procedures.

There was a reported conflict between funding allocation procedures and quality programs. The Base Ranking System was seen as a great constraint permitting funding to only the highest ranked districts, regardless of program quality. The trade-off is that highest need districts are served at the expense of spread of support and high quality programs that could be conducted by lower need districts. This is a significant issue in the vocational guidance program - one that should be addressed by PDE.

## Program Outcomes

A major objective of the evaluation study was to gather information on the impacts of the vocational guidance program. Impact, or outcomes, could be on the state guidance system as a whole or on the participants in individual projects. Meeting the guidance needs described above could also be part of the program outcomes. Finally, capacity-building was seen as a possible outcome; that is, the funded projects could begin to stand on their own, without state support, or they could spread to other schools. Each of these potential impacts was included in the study design and the results are presented in this section.

### Question 1: What changes in the Pennsylvania vocational guidance system occurred as a result of PDE funded projects?

At a general level two changes are evident. First, new projects and new ideas are stimulated each year by the program. One-third to one-half of the projects are new each year, and this opportunity for districts gives incentive for development of the guidance system. The program thus has an encouraging and rejuvenating effect. Second, there has been a shift of support to urban, disadvantaged populations. This shift provides additional programs and services for this high need population.

In addition to these general changes, a number of specific noteworthy developments have resulted from the vocational guidance program.

- Corrections and post secondary funding has supported the development of systematic counseling services in these environments where there was none before.
- Projects have coordinated services from elementary, to middle, to high school levels in comprehensive guidance programs.

- Career resources centers have been expanded to include computerized data bases for tracking jobs and labor market trends.
- Materials to reduce occupational sex stereotyping have been infused into guidance programs.
- Business and industry personnel have been used as a resource in career guidance.
- The assessment of career-related abilities and attitudes and the use of results in career decision-making has been improved.
- Programs have been developed to increase skills in career planning and job seeking and getting.
- Post secondary funding has enabled outreach to adult populations in need of career guidance.
- Counselors have been give exposure to business and industry and vocational training options.

Question 2. What evidence of project impact exists for each project and specific types of projects?

Each of the projects selected for interview conducted some form of evaluation. Some of the evaluations yielded information on impact, while others did not - Table 13 summarizes the project evaluations. Projects are categorized into six types: job placement, career awareness, resource centers, assessment, adult counseling, and inservice. It should be emphasized that the categories denote the main project emphasis, but there is much overlap among categories. For example, most placement projects also have career awareness or assessment activities as a means. Likewise, adult counseling and resource centers, have placement as a goal.

Of the 27 projects for which interviews were completed, most (56 percent) were in the \$25,000 funding range. About one-third were in the \$10,000 range, and two were large, exceeding \$100,000 in support.



Table 13

## Project Evaluation Summary

Type	Funding Level (in thousands)			Evaluation Procedures					Results
	10	25	100	Review	Survey	Tests	Follow up	Other	
JOB PLACEMENT			✓	✓		✓			
1.				✓					- improved career planning - follow-up under way
2.	✓			✓			✓		- 93% rated program successful - 58% found jobs, most with help of program
3.		✓		✓					- 31% go on to post secondary training
4.		✓		✓				✓	- informal follow-up and PDE site visit suggest success
5.		✓		✓	✓				- high student ratings
6.		✓		✓				✓	- positive feedback from students
7.	✓			✓				✓	- increases in further education and training
8.	✓			✓			✓		- 50% completed college in 4 years - 8% went to graduate school - 80% got jobs

Type	Funding Level (in thousands)			Evaluation Procedures					Results
	10	25	100	Review	Survey	Tests	Follow up	Other	
9.		✓		✓				✓	- informal follow-up
10.	✓			✓				✓	- reduced discipline problems - informal follow-up
11.	✓			✓				✓	- staff estimate 25% placement after release
CAREER AWARENESS 12.		✓		✓			✓		- 50% go on to post secondary training - 35% get jobs
13.	✓			✓				✓	- advisory committee positive evaluation - EQA increases
14.	✓			✓				✓	- positive feedback from students
15.		✓		✓					- increased use of guidance services

Type	Funding Level (in thousands)			Evaluation Procedures					Results
	10	25	100	Review	Survey	Tests	Follow up	Other	
RESOURCE CENTERS									
16.	✓			✓					- met objectives of project
17.		✓		✓				✓	- materials evaluation supported quality
18.		✓		✓				✓	- use log shows high utility
19.		✓		✓				✓	- records show high use - positive feedback from counselors
20.		✓		✓				✓	- informal follow-up shows success
ASSESSMENT									
21.			✓	✓		✓			- improved awareness of occupations, self, and sex role stereotype
22.		✓		✓				✓	- case studies show development - attendance and grades improve

Type	Funding Level (in thousands)			Evaluation Procedures					Results
	10	25	100	Review	Survey	Tests	Follow up	Other	
ADULT COUNSELING									
23.		✓		✓				✓	- college has more involvement in community
24.		✓		✓					- survey attempted but insufficient returns
25.		✓		✓				✓	- partial follow-up suggests success
INSERVICE									
26.	✓			✓	✓				- favorable opinions
27.	✓			✓					- new programs and interests developed
TOTALS	10	15	2	27	2	2	3	15	

All projects conducted a self-evaluation which involved a review of their progress in relation to the goals stated in their project proposals. These reviews ranged from brief evaluative assertions on the part of the project director to more extensive analyses supported by descriptive statistics and testimonials. This kind of review may demonstrate that the project was conducted as intended and that services were rendered, but it does not answer impact questions.

Three kinds of impact evaluation were found: surveys, tests, and follow-up interviews. The survey approach involves collecting the opinions of project participants using a measurement instrument. Tests refer to applications of tests which measure intended outcomes before and after participation in the project. Follow-up techniques include any systematic means of locating graduates of the program to find out what's happened to them and how their status might have been affected by the project. These are all acceptable techniques for evaluating impact, but they were used only seven times. The most striking finding about impact is that only about 25 percent of the projects took a scientific approach to measuring it. In these projects participant impacts were found in career planning, job placement, opinions about the projects, post-secondary training, and awareness of occupations, self, and sex role stereotyping.

Other evaluation procedures often included informal interviewing of participants or feedback from faculty, but the results were not documented and were accessible only by recollection. Also, projects frequently maintained detailed records on individual participants, which had not been summarized or analyzed for evaluative purposes.

