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ABSTRACT

This study attempted (1) to identify factors relating positively and negatively to job placement of postsecondary vocational-technical education students; (2) to provide detailed descriptions of the education and community processes appearing to influence job placement; and (3) to generate hypotheses concerning variables relating to job placement. Data for the study came from a review of the literature, case studies, and a mail questionnaire received from 2,599 persons in 31 postsecondary institutions. Concerning the postsecondary educational institutions, findings indicated that higher job placement seems to occur in institutions in which (1) personnel and teachers are committed to and enthusiastic about the placement of students in a job related to their training; (2) administrators and teachers are committed to interactions among community, labor, and business organizations in order to support job placement; (3) job placement specialists and counselors serve as the initial sources of information about job openings and provide clearinghouse and support functions; (4) advisory committee input is sought; (5) planning is related to community and state economic development efforts, especially to anticipated labor demand and supply; (6) work experience programs are available; and (7) job placement rates are used as a program evaluation criterion. Higher job placement rates were also found in postsecondary institutions where there is a high demand for labor in the surrounding area; and the medium-sized community is supportive of vocational-technical education. Recommendations for action were made to Congress, the Department of Education, state government agencies, postsecondary institutions, and teacher education institutions. (KC)

FACTORS RELATING TO THE JOB PLACEMENT OF FORMER POSTSECONDARY VOCATIONAL-TECHNICAL EDUCATION STUDENTS

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FOREWORD

Employment in a job related to training is a widely accepted outcome of postsecondary vocational-technical education programs. Even those persons who view training-related job placement as a supplemental rather than as a primary purpose of vocational-technical education do not deny that job placement is an outcome which represents the expectations of most of those receiving, providing, and supporting postsecondary vocational-technical education programs.

Given the importance of job placement as an outcome for vocational-technical education, it is logical to assume that policymakers and decision makers at the federal, state, and local levels have great need for information that allows them to optimize the allocation of limited resources toward the achievement of high rates of job placement for former postsecondary vocational-technical education students. This study attempts to identify factors influencing the placement of former postsecondary vocational-technical education students in jobs related to their training. In addition to the identification of the factors, that influence placement, the study findings provide a description of the education and community processes that appear to influence the placement of former postsecondary vocational-technical education students in jobs related to their training.

From a methodological viewpoint, this study should be of interest to vocational-technical educators. The study represents one of the early efforts of researchers in vocational-technical education to combine qualititative and quantitative approaches in a sizable effort to address a complex problem.

This report is the second of two reports prepared by National Center staff to provide information about the factors relating to the placement of former vocational education students in jobs related to their training. The first report, Factors Relating to the Job Placement of Former Secondary Vocational Education Students, was published in 1981 and focused on secondary vocational education programs. This inquiry included case studies at eight local school sites, an analysis of existing data (586 LEAs in seven states), and mail questionnaires (ten respondent groups in sixty-two LEAs in the same seven states).

A number of distinguished persons provided advice and assistance in planning and conducting the study. A list of these individuals can be found in the Appendix. The National Center is most appreciative of the help provided by these individuals.

The National Center is indebted to the staff members who worked on the study. The study was conducted in the Evaluation and Policy Division under N. L. McCaslin, Associate Director. Floyd L. McKinney, Senior Research Specialist, served as Project Director. The project staff members were: Stephen J. Franchak, Senior Research Specialist; Ida M. Halasz, Research Specialist; Irene Morrison, Program Associate; Douglas McElwain and Patricia Fornash, Graduate Research Associates; and Priscilla Ciulla and Sherry White, Secretaries. Final editorial review of this report was provided by Brenda Sessley and Sharon Fain of the National Center's the Editorial Services area.

Robert E. Taylor
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EXECUTIVE SUMMARY

Historically, vocational-technical education has been evaluated on the basis of the number of former students placed in jobs related to the training they received. As policymakers and decision makers have attempted to achieve higher job placement rates, they have been frustrated by a lack of information about those factors that seem to influence student job placement. This study attempted (1) to identify factors relating positively and negatively to job placement, (2) to provide detailed descriptions of the education and community processes appearing to influence job placement, and (3) to generate hypotheses concerning variables relating to job placement.

Data for the study came from a review of the literature, case studies, and a mail questionnaire. The study was conducted in four states. The case studies were conducted in one postsecondary institution in each of the four states. Mail questionnaires were received from 2,599 individuals representing eight respondent groups in thirty-one postsecondary institutions in the four states.

Conclusions

The following statements should not be regarded as final conclusions concerning the factors affecting the placement of former students in jobs related to their training. The statement should be considered as working hypotheses, to be tested again and again in the ever-changing context in which vocational-technical education programs operate.

Education

Higher job placement seems to exist in those postsecondary institutions where:

- Postsecondary institution personnel and teachers are committed to the placement of students in a job related to training as the major goal for the vocational-technical education programs
- Postsecondary institution personnel are enthusiastic about the placement of students in a job related to their training as the major goal for the vocational-technical education programs

- Teachers are enthusiastic about the role they play in ensuring that students are placed in jobs related to their training
- Administrators are committed to and encourage essential interactions among community organizations, labor, business, industry, and postsecondary institution personnel that promote open communication to support job placement
- Teachers maintain frequent and meaningful contacts with the business and industrial community
- The vocational-technical education curriculum is relevant and responsive to the needs of employers
- Job placement specialists and counselors serve as the initial sources of information about job openings for teachers and students
- Job placement specialists and counselors provide a clearinghouse function and a support function (secretarial assistance, telephone, job listings) for information about jobs
- Advisory committee input is used in planning vocational-technical education programs
- Planning in the postsecondary institutions is coordinated with community and state economic development activities, especially those activities related to labor supply and demand
- Job placement rates are used as a program evaluation criterion.
- Program evaluation efforts are systematic and comprehensive
- Student performance is evaluated on employability skills such as preparing resumes, and interviewing
- Teachers keep up to date with the latest trends in the occupational fields
- Programs providing students with "real world" work experiences are available to students

Labor

Higher job placement seems to exist in those postsecondary institutions where:

- There is a high demand for workers in the surrounding labor market area. However, high labor demand does not always result in high job placement. Higher job placement tends to result when the postsecondary institutions vocational-technical education programs are specifically oriented to the high skill labor demand areas. Labor market conditions over which vocational-technical educators have no control are at least as important as the nature of vocational education itself in determining job placement

Community

Higher job placement seems to exist in those postsecondary institutions where:

- The community is supportive of vocational-technical education
- The postsecondary institution is located in medium-size communities

Recommendations

The study recommendations are directed toward agencies or policymaking groups who have historically developed and/or enforced policies and decisions regarding vocational-technical education programs.

Congress

It is recommended that Congress:

- Recognize that vocational-technical education programs operate with multiple goals and therefore do not specify the specific criteria for the evaluation of such programs
- Develop legislation that is flexible enough to allow state agencies to develop funding formulae that will encourage postsecondary institutions to conduct activities enhancing job placement

U.S. Department of Education

It is recommended that the U.S. Department of Education:

- Encourage further research about the factors relating to job placement especially in isolated areas, inner cities, and areas with unique labor market or geographical locations
- Encourage the dissemination of findings regarding the factors relating to job placement through the funding of symposia, workshops, monographs, and widely distributed publications

State Government Agencies

It is recommended that state governing agencies:

- Develop funding formulae that reward postsecondary institutions for implementing activities that enhance job placement
- Provide teacher education institutions and postsecondary institutions with funding to conduct inservice education programs for teachers and administrators concerning the factors relating to job placement
- Promote professional development activities that assist teachers in keeping up to date in their occupational skill area

Postsecondary Institutions

It is recommended that postsecondary institutions:

- Develop clear statements of the goals for postsecondary vocational-technical education programs
- Promote and reward enthusiasm for placing students in jobs related to training
- Encourage frequent and active meetings of citizen advisory committees and utilize their recommendations in program planning and evaluation
- Use job placement data as a major criterion for evaluating programs

- o Recognize the importance of the role of teachers in the job placement process by including teacher performance concerning job placement in considerations for tenure, promotions, and salary adjustments

- o Recognize the importance of the role played by chief administrators and deans/directors in the job placement process. Reward chief administrators and deans/directors for their leadership and allocation of resources to attain institutional goals concerning job placement

- o Develop and maintain systematic processes for ensuring that the vocational-technical education curriculum is relevant and responsive to the needs of business and industry

- o Develop and maintain current and relevant job placement information in a central location that is easily accessible to teachers, job placement specialists, counselors, administrators, and students

- o Provide teachers with clerical support to assist in maintaining contact with employers and in preparing recommendations for students

- o Use local labor market information in program planning and evaluation

- o Maintain close contact with other agencies involved in job development/job placement in the community

Teacher Education Institutions

It is recommended that teacher education institutions:

- o Include in the courses required for postsecondary institution administrators, information concerning the goals of postsecondary vocational-technical education programs, information about those factors enhancing the attainment of the goals, and information about the vital role of deans/directors in determining whether former students are placed in jobs related to their training

- o Impart to future vocational-technical educators the significant role teachers play in determining the placement of former students in jobs related to their training

- o Seek innovative ways to provide current education personnel with information about methods that will enhance job placement

CHAPTER I

PURPOSE AND OVERVIEW OF STUDY

This report is the second of two reports that provide information about the factors relating to the placement of former vocational education students in jobs related to their training. The first report, Factors Relating to the Job Placement of Former Secondary Vocational Education Students, was produced by the National Center in 1981 and concerned secondary vocational education programs.

In this chapter, information is provided concerning the need for the study, study goals and objectives, the study's dependent variable, conceptual framework developed for the study, study approaches, major issue areas, and study research questions.

Need

Historically, the placement of students in jobs related to training has been the primary criterion used in evaluating vocational-technical education programs. In recent years the placing of students in jobs related to their training has assumed even greater importance in vocational-technical education. In 1976, P.L. 94-482, popularly known as the Education Amendments of 1976, was enacted. A portion of this legislation mandated that each state systematically evaluate its vocational education programs and identified the primary evaluative criterion as the extent to which completers and leavers find employment in occupations related to training. Also in the 1970s a school-based job placement movement developed. While this movement has a lengthy history, its ultimate goal has been to make school-based job placement services available to all secondary and postsecondary students. In addition, there has been a chronic unemployment problem in the United States. The problem is especially acute among female, minority, and lower socioeconomic class youth. Together, these three events (among others) have focused the attention of education, business/industry, and government on the job placement of students trained in publicly supported institutions.

Traditionally, federal, state, and local education agencies have collected information through follow-up studies intended in

part to identify the extent to which vocational-technical education program completers find employment in occupations related to t r training. One major problem with the information obtained through follow-up studies is that it does not adequately address the question of what factors and processes have an important influence on the job placement of former postsecondary vocational education students. Without information on the factors influencing the job placement process, vocational-technical educators face difficulties in making recommendations to enhance the placement of students in jobs related to their training. If policymakers and decision makers are to optimize the use of resources, it is essential that they have information concerning those factors affecting the placement of former students in jobs for which they were trained.

Goals and Objectives

The overall goal of this study was to produce knowledge that can be used in determining policy and making decisions to improve the job placement rates of vocational-technical education programs. The objectives of the study were --

1. to identify factors relating positively or negatively to the placement of former postsecondary vocational-technical education students in jobs related to their training;

2. to provide a detailed description of the educational and community processes that appear to influence former vocational-technical education students being placed in jobs related to their training;

3. to generate hypotheses concerning variables relating to the placement of postsecondary vocational-technical education students in jobs related to their training.

Dependent Variable

The dependent variable for the study was the percentage of former postsecondary vocational-technical education students available for placement who were employed in a field related to their training.

Conceptual Framework

In this study, the job placement rate provided by state and local postsecondary governing agencies was viewed as a measure of the ability of a vocational-technical education program within a postsecondary institution to effectively attain the goal of placing students in jobs related to their training upon their leaving

the vocational-technical education program. This conceptualization of job placement focused the initial generation of issue areas and of research questions on vocational-technical education processes and school activities that were intended to achieve the outcome of job placement for students leaving the program. Priority was given to those processes and activities that appeared to be links in explaining why vocational-technical education, as a distinctive education treatment, influences high job placement rates. In addition, the educational activities are more important to policymakers and decision makers because they tend to be processes or activities that can be manipulated.

This conceptualization, in and of itself, did not provide clear direction as to what processes or activities are needed, required, or desirable to achieve high job placement rates. The conceptualization did suggest, however, that different compositions of processes and activities in different contexts will result in variations in the outcome of training-related job placement.

Although emphasis in this conceptualization focused on education factors, it was realized that other types of factors influence youth and adult employment, e.g., labor market demand, minimum wage laws, etc. Therefore, two other types of factors (labor market factors and community factors), were included.

The framework was developed using information from a literature review and input from consultants. Numerous research reports, for example Robock (1978), noted that several factors contribute to youth attaining jobs:

- Size and economic characteristics of the community
- Capabilities and policies of local employment service/job service offices
- Characteristics of the public school system
- Hiring practices of large and small employers in the community
- Role of community based organizations in economic and education affairs
- Patterns of cooperation among employers, labor unions, educational institutions
- Community attitudes toward education and work

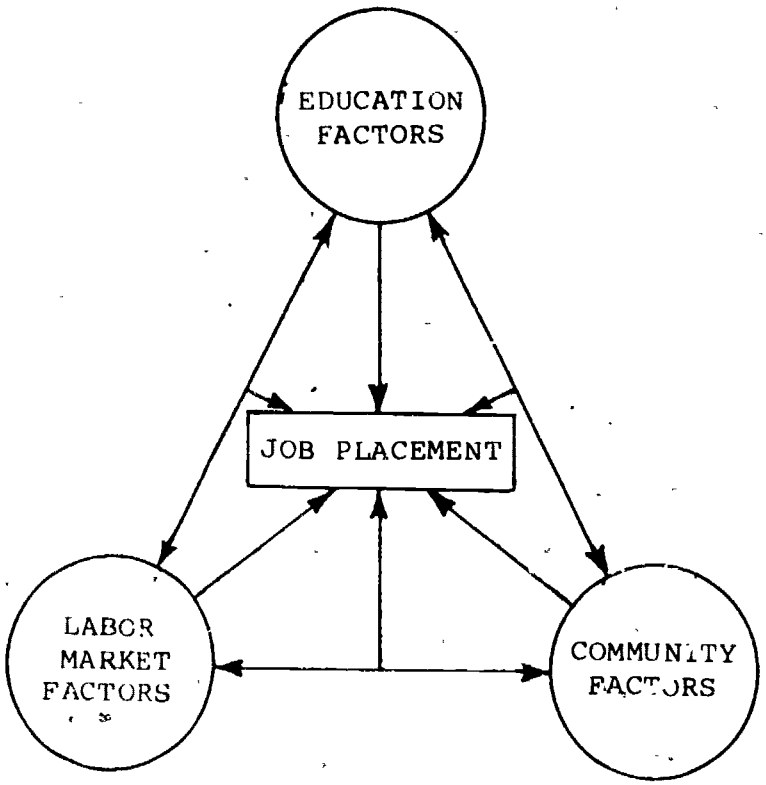
Education factors were emphasized by a panel of consultants serving as an advisory group for the study. (See Appendix A for a listing of individuals serving as consultants to the study.)