While not much attention was given to the scientific determination of impact, project directors had definite opinions about the outcomes of their programs. Interviews yielded the following suggested program outcomes in the six categories used above:

#### Job Placement

- knowledge of job hunting skills
- resume, application, interview skills
- knowledge of job possibilities and job market trends

#### Career Awareness

- exposure to variety of careers, including non-traditional
- development of career preferences and interests
- awareness of post-secondary training opportunities

#### Resource Centers

- expanded to include job search facilitators
- increased information on career options and potential jobs
- extended hours of use

#### Assessment

- improved selection of courses in relation to career interests
- knowledge of self and self image
- articulation of curriculum across levels

#### Adult Counseling

- extended counseling to unserved populations
- improved school-community relations
- incentive for further education

#### Inservice

- knowledge of private sector
- awareness of vocational training opportunities
- improved school-community relations

Question 3. Have the priority vocational guidance needs of Pennsylvania LEAs been met?

When the interview samples were asked this question directly, almost half responded that the needs were met for those students who participated in the project. However, other students still have unmet needs which could be addressed by vocational guidance projects. This response is categorized as "Yes, but continuing" in Table 14. Of those interviewed, 37 percent indicated that the project dealt with specific needs which have been met. These could include expanding a resource center or developing assessment procedures. A few respondents weren't certain about the status of needs or didn't think they had been met at all.

The following continuing or additional needs were mentioned in the interviews:

- follow-up procedures to track placement and success rate
- more resources to meet continuing needs for expanded populations - career awareness, placement
- more attention to rural areas - displaced workers, high school students
- more attention to junior high and elementary levels
- better career education materials.

Question 4. Have funded projects developed the capacity to continue to meet the priority vocational guidance needs of Pennsylvania schools?

This question was addressed by asking LEAs whether their project had ripple effects on other LEAs and whether their project had been or could be continued with less or no PDE support. Table 15 summarizes the results. Almost three-quarters of the respondents indicated that their project had

Table 14

## LEA Vocational Guidance Needs

Needs Met?	LEAs	
	#	%
Yes	10	37.0
Yes, but continuing	13	48.2
Not sure	3	11.1
No	1	3.7
Total	27	100.0



Table 15  
LEA Capacity Development

Type of Capacity	LEAs	
	#	%
Ripple effect to other LEAs		
No	5	18.5
Not sure	3	11.1
Yes	19	70.4
Total	27	100.0
Project institutionalized by LEA		
No	9	33.3
Not sure	3	11.1
Yes	15	55.6
Total	27	100.0

some effect or impact on other LEAs. The evidence cited included the following.

- Other LEAs developed similar projects and applied for funding.
- Community groups and business leaders expressed interest.
- Other LEAs used materials and ideas developed by project.

A lesser number of LEAs, but still over half, indicated capacity development in terms of institutionalization, or the LEA picking up support of the project. In these cases some changes in the project were usually necessary to cope with the funding shift. These changes included the following.

- Project was able to continue with materials previously acquired.
- Services were diminished.
- Project continued but materials could not be updated.
- Project continued with reduced staff.
- Project responsibilities redistributed existing LEA staff members.

## Future Directions/Policy Recommendations

This final section on results presents the recommendations of state and local staff interviewed regarding the future of the vocational guidance program. In the next chapter these recommendations are considered with all of the other evaluation results to formulate conclusions and recommendations for PDE from the evaluator's perspective.

Question 1. What issues or activities require further attention?

--AND--

Question 2. What recommendations for future PDE policies/practices can be made?

These questions were intended to provide direct and formal feedback to PDE from the LEA project personnel interviewed during the course of the evaluation. They were the two final questions on the LEA interview and are combined because they yielded similar and related results. Table 16 summarizes the findings. Generally speaking PDE and the project monitors were praised for the conduct of the guidance program, but there were several notable suggestions for improvement. The most evident was a perceived need for more sharing of information about vocational guidance. This includes discussion of successful practices in Pennsylvania as well as materials, research, and ideas developed elsewhere. Another recommendation apparently referred to some past difficulties in getting project funds in time to operate a full-year program. A third recommendation requests a better fit of state priorities to local needs. Others referred to continuity among applicants, long-range projects, materials upgrading projects, demonstration projects, and sex equity projects.

Table 16

LEA Recommendations

Recommendation	# of LEAs
● PDE should promote sharing of guidance information through inservice	7
● PDE should supply funding on time	4
● PDE should align state and local priorities	3
● PDE should promote continuity among applying LEAs	2
● PDE should develop role models for projects with long range goals	2
● PDE should provide support to upgrade materials of previously-funded projects	2
● PDE should support the most successful projects as demonstration projects	2
● PDE should emp! size projects that encourage sex equity	2

Question 3. What criteria should PDE employ in funding future vocational guidance programs to meet state needs?

Again, the primary sentiment among LEA interviewees was satisfaction with the current PDE funding guidelines and criteria. There were a few specific suggestions including the need for long range projects, better apportionment of funds, financial assistance for preparing proposals, and evaluation of proposals for capacity-building potential.

PDE officials, on the other hand, were generally dissatisfied with the funding outcomes. As discussed in relation to other questions above, there is a dissatisfaction with the results of the Base Ranking System in terms of its reducing the number of districts that can be funded and its reducing the practical value of quality review of proposals. PDE would like to see some improvement in this situation. Recommendations in other areas included the need for an emphasis on displaced homemakers, use of funds for leverage in institutional improvement, expanding career areas dealt with, using categorical funding in areas of particular interest, and more world of work experience for counseling staff.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

It is the purpose of this chapter to sort through all of the information presented in the previous chapters and draw the major summary conclusions of the evaluation study. The conclusions are organized and discussed within the study's five areas of focus in order to provide concise and direct answers to the questions of policy makers regarding the vocational guidance program. At the end of the conclusions for each area the evaluator's recommendations for action in that area are presented.

##### federal Priorities

The federal priorities were seen as fairly broad and well-matched to Pennsylvania's priorities. However, the federal regulations for allocating funds do not meet some of Pennsylvania's needs. In allocating vocational funds among the states the following factors are ignored: differences in program operational costs from state to state, differences in program quality, special needs related to declining populations, and the dilemma of both high urban poverty and high average income in the same state.

##### Recommendation 1. Seek recognition of Pennsylvania's needs in the federal funding allocation regulations.

Pennsylvania representatives should work with the U.S. Department of Education and Congress to gain recognition of Pennsylvania's needs in vocational education, including the guidance program. Many of Pennsylvania's interests are shared by other northeastern states who have declining populations, high unemployment, high operational costs, and high

quality programs. These factors should be recognized in the procedures for allocating funding to the states.

### PDE Approach

The PDE approach to supporting guidance projects seems to be well-related to vocational guidance needs in the state. The program also seems to be administered in a fair and conscientious fashion. One problem does loom large in the PDE procedures - the effects of the Base Ranking System.

This system ranks all of the state's LEAs using a complex formula which is affected mostly by property value and poverty indicators. In so doing, the system enacts the federal priority of aid to economically depressed areas, but it also raises some questions about the equitable distribution of funds and the quality of projects.

One effect of the system has been a large increase in the average project size and decrease in the number of projects which can be funded. In the 1981-82 year, the largest Pennsylvania LEA had projects amounting to almost half of the total funding, and only 23 other LEAs could be funded for projects. This situation means that not only were low-ranked districts unable to compete for funds, but also only one-quarter of the highest need LEAs could get projects. As fewer districts can expect to attract funding, fewer proposals will be submitted and proposal and project quality may suffer. It can be argued that this is, indeed, equitable as the money is going to those who need it most. On the other hand, it can be asserted that this situation is not equitable because most of Pennsylvania's LEAs

are de facto excluded from participating in the program. PDE policy makers must decide, and they do have some latitude for action.

Recommendation 2. Explore the desirability of simplifying the Base Ranking System and including other factors in it.

federal regulations suggest a formula approach to establishing LEA priority which uses relative financial ability and low income/higher cost populations as the two most important factors. But these don't have to be the only factors. Also, the means of operationalizing the factors is not prescribed, but must be approved. PDE should explore their degrees of freedom with the U.S. Department of Education and, at least, simplify the formula so that it is understandable and the effects of changes can be estimated. PDE should also consider additional terms for the formula, such as proposal quality and relation to state priorities. In addition, it might be advisable to require that some set number of LEAs be funded each year. The Base Ranking System raises many important and difficult issues. Any changes should be considered very carefully with full simulation testing of effects.

PDE Funded Activities/Programs

In the three years studied, over 250 projects were funded in the secondary, post-secondary, and corrections areas. Secondary level guidance projects accounted for the lion's share.

However, the secondary project share decreased from 79 percent to 65 percent from 1979-80 to 1981-82. This decrease magnified the effect of the Base Ranking System in reducing the number of projects which could be



funded to a small number - 24. The post secondary and corrections programs increased in size over this time period. The projects were reasonably well-distributed in terms of state regions and new vs. continuation projects. Slightly over half of the projects addressed the state goal of understanding education and career options/placement. The most popular project components were vocational information, career awareness, placement, employability skills, and assessment/career decision making skills. These projects involved over a quarter million participants from elementary school through adult populations.

A large amount of money - over \$4,000,000 - was spent and an impressive array of projects was developed and conducted. They affected in some way about every element in the school population spectrum and reflected the state emphasis on career awareness and placement, in contrast to "traditional" guidance programming. No recommendations are offered in this area.

Recommendation 3. Review funding allocations among program areas to ensure that they reflect state priorities.

PDE should analyze the potential of each program area to contribute to meeting state needs and priorities and assign funding allocations based on the results. There are other, constituency-related factors that go into the decision-making process, but as resources decline, the priority-project fit becomes even more important.

### Program Outcomes

The vocational guidance program has had substantial affects on Pennsylvania's vocational guidance system. In addition to the innovative project opportunities offered to hundreds of LEAs, several trends have been facilitated by the guidance project support. First, guidance support has been increased to previously underserved populations, including the disadvantaged, post secondary students, adults, and persons in correctional institutions. Second, guidance programs have been developed and expanded, including career resource centers, efforts to reduce sex stereotyping, and relating job and school environments.

While finding impact in terms of program was fairly easy, uncovering evidence of impact on individual participants was not. It may be argued that well-conducted projects will produce the impact they proposed. The guidance projects generally seemed to be well conducted, but they usually did not include an objective evaluation to support their rational, but subjective, claims regarding impact. A small number (25 percent) of projects in the interview sample who did use empirical evaluation procedures found favorable impacts: high student ratings of the project; job and educational placement with help from the project; improved career planning; and increased awareness of occupations, self and sex role stereotypes.

The projects met many specific needs of LEAs, but often the needs were continuing ones, based on servicing the continuing needs of students. In most cases, projects indicated local capacity development as a result of their guidance project in the form of dissemination to other LEAs or institutionalization of the project in their own district.

Recommendation 4: Improve the descriptive and evaluative information available on guidance projects.

The information available to PDE for policy making and management purposes is both vast and resistant to analysis. The number of projects is large, and several files are kept on each one. Analyzing file data requires searching the files and selecting the projects, reading through the selected files to find the information needed, transferring or coding the information, then, finally, analyzing it. This process is not practical in most cases. In order to solve this problem for the evaluation study, a microcomputer data base was created and all quantifiable information reliably available on projects was coded and entered into it. This approach worked well and it is recommended that PDE institute a computerized guidance project information base. PDE should determine what data would be most useful and design a system to handle it. An optical scanning input form could be prepared for completion by LEA applicants as part of the proposal process.

Project evaluation information was in an even more primitive state than the descriptive data. Few projects conducted a structured evaluation. This situation hinders the state in meeting its evaluation responsibilities to the federal government and in employing data-based planning procedures. LEA staff, too, would be benefitted by evaluation information on their own and others' projects. It is recommended that improvements be promoted by more specific project evaluation requirements and suggestions in the application process. Applicants must include something on evaluation; their plan should be structured by some standards. Projects often collect

data on individuals without aggregating it. Suggested aggregation procedures could greatly enhance the evaluative data without extensive extra effort. Recommended procedures for acceptable evaluation review, survey, test, and follow-up procedures might also help.

#### Future Directions/Policy Recommendations

On the whole, PDE and LEA staff were satisfied with the vocational guidance program. Most respondents wished that more funds were available to support projects, but thought that the program was valuable and effective. The biggest problem seemed to be dissatisfaction with the Base Ranking System. In addition, LEA staff saw a need for more information sharing about guidance developments and had suggestions for enhancing the collective value of the projects.

#### Recommendation 5: Explore means to extend the programmatic development value of the individual guidance projects.

As best as can be determined, the vocational guidance program functions well to support a group of projects which seem to be well-conducted and have positive impact on participants. But is the potential of this group of projects to enhance Pennsylvania's vocational guidance program as a system fulfilled? Improvements may be possible through system-level assessments and consequent establishment of project priorities, documentation of successes, and dissemination of guidance information. This level of development should be explored so that full value of the guidance funding can be applied to Pennsylvania's schools.