The Evaluation Technical Advisory Panel members reviewed the study design and the conceptual framework. Many of their suggestions were used by the project staff.

The conceptual framework around which the study was organized is displayed in figure 1.1. The framework was used as a starting point for identifying and organizing possibly significant factors influencing job placement.

FIGURE 1.1

HEURISTIC FRAMEWORK
FOR FACTORS INFLUENCING JOB PLACEMENT



The framework suggests that in the transition from school to work three broad categories of factors have an impact on the obtainment of jobs by young people. These interacting categories are labeled education factors, labor market factors, and community factors.

Study Approaches

The research approaches used in the study included a literature review, case studies, and mail questionnaires. A detailed description of these approaches is provided in Chapter II.

Issue Areas

Broad issue areas were identified by the National Center staff at the beginning of the study. These areas were identified from reviewing the literature, staff experience, and assistance from consultants who represented a wide variety of backgrounds and experience. The issue areas further extended the framework (figure 1.1) and served as a basis for generating the research questions used in the quantitative aspects of the study.

The initial issue areas identified were:

A. Labor Market

1. Employer profile
2. Labor market demand and supply
3. Unionization
4. Growth/decline of economy
5. Occupational mix

B. Community

1. Size
2. Social mobility
3. Racial composition
4. Income level and distribution
5. Political consideration
6. Youth training programs

C. Education

1. Management and administration
2. Policy and planning processes
3. Resource allocation
4. Program Evaluation
5. Needs assessment
6. Personnel development
7. Facilities and equipment
8. Personnel qualifications
9. Business/industry involvement
10. Curriculum
11. Student organizations
12. Cooperative work programs
13. Student evaluation

14. Job placement processes and outcomes
15. Follow-up system
16. Philosophical commitment
17. Legislation

Research Questions

Using the framework presented in figure 1.1, and the issue areas identified in the preceding section, research questions to be addressed in the study were generated. These questions were developed using project staff expertise, input from the advisory committee mentioned earlier, suggestions from the Evaluation Technical Panel, and advice from individual consultants.

In the mail questionnaires, the research questions were divided into two categories: descriptive questions and analytical questions. As the names of the categories imply, the descriptive questions called for a description of ongoing placement practices while the analytical questions focused on variables hypothetically influencing placement rates. The dependent variable associated with the questions was the ratio of the percent of vocational education students placed in training-related jobs to the percent of students available for placement.

The research questions guiding the analysis of data from the mail questionnaires evolved from the broad issue areas identified by the project staff. The issue areas also provided the organizing framework for conducting the case studies and for analyzing and writing the study findings. The information in figure 1.2 shows the relationship between the issue areas and research questions. The descriptive research questions identified according to the broad issue areas were as follows:

Community

1. What are the perceptions of postsecondary personnel and employers regarding the comparisons of former vocational-technical education students to experienced workers in terms of employability?

2. How do employers think workers trained in vocational technical education compare on the job to workers who have not received vocational-technical education?

3. What are the factors that are perceived to enhance the employability of former vocational-technical education students?

Labor Market

4. What kinds of firms in the labor market areas surrounding the postsecondary institutions hire former vocational-technical education students?

5. How large are the firms that hire former vocational technical education students from the postsecondary institutions?

6. Do employers of former vocational-technical education students from postsecondary institutions have labor unions present in th[illegible] firms?

Education

7. What are the perceptions of postsecondary institution personnel regarding the comparison of vocational technical education students to nonvocational-technical education students in terms of employability?

8. How many students obtained employment after leaving their vocational-technical education programs?

9. How many students obtained employment in training related jobs after leaving their vocational-technical education programs?

10. What factors are perceived to present difficulties to former vocational-technical education students' obtaining jobs?

11. How many of the postsecondary institutions included in the study conduct assessments of employer skill needs?

12. What are the requirements for admission into the vocational-technical education programs in the post-secondary institutions included in the study?

13. Do employers participate in the postsecondary vocational-technical education programs?

14. What is the rate of student participation in work-study or cooperative education programs in the postsecondary institutions in the study?

15. How many of the postsecondary institutions included in this study provide instruction in job-seeking and job-obtainment skills?

16. How often do the postsecondary institutions included in the study contact employers regarding the job placement of students?

17. How often do employers contact the postsecondary institutions included in the study regarding job openings for which former vocational-technical education students might qualify?

18. How effective is the postsecondary institution as perceived by staff and vocational-technical education students in providing various job placement services?

19. What types of job placement services are provided by the postsecondary institutions in the study?

20. How many postsecondary institutions in the study have formalized job placement offices?

21. What members of the postsecondary institution staff participate in performing job placement activities?

22. How much work time is spent by postsecondary institution staff in performing job placement activities?

23. How many vocational-technical education students use the job placement services of the postsecondary institutions in the study?

24. What persons/agencies are perceived to be the most helpful to students in identifying job openings?

25. What person/agency should have primary responsibility for job placement as perceived by vocational-technical education students and vocational-technical education personnel?

26. What sources of information regarding job openings are perceived by postsecondary institution personnel and students as most helpful to vocational-technical education students in finding jobs?

27. How often are the vocational-technical education programs evaluated in the postsecondary institutions included in the study?

28. How frequently do the postsecondary institutions included in the study conduct follow-up studies of former students?

29. What are the professional responsibilities of postsecondary institution staff?

30. How many of the vocational-technical education teachers in postsecondary institutions hold certificates in their area of teaching?

31. What is the ratio of female to male students enrolled in the vocational-technical education programs in the postsecondary institutions in the study?

32. What is the ratio of nonwhite to white students enrolled in the vocational-technical education programs in the postsecondary institutions in the study?

33. What is the distribution of the vocational-technical education student grade point averages in the post secondary institutions in the study?

34. What are the career plans of vocational-technical education students enrolled in the postsecondary institutions in the study?

35. In what ways do advisory committees assist the postsecondary institution vocational-technical education program?

The analytical questions identified were as follows:

Labor Market

1. Is the presence (or absence) of unions in firms employing former vocational-technical education students of site postsecondary institutions associated with job placement rates?

Education

2. How does enrollment in a particular vocational-technical education program affect the relationship between participation in vocational-technical education student organizations and employment in training-related jobs?

3. Is the postsecondary institution's rate of student participation in work-study/co-op programs associated with job placement rates?

4. Is student participation in work-study/cooperative education programs associated with student employment after leaving the program?

5. Is student participation in work-study/cooperative programs associated with student employment in training-related jobs upon leaving the program?

6 What is the relationship between participation in work study/cooperative program and job placement by vocational technical education program areas?

7. Do postsecondary institutions that provide job placement services have higher job placement rates than postsecondary institutions that do not provide such services?

8. What types of job placement services are associated with high job placement rates?

9. Is the postsecondary institution's rate of student utilization of job placement services associated with job placement rates?

10. Is the amount of time spent by the postsecondary institution staff on performing job placement activities associated with job placement rates?

11. Is the provision by postsecondary institutions of job seeking and job-obtainment skills associated with job placement?

12. Is the level of perceived effectiveness of postsecondary institutions in providing job placement services associated with job placement rates?

13. Is the frequency of evaluation of vocational-technical education programs in the postsecondary institutions included in this study associated with the postsecondary institution's job placement rates?

14. Are there higher job placement rates at postsecondary institutions where the students give high ratings to their vocational-technical education experiences?

15. Is the use of employer needs assessments by postsecondary institutions associated with higher job placement rates?

16. Is the average length of time spent teaching by the vocational-technical education staff in postsecondary institutions associated with job placement rates?

17. Is the average length of time spent by the postsecondary institution's vocational-technical education teachers in occupational areas related to their training areas associated with their students' job placement rates?

18. Is the percent of female enrollment in the postsecondary institution's vocational-technical education programs associated with the institution's job placement rate?

19. Is the percent of male enrollment in the postsecondary institution's vocational-technical education programs associated with the institution's job placement rates?

20. Is the percent of white enrollment in the postsecondary institution's vocational-technical education programs associated with the institution's job placement rates?

21. Is the percent of nonwhite enrollment in the postsecondary institution's vocational-technical education programs associated with the institution's job placement rate?

22. Is performance in postsecondary institutions, expressed by grade point average, associated with former student employment in jobs related to training?

FIGURE 1.2

RELATIONSHIP BETWEEN ISSUE AREAS AND RESEARCH QUESTIONS[a]

Issue Areas	Considered in Mail Questionnaires: Descriptive	Considered in Mail Questionnaires: Analytical	Considered in Case Studies
A. Community			
1. Size			Yes
2. Social mobility			Yes
3. Sociodemographic characteristics[b]			Yes
4. Educational level of population[b]			Yes
5. Income level and distribution			Yes
6. Political considerations			Yes
7. Attitudes towards work education programs	1, 2, 3,		Yes
8. Youth training programs			Yes
B. Labor Market			
1. Labor force characteristics[b]			Yes
2. Labor market demand and supply			Yes
3. Employer profile			Yes
4. Occupational mix	4, 5		Yes
5. Unionization		1	Yes
6. Growth/decline of economy	6		Yes
C. Education			
1. Management/ administration			Yes
2. Policy/planning processes			Yes
3. Resource allocation	10, 11, 12		Yes
4. Facilitites/ equipment			Yes
5. Philosophical commitment[a]			Yes

FIGURE 1.2
(continued)

RELATIONSHIP BETWEEN ISSUE AREAS AND RESEARCH QUESTIONS[a]

Issue Areas	Considered in Mail Questionnaires		Considered in Case Studies
	Descriptive	Analytical	
C. Education, continued			
6. Legislation			Yes
7. VocEd program characteristics		2	Yes
8. Instructional processes			Yes
9. Cooperative work programs	13,14	3, 4, 5, 6	Yes
10. Curriculum development	15		Yes
11. Job placement services	16,17,18,19,20,21 22,23,24,25,26	7,8,9,10,11,12	Yes
12. Program evaluation	7,8,9,27	13,14	Yes
13. Needs assessment	11	15	Yes
14. Follow-up system	28		Yes
15. Staff characteristics	29,30	16,17	Yes
16. Personnel development			Yes
17. Student characteristics	31,32,33,34	18,19,20,21,22	Yes
18. Student organizations			Yes
19. Student evaluation			Yes
20. Business/industry involvement	35,13		Yes

[a] Listed on pages 8-16
[b] Added after the initial development of issue areas. Initial list of issue areas is located on pages 6 and 7.

CHAPTER II

STUDY PROCEDURES

In this chapter the procedures used in conducting the study are described. Information is presented regarding the study approaches and the sampling plan.

Study Approaches

In order to provide a rich pool of information for analysis, the project staff used three different research approaches: a literature review, case studies, and mail questionnaires. These study approaches were deliberately chosen in order to produce a mixture of qualitative and quantitative data. By combining qualitative data from the case studies with the quantitative data available from the mail questionnaires, the project staff was able to substantiate findings from more than one source. An overview of the study is shown in figure 2.1.

Literature Review

The literature review was conducted in order to fulfill three objectives. The objectives were

1. to determine previous research in the area of training-related job placement for former vocational-technical education students that would influence the present study.

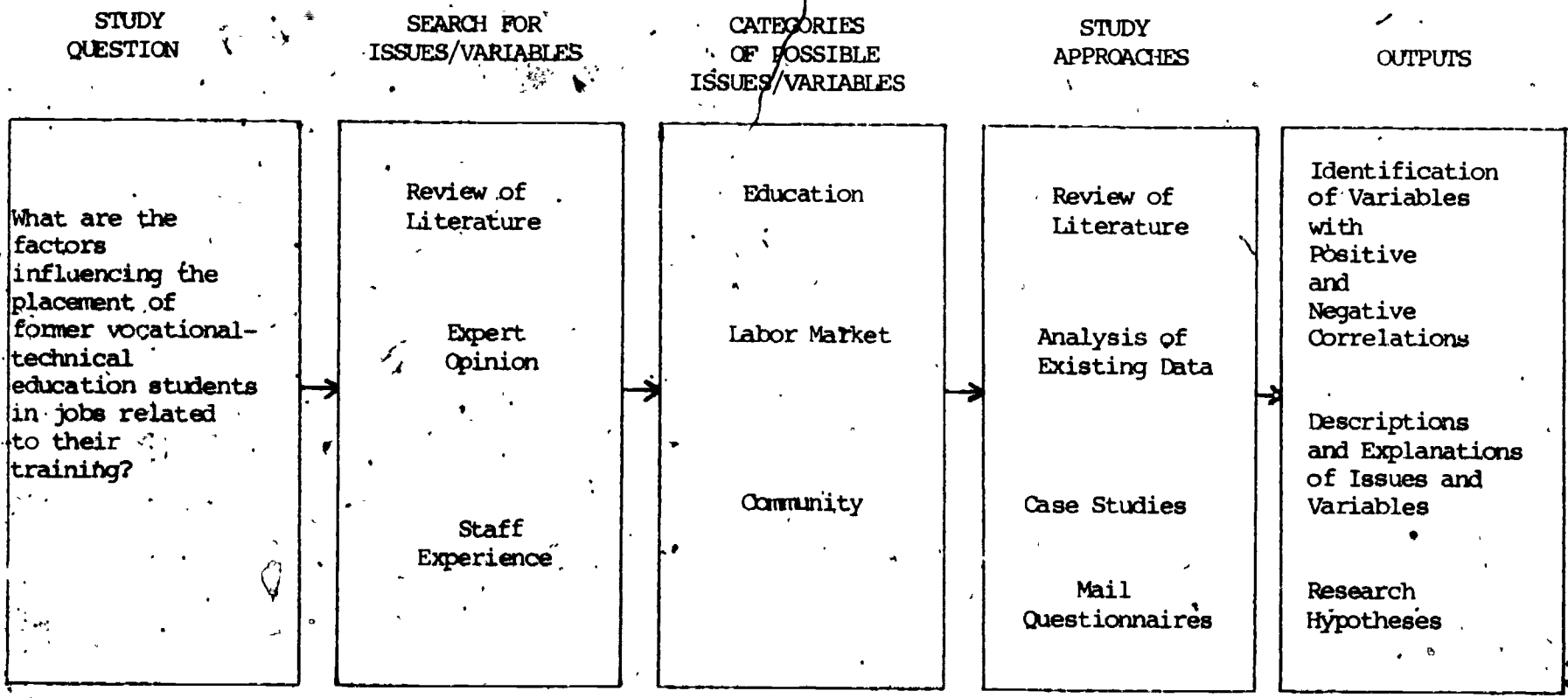
2. to identify existing information relevant to the study's research questions.