## V. DISSEMINATION

The primary mechanism for dissemination of this final report will be the Vocational Education Information Network (VEIN). It is expected that PDE will also submit the report for inclusion in the ERIC system. In addition, an executive summary of the final report has been prepared for wide distribution. This summary will be mailed to institutions, associations, and groups, such as the following:

- Universities (e.g., Temple, Penn State, Pitt, all schools in state university/college system)
- Pennsylvania State Department of Education (various bureaus and units)
- Intermediate Units
- Urban School Districts
- National Center for Research in Vocational Education (Ohio State University)
- Center for Vocational Personnel Preparation (Indiana University of Pennsylvania)
- Pennsylvania State Advisory Committee for Vocational Education
- Vocational Administrators of Pennsylvania
- Pennsylvania Association of Vocational Education Special Needs Personnel
- Pennsylvania Association of Vocational Teacher Educators
- American Vocational Association
- American Personnel and Guidance Association
- Pennsylvania Vocational Guidance Association
- Pennsylvania Vocational Association
- Pennsylvania State Education Association
- RISE.

RBS staff will cooperate with newsletters or publications of these groups and will prepare press releases, upon request. In addition, at least one presentation of study results will be made at the annual meeting of a professional association, such as the Pennsylvania Vocational Education Association and the American Educational Research Association. Finally, study findings and recommendations will be disseminated through existing RBS dissemination channels, such as the Research and Development Exchange.

The major purpose of this widespread dissemination effort is to create an awareness of the current status of vocational guidance in Pennsylvania. This increased awareness will help to mobilize groups for acting on policy recommendations and future PDE policies. PDE, however, will be the primary beneficiary of the evaluation study, since results will provide a comprehensive data base for making important policy decisions.

## REFERENCES

- Alaska State Department of Education. Promising practices: Criteria for excellence in guidance and counseling. Juneau, Alaska, 1981.
- Benson, C. S. and Hoachlander, E. G. Descriptive study of the distribution of federal, state, and local funds for vocational education: The project on national vocational education resources final report. Berkeley, CA: University of California, 1981.
- Beuke, V., et al. Implementation of the Educational Amendments of 1976: A study of state and local compliance and evaluation practices. Cambridge, MA: Abt Associates, 1980.
- Campbell, R. E. Enhancing career development: Recommendation for action: A review of empirical studies of the effects of career guidance. Columbus, OH: National Center for Research in Vocational Education, 1983.
- Cheney-Stern, M. R. and Phelps, L. A. Development of procedures for assessing the impact of vocational education research and development on vocational education. Urbana, IL: University of Illinois, 1980.
- Cormany, . Guidance and counseling in Pennsylvania: Status and needs. Harrisburg, PA: Pennsylvania Department of Education, 1975.
- Datta, L. "Better luck this time: From federal legislation to practice in evaluating vocational education." In T. Abramson, C. Kehr-Tittle, and L. Cohen (Ed.) Handbook of Vocational Education Evaluation, Beverly Hills, CA: Sage Publications, 1979.
- Educational Testing Service. Survey of career information systems in secondary schools. Princeton, NJ: Author, 1980.
- Education Commission of the States. Evaluation of vocational education: Roles, responsibilities, and responses of state and federal agencies. Denver, CO: Author, 1979.
- Evans, R. N. Assessing the impact of vocational education research and development. Urbana, IL: University of Illinois, 1982.
- Foster, P. V. Handbook in vocational education evaluation. Columbus, OH: National Center for Research in Vocational Education, 1979.
- Gade, E. How to evaluate a school guidance program. Grand Forks, ND: University of North Dakota, 1981.
- Ghazalah, I. A. System for evaluation of investment in vocational education in Ohio. Columbus, OH: Ohio State Department of Education, 1978.

- Gushee, T. The impact of vocational guidance funding on eight states during FY 1979. Falls Church, VA: American Personnel and Guidance Association, 1980.
- Haney, W. Federal requirements for the evaluation of vocational education programs. Cambridge, MA: Huron Institute, 1981.
- Harris-Bowlesby, J. Career guidance needs of the nation's youth and adults. Washington, D. C.: National Institute of Education, 1975.
- Hearings on reauthorization of the Vocational Education Act of 1963. Part 7: Vocational Guidance and Counseling and H. R. 4974, Vocational Guidance Act of 1981. Washington, D. C.: Congress of the United States, November 19, 1981.
- Herr, E. L. "The effects of guidance and counseling: Three types of perspectives." In E. L. Herr and N. Pinson (Ed.) Foundations for Policy in Guidance and Counseling. Washington, D. C.: National Institute of Education, 1980.
- Long, D. C., et al. An analysis of the fiscal and equity provisions of the VEA. Volume I: Introduction and summary of major findings and conclusions. Washington, D. C.: Lawyers Committee for Civil Rights Under Law, 1981.
- Missouri State Advisory Council on Vocational Education. The distribution of federal funds for vocational education in Missouri and an analysis of how it is accomplished. Jefferson City, MO: Missouri Division of Career and Adult Education, 1982.
- Morris, C. A. and Finley, M. J. Evaluation of guidance and counseling program: Effectiveness of counselor activities. Phoenix, AZ: Phoenix Union High School District, 1982.
- National Institute of Education. The Vocational Education Study: The Final Report. Washington, D. C.: Author, 1981.
- New York State Department of Education. Vocational guidance for occupational choice: A study of effective program practices. Albany, NY: Author, 1982.
- Orr, D. B. Data available for studying vocational education. Washington, D. C.: National Center for Education Statistics, 1982.
- Phelps, L. A. Developing a programmatic emphasis in vocational special needs education. Urbana, IL: University of Illinois, 1982.
- Pinson, N. The National Vocational Guidance Survey. Falls Church, VA: National Vocational Guidance Association, 1981.



- Pinson, N., Gysbers, N. and Drier, H. Strengthening work-related education and training in the 1980s through improved guidance programs. Falls Church, VA: National Vocational Guidance Association, 1981.
- Prediger, D., Roth, J., and Noeth, R. Nationwide study of student career development. Iowa City, IA: American College Testing Program, 1973.
- Smith, E. and Holt, N. State of the art of vocational education evaluation: State evaluation procedures and practices. Belmont, MA: CRC Education and Human Development, 1979.
- Stump, R. W. Vocational guidance: Policy options within the context of the Vocational Education Act and other federal legislation. Washington, D. C.: National Institute of Education, 1981.
- United States Department of Education. Vocational education: Report by the Secretary of Education to the Congress 1982. Washington, D. C.: Author, 1983.
- Wentling, T. L. A survey of state evaluation practices in vocational education. Champaign, IL: University of Illinois, 1981.

APPENDIX

- A. PDE Interview Guide
- B. PDE Guidance Project File Data Base
- C. LEA Interview Sample
- D. LEA Interview Guide
- E. Vocational Education Goals and Sub Goals

A. PDE INTERVIEW GUIDE

## PDE Interview Guide

Person Interviewed: \_\_\_\_\_ Interviewer: \_\_\_\_\_

Position Title: \_\_\_\_\_ Date: \_\_\_\_\_

1. What has been your role and responsibilities with respect to the Vocational Education Program for Guidance? During what period of time have you had this role and these responsibilities?
2. What is the background and intent of federal priorities for the Vocational Education Program for Guidance? In short, what does the federal government intend for these programs to do? (I-1)
3. What is the relationship between explicit federal priorities and demonstrated state needs? That is, how well do the state needs evidenced in Pennsylvania correspond to the stated federal priorities? (I-2)

4. What are the implications of mandated federal funding allocation regulations for Pennsylvania? That is, how well do the formulas for funding work, and does the distribution strategy significantly impact on vocational guidance in Pennsylvania schools? (I-3)
5. What is the current PDE approach for addressing vocational guidance needs (e.g., stated goals, objectives, and guidelines) and how has it evolved? (II-2)
6. How were annual priorities determined and validated? Has the strategy of addressing one primary priority each year resulted in its accomplishment? (II-3)
7. How does the PDE approach compare with desirable/alternative policies identified in the literature (e.g., national studies, practices of other states, legislative intent, quality criteria, etc.)? (II-4)

8. What is the PDE method for equitably distributing vocational guidance funds (e.g., guidelines and approaches, communication with LEAs, formula, factors, weights, scaling, selection decisions, criteria, etc.)? Have the funding strategies provided equitable distribution of available guidance funds? (II-5)
  
  
  
  
  
  
  
  
  
  
9. What are the implications of alternative funding strategies, in terms of equity, program quality, federal mandates, LEA needs, and implementation? (II-6)
  
  
  
  
  
  
  
  
  
  
10. What are the characteristics of projects that were not funded and what are the resulting implications? (III-3)
  
  
  
  
  
  
  
  
  
  
11. What are the tradeoffs involved in meeting federal/state priorities vs. meeting equity/funding allocation mandates vs. sponsorship of high quality programs or program improvements? That is, can you do all this and still fund high quality programs? Has the application/ratings/base ranking procedures been counterproductive in terms of the quality of the proposals being funded? (III-5)

12. What changes in the Pennsylvania vocational guidance system occurred as a result of PDE funded projects (e.g., new initiatives, improvements, or maintenance of status quo)? (IV-1)
13. Have the priority vocational guidance needs (short-term and long-term) of Pennsylvania LEAs been met (i.e., for each priority area is need diminished, eliminated, or recurring)? That is, is any progress being made as a result of state funding? Does the expenditure of funds merely perpetuate the college-bound orientation of most guidance efforts? (IV-3)
14. Have funded projects developed a capacity to continue to meet the priority vocational guidance needs of Pennsylvania schools? Have they developed the capability to continue despite diminished state reserves? That is, is there any evidence that funded projects have been internalized or institutionalized at the LEAs which have operated such programs? Has vocational guidance in Pennsylvania changed as result of addressing federal priorities annually? (IV-4)

15. Have successful efforts in funded projects had a ripple effect on non-funded schools? That is, how much dissemination and diffusion of success is there?
16. Have vocational guidance services permeated student populations beyond the secondary level?
17. What issues or activities require further attention by the guidance program? (V-1)
18. What recommendations for future PDE policy/practices can be made in terms of: funding, leadership, delivery of effective vocational guidance services, evaluation/quality assurance, liaison with LEAs? (V-2)



19. What criteria should PDE employ in funding future vocational guidance programs to meet state needs? (V-3)

B. . PDE GUIDANCE PROJECT FILE DATA BASE

PDE Guidance Project File Data Base

6 Contract Number - - - - -

1 Region - (E,C,W,)

1 New Project - (Y or N)

4 Base Rank - - - - (Guidance Only)

20 LEA - - - - -  
- - - - -

10 Contact Person - - - - -

10 Telephone - - - - -

35 Project Title - - - - -  
- - - - -

6 Amount Requested - - - - -

8 Activities/Services - -, - -, - -, ---\*

8 Objectives/Components - -, - -, - -, - -\*

2 Funding Area Subpart - Section - \*

10 Participants, Field - - M - - - - F - - - -  
10 - - - - -  
10 - - - - -  
10 - - - - -  
10 - - - - -

10 - - - - -  
10 - - - - -

7 Goals, Subgoals - , - - - - -  
7 - , - - - - -  
7 - , - - - - -  
7 - , - - - - -

6 Proposed Expenditures, Salary - L - - - - -  
6 S - - - - -  
6 F - - - - -  
6 Benefits - L - - - - -  
6 S - - - - -  
6 F - - - - -

6 Other - L - - - - -  
6 S - - - - -  
6 F - - - - -

6 Final Expenditures - - - - -

6 Previous Contract Numbers - - - - -  
- - - - -

275 (up to 700 projects)

\* - See Coding Scales



## CODING SCALE

### PDE Guidance Objectives/Components

01. Students in work settings
02. Student career awareness and exploration
03. Student vocational assessment and decision-making
04. Student employability skills, attitudes
05. Student placement and follow-up
06. Student vocational information services
07. Counselor experience in business settings
08. Counselor in-service
09. Counselor training regarding sex-stereotyping
10. Business people as paraprofessionals in schools
11. Guidance services to youth offenders
12. Guidance services to persons of limited English speaking ability
13. Vocational guidance leadership
14. Curriculum integration
15. Community relations, resources, awareness
16. Other

### PDE Guidance Activities/Services

01. Salaries and benefits
02. Equipment, audiovisual
03. Materials and supplies
04. Evaluation and dissemination
05. Contracted services for in-service
06. Transportation/travel
07. Clerical assistance
08. Other

PDE Guidance Participants Vocational Field

- 01 Agriculture - Horticulture
- 04 Distributive Education
- 07 Health Occupation
- 10 Industrial Arts
- 14 Office Occupations (Business Ed)
- 16 Technical Education
- 17 Trades and Industrial Occupations
- 18 Other
- 19 Coop Program
- 20 Vocational Preparation Training
- 21 Diversified Occupations Program
- 31 All Fields
- 50 EL - K-6
- 51 6-9 - M-JR HIGH
- 52 6-12
- 53 K-12
- 54 M-12
- 91 Occupational Home Economics
- 92 Home Economics (Consumer & Homemaking)

The Pennsylvania Department of Education, an equal opportunity employer, will not discriminate in employment, educational programs or activities, based on race, sex, handicap, or because a person is a disabled veteran or a veteran of the Vietnam Era. This policy of non-discrimination extends to all other legally protected classifications. Publication of this policy in this document is in accordance with state and federal laws including Title IX of the Education Amendments of 1972 and Sections 503 and 504 of the Rehabilitation Act of 1973.