3. to assess where additional information is needed to extend or modify what is known about the job placement of former vocational-technical education students.

In the literature review, minimal attention was given to the numerous annual former student follow-up studies conducted by state and local education agencies. This decision was made because: (1) follow-up studies usually report statistics on placement rates of former students, but they do not provide much

FIGURE 2.1

OVERVIEW OF STUDY



insight into the processes producing these rates, and (2) methodological and design differences between follow-up studies prevent the drawing of general conclusions regarding job placement (Copa and Forsberg 1980, Mertens et al. 1980). In addition, attempts to focus specifically on training-related job placement proved almost fruitless. In the literature dealing with placement, the distinction between training-related and nontraining-related jobs was rarely made. McKinney, Gray, and Abram (1978) also pointed out that training-related placement is defined differently by researchers and by those providing the placement data, thus contributing to the problem of generalization across studies.

Literature was obtained from a number of sources. Reports were sought from Research in Education (RIE), Abstracts of Instructional and Research Materials in Vocational Education (AIM/ARM), Resources in Vocational Education (RIVE), Current Index to Journals in Education (CIJE), Educational Research Information Center (ERIC), and Social Sciences Retrospective of the Ohio State University's Mechanized Information Center. Reports addressing the three categories of factors in the study's conceptual framework (community characteristics, education processes, and labor market characteristics) were obtained and reviewed.

Case Studies

The case studies were designed to obtain data in four ways: interviews, observations, document reviews, and record reviews. Interviewing methods were based upon the elite (open-ended) technique developed by Dexter (1970). Within this framework, the interviewer sets the context of the interview and then allows the interviewees to respond in their own manner. During the interview each interviewee was treated in a way that stressed the interviewee's definition of the situation, encouraged the interviewee to structure the account of the situation, and allowed interviewees to individually introduce their own notions of what they regarded as relevant instead of relying upon the investigator's notion of relevance.

Prior to or concurrent with the visits to the postsecondary institutions, one project staff member interviewed appropriate personnel in the state governing agency. During these visits, state officials were interviewed to obtain a state-level perspective about factors influencing job placement. In addition, relevant state documents and records were obtained. Examples of documents and records included reports of program evaluation studies, and job placement studies.

A project staff member visited each case study site prior to a two-week stay at each site. This initial visit enabled project staff to brief postsecondary institution officials at the case study site on the purposes and techniques of the study and

to schedule interviews and observations for the first few days the staff would be on site. This initial contact with personnel at the site provided an opportunity to obtain records and to collect documents. Examples of records and documents obtained from postsecondary institutions included governing board policy manuals, advisory committee minutes of meetings, chamber of commerce information about local business/industry, and program evaluation studies. Project staff members reviewed the collected documents and records prior to traveling to the site to acquaint themselves with as many of its unique features as possible.

Two project staff members were usually on site for two weeks. During this time, approximately sixty to seventy interviews were conducted in addition to the time scheduled for observation and document review. Typically, interviewees represented teachers, counselors, job placement specialists, deans, department heads, chief administrative staff, employers, directors, advisory committee members, current students, former students, and community personnel such as chamber of commerce representatives and state employment office staff. The interviews averaged forty-five minutes in length. Several individuals participated in second and occasionally third interviews. The individuals interviewed a second and third time were able to provide additional information and/or to assure the accuracy of information. While interviews were scheduled to include representatives of the aforementioned groups, interviewers were encouraged, based upon the information they obtained from previous interviewees, to interview persons who seemed to possess "key information" about the job placement process at the site.

After each day's interviews, observations, or document reviews, the project staff members on site were able to discuss the interactions, solve any emerging problems, and plan the subsequent work. Modifications and adjustments of language, approach, and emerging issues were made on a consensual basis.

All the information collected in the case studies was coded according to the major issues areas as shown in Figure 1.2. This organization of the data permitted the project staff to retrieve information relative to a specific issue area.

On the final day at the case study site, team members met with postsecondary institution administrators and staff members to discuss with them the impressions they had gained from the case study. After returning to the National Center, reports were prepared using the coded information from the sites.

Data analysis procedures. Patton (1980) writes, "There are no formal, universal rules to follow in analyzing, interpreting and evaluating qualitative data (p. 268)." Patton's definition of analysis and interpretation is helpful in understanding how

the case study information was analyzed.

> Analysis is the process of bringing order to the data, organizing what is there into patterns, categories, and basic descriptive units. Interpretation involves attaching meaning and significance to the analysis, explaining descriptive patterns, and looking for relationships and linkages among descriptive dimensions (p.238).

The project staff has described the patterns that appear to be present in the data. Those patterns represent the perspective of the project staff members based on their understanding of the data collected. As with any data, the readers will judge these interpretations in view of their own understanding of post-secondary vocational-technical education and the environment in which such programs operate.

The analysis of the case study information focused on the study problem and the initial issue areas presented in Chapter I. The notes collected from the interviews, observations, documents, and records were written or dictated by the project staff. As this initial write up or dictation was being done, the data were organized according to the initial issue areas. The first step of analysis was the coding of the information. As the coding continued it became apparent that the initial listing of issue areas was incomplete. Additional issue areas were added, and some issue areas were combined or defined in slightly different ways. As project staff worked with the data, there was a continuing search for recurring regularities in the data. These regularities merged in to patterns that could be assigned to homogeneous issue areas. The project staff maintained a keen awareness of the need to detect divergence in the data from high and low placement sites (The "Sampling Plan" section of this Chapter presents more information about high and low placement sites). It is important to note, once again, that the ways by which the data were categorized (issue areas) were always driven by the study problem.

Several staff members worked on the data analysis. This provided opportunities for diversity of opinions to surface. The comparison and discussion of these differences frequently led to the emergence of important insights about the factors relating to job placement.

As the project staff analyzed the data there was a continuing search for relationships of factors (variables) and job placement. The determination of relationships was a time consuming process. The effort was accurately described by Patton (1980) as a process of:

> ...constantly moving back and forth between the phenomenon of the program and our abstractions of that program, between the descriptions of what has occurred and our analysis of those descriptions, between complexity of reality and our simplifications of those complexities, between the circularities and inter-dependence of human activity and our need for linear, ordered statements of cause effect..(p.268).

This frequently resulted in other possible findings being suggested and a determination being made to see if there were sufficient data to support the new suggestion. In addition, the data were verified by the checks and balances resulting from the combination of qualitative and quantitative data in the study.

In this study the project staff was more interested in emerging descriptive patterns for the individual sites. The staff recognized the value of considering emerging patterns across all sites and this was done in the correlational, regression and discriminant function analysis of the mail questionnaire data. However, the need to analyze all of the data by state was necessary due to the many differences among state governance structures, local postsecondary institution characteristics, and enormous variation in job placement rates.

Mail Questionnaires

Another major data collection effort involved the use of mail questionnaires. The development of mail questionnaires to send to prospective respondents in the postsecondary institutions was aided greatly by the information gained from the development of the mail questionnaires for the sampled groups in the secondary schools. Most of the secondary questionnaire items were appropriate for inclusion in the postsecondary questionnaire. The following information describes the procedures used in developing the questionnaires.

Work on developing eight questionnaires (refer to Appendix B for copies of each questionnaire) was divided into four phases: (1) identification of variables to be incorporated into each questionnaire; (2) development of the format and specific questionnaire items; (3) pilot testing of the questionnaire; and (4) approval by the Federal Education Data Acquisition Committee (FEDAC).

Instrument development. In phase one of the development of the instruments, project staff were involved in a number of activities concerned with identifying the major variables considered to be related to job placement. First, a review of

literature was completed. Second, a number of persons were asked to consult with project staff in identifying appropriate variables for consideration. For this activity, both formal and informal techniques were used. Informal techniques involved such activities as telephone conversations with state and local persons and analysis of information from meetings dealing with job placement and related areas. Formal techniques used included the conducting of a seminar focusing on variables relating to job placement, and gathering information from the Evaluation Technical Advisory Panel. The persons involved in both the informal and formal techniques included, but were not limited to, state and postsecondary institution vocational-technical education administrators, vocational-technical education practitioners (teachers, counselors, job placement specialists), sociologists, labor economists, psychologists, and employers. These persons brought both substantive and methodological knowledge to the process of defining the information needs for the mail questionnaires. Moreover, the project staff informally interacted with individual representatives of the eight respondent groups to identify the kind of information that was feasible in a survey of this nature. The heuristic framework displayed in figure 1.1 was developed as a result of the above mentioned activities. The information in figure 2.2 shows a more detailed breakdown of the heuristic framework. Using the areas identified in figure 2.2, the project staff identified variables related to the issue areas and developed questionnaire items for the respondent groups. The relationship of questionnaire items to variables and issue areas is shown in figure 2.3. Copies of the questionnaires are located in Appendix B.

The second phase of the instrument development focused on the construction of the questionnaries. Project staff developed the format and questionnaire items of a first draft of each of the eight questionnaires and sent these to consultants for review. This process was repeated five times for the revision of the questionnaires before the final versions found in Appendix B were adopted. Consultants knowledgeable in instrument development and the subject matter areas (e.g., vocational-technical education, job placement, career counseling, labor economics) critiqued the various versions of the questionnaires.

Downie (1967) indicated a major techniques used in determining face validity of questionnaires, is the use of a group of judges knowledgeable in the substantive areas. For this study these areas included vocational-technical education, labor economics, evaluation research, measurement theory; and thorough exploration of the available literature on factors affecting job placement such as job search, education, community, labor market, and so forth. The items were constructed to reflect the meaning associated with each dimension and subdimension of job placement in related fields of training. However, as stated by Carmine and Zeller (1980),

FIGURE 2.2

HEURISTIC FRAMEWORK DISPLAYING EXAMPLES OF FACTORS INFLUENCING JOB PLACEMENT

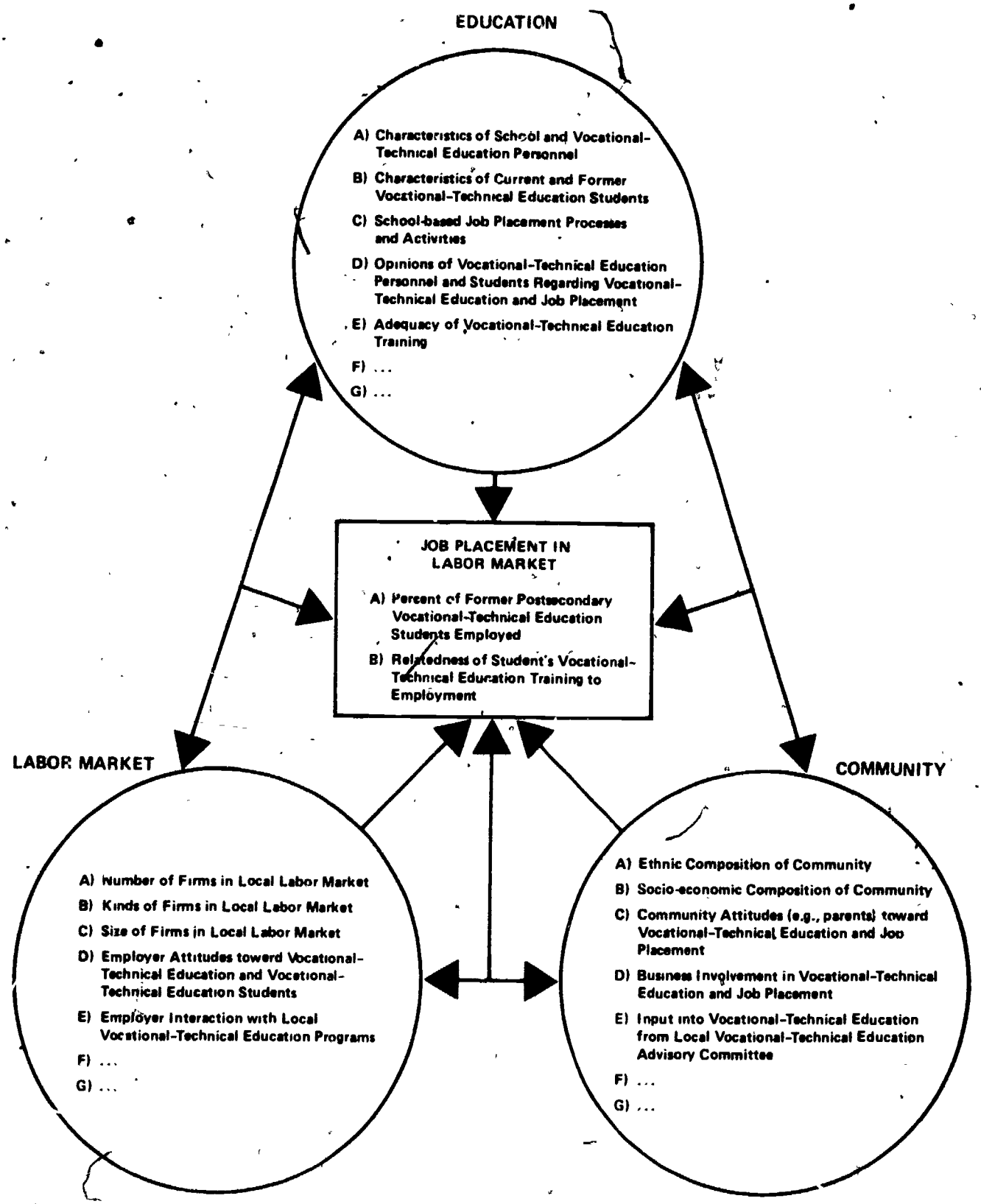


FIGURE 2.3

RELATIONSHIP OF HEURISTIC FRAMEWORK TO VARIABLES AND QUESTIONNAIRE ITEMS

HEURISTIC FRAMEWORK	VARIABLES	QUESTIONNAIRE AND ITEM NUMBER[a]
I. Education		
A. CHARACTERISTICS OF POSTSECONDARY INSTITUTION AND EDUCATION PERSONNEL	1. Professional experience	D-17,19;T-32,33;C-6,19, 21; J-21,24
	2. Related/nonrelated occupational experiences	D-19;T-6,33;C-21;J-24
	3. Professional responsibilities and certification	D-3,11,18;T-1,2,5,13;C-2,7,9,20;J-1,22
B. CHARACTERISTICS OF CURRENT AND FORMER VOCATIONAL-TECHNICAL EDUCATION STUDENTS	1. Vocational-technical programs	CS-1,2; FS-1,2
	2. Postsecondary institution performance	CS-6,7,8; FS-4,6,7,8
	3. Career plan	CS-17; FS-18
	4. Work experiences before leaving postsecondary institution	CS-11; FS-11,22
	5. Students' emplcyment experiences after leaving postsecondary institution	FS 18,19
	6. Use of job placement services	CS-15; FS-15
	7. Parents of students	CS-26,27; FS-31,32
	8. Reason for enrollment	T-4; CS-4; FS-3
C. PHILOSOPHICAL POSITIONS	1. Goal of vocational-technical education	D-9;T-11;C-15;J-12;A-5; E-7
	2. Responsible for vocational technical education philosophy	D-4
D. PROGRAM PLANNING	1. Program objectives	D-5,6
	2. Equipment	D-4
	3. Employer needs	D-3

FIGURE 2.3
(continued)
RELATIONSHIP OF HEURISTIC FRAMEWORK TO VARIABLES AND QUESTIONNAIRE ITEMS

HEURISTIC FRAMEWORK	VARIABLES	QUESTIONNAIRE AND ITEM NUMBER[a]
I. Education (continued)		
E. POSTSECONDARY INSTITUTION BASED JOB PLACEMENT PROCESSES AND ACTIVITIES	1. Contact and involvement:	
	a. Between postsecondary institution and labor market for job placement purpose	T-13,15,17,20;C-8,9;J-8,10;E-1,2,3,4,5,6
	b. Between postsecondary institution and labor market for related job placement purposes	D6;T-13,17,20;C-8,9;J-1,3,7,8,10;E-2,3,4
	2. Existence of job placement service	CS-14;FS-14
	3. Time and person working on job placement related activities	D-10;T-15,17;C-1,8;J-1,2,3,4
	4. Students who received job placement services	T-16; J-6;CS-15; FS-15
	5. The most helpful person/agency for job placement	T-21;C-11;J-15;CS-18;FS-21
	6. Instruction in job seeking and job obtainment	T-7;J-3,7;CS-9,13;FS-12
	7. Types of postsecondary institution support for placement	T-24

FIGURE 2.3
(continued)
RELATIONSHIP OF HEURISTIC FRAMEWORK TO VARIABLES AND QUESTIONNAIRE ITEMS

HEURISTIC FRAMEWORK		VARIABLES	QUESTIONNAIRE AND ITEM NUMBER[a]
I. Education (continued)			
F. OPINIONS OF VOCATIONAL-TECHNICAL EDUCATION PERSONNEL AND STUDENTS REGARDING VOCATIONAL-TECHNICAL EDUCATION AND JOB PLACEMENT	1.	Goals of vocational-technical education: job placement as a part of goals	D-9;T-11;C-15;J-12; CS-4;FS-3
	2.	Person/agency's responsibility for job placement	D-13;T-28;C-10;J-13;A-8
	3.	Factors enhancing student's employability	T-26;C-12;J-16;A-6;E-11; CS-19;FS-23,24
	4.	Difficulties for students employed	D-12;T-27;C-13;J-17;A-7; E-12;CS-21;FS-26
	5.	Vocational-technical education student vs. nonvocational-technical education student in employability	E-13
	6.	Students' sources of employment information	T-13;C-10;J-1;CS-9;FS-9
	7.	Effectiveness of job performance	T-12;FS-22,23
	8.	Importance of role of advisory committee in assisting vocational-technical education programs	A-1,2,3,8
	9.	Helpful information in obtaining jobs	T-21;C-11;J-15;CS-18; FS-21
	10.	Important instruction for job placement	CS-9,14,15;FS-9,14,15
	11.	Preparation for employment	T-12;CS-20;FS-21,23
	12.	Curriculum development and content	D-3,5;T-12
	13.	Student admission/selection	D-3;T-4
	14.	Program planning and evaluation	D-4,5,6,7,8;T-9,10;C-4; J-11;FS-17
	15.	Teacher evaluation	D-11
	16.	Postsecondary institution performance in job placement	T-14;C-14;J-14;CS-16; FS-16

FIGURE 2.3
(continued)
RELATIONSHIP OF HEURISTIC FRAMEWORK TO VARIABLES AND QUESTIONNAIRE ITEMS

HEURISTIC FRAMEWORK	VARIABLES	QUESTIONNAIRE AND ITEM NUMBER[a]
I. Education (continued)		
G. ADEQUACY OF VOCATIONAL-TECHNICAL EDUCATION TRAINING	1. Adequacy of students vocational-technical education training to employment	T-12;FS-22,23
II. Local Labor Market		
A. NUMBER OF FIRMS IN LOCAL LABOR MARKET	1. Number of firms	
B. KINDS OF FIRMS IN LOCAL LABOR MARKET	1. Type of business	E-14
C. SIZE OF FIRMS IN LOCAL LABOR MARKET	1. Size of business	E-15
D. EMPLOYER ATTITUDES TOWARD VOCATIONAL EDUCATION AND VOCATIONAL EDUCATION STUDENTS	1. Goals of vocational-technical education: job placement as a part of goals	E-7
	2. Person/agency's responsibility for job placement	E-3
	3. Factors enhancing students employability	E-11
	4. Difficulties for students employed	E-12
	5. Vocational-technical education student vs. nonvocational education students in employability	E-13
	6. Contact between school and labor market	E-1,2,4,5,8
	7. Comparison of vocationally-trained employees to nonvocationally trained employees	E-13

FIGURE 2.3
(continued)
RELATIONSHIP OF HEURISTIC FRAMEWORK TO VARIABLES AND QUESTIONNAIRE ITEMS

HEURISTIC FRAMEWORK	VARIABLES	QUESTIONNAIRE AND ITEM NUMBER[a]
II. Local Labor Market (continued)		
E. EMPLOYER INTERACTION WITH LOCAL VOCATIONAL-TECHNICAL EDUCATION PROGRAMS	1. Contact between school and labor market	T-13,15,17,20,22;C-8,9; J-8,10;E-1,2,3,4,5,6
	2. Participation in activities with vocational-technical education programs	D-6;A-3;E-6
	3. Union connection	E-17
III. Community		
A. ETHNIC COMPOSITION OF COMMUNITY	1. Race	D-16; T-31; C-18; J-20; A-11; E-20; CS-24; FS-29
B. SOCIODEMOGRAPHIC COMPOSITION OF COMMUNITY	1. Educational level	D-17; T-32; C-19; J-21; A-12; E-21; FS-31; CS-26
	2. Students' SES	CS-[illegible],26,27; FS-11,19, 31,32
	3. Age	D-14;T-29; C-16; J-18; A-9; E-18; CS-22; FS-27
	4. Sex	D-15;T-30; C-17; J-19; A-10; CS-23; FS-28

FIGURE 2.3
(continued)
RELATIONSHIP OF HEURISTIC FRAMEWORK TO VARIABLES AND QUESTIONNAIRE ITEMS

HEURISTIC FRAMEWORK	VARIABLES	QUESTIONNAIRE AND ITEM NUMBER[a]
III. Community (continued)		
C. COMMUNITY ATTITUDES TOWARD VOCATIONAL-TECHNICAL EDUCATION AND JOB PLACEMENT	1. Goals of vocational-technical education: job placement as a part of goals	A-5;E-7
	2. Person/agency's responsibility for job placement	E-3;5
	3. Factors enhancing students' employability	A-6;E-11
	4. Difficulties for students employed	A-7;E-12
	5. Vocational-technical education student vs. nonvocational education students in employability.	E-13
	6. Quality of vocational-technical education program	E-10
	7. Rating of job placement service	
	8. Contact with school	
	9. Parental expectations	N/A
D. INPUT INTO VOCATIONAL-TECHNICAL EDUCATION FROM LOCAL VOCATIONAL EDUCATION ADVISORY COMMITTEE	1. Number of years serving on committee	A-1
	2. Type of assistance	A-3
	3. Frequency of meeting	A-2
	4. Evaluating the activities of the local vocational-technical education advisory committee	NA

FIGURE 2.3
(continued)
RELATIONSHIP OF HEURISTIC FRAMEWORK TO VARIABLES AND QUESTIONNAIRE ITEMS

HEURISTIC FRAMEWORK	VARIABLES	QUESTIONNAIRE AND ITEM NUMBER[a]
IV. Job Placement in Labor Market		
A. PERCENT OF FORMER POSTSECONDARY VOCATIONAL-TECHNICAL EDUCATION STUDENTS EMPLOYED	1. Percent of former postsecondary vocational-technical education students employed	FS-19
B. RELATEDNESS OF STUDENTS' VOCATIONAL-TECHNICAL EDUCATION TRAINING TO EMPLOYMENT	1. Relatedness of student's vocational-technical education training to employment	E-10; FS-22,23

[a] Abbreviations used in identifying mail questionnaires (mail questionnaires are provided in Appendix B):

A - Advisory Committee Member Questionnaire
C - Guidance Counselor Questionnaire
CS - Current Vocational-Technical Education Student Questionnaire
D - Dean/Director Questionnaire
E - Employer Questionnaire
FS - Former Vocational-Technical Education Student Questionnaire
P - School Principal Questionnaire
J - Job Placement Specialist Questionnaire
T - Vocational-Technical Teacher Questionnaire

> ....in measuring most concepts in the social sciences it is impossible to sample content. Rather, one formulates a set of items that is intended to reflect the content of a given theoretical concept. Without a random sampling of content, however, it is impossible to insure the representativeness of the particular items (p.22).

Moreover, in content validity, as Cronbach and Meehl (1955) observe, the "acceptance of the universe of content as defining the variable to be measured is essential" (p.282). Further they add:

> However easy this may be to achieve with regard to reading and arithmetic tests it has proved to be exceedingly difficult with respect to measures of the more abstract phenomena that tend to characterize the social sciences (p. 282).

Additionally, Nunnally (1967) states that, "Inevitably content validity rests mainly on appeals to reason regarding the adequacy with which the content has been cast in the form of test items" (p. 93). In summary, in the development of the questionnaires the reviews of individuals' knowledgeable in the substantive areas was the primary method for addressing the validity of the questionnaires used in this study, along with the examination of information from the literature review.

The third phase of the instrument development process involved the pilot testing of the questionnaires. Questionnaires for each respondent group were piloted with less than nine individuals (federal government requirement) representative of each group. The results of the pilot test were used to revise the questionnaires and to assist in determining the time required to complete the questionnaires. Prior to adoption of the finalized questionnaires, reviews were made by nonproject staff from the National Center and reviewers from outside the National Center.

The fourth and final phase of the instrument development involved submitting the questionnaires to the Federal Education Data Acquisition Committee (FEDAC) for official government approval. The instruments were approved by FEDAC and assigned FEDAC Number S 208 with an expiration date of October 1981.

After the questionnaires were approved by FEDAC, they were considered ready for mailing to potential respondents.

Data collection. The first mailing of the questionnaires to respondent groups contained a cover letter, the questionnaire, and a stamped, self-addressed return envelope. A project staff

member carefully monitored the questionnaire returns and checked off each respondent's individual code number. Four weeks later a second mailing was sent to the nonrespondents. This mailing contained a cover letter, the questionnaire, and a stamped, self-addressed return envelope.

Data handling and storage. Coding of variables such as occupation was done manually. One project staff member was assigned the task of coding occupations using the Dictionary of Occupational Titles coding scheme. Two-digit codes were used for this purpose. Interrater reliability checks were made by using other project staff members as coders and comparisons were made with sufficient evidence to support the reliability of the coding scheme.

Editing. Compilation of all data required a number of editing procedures. Occasionally, respondents would write in unrelated comments, which, upon preliminary screening were eliminated from the data file. Fortunately, these were very few in number. A project staff member responsible for the preparation of the returned questionnaire for keypunching visually examined the questionnaire to address concerns of reliability and validity of the data. Coding checks were made visually. After keypunching from the questionnaire to computer cards was completed, another check was made to verify the keypunching process.

Another editing phase used to ensure the accuracy of the data was the development of a computer program used to identify any inaccurately punched data. The program was developed for editing purposes by checking the values of the computer tape to assure they were legitimate values. For example, when certain questions required a Likert scale rating of 1 to 5, the legitimate codes of 1, 2, 3, 4, 5 were tested for by the editing program. Other codes such as 6, 8, 0, A, C, and so forth, were noted on a printout so that proper corrections could be made.

In summary, the editing procedures were included to address concerns for the reliability and validity of the data from the usable questionnaires.

Data storage and analysis procedures. The data were stored on computer tape to facilitate data analysis requirements. Every attempt was made to safeguard the loss of data and the confidentiality of the data set. This was addressed by limiting the work with the tapes to the computer and project staff personnel. To safeguard the loss of the data, duplicate tapes and punched card decks were maintained in a restricted storage area.

The data analysis was conducted by the researchers using The Ohio State University's computer facilities. The primary system of computer programs used for the analysis of data was the Statistical Package for the Social Sciences (SPSS). This package is

defined as a system which provides the user with a comprehensive set of procedures for data transformation and file manipulation, and offers a large number of statistical routines commonly used in the social sciences.