Inquiries should be directed to Vercene McFarland, Affirmative Action Officer, 503/504 Coordinator and Title IX Coordinator, Pennsylvania Department of Education, 333 Market Street, Harrisburg, PA 17126.

PDE USE ONLY

To be completed after contract is approved.

APPROVED CONTRACT NUMBER:

COST CENTER:

COMMONWEALTH OF PENNSYLVANIA - DEPARTMENT OF EDUCATION  
**VOCATIONAL EDUCATION APPLICATION/PROGRAMS FOR WHICH FUNDS ARE PROVIDED ON BASIS OF PROJECTS**

DEBE-131 (11/79)

Check appropriate block for type of funds requested. Also check the description which best describes the location of type population being served.

SUBPART 2

- Disadvantaged
  - Limited English Speaking
  - Corrections Ed - Adult
  - Corrections Ed - YDC & YFC
  - Higher Education
- Post Secondary
  - Higher Education
  - Adult Short Term (less than 500 hrs.)
  - Adult Long Term
  - Displaced Homemaker (H.E.)
- Handicapped
  - Higher Education Only
  - Secondary
- Vocational Student Organization(s)
- Industrial Arts

SUBPART 3

- Guidance, Counseling & Placement
  - Secondary
  - Higher Education (P.S.)
  - Disadvantaged
  - Corrections Ed
  - Handicapped
- Research
- Exemplary
- Curriculum
- Staff Develop.
- Regular
- Disadvantaged
- Handicapped

SUBPART 4

- Special Programs for Disadvantaged
  - Secondary

SUBPART 5

- Consumer & Homemaking
  - Ancillary
  - Teacher Education
  - Comm College Institutional Program

FEDERAL FUNDS	
(Detailed Budget Attached)	
REQUESTED TOTAL	\$
(PDE USE ONLY)	
APPROVED TOTAL	\$

INSTRUCTIONS: Submit original and FOUR copies. See Guidelines for Application of Federal Funds for detailed instructions.

PROGRAM	PERIOD DURING WHICH OBLIGATIONS MAY BE INCURRED From _____ Through _____
EDUCATIONAL AGENCY	ADDRESS
COUNTY	TELEPHONE NUMBER
CONTRACT NUMBER (If this is a continuation of a previously approved contract)	

VOCATIONAL FIELDS AND PROGRAM PARTICIPANTS OR BENEFICIARIES

VOCATIONAL FIELD	PROGRAM PARTICIPANTS OR BENEFICIARIES									
	SECONDARY		POST SECONDARY Associate Degree Only		Less than 500 Short Term		ADULT + 500 hrs. Long Term		NON-PUBLIC ENROLLMENT	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
01 Agriculture										
04 Distributive Education										
07 Health Occupation										
09 Occupational Home Economics										
09 H.E. (Cons. & Homemaking)										
10 Industrial Arts										
14 Office (Business Education)										
16 Technical Education										
17 Trades & Industrial Occupations										
Other Vocational Instruc. or Services (Identify below)										

The assurance of compliance with Title VI of the Civil Rights Act of 1964 Dated \_\_\_\_\_ applies to this application.

The assurance of compliance with Title IX, Education Amendments of 1972 by our agency dated \_\_\_\_\_ applies to this application.

Agency is in compliance with Section 504 of the 1973 Rehabilitation Act which prohibits discrimination against the handicapped in programs that receive Federal monies.  Yes  No (Check One)

GOALS and SUBGOAL(S) this application is addressing in accordance with Pennsylvania State Plan for Vocational Education are:

GOAL(S) -- NO.(S) \_\_\_\_\_

SUB GOAL(S) -- NO.(S) \_\_\_\_\_

LOCAL APPROVALS

SIGNATURE, PERSON RESPONSIBLE FOR CONTRACT PROPOSAL \_\_\_\_\_ DATE \_\_\_\_\_

REVIEW

SIGNATURE, CONSULTANT FOR LEA \_\_\_\_\_ DATE \_\_\_\_\_ SIGNATURE, REGIONAL CHIEF \_\_\_\_\_ DATE \_\_\_\_\_

**INSTRUCTIONS:** Applicant to insert entries on the "Proposed Expenditures" lines under each appropriate heading (These figures are obtained from the attached detailed budgets)

To preclude duplicate reporting of local matching for instructional salaries, please indicate in the block below, the amount included in the proposed expenditures, local column, which is also being reported on the DEBE 752, Basic Data For District School Personnel:

\$	
.	

= (Must have entry which can be zero)

ITEMS	SHARE OF PROPOSED EXPENDITURE			TOTALS
	LOCAL	STATE	FEDERAL	
<b>Instructional Salaries</b>				
Proposed Expenditures				
Approved Amounts				
<b>Employer Share of Employee's Benefits</b>				
Proposed Expenditures				
Approved Amounts				
<b>Other (Include all items not identified above)</b>				
Proposed Expenditures				
Approved Amounts				
<b>TOTALS</b>				
TOTAL PROPOSED EXPENDITURES				
TOTAL APPROVED AMOUNTS				

**MANDATED MATCHING**

(Indicate percentage obtained from matching support table in Federal Vocational Educational Guidelines)

\_\_\_\_\_ and \_\_\_\_\_ = 100%

**ROUNDING FIGURES**

All amounts may be rounded to the nearest dollar for budgeting purposes.

C. LEA INTERVIEW SAMPLE



LEA Interview Sample

#	Title	Location	Funding	Type	Site Visit	Telephone	
1.	81-1150	Voc. Assessment Center	Philadelphia	101,741	Secondary	X	
2.	81-1153	World of Work Seminars	Philadelphia	6,600	Secondary	X	
3.	81-2001	Job Placement & Related Services	Philadelphia	258,765	Secondary	X	
4.	81-2014	Job Placement	Schuylkill Avts	25,000	Secondary	X	
5.	81-1154	Voc. Guidance & Counseling	Cameron Co.	6,369	Secondary		X
6.	81-1156	Vocational Career Guidance	Penn Cambria	14,036	Secondary		X
7.	81-1158	Guidance Toward Sex Equity	Pittsburgh	10,812	Secondary		X
8.	81-2002	Job Placement	Riverside	24,788	Secondary		X
9.	81-2004	Voc. Guidance --- Job Placement	Armstrong	38,551	Secondary		X
10.	81-2006	Job Placement	Charleroi Area	30,000	Secondary		X
11.	81-2008	Voc. Guidance, Counseling & Placement	Big Beaver Falls	15,450	Secondary		X
12.	81-2010	School to Work Job Placement	Penncrest	24,112	Secondary		X
13.	81-2012	Vocational Guidance/Counseling & Placement	Clearfield Area	25,005	Secondary		X
14.	81-1030	Vocational Guidance	Southmoreland	24,320	Secondary		X
15.	81-1035	Vocational Guidance	Erie	29,400	Secondary		X
16.	81-1044	Career Information Job Placement	Shenandoah Valley	7,075	Secondary		X



17.	81-0154	Expansion of Career Resource Center	Mt. Union Area	26,752	Secondary		X
18.	82-2003	Hispanic Career Counseling Project	Harrisburg ACC	29,788	Post Secondary	X	
19.	82-1802	Continuation Job Hunting Skills Clinic	Bucks CCC	11,650	Post Secondary	X	
20.	82-2015	Employment Resource Center	Allegheny CCC	33,059	Post Secondary		X
21.	82-2004	Project Return	Philadelphia CCC	25,751	Post Secondary		X
22.	82-1803	Adult Resource Center	Northampton CCC	25,717	Post Secondary		X
23.	82-2009	Career Resource/Job Placement	Berean Institute	20,000	Post Secondary		X
24.	82-2006	Vocational/Education Services	IUP	20,000	Post Secondary		X
25.	82-1007	Vocational Guidance & Counseling for Disadvantaged	Luzerne CCC	25,777	Post Secondary		X
26.	81-1012	Education & Training in Vocational Guidance & Counseling for Adults	PSU	24,203	Post Secondary		X
27.	82-1002	Career Counseling & Placement	Waynesburg College	13,500	Post Secondary		X
28.	81-2805	Vocational Assessment & Counseling	Greensburg SCI	53,000	Corrections		X
29.		Vocational Guidance	Dallas SCI	12,000	Corrections	X	
30.	81-1807	Cornwells Heights YDC	IU #22	21,912 <sup>d</sup>	Corrections	X	
31.	81-2802	Vocational Guidance Evaluation/ Training System	IU #1	11,000	Corrections		X

D. LEA INTERVIEW GUIDE

PDE SITE VISIT INTERVIEW GUIDE  
VOCATIONAL GUIDANCE & HANDICAPPED PROJECTS

A. Introduction (suggested time = 10 minutes)

- The general purposes for this group of questions are to provide a non-threatening lead-in to the interview, to describe the overall context for the project, and to verify information on the project abstract. It should establish what the project intended to do.
- Interviewer should preface the questions with a brief overview of the purposes of the study, RBS' role, and basic content of today's interview. Ask if there are any questions. Provide a copy of the RBS Annual Report.
- Question 1: indicate that we have briefly reviewed sections of the project's proposal and have compiled an abstract to describe it; have the respondent verify abstract data; however, don't get bogged down in details; in some instances it may be better to get the respondent talking about the overall goals, objectives, etc. (Q.2) before mentioning data in the abstract. .
- Question 2: self explanatory; make sure that the answer is not too long; may want to tie in with Q1.
- Question 3: self explanatory, note years before and after those being studied (79-80, 80-81, 81-82); if no longer operating ask why; given time limits, focus only on major changes (e.g., at policy level); reinforce the idea that the interview is focusing on one specific years of operation.
- Question 4: What is the major problem that the project has addressed?
- Question 5: The VEA specifies that PDE should help educational agencies to address vocational guidance/handicapped needs throughout the state; how is this project part of the "big picture"? What does the project "do" for the statewide system? Don't get into impact at this point.

B. Project Characteristics (Suggested time = 15 minutes)

- The general purpose for this group of questions is to accurately describe what the project did to accomplish its objectives.
- Note changes over various project years.
- Ask if there are any descriptive documents that we could take back to RBS and/or review during the interview.

- Question 1: who did the project serve (numbers and descriptive categories)?
- Question 2: briefly describe what was done; although this is the bulk of this section; can't spend too much time; examples of issues by project type are:
  - a. guidance - components or features could include services provided, placement activities, counseling, establishment of resource center, etc.; describe typical student contact; determine if project involved "substitution" for prior services/activities (i.e., maintain guidance counselor).
  - b. handicapped - services, type of instruction, curriculum, focus on pre-employment or skill development, mainstream vs. sheltered, etc.; describe typical day/week for a student.
- Question 3: number involved, roles, certification, (i.e., special ed, voc. ed, guidance, other), total FTE; note changes year to year; overview rather than specifics.
- Question 4: what did they have to draw upon, e.g., facilities, equipment, technical support, etc.; supplementary resources (not included in PDE grant), including additional funds.
- Question 5: note that PDE and VEA have implied that projects should undergo self-evaluation; have they done any evaluation? if so, describe; obtain available reports; PDE requires annual accountability reports and long-range planning efforts (LRPSI) for certain projects; do they have anything? don't get into description of impact yet.
- Question 6: how is what they've done exemplary in terms of what's regarded as "best practice" in vocational guidance/handicapped? e.g., for handicapped, must have adequate IEPs, should be individualized, responsive to local job market, should have coordination between special ed department and vocational ed department; may need to ask for evidence to back-up statements (e.g., IEPs, job market data, etc.); this is an important question for handicapped.

C. Process Evaluation (suggested time = 10 minutes)

- The general purpose of this group of questions is to have the respondent provide subjective judgments about the success/failure of project activities/implementation.
- Question 1: note if responses to this section are based on post hoc impressions or systematic formative evaluations, i.e., what is the basis for their responses?

- Question 2: what barriers, if any, prevented them from doing what they wanted to do? Are there any implications for other projects based on their experience? Don't get bogged down in documenting minute changes.
- Question 3: reverse of Q. 2; what implementation factors have implications for other projects as facilitators of success?
- Question 4: self explanatory; if no, document additional needs, how this potentially affected outcomes.
- Question 5: as appropriate; did organizational/agency factors affect implementation.