Arrangements for confidentiality of data. The project staff followed a number of procedures to ensure confidentiality for respondents, and to ensure that no unauthorized use was made of the collected information. Specifically, the following steps were taken to address this vital part of the study. First, the respondent's name did not appear on the data collection instrument. Rather, a separate code was assigned for the identification of the following pieces of information:

- State in which the respondent resided/worked
- Questionnaire type (e.g., was respondent a vocational-technical education teacher, a former student, etc.)
- Postsecondary institution district in which respondent resided or worked
- Postsecondary institution in which respondent worked or participtated in curricular activities
- Identification code of respondent for mail purposes and follow-up mailing purposes

Second, safeguard procedures involved processing the data at the National Center by project staff members. For the third procedure, only one person was responsible for the maintenance of a master list of respondents' names and addresses. All master lists were destroyed following the completion of data collection The fourth safeguard procedure involved the destroying or securing of all completed questionnaires upon completion of the project and sponsor approval. Further, the conduct of this study did not constitute a system of records as defined under the Family Education Rights and Privacy Act (P.L. 93-380) and the Privacy Act (P.L. 93-579). There were no "sensitive" questions in the questionnaires. However, there was a section on "background information". These questions requested information from certain respondent groups on factors such as age, education aattainment, and work experiences. A number of previous studies relating to employment of youth reveal that background information is a significant factor. Moreover, these were considered essential items of background information to aid in assessing the contextual characteristics of study respondents' roles in the vocational-technical education program. No respondents' names nor their respective agency affiliation were reported. Respondents were not forced to answer the questions if they did not desire to do so. Therefore, no confidentiality problems were presented by the inclusion of these items.

Finally, the study complies with the Freedom of Information Act (P.L. 89-554) within the limits of confidentiality noted above. Data in aggregated form will be made available in accordance with the Freedom of Information Act.

Data analysis procedures. As discussed previously, the unit of analysis was the postsecondary institution. The rationale for using the postsecondary institution as the unit of analyses was based on the fact that the individual postsecondary institutions could provide only an average job placement rate for their respective postsecondary institution. Therefore, for each independent variable used in the analysis of the mail questionnaire data set, a mean was calculated based upon the responses of the various groups comprising the sample of each postsecondary institution. The limitations of the use of aggregate data have been well documented under the concept of "ecological fallacy". Robinson (1950) cautions the researcher regarding the interpretation of individual-level variables based on the analyses of data aggregated by geographical or other units. Moreover, Borgatta and Jackson (1980) indicate that this interpretation leads to the assumption that because the use of aggregated data could be misleading at the individual level, every such interpretation of the analysis of aggregate data had to be incorrect. However, they state that, while always suspect, aggregate data can possibly suggest findings that exist at the individual level. In addition, Borgatta and Jackson state that a particular brand of reductionism is required to attribute some characteristics associated with geographical and other aggregation limits to individuals. In this project, the interpretation of this reductionism was approached by using the four study methods: review of literature, analysis of existing data bases, case studies, and mail questionnaires. Guided by the study objectives and the resulting research questions (refer to chapter 1), simple descriptive statistics were prepared for describing the characteristics of the respondent groups and the variables under study. Moreover, to show simple relationships between two variables a two-variable frequency table or cross-tabulation was developed. Initially, these tables were developed to provide a basis for testing or presenting assumptions about variable relationships.

Measures of association were used to analyze certain variables. Zero-order correlations were used to define the degree of relationship. Also, the scattergram technique was used to provide a definition of the relationship as linear or curvilinear, along with the degree of association between the two variables.

To show the joint or cumulative affect of two or more explanatory variables on the dependent variable, rate of job placement in related field of training, multiple regression analysis (MRA) and discriminant analysis (DA) were used. These techniques were used as descriptive tools in an exploratory mode to provide

definitions of potential hypotheses for future study on the separate and combined influence of the explanatory variables. Stepwise procedures which contained only those independent variables that made a significant contribution to explaining the variable were used in both the MRA and DA procedures.

Multiple linear regression was selected as a method of analysis to identify the best sets of independent variables that could be used to explain the variance in the dependent variable (the rate of job placement in related field). The multiple regression model focusing on the job placement in related field was the general form:

$$Y_1 = a + b_1x_1 + b_2x_2 \ldots\ldots b_mx_n + e$$

where Y is the dependent variable representing the percentage of former vocational-technical education students who completed their vocational-technical education program and were employed in a job related to their training (former students, class of 1978-79); x_1 through x_n are independent variables representing categories of variables including: (1) background information on the respondents, (2) information about the job placement process, (3) information about the instructional process, and (4) opinions about vocational education.

In this regression analysis, the independent variables were introduced into the equation by a forward (stepwise) inclusion method only if they met certain statistical criteria. The order of inclusion was determined by the zero-order correlations with the dependent variable, the degree of association with the dependent variable determined in the analysis of the other data bases, and the importance of the educational variables relating to whether the postsecondary institution could influence or control the particular variable. The central determination of influence or control was made by consulting with various groups and by using information from the review of literature by the project staff. (Refer to Appendix A for a list of persons from which information was obtained.)

Separate regression analyses were done for the following respondent groups:

1. Directors, teachers, counselors, and job placement specialists (school personnel)
2. Current students
3. Former students
4. Vocational education advisory committee members
5. Employers of former students

Discriminant analysis was used as a statistical technique for studying the differences between the high placement sites (sixteen) and the low placement sites (fifteen) with respect to several variables simultaneously. For the purposes of this exploratory study, attempts were made to determine how well certain variables discriminate between the high placement postsecondary institutions and low placement postsecondary institutions and which variables are the most powerful discriminators.

The designation of high and low labor demand areas was based on the Federal and individual state departments of labor estimates of the 1979 annual average adjusted civilian labor force unemployment rate for the particular labor market area in which the postsecondary institution existed.

The iteration or data reduction techniques discussed earlier include a heuristic framework, a review of literature, discussions with a group of consultants familiar with the school-to-work transition, preliminary analysis of data using correlational techniques on existing data bases, and information obtained from the case studies. The analysis of those data provided the basis for the design of the discriminant analysis study.

Klecka (1980) states that the mathematical objective of discriminant analysis is to weight and linearly combine the discriminating variables in some manner so that groups are forced to be as statistically distinct as possible. The major mathematical assumptions for the use of discriminant analysis are that discriminating variables have multivariate normal distribution and that they have equal variance-covariance matrices within each group. Moreover, the assumptions required of discriminant function analysis are similar to multiple regression.

One of the regression and discriminant analysis assumptions focuses on the requirement for the absence of perfect multicollinearity. High multicollinearity (.8 or larger), can create serious estimation problems because, according to Lewis-Beck (1980), it produces large variances for the slope estimates and, consequently, large standard errors. Zero-order correlations among all variables used in the discriminant and regression analyses were computed. Examination of the intercorrelations showed that they ranged from .80 to -.60 (current students); .89 to -.66 (former students); .91 to -.65 (current and former students); .74 to -.83 (school personnel); .56 to -.61 (employers); .89 to -.88 (teachers); and .86 to -.68 (employers and advisory council members). Lewis-Beck (1980) indicates that while this approach is suggestive, a preferred approach is to regress each independent variable on all the other independent variables, and when any of the R^2 values from the equation is near 1.0, there is high multicollinearity.

Where multicollinearity was extreme, the independent variables in question were examined for their relationship with the dependent variable. In each case where the independent variable was the nonsignificant, that variable was excluded from further analysis.

The standardized Beta represents the amount of units of the independent variable which are uniquely associated with the percentage of job placement in related field of training with the effect of all of the other independent variables partialled out. Because the measurement units of various independent variables in a number of cases were not comparable, standardized or Beta coefficients were used. Moreover, Ezekiel and Fox (1967) state that for comparisons between problems where the standard deviations are much different, the Beta coefficient may have value.

The significance of the Beta was tested with an F statistic which generally should be at least four. Bowen and Weisberg (1980) state that this rule of thumb is actually very close for regressions with at least sixty cases. They add that if a coefficient is not significantly different from zero, then that variable can safely be dropped from the regression.

Multiple regression analysis is based on minimizing the sum of squares within any one group, whereas discriminant function analysis is based on minimizing the ratio or sum of squares between groups to sum of squares within groups. Klecka (1980) explains further the similarities and differences between multiple regression and discriminant analysis. He states that if a research situation defines the group categories as dependent upon the discriminating variables, then that situation is analogous to multiple regression. In discriminant analysis the groups are not defined as either the dependent or independent variable, and the same applies to the discriminating variables.

In the presentation of discriminant analysis by respondent groups in Chapter 3 attention is focused on the contributions of the individual variables to describe the relative importance of a variable in determining the discriminant score. Because there is variation in the scaling of variables, the standardized coefficients were examined. Simply put, the magnitude of the standardized coefficients was examined, ignoring the sign, to determine the variables' absolute contribution in discriminating between the high and low placement sites. Another statistic to be presented will be the eigenvalue. Klecka (1980) states that the size of the eigenvalue is related to the discriminting power of that function; that is, the larger the eigenvalue, the greater the discrimination. The canonical correlation, which is used in judging the substantive utility of the discriminant function is also presented in Chapter 3. A high coefficient indicates that a strong relationship exists between the groups and the

discriminant function. If the high and low placement groups are not different on the variables being analyzed, then the correlation will be low, because one cannot create discrimination when none exists. The fourth statistic is the overall Wilkes Lambda. Wilkes Lambda is a multivariate measure of group differences over the discriminating variables. The values of Lambda which are near zero denote high discrimination. The final measure to be presented is the classification function, in which the discriminating variables are used to predict the group to which a case most likely belongs. However, since we are dealing only with the high and low placement groups, we can expect 50 percent of the predictions to be correctly classified by chance alone. Klecka recommends that a proportional reduction in error statistic, tau, be used to give a standardized measure of improvement irrespective of the number of groups:

$$\text{tau} = \frac{n_c - \sum_{i=1}^{g} p_i n_i}{n. - \sum_{i=1}^{g} p_i n_i}$$

n_c = number of cases correctly classified.
p_i = prior probability of group membership.
$n.$ = total number of cases classified

A number of assumptions are identified when using discriminant function analysis. Assumptions identified by Klecka (1980) include the following:

- Two or more groups
- At least two cases per group
- Any number of discriminatory variables, provided that they are less than the total number of cases minus two discriminating variables measured at the interval level.
- No discriminating variable may be a linear combination of other discriminating variables.
- The covariance matrices for each group must be (approximately) equal, unless special formulas are used. Each group has been drawn from a population with a multivariate normal distribution on the discriminating variables.

Klecka states that the requirements for multivariate normal distribution on the discriminating variables and equal group covariance matrices are the most difficult assumptions to satisfy. However, he cites Lachenbruch (1975) as having shown that

discriminant analysis is a rather robust technique which can tolerate some deviation from the multivarate distribution and equal group covariances assumptions.

Summary. This study involved the use of three research approaches: (1) literature reviews, (2) case studies, and (3) mail questionnaires. These approaches were chosen in order to produce a mixture of qualitative and quantitative data. The use of multiple data sets provided an opportunity for checking the reliability of the findings from the three approaches. Data patterns which emerged from more than one of the study approaches were presented to provide more reliable information.

The sets of quantitative and qualitative data used for the analysis were as follows:

1. Review of literature relevant to the placement of former postsecondary vocational-technical education students in jobs related to their training.

2. Case studies conducted by two researchers for two weeks at four sites in four states. Data were collected from documents, observations, and in-depth interviews with administrators, vocational-technical education teachers, job placement specialists, guidance counselors, employers, advisory council members, current students, former students, and key community members.

3. Mail questionnaires received from respondents at thirty-one sites in the same four states. The respondents were vocational-technical education directors/deans, vocational-technical education teachers, job placement specialists, guidance counselors, employers, advisory committee members, current students, and former students.

Factors appearing to relate to high or low job placement from each set of data were incorporated in the report. These sets of data initially were analyzed independently to identify factors relevant to the job placement of former postsecondary vocational-technical education students. When cross-analyzed the findings from the three data sets did not always concur. These discrepancies are indicated in the report.

For vocational-technical education, this report represents a bold and somewhat nontraditional approach to data exploration and analysis. For the most part, vocational-technical education researchers and evaluators have relied upon the rationalistic paradigm to provide the basis for the inquiry mode. In this study, the data from the mail questionnaires and from the analysis of the existing data is representative of inquiry based on the rationalistic paradigm and the data collected in the case studies is representative of inquiry based on the naturalistic paradigm.

Numerous writers, including Pillemar and Light (1980) have noted that qualitative information enables the researcher to provide a thickness and richness of description that is nearly impossible to capture using only quantitative information. The case studies conducted as a part of this project have contributed to the depth of understanding of the factors relative to the placement of former students in jobs related to their training.

It was obvious from the framework guiding the study that the number of factors affecting job placement could be limitless. It was also readily apparent that vocational-technical educators can have very limited to no control over many of the factors affecting job placement in the labor market. Most of the study effort was concentrated on factors the National Center staff believed could be manipulated by vocational-technical educators. The primary focus for the data analysis was determining the relationship of these factors to job placement rates and the comparison of high job placement sites with low job placement sites. Minor data analysis was conducted by using the sampling stratification variables of labor market demand or community type.

Sampling Plan

A nonprobability sampling design was used in this study. The major disadvantage of this design is that no valid estimate of the risks of error can be obtained (Blalock, 1979). However, because this was an exploratory study in which the main goal was to obtain valuable insights that ultimately may lead to testable hypotheses, the nonprobability sampling design was deemed appropriate (Blalock, 1979; Ackoff, 1962, and Kish, 1965).

The first stage of sampling involved the initial selection of states to participate in the study. Judgment sampling was used to select four states to be included in the study. The criteria used in this selection process included the following:

1. The presence of an operating management information system in the state
2. The willingness of states to participate in the study
3. A geographic distribution of states
4. A strong statewide commitment for providing postsecondary vocational-technical education programs

5. Consideration of project constraints such as level of funds, staff, and time

Based on these criteria, four states were selected and subsequently agreed to participate in the study. All individuals contacted were promised confidentiality regarding the identification of their names and the names of their participating state, postsecondary institution, and individual respondents at all sites.

The second sampling stage involved the selection of postsecondary institutions to serve as sites for the mail questionnaire part of the study. The population from which institutions were selected to participate was composed of postsecondary institutions offering vocational-technical education programs in at least five different occupational fields as defined by the six-digit USED code number. This criterion was based upon the definition of vocational education used in P.L. 94-482, Section 195.

The postsecondary institutions in each state were then stratified on the basis of two major variables:

1. Average job placement rate of the postsecondary institution (high or low). By establishing a median split of existing job placement rates by State, "high" placement sites and "low" placement sites were identified. The job placement rate was obtained from the individual state or local management information system records for the school year 1978-79.

2. Labor market demand (high or low). High labor market demand was defined as having unemployment rates of 5.9 percent and below. Low labor market demand was defined as having unemployment rates of 6.0 percent and above. These data were obtained from records of the U.S. Department of Labor and the respective labor statistics office in each state (annual average 1979 unemployment rate). The classification scheme, shown figure 2.4, was adapted from the U.S. Department of Labor's classification system for labor supply.

FIGURE 2.4

LABOR MARKET DEMAND CLASSIFICATION

Labor Market Demand Designation	Labor Supply Category	Description	Unemployment Rate*
High	Group A	Overall labor shortage	>1.5%
High	Group B	Low unemployment	1.5% to 2.9%
High	Group C	Moderate unemployment	3.0% to 5.9%
Low	Group D	Substantial unemployment	6.0% to 8.9%
Low	Group E	Substantial unemployment	9.0% to 11.9%
Low	Group F	Substantial unemployment	12.0% or more

SOURCE: U.S. Department of Labor, Area Trends in Employment and Unemployment. July-December, 1979, pp. 30-31.

* Ratio of unemployment to area's total labor force.

The combination of two levels of labor market demand (high, low), and two levels of job placement rates (high, low) resulted in a 2 x 2 design with four cells as shown in figure 2.5. The stratification was done in order to ensure that communities of differing sizes having different labor market demands would be included in the study. In addition, stratification allowed the researchers to explore job placement in specific subdomains of the population of postsecondary institutions, for example, among those postsecondary institutions in metropolitan areas having low labor demand.

FIGURE 2.5

POSTSECONDARY INSTITUTION SELECTION MATRIX

LABOR MARKET DEMAND	JOB PLACEMENT IN RELATED FIELD: High	JOB PLACEMENT IN RELATED FIELD: Low
High	8 PSIs	8PSIs
Low	8 PSIs	7PSIs*

* One site from the original sample withdrew from the study.

The third stage of sampling involved the identification of sites for the questionnaire phase of the study. Thirty-two postsecondary institutions were randomly selected to serve as questionnaire sites. Because of the contraints of time and money, the number of postsecondary institutions was limited to thirty-two. To ensure representation in all cells of the matrix, a requirement of randomly selecting eight postsecondary institutions per cell was made. Ultimately, thirty-one of the thirty-two selected sites agreed to participate in the mail questionnaire phase of the study. The one nonparticipating site had originally agreed to participate in the study, but then withdrew. When the one site withdrew, insufficient time remained in the study to select an additional site.

The fourth sampling stage consisted of selecting the individuals to receive the mail questionnaires. Based upon the review of the literature and meetings with external project consultants (see Appendix A for a list of consultants), eight groups of respondents were identified: postsecondary vocational-technical education deans/directors, postsecondary vocational-technical education teachers, postsecondary guidance counselors, postsecondary job placement specialists, advisory committee members, employers, current vocational-technical education students, and former vocational-technical education students. These respondent groups were chosen because each is directly involved in the job placement of vocational education students.

Because five of these groups were relatively small in size, all of their members were included in the survey. These five groups were: vocational-technical education deans or directors,

teachers, counselors, job placement specialists, and advisory committee members. Due to the larger size of the remaining three groups (employers, current students, and former students) random sampling was required. Current and former students were systematically sampled from enrollment lists provided by the postsecondary institutions' student accounting systems for the school years 1979-1980 and 1978-1979 respectively. The sample of employers was randomly selected from lists of employers provided by the postsecondary institutions. The employers on the lists were known to have hired former vocational-technical education students.

For the case study phase of the project, one institution was selected in each of the four states. These selections were based on the judgment of the study staff working with state liaison personnel. The case study sites represented high and low job placement sites. Two of the study sites were very large and complex institutions. One of the institutions was located in the inner city. One institution was located in a small rural setting. Three of the institutions were community colleges and one was a postsecondary vocational-technical school.

CHAPTER III

FINDINGS

In this chapter information will be presented about the study sites, the respondents, and the findings concerning the relationship of labor market, community, and education factors to the placement of former postsecondary students in jobs related to their vocational-technical education experiences. The major portion of the chapter is organized by issue areas or themes that were identified initially or that emerged during the study. Due to the unique characteristics of each state, and the extreme variability of placement rates among the states, information within the issue areas or themes is presented by states. However, the four states were aggregated for the correlational regression and discriminant analysis. Due to the length and complexity of some tables, all tables are located in the appendices.

Information About Study Sites

Thirty-one postsecondary institutions (sites) located in four states were represented in the mail questionnaire part of the study. One of the sites in each state served in a dual role as a case study site as well as a mail questionnaire site. Procedures used to select the sites were described in chapter 2.

Job Placement Rates

The dependent variable for the study was the percentage of students who completed their vocational-technical education program in 1979, who were known to be available for work and were placed in full-time, training-related jobs within six months after leaving the program. As shown by the data in table 1, the range and median of placement rates differed for each state. In this study the rates were considered for area postsecondary technical schools in State A and for community colleges with vocational- technical education programs in States B, C, and D.

In State A, the placement rates for the area technical schools ranged from 89 to 100 percent, with a median of 96 percent. The job placement rates for the eight area technical schools participating in the study ranged from 90 to 99 percent.

Five of the schools with 96 and above percent placement rates were high placement sites whereas the three schools with less than 96 percent were low placement sites. The case study site in State A had a placement rate above the median and was considered a high placement site.

The fifty-one community colleges in State B reported a range of placement rates from 56 to 94 percent. The median was 83 percent. The range of placement rates for the eight mail questionnaire sites was 80 to 92 percent. Three of the colleges were high placement sites whereas five were low placement sites. The case study site in State B had a placement rate below the median and was considered a low placement site.

In State C the median was 68 percent for the 102 community colleges with a range of placement rates from 33 to 100 percent. The range of placement rates for the eight mail questionnaire sites was 44 to 95 percent. With a placement rate of 68 percent, the case study site in this state was a high placement site.

The median placement rate in State D was 55 percent for the sixteen community colleges. The placement rates ranged from 20 to 75 percent. The range of placement rates for the seven mail questionnaire sites was 42 to 73 percent. Five of the seven colleges participating in the study were high placement sites whereas two were low placement sites. The case study site was classified as a high placement site.

The postsecondary intitutions' placement rates collected for the study had been officially reported to the four respective state agencies. At the case study sites, however, the placement rates were not readily known by the majority of school staff interviewed. At the case study site in State C for example, neither the job placement specialist nor the academic dean would estimate the rate of job placement. They explained that the range of rates varied widely among the twenty-eight day and twenty-five evening vocational-technical education programs. They believed, as did other staff interviewed, that the reported rates exceeded the actual rates. The director of vocational training for the area community colleges which included the case study site in State C said, "When we need to report placement information we hire an official guesser to complete the reports." Interviewees at the other case study sites believed that reported job placement rates were representative of job placement in their schools and were as accurate as possible given the varied student populations and current follow-up systems.

The follow-up system developed in State B was used at that state's case study site to provide detailed information about job placement. School staff interviewed at that site appeared satisfied that the job placement rates were realistic, reflecting the

information they received through informal channels. Notwithstanding the alleged accuracy or inaccuracy, the officially reported placement rates were determined to be the best source available for this study.

Postsecondary Institution Characteristics

Table 2 displays the 1979 enrollments of the schools in the study. The enrollment figures for the community colleges (States B,C, and D) include all students, including vocational-technical, academic, and continuing education students. The number of students at the case study community colleges enrolled in vocational-technical education courses are shown in the last column of table 2.

As the data in table 2 show, part-time enrollments exceeded full-time enrollments at nearly all the community colleges in the study. The vocational-technical education school enrollments ranged from 146 to 2,353 full-time students in State A, with 1,774 students at the case study site. In State B the range was from 194 to 7,893 total full-time students in the community colleges. There were 8,600 full-time and part-time students enrolled in vocational-technical education programs at the case study site, which had a total enrollment of 20,764. In State C the enrollments ranged from 637 to 6,519 full-time students and from 947 to 16,333 part time students. At the case study site there were 555 full-time students and 623 students in night programs in vocational-technical education programs. The enrollment range in State D, was 1,123 to 2,504 full-time and 1,128 to 4,345 part-time students. At the case study site there were 258 fulltime and part-time students enrolled in vocational-technical education programs.

The case studies provided additional descriptive information about four postsecondary institutions and the vocational-technical education programs. Various characteristics of the four case study institutions are presented in table 3. As indicated in table 3, the four case study sites differed in the type of settings, number of students enrolled, and vocational-technical education programs offered. The education programs at case sites A and D were housed in single buildings that contained all of the services and programs offered by the school. Although all of the programs at case site A were vocational-technical, many of the vocational-technical programs at case site D were considered transfer "career" courses. At both case sites B and C, the vocational-technical programs were increasing in number and enrollments, and were housed in at least two buildings on a multibuilding campus. Case site C had a very compact, inner-city setting, with numerous building levels along with connecting ramps for the physically handicapped. Case site B had an open, spacious campus, typical of a four-year college environment.

In State C, the case study community college was located in the downtown area of a major metropolitan city. The college was one of several in the local community college district, which was organized as a single administrative unit. Admission was open to state residents who were high school graduates, holders of certificates of proficiency from an accredited high school, or transfer students from accredited postsecondary institutions. The student body was 53 percent white, 27 percent black, 13 percent Hispanic, and 7 percent other ethnic groups.

Case site D had open admissions to all state residents with a high school diploma or recognized equivalent. The student body was virtually all white with 60 percent female. Counselors said that "it has been regarded as a good transfer school." A follow-up of the mid-1970s students indicated that 63 percent ultimately received baccalaureate degrees, mostly from the numerous four-year institutions nearby. Former and current students viewed their education as an opportunity to explore careers. An administrator said that "we feel one of our biggest jobs is to offer retraining for jobs as needs change in this area." According to the college catalog, the career programs are designed to prepare students for employment in a variety of occupational fields and in some cases, to provide the foundation for transfer to a four-year baccalaureate program.

Population Characteristics

Information was collected to describe the population in the communities in which the thirty-one postsecondary institutions were located. Data were collected about the population for the counties in which the institutions were located. Additional information was collected regarding the community sites of the four case study institutions.

Table 4 displays the 1970 and 1980 population, and the percentage of change in that decade. In three of the states (States B, C, and D) there was a greater increase in population during the 1970s at the low job placement sites than at the high job placement sites. In State A, there was a lower average increase in the population at the high job placement sites and a decrease in population at the one low job placement site. In State D, three of the four high job placement communities decreased in population. It appeared that the trend was for more population growth in low job placement communities than in high job placement communities.

The distribution by ethnic origin of the population in the study site counties is displayed in table 5. There did not appear to be any relationship between the percentage of minorities

in the population and the rate of job placement. At a number of sites in States B and C, a high percentage of the population was of Spanish origin. It was somewhat discernible that at least two sites (numbers 9 and 13) in the study had a "majority-minority" population. One site (number 2) in State A had a sizeable percentage (13 percent) of American Indians although at the remaining sites at least 94 percent of the population was white. At nine sites in States B, C, and D, the range in Black percent of the population was 11 percent to 22 percent of the total population.

A closer examination of the population characteristics of the case study sites shows approximately 98 percent of the population was white at case study site A (State A, 6). Interviewees described the population as strongly believing in the protestant work ethic. Interviewees also felt that the population was supportive of vocational-technical education, viewing it as providing opportunities for their children and fostering economic growth. Postsecondary vocational-technical education had a strong position in the community, due in part to the involvement of vocational educators in community activities and in the involvement of the public with the schools through advisory committees.

In State B the population of the case study site was 52 percent Hispanic and 39 percent white, with 8 percent black. There were indications of past and current tensions between the whites and Hispanics. Although historically whites dominated in positions of power and control in the city, more Hispanics had been assuming key positions in recent years. Blacks appeared to be discriminated against by both groups. A few months prior to the case study, a Hispanic businessman was elected chairperson of the board of trustees of the district community college. This shift in the balance of power caused concern and speculation in the community about the forthcoming policies and governance of the schools. The majority of the enrollment at the site school was Hispanic whereas the other school in the community college district had a 30 percent enrollment of blacks.

The census data showed that 15 percent of the population were Hispanics at the case study site in State C, but public officials explained that the illegal alien population was considerably higher but could not be officially tabulated. Members of the armed forces comprised almost 14 percent of the population sixteen years of age and older. Although this community had grown very rapidly during the past two decades, the political conservatism had been maintained. Most interviewees felt that the public was supportive of vocational-technical education, especially in community colleges, primarily because of concern about unemployment among young adults. Interviewees felt that the numerous postsecondary institutions in the community minimized the economic impact of any one institution, especially

the study site community college that was located in the inner city.

The population (20,000) of the rural town where the case study site (number 25) in State D was located had less than 170 minorities. The population was described by interviewees as conservative yet allowing for individualistic thinking, and as having a wealth of well-educated people working in small businesses and crafts along with hill people, factory workers and farmers. The surrounding region was described as a student enclave due to the tremendous growth of four-year colleges and universities during the past decade. Higher education was important as a way of life and as a major part of the economy. Interviewees felt, however, that postsecondary vocational-technical education was not highly regarded despite the high work ethic of the people in the region.

Economic Characteristics

Unemployment rates are displayed for the study sites in table 6. In each state, site schools selected to participate represented communities with high and low labor market demand. At the time of site selection in 1979, the national median rate of unemployment was 6.0 percent. Sites with unemployment rates of 5.9 percent and below were designated as low unemployment rate sites. Sites with unemployment rates of 6.0 percent and above were hign unemployment rate sites. As the data in table 6 show, in States B, C, and D the average rates of unemployment were higher for low placement site communities than for high job placement communities. In State A the average unemployment rate was slightly higher for high job placement communities. There appeared to be a trend toward higher unemployment in low job placement communities across all sites. There was a wide range in the unemployment rates however, which indicates that the trend was not consistent for all thirty one sites. In State A, for example one low job placement site had a low unemployment rate of 3.3 percent while at one high placement site the rate of unemployment was 7.5 percent.

The data in table 7 show the per capita income for the population residing in the immediate vicinity of the school. In States B, C, and D, the average per capita income of high job placement communities was higher than the average per capita income in the low job placement communities.

Analysis of Respondents

A detailed explanation of the selection of the postsecondary institutions is provided in Chapter 2. Briefly, thirty-two

schools, eight in each of four states, were initially identified and agreed to participate in the mail questionnaire phase of the study. One school subsequently withdrew from the study but was not replaced due to project administrative and resource constraints.

The data in table 8 indicate the number and percent of questionnaires mailed and returned. Twenty-four percent (2,599) of the total number (10,983) of questionnaires mailed to all sites were returned in time for analysis. The highest mean response rate was 30 percent from the state with the highest placement rate (State A). In all except State A there was a higher response rate from high placement sites than from low placement sites.

A further analysis of the respondents is presented in table 9. The response rate for all states is shown by respondent types in table 9. The greatest percentage of the mail questionnaires was sent to former and current students, with approximately 41 percent sent to former students and 25 percent sent to current students. Former students returned 24 percent and current students returned 22 percent of the mail questionnaires. Students comprised almost half of the respondents (former students 24 percent and current students 22 percent). Job placement specialists received the smallest number of mail questionnaires (26 or .2 percent) with a 69 percent return rate. Deans/directors received 0.3 percent of the mail questionnaires with a 71 percent return rate. Approximately one-third (34 percent) of the vocational-technical teachers who received mail questionnaires (1,925) returned them, comprising 25 percent of the total returned from all groups. Almost half (45 percent) of the counselors who received the mail questionnaires returned them. Advisory committee members and employers received 7 and 8 percents and returned 42 and 37 percents respectively to comprise a fourth (25 percent) of the mail questionnaires received.

A further analysis by type of respondents is displayed in table 10. The information indicates how many individuals responded at the high and low placement sites in each state. The number of questionnaires mailed to the respondent groups depended upon the names drawn in the proportional sample. With the exception of job placement specialists, the numbers of respondents are representative of the sites. In State A there were no job placement specialists at the postsecondary institutions participating in the mail questionnaire.

At the case study sites, individuals were selected for interviews primarily through the cooperation of the state and local school liaison persons. Additional interviewees were selected as project staff identified key individuals at the schools and in the communities throughout the site visits. In table 11 ab analysis of interviews held at the case study sites

indicates that a total of 261 individuals were interviewed. A number of interviewees who were contacted more than once to provide additional information were counted once for the data displayed in table 11. The largest group interviewed, site school staff, included deans/directors, other administrators, job placement specialists, counselors and teachers. In order to maintain cooperation at the case study sites the liaison persons were encouraged to organize the interviews to be as unobtrusive to the regular school schedule as possible. One result of the cooperation displayed at one site in State D was the scheduling of group as well as individual interviews. The entire faculty of several departments met for group interviews. Several faculty members were interviewed individually as well. Similarly, students were scheduled for initial interviews in groups and when time permitted, were interviewed individually.

In several instances interviewees represented more than one role and were asked to discuss opinions from their various perspectives. For example, several part-time vocational-technical teachers were also employers or advisory council members. Frequently employers had been students at the postsecondary institutions.

Labor Market Factors

A number of labor market factors potentially contribute to the job placement of postsecondary vocational-technical education students. The majority of the interviewees at the case study sites emphasized that the most important factor in job placement was the rate of employment in the community. A frequent explanation was "if you've got jobs, you'll have high job placement."

Closer examination of the impact of labor market demand upon the job placement of postsecondary vocational-technical students indicated that the average demand was not as salient as the demand for a specific type of occupation or technical skill. For example, whereas at case site B employers hired all of the computer technology students available, often prior to graduation, at case site C computer technology graduates found they would not be hired without previous experience. The average unemployment rate was, however, lower at site C than at the time of the case study visits at case site B.

In a study of secondary vocational education programs there was a higher rate of job placement reported for vocational programs in communities with a greater proportion of small businesses, (McKinney et al. 1981). This relationship did not appear to hold for the postsecondary site communities in the study.

The data reported in table 12 show the relative sizes of businesses in the mail questionnaire site communities. There appeared to be no distinct trend between the rate of placement

and relative sizes of industries. The averages indicated that there was more of a tendancy for proportionately larger businesses at high placement sites than at low placement sites.

Employers who responded to the mail questionnaire indicated the sizes and types of firms they represented. Table 13 provides an analysis of the sizes of the firms in terms of the numbers of employees. As the data in table 13 show, there was no consistent trend across high or low placement sites in the states. In State A the largest group of firms had between ten and ninety-nine employees in both high (41 percent) and low (33 percent) placement site communities. In State B, 36 percent of the firms at high placement sites had 100 to 499 employees and 34 percent of the low placement site firms had 10 to 99 employees. In State C there was a greater difference between sizes of firms in high and low placement site communities. Approximately half (51 percent) of the low placement site firms had 10 to 99 employees although the largest group (29 percent) of firms at high placement sites had 1000 to 2499 employees. In State D 42 percent of the high placement site firms had 10 to 99 employees compared to 36 percent having 100 to 499 employees at low placement site firms. These data indicate that the size of firms, at least in terms of members employed, did not appear to be associated with the job placement of postsecondary vocational-technical education students.

Employers who responded to the mail questionnaire also indentified the types of firms they represented. The data in table 14 show the distribution of types of firms represented by the respondent employers. Approximately 20 percent of the employers in both the high and low placement sites in State A indicated that they represented firms classified as service industries. Further, the employer respondent group indicated that 15 percent in the high placement sites and 13 percent in the low placement sites represented manufacturing industries. Of those employers in State A from retail trade industries, 15 percent were in high placement sites and 11 percent were in low placement sites.

Of the employers in high placement sites in State B who responded to the mail questionnaire approximately 31 percent represented manufacturing industries. In low placement communities approximately 19 perent of the employers were from manufacturing industries. Twelve percent of the respondents represented firms in retail trade in the low placement communities. This data suggest more diversity among the types of firms represented in the low placement communities of State B than in high placement communities.

In State C the employer respondent group indicated that retail trade, services and local/state government industries each represented 19 percent of the firms in high placement communities. In comparison, 29 percent of those responding in low

placement communities indicated they represented local and state government. Twenty-six percent of the employers in low placement sites did not identify their respective industry type.

In state D 29 percent of the firms represented by the respondents in high placement communities were classified as service industries and in low placement communities 24 percent of the respondents indicated that they represented manufacturing firms. For the high placement sites 29 percent of the respondents indicated that they represented other industries, and in the low placement sites 28 percent of the 75 respondents indicated that they represented other industries.

These results indicate a diversity of industrial types representing the thirty-one local public postsecondary sites. The crosstabular data suggest no distinctive pattern which would distinguish high placement sites from low placement sites. At the case study communities more specific types of firms were identified. Table 15 shows the specific types of firms in the communities where the four case studies were conducted.

Community Factors

The demographic and economic context of the study sites were described in previous portions of this report. The four case studies provided the opportunity to examine job placement in relation to the multitude of other phenomena in the communities. Table 16 provides a capsule overview of the context of the four case study sites.

As the information in table 16 shows, the case study sites were located in diverse types of communities. Case site A was located in a mid-sized city with an almost predominant white population. This contrasted sharply with case site B, which was located in a sprawling growing city with a majority-minority population. Case site C was located in the heart of a growing city with a 21 percent minority population along with uncounted numbers of illegal aliens. Case site D was located in a small, somewhat isolated town with less than 200 minorities. The minorities accounted for approximately 1 percnt of the population in case site D. This town, however, was the largest in the county and served as the county seat.

The interviews in case sites A and B viewed postsecondary vocational education as an integral and vital component of economic development of the communities. At case site B, the director of vocational-technical education was an active member of a well-organized and powerful economic development committee composed of community leaders.

In each case site the postsecondary institution occupied a unique position in its community relative to the other opportunities for postsecondary education. In sites A and D case site institutions were the only two-year public postsecondary institutions located in the respective communities. However, there were two or more four-year institutions located in or near the postsecondary institutions. In those communities (case sites B, C, and D) where many postsecondary education choices existed, the case study site postsecondary institution did not appear to be as important as in the communities with far fewer opportunities. Of the four case study sites, case site C had the greatest number and most diverse types of public postsecondary institutions in the immediate region. Although there was considerable economic development activity, the key officials in the city did not actively involve school personnel in case site C. Employers and others not directly associated with case site C pointed out that it was only one of many other public and private postsecondary institutions in the city. Administrators at case site C felt that the vocational-technical education programs were meeting employer needs in the community but also felt that their job placements did not have a major impact upon the labor market. It appeared that higher education was an important enterprise in itself and a way of life in this community; that many persons took advantage of the numerous opportunities for education without specific career goals in mind; and that placement in related jobs was not the highest priority for the interviewees other than students.

Although case site D was the only two-year postsecondary institution in the community, graduates did not appear to have many opportunities for job placement. Interviewers said that the majority of the career programs are taught as transfer programs "especially since the job market simply doesn't exist here." According to the majority of interviewees, many who do find work in the area are underemployed or employed in a field unrelated to their training.

In contrast, most of the graduates of case site A, which was also the only two-year public postsecondary school in the community, found jobs. The community strongly supported vocational-technical education as evidenced by public expression of the value of the program and by the allocation of tax dollars.

Education Factors

Philosophical Positions

Information from review of literature. There was little pertinent literature about the philosophical position of post-secondary vocational-technical educators relative to placement in jobs related to their training. Cross (1981) conducted a study focusing on community college goals. Over eighteen hundred faculty members, administrators, trustees, students, and community members from eighteen geographically dispersed community colleges indicated their rankings of twenty possible goals for community college education. All of the respondent groups agreed that community colleges have a major obligation to provide vocational-technical education for students. Four of the five groups indicated that general education is the highest priority and vocational-technical preparation is the second highest priority from among the twenty goals. The fifth group, trustees, indicated that vocational-technical education is the highest priority goal for community college education.

Information from the case study sites. At the four case study sites interviewers' opinions regarding the importance of job placement as a goal of vocational-technical education ranged from regarding it the highest priority to not recognizing it as a responsibility of the postsecondary institution.

At case site A (designated a high placement site in State A) job placement appeared to be the highest priority goal of the interviewees. The majority of the interviewees agreed that the ultimate goal of the area vocational-technical school was to place students in jobs related to their training. Most interviewees also believed that the attainment of competencies was extremely important, especially since the vocational-technical education programs were based upon the mastering of occupational competencies. Case site A is located in a state that appears to value vocational-technical education. The state's fiscal manager for vocational-technical education said "education is a high priority for the state and for the people. The second largest expenditure of state funds is for vocational education in the state." Locally the employers stated, "the school is doing a good job of training," and "graduates of the school are very successful--vocational students are in high demand." The number of students participating in postsecondary vocational-technical education programs increased in 1979 despite the extensive declines in secondary school enrollments. The faculty handbook at case site A states that:

> It is the intent that the vocational-technical program shall concern itself with the welfare and interests of the people of the area and

> shall maintain close ties with those segments of activity contributing to increased quality of life and economic development of the area.

According to an administrator at the case site, "the school's reputation and the reputation of the instructors are major factors in the high job placement here." Employers agreed, as one stated, "the school's willingness to accommodate you to the best of their ability is noteworthy." The school's philosophy appeared to be one of responsiveness to the community's labor needs, along with emphasis upon high quality vocational-technical education and rigorous attempts to place all graduates of the programs. Interviews with teachers revealed that they understood that "placement is a part of my job" even though a job service counselor said:

> Within my tenure here the economic factors are beginning to place a greater role in job placement than several years ago. As a result of the local market getting tighter, more attention is being paid to job placement outside the local area.

At case site B (designated a low placement site in State B) job placement was considered most important as the overall goal of the vocational-technical education programs. Several teachers said that placement was the ultimate test of their teaching and of the programs offered by the community college. The college president said:

> The designed outcome is for a person to fit into the economic structure and placement attempts to see that it is brought about. I would assume that our success in technical education is measured almost entirely by whether or not we place people and whether or not they are well-trained people who can do the job when we place them.

The philosophy of the college, according to the president and the dean of technical education, is to meet the employer's needs for trained personnel and to provide high quality training for the students. With a shortage of skilled labor in the city, the students enrolled in training programs, especially electronics, data processing, and health fields, are hired prior to graduation and often without recognition of the job applicant's qualifications.

The director of counseling explained that job placement counseling is available for students but, "so many times the employers hire the students before they even get their associate

degrees" or the students work directly with the faculty to get placed. "In other words," he said, "the students are hired in many fields before they get out and it's just a matter of communicating to let them know which companies need someone." "I think," the director of counseling continued, "the teachers do a better job because they work directly with the community and because, after all, there's a limit to what a job placement officer can do."

An Hispanic city councilman who worked closely with the dean of technical education on the economic development council stated "I think the college has prepared people well--they have simply done a good job of building the city work force and I regard them as an integral part of our economic development program." He continued, "the college has a good deal of flexibility in their programs and they tend to be pretty responsive to market changes."

At the state level the commissioner of community college said, "Programs to be offered by the individual community colleges are a local option." However, the commissioner stressed:

> The training received by students must not be too narrowly focused. Students must reserve enough broad training to be able to progress on the job. Narrow, specific training for local labor needs allows the individual to secure job entry but does not adequately prepare him or her for advancement on the job.

At case site C (designated a high placement site in State C) the community college administrators and teachers complied with the reporting requirements of the local district and the state. The district's chief administrator of vocational-technical education stated:

> The thrust in vocational education is realistic training for jobs that exist, essentially in the community. We are dealing with the real world. We want our programs to reflect the real world. So obviously placement is tied up right in the middle of all this. We look at programs that don't have a good placement rate and wonder why and how we can change it. Job placement is one of our top goals.

The case site administrators and teachers appeared to believe that placement rates were more influenced by the local economy than by their interventions. The director of placement said "the high placement in this area is because the demand is here. I think that's number one. Even if we can have the best program in

the world, if there are no jobs, then there are no placements." All teachers submitted monthly placement reports to the director of placement enumerating their students' job placements and starting hourly wages. Although the director of placement felt that "we all do placement," several teachers felt that the director received the "credit" for their placements and were less prone to make efforts to place students. A number of interviewees believed that job placement was a high priority for reporting purposes but not in reality. The director of placement explained:

> The placement officer is the clearinghouse. I am the only professional here, and to be in charge of the myraid of things that I have to be in charge of, there's no way to deal with 12,000 students individually. As a result, everybody does job placement. I gave the instructors the credit because they're our pipeline.

At case site D (designated a high placement site in State D) several interviewees expressed surprise that job placement would be considered a function of a community college. Although there were sixteen vocational-technical education programs, most were taught as transfer programs. The majority of the teachers believed that there were few program-related jobs in the immediate community and did not see themselves as having many opportunities to place students. The college president stated:

> I'm not sure per se the college has any obligation for placement--I'm not an employment agency, however, I feel we have a distinct obligation to keep in touch with the employers in the community and to communicate their needs to our curriculum, our faculty, and our students. We also inform the employers of the kind of careers we prepare the students for. But, in terms of finding the students a job, I'm sorry, but I don't think that's our function. In some cases, we have to tell them there are no jobs in this area in their field--that's a truth in selling that's very important--it's our obligation to tell them, they have a right to go somewhere else, but if they still want the courses, terrific, it's their choice!

Most of the students regarded the vocational-technical education programs as "an opportunity to explore careers." Most of the students were positive about their experience at the college, as one described:

> I feel I've really blossomed here - I've gained a lot of self-confidence. In contrast to the state college I attended for a while, I feel like I've gotten a lot more direction here. The teachers have been really, really interested in my plans and have advised me accordingly.

Other students spoke about the personal attention they've received from faculty members. One student said "the teachers are so interested in the students."

Students were less optimistic about opportunities to find jobs and about the help the school could provide with job placement. One student said, "I think a lot of times this college is a resting place because of the job market." Another said, "I've heard of people using the placement office for transferring to other schools, but I've never heard of them going there for jobs." A teacher stated a commonly held feeling:

> I feel quite guilty about my students because they're heading into careers where they'll find no fulfillment. I hear a lot of things about placement, but I have no evidence it exists except for placement in other colleges, as transfer students. I don't see the college committed to job placement at this time.

Most interviewees believed that the school provided an excellent foundation for transferring to one of the numerous four-year schools nearby but did little, due to the low labor demand, to encourage students to take jobs after receiving an associate degree.

As the case studies revealed, there were similarities and differences in the philosophies regarding job placement. Whereas at case site A the top priority was job placement to the extent of placing students in areas beyond the local labor market when necessary, at case site D the president did not believe job placement was a responsibility of the community college.

Information from the mail questionnaire. The respondents to the mail questionnaire indicated their priorities for vocational-technical education in the following question.

> In your personal opinion, how should the following goals of vocational-technical education programs be ranked in importance?
>
> (Rank the most important goal as 1, the next most important 2, the next most important 3, the next most important 4, and the least important 5.)

a. To place students as they leave school in jobs related to their training

b. To provide students with competencies needed to obtain jobs

c. To place students as they leave school in jobs including nontraining-related jobs

d. To create an awareness of the various jobs for which students might prepare

e. To provide an opportunity for students to explore various occupational areas

The deans/directors, vocational-technical teachers, counselors, job placement specialists, advisory committee members, and employers who responded overwhelmingly agreed that their top priority was to provide students with competencies needed to obtain jobs. Responses are aggregated by state in table 17 to indicate goals considered most to least important for vocational-technical education programs.

As the data in table 17 indicate, 72 percent of the respondents felt that providing students with competencies needed to obtain jobs was the most important goal and 11 percent ranked it next most important. The second highest priority was the goal of placing students in related jobs, which was ranked most important by 8 percent and next most important by 37 percent of the respondents. The third highest priority, creating an awareness of jobs, was ranked most important by 10 percent and next most important by 29 percent of the respondents. The goal to provide opportunities to explore occupational areas was ranked most important by 6 percent and next important by 17 percent of the respondents. Finally, the goal to place students in unrelated jobs was ranked fifth with one percent of the respondents indicating it most important and 3 percent indicating it next most important.

The breakdown of the aggregate rankings indicated the differences in opinion among the various respondent groups in each of the four states. Table 17 shows the percentage ranked most important and the relative overall ranking indicated for each of the goals by the respondent groups and states. With the exception of advisory group members at low placement sites and employers at high placement sites in State A, all other respondent groups ranked providing students with competencies needed to obtain a job as the top priority goal. The advisory committee members at low placement sites and employers at high placement sites ranked awareness of occupation first. In State A the

teachers, counselors at low placement sites, job placement specialists, and advisory council members at low placement sites ranked placing students in related jobs second.

In State B all respondent groups rated providing competencies needed to obtain a job as their top priority. A higher percentage of respondents ranked awareness of occupations second than they ranked placement in related jobs. Advisory committee members and employers ranked placement in related jobs third or fourth.

In State C all respondents except the job placement specialists and deans/directors at low placement sites ranked providing competencies needed to obtain a job first. Job placement specialists favored awareness of occupation, which was ranked second by several of the other respondent groups. Teachers and counselors at high placement sites, however, ranked placement in related jobs as their second highest priority.

With the exception of one dean/director at a low placement site and job placement specialists, State D respondents also ranked providing competencies necessary to obtain a job first. None of the respondent groups ranked placement in related jobs second, and only employers at low placement sites ranked it third. Rankings were mixed in this state, with teachers at high placement sites and counselors at low placement sites ranking placement in jobs not related to training second. Teachers at low placement sites and counselors at high placement sites and employers ranked opportunity to explore various jobs second whereas advisory council members ranked awareness of occupations second.

Despite the differences among various respondent groups in the four states, it was apparent that placement was not the highest priority. There appeared to be a trend for ranking placement in related jobs higher in the states with a high placement rate. In State A (median placement rate was 96 percent) the majority of respondents ranked placement in related jobs second whereas in State D (median placement rate was 55) that goal was ranked third by only one group and fourth or fifth by the remaining groups.

The data in table 18 show that the deans/directors assumed responsibility for identifying and critiquing the philosophy for vocational-technical education at the majority of sites. Over a third (eight to twenty-one) of the respondents did not know the locus of responsiblity for identifying the philosophy. No trends emerged within the state due to the low number of deans/directors responding to the mail questionnaire.

The deans/directors also reported how often the philosophy for vocational-technical education was identified and critiqued. As indicated by the data in table 19, approximately 73 percent of the respondents reported that the philosophy is identified and

critiqued at least once every two years. There were no trends apparent differentiating high and low placement sites among the states.

Summary. Findings from the case study and the mail questionnaires revealed that positive philosophical positions regarding job placement are critical for high job placement. However, the majority of respondents did not believe job placement in related jobs is the highest priority for their institutions. Placement in jobs related to training was considered a higher priority in the state where the postsecondary institutions had higher job placement rates than in the other three states. When the respondents to the mail questionnaire in all states, were asked to rank goals for vocational-technical education in postsecondary institutions they overwhelming chose "to provide students with competencies needed to obtain jobs" as the most important goal for vocational-technical education.

At the postsecondary institutions with relatively high job placement rates the commitment of administrators, faculty, and other staff to job placement as one important goal of their vocational-technical program was evident. The commitment was apparent not only in the staff attitudes but in the level of resources alloted to promote job placement activities at the institution. The level of communication about job placement between institution and labor market representatives was higher and more consistent at high job placement sites than at low job placement sites. Throughout the study it was evident that the most significant factor in the level of job placement at postsecondary institutions was the underlying philosophical position of administrators and the individual faculty members who did much of the actual job placment and the other staff members who provided essential support and informational services.

Program Planning

Information from review of literature. Planning of vocational education programs was explicitly emphasized in the Education Amendments of 1976 (P.L. 94-482). The law stated that plans for the use of federal funds must satisfy at least four requirements:

1. Coordination and consultation with representatives from other education and training agencies in the service area
2. Consultation with a local advisory council for vocational education
3. Assessment and evaluation of student needs

4. Explanation of how the vocational program plan meets identified student needs and the needs of the employers for skilled workers

In addition to meeting federal requirements for planning, Van Ausdle (1980) emphasized the "crucial need for two year colleges to strengthen their managerial capabilities" through planning due to the "unprecedented changes in societal trends which have created both threats and opportunities for the two-year college." According to Van Ausdle (1980) comprehensive program planning is best implemented in a step-by-step process that requires administrators to do the following:

1. Assess current and past conditions and the environment in which the institution operates

2. Assess the needs of present and future clientele and the societal needs for which the institution operates

3. Define goals and set objectives based on the needs assessment

4. Determine and implement programs to achieve the objectives

5. Assess the progress toward achievement of objectives

Collection of data about students and the local labor market has become essential for comprehensive program planning and for meeting the requirements of the law. Rall and O'Brian (1977) stated:

> When implementation of a new curriculum is being considered it is necessary to consult with representative employers of persons in order to be reasonably certain that jobs will become available. A review of national, regional, and state manpower projections may indicate broad trends--but more exact, local data are needed (p. 61).

No consistent mode of planning for vocational-technical education programs emerged from the analysis of interviews and documents at the four case study sites. A recent study by Starr et al (1981) similarly found the following:

- Relatively few schools have a long-range institutional plan for vocational education.

- Long-range vocational education planning, when it does take place, occurs most often in conjunction with facility planning.

- The schools do engage in numerous vocational education planning activities. However, the planning that does take place is usually not found in a written planning document. As a consequence, the planning processes and procedures that do occur in local schools are seldom, or only partially, communicated to groups or individuals outside of the school.

- Local applications for federal funds received at the state level from postsecondary schools seldom contain sufficient detail to serve as planning documents. Indeed, it is usually difficult to discern the extent or nature of local level planning simply by reviewing local applications.

- Larger postsecondary schools are more likely to have formalized planning processes and policies and are more likely to have the resources to employ staff who have expertise in planning or research. It is important to recognize that many schools offering vocational education do not employ persons with specific expertise in planning or research.

- Decisions about vocational programs and services in many schools are often made by persons who are not vocational administrators. Planning decisions are often finalized by presidents of the postsecondary institution rather than by deans of occupational/vocational education.

- Some kinds of planning activities are more likely to occur on a regular basis; other kinds of planning activities are likely to occur sporadically. Monitoring and assessing enrollment levels and student interest in vocational programs, and determining costs and expenditures are examples of instructional program planning activities that are usually conducted on a regular basis. Planning instructional programs and services to meet the needs of special client groups (e.g., handicapped and disadvantaged) and to ensure equal access to vocational education by both sexes are more likely to occur on an irregular basis and then usually on a "felt-need" or externally induced basis. Systematic planning that includes needs assessments as a basis for providing instruction and services to special client groups or to promote equal access is the exception rather than the rule (pp. 7-8).

Information from the case study sites. At the four case study sites administrators and teachers said that advisory committee input was used to some degree but no other processes were mentioned which were common across all sites. Student interests,

enrollment and follow-up data, teacher input, local labor market information, and state-level data were cited most frequently as sources of information for planning.

At case site A (designated a high placement site in State A) new programs were started based on employment needs of the community. These needs were determined by gathering employment projection information and from recommendations of the advisory council. According to the state plan

> Area vocational-technical institute instructors shall be responsible for program planning, and that such responsibilities shall be directed toward a learning environment in which subject matter knowledge, occupational skills, and related attitudes are directed as needed in meeting a specific student identified occupational objective, so that such learning experiences provide the students with entry-level qualifications for defined employment.

Once a program is approved by the program advisory council it is sent to a general advisory committee made up of representatives from program advisory committees, students, former students, employers, and others. If this group approves the program is then presented to the school board for review. The school board will not approve or act on any vocational-technical education question until the position of the general advisory council is known. One instructor said,

> A real battle is beginning to build between the postsecondary academic schools in the area, and the vocational school because the postsecondary academic school is starting to offer AA degrees that conflict with the area vocational-technical education programs.

The board for higher education has the responsibility to keep schools from duplicating efforts, but interviewees indicated the board has taken no action to control this problem so far.

At case site B (designated a low placement site in State B) vocational programs that are offered are based on priorities, desires, and needs of the local people...not the state people. As one state official said, "the community colleges in the state are 'locally automonous'." He further said:

> while an area may seem to require trained persons in a specific field, unless the local board and advisory committees perceive the need because new jobs will be created then nobody wants to train somebody in these high

cost programs where they're going to go off to a nearby town instead of staying home to work. In this state community colleges, and not the state, have the last word.

A state education agency document includes the following principle of operation for program planning for postsecondary programs:

> Each program of instruction must be designed to prepare individuals upon completion for employment in a specific occupation or cluster of closely related occupations in an occupational field, and must be particularly suited to the needs of those engaged in or preparing to engage in such occupation(s).

There is a general consensus that program planning is strongly influenced and often directed by input from the advisory committees. One advisory member indicated, We're able to tell them what we perceive as needed in the field; consequently, we prefer their students, in comparison to other institutions." Another advisory committee member stated that "our input is definitely used."

A mid-management faculty chairperson reports that substantial program changes, which deviate from what is offered in the catalogue must be approved by the academic council, chaired by the dean. Following approval by the academic council, changes must then be approved by the state education agency.

At case site C (designated a high placement site in State C) a new program must be approved by the community college board of trustees before it is sent to the state for their approval. The president reported that a new program is usually considered because of a recommendation from the business community. If the request for such a program is viable, a needs assessment of the community is conducted to see if the program is needed and wanted. The state plan in its guidelines for developing new education programs states that programs must show need in "relation of proposed program to job market analysis." When need is established, the instructor prepares a proposal and submits it to the president and board for approval. If they approve the program, then a curriculum is developed and both the proposal and curriculum are sent to the state department for approval.

The institution president reported "that programs are often started and then stopped depending on the continued need for them." He gave an example of a program, which had been cancelled recently because the graduates were not being paid anymore than if they had applied for the job without the further education. This was a program that the community had requested as being highly needed.

All persons interviewed agreed that teachers have the greatest involvement in changing programs at the college, but that this happens because of the labor demands of the area or the advisory council has stated a need for the change.

At case site D (designated a high placement site in State D) when a new program was being considered a proprosal is submitted to the president and executive committee of the community college for their approval. If in their opinion, the proposal has merit, it is then sent to the state community college board for its approval. This agency has a person assigned the responsibility for approving all requests for new programs for all the community colleges in the state and to make sure the requested program will not be a duplication of effort. This person decides whether the program should be approved based on labor market data showing