D. Impact Evaluation (suggested time = 15-20 minutes)

- The general purpose of this group of questions is to document the nature and extent of program impact.
- This is probably the most important set of questions in the interview.
- Different impact areas are appropriate for different projects.
- Question 1: how did they gather what evidence of project impact? Is the evidence hard or soft? Obtain copies or review documented evidence.
- Question 2: what are their claims of impact? Document the source of each claim; specifically, note impacts such as placement rates, completion rates, achievement, mainstreaming (handicapped), skill development, affective, etc.; get subjective impressions of where the project succeeded and where it failed.
- Question 3: was there a relationship between certain activities and specific impacts? What activities seem to contribute most to particular kinds of impacts?
- Question 4: self-explanatory; important question given PDE "strategy"; if needs not totally met, what are remaining needs?
- Question 5: "ripple effect" refers to spillover to other schools, staff, students, etc.; e.g., has the project had any effects on processes or outcomes beyond what was specifically targeted in the proposal? Is it being institutionalized?
- Question 6: important question, but touchy issue; assume that diminished level of PDE resources for vocational education, in general, is a given; what would be effects of diminished/no PDE resources upon the project? Aside from support of program operations has the project added to agency "capacity" to deliver

programs or services? If so, how (e.g., improved staff capability, program development, improved facilities, equipment, etc.).

E. Recommendations (suggested time = 5-10 minutes)

- The purpose of these questions is to give respondents an opportunity to make suggestions regarding future PDE vocational education strategies.
- Question 1: the first part of this question looks at recommendations for PDE roles, responsibilities, and/or policies (e.g., regarding funding, leadership, service delivery, quality assurance, etc.); the second part focuses specifically on the PDE application guidelines (and process); are they adequate and how could they be improved?
- Question 2: open-ended question for any other concerns.

PDE GUIDANCE & HANDICAPPED SITE VISIT INTERVIEW

Name \_\_\_\_\_

Date \_\_\_\_\_

School \_\_\_\_\_

Interviewer \_\_\_\_\_

Project \_\_\_\_\_

A. Introduction

1. Review information on project abstract.
2. Describe general purpose of project, objectives, and procedures.
3. How many years has the project been running? What have been the major changes over time?
4. Describe how project relates to vocational guidance (or handicapped) needs.
5. Describe what improvement or advantage the project represents for the Pennsylvania vocational guidance (or handicapped) system.



B. Project Characteristics (Describe each)

1. Target Group -

2. Activities -

3. Staffing -

4. Resources -

5. Evaluation Procedures -

6. How were the project activities selected? What evidence exists that they represent "best practice" in the field?

C. Process Evaluation

1. Did evaluation procedures provide formative information?
2. Was the project implemented according to plan? Were there obstacles, changes?
3. What factors helped the project proceed smoothly?
4. Were the resources sufficient to accomplish project objectives?
5. Did the project get sufficient support from school and/or district administration?

D. Impact Evaluation

1. Did evaluation procedures provide information on project impact?
2. What was the impact of the project? Based on what evidence?
3. What activities work best for particular target population?
4. Did the project meet intended needs? How were needs diminished, eliminated, or otherwise affected?
5. Has the project produced "ripple effects on other schools"?
6. Can the project continue with diminished PDE resources? No PDE resources?

E. Recommendations

1. Do you have recommendations for PDE procedures or activities?  
Do the guidelines meet LEA needs?

2. What issues or activities require further attention?

Interviewer Comments

PDE GUIDANCE & HANDICAPPED TELEPHONE INTERVIEW

Name: \_\_\_\_\_

Date: \_\_\_\_\_

School: \_\_\_\_\_

Interviewer: \_\_\_\_\_

Project: \_\_\_\_\_

1. Describe the general purpose and objectives of the project.

2. How many years has the project been running? (Provide historical context.)

3. Describe how the project relates to vocational guidance/handicapped needs and how it adds to Pennsylvania's vocational education system.

4. Briefly describe project characteristics in terms of:

a. Target Group -

b. Activities (including how activities were selected) -

c. Staffing -

5. Did you conduct any formal evaluation activities? If so, describe process and data sources (e.g., hard vs. soft).
6. Was the project implemented according to plan? Were there any changes/obstacles/barriers (e.g., level of resources, administrative support, etc.)?
7. What factors helped the project proceed smoothly (i.e., facilitating factors with implications for other projects)?

8. What is the impact of the project (e.g., related to objectives)? based on what evidence?

9. Did the project meet intended needs? Were overall needs of target population diminished, eliminated, or otherwise affected?

10. Has the project produced "ripple" or side effects (e.g., on other schools)?

11. Can the project continue with diminished PDE resources? No PDE resources? What are the implications?



12. Do you have recommendations for PDE procedures or activities? Do the application guidelines meet LEA needs?

13. What issues or activities require further attention?

Interview Comments:

E. Vocational Education Goals and Sub-Goals

STATE GOALS FOR VOCATIONAL EDUCATION  
IN PENNSYLVANIA

The State Board of Education recognizes the increasing complexity and rising costs associated with providing educational services for all citizens of the Commonwealth. It is imperative that: (1) accountability be an integral part of planning; (2) existing and prospective educational programs be monitored and evaluated; (3) outdated and unnecessary duplication of programs and services be eliminated; (4) educators justify their educational expenditures to the public; and (5) representatives of all educational levels participate in determining the optimum delivery system for meeting educational needs of the public. Considering these points and, in an effort to provide a clear direction for vocational educators, the State Board of Education has adopted the following goals to guide vocational education for the next five years.

- I. Develop, expand or modify quality vocational education so that by 1982 every public secondary student will have had the opportunity to: (1) enter the labor force with a marketable vocational skill; (2) learn a useful vocational skill; or (3) acquire a basic vocational skill and continue at the postsecondary level.
- II. Promote the expansion, range and diversity of adult and postsecondary occupational education opportunities to facilitate: (1) the entry/reentry of persons into the labor force and; (2) to provide upgrading or retraining for persons already employed/unemployed.
- III. Encourage alternative forms of vocational/occupational education to broaden the options available to students.
- IV. Intensify articulation efforts among programs at middle schools and junior high schools with secondary school and postsecondary vocational/occupational programs.
- V. Support a greater understanding of educational/career options by expanding vocational guidance, counseling, and job placement services and providing occupational experiences for students.
- VI. Foster a concerted effort to achieve equal educational opportunities by eliminating sex, racial/ethnic and linguistic bias, stereotyping, and discrimination.
- VII. Strengthen the development and implementation of comprehensively planned programs to meet the needs of and demands for competent professional vocational teachers, counselors, supervisors, and administrators.
- VIII. Develop and expand vocational education opportunities for the disadvantaged and handicapped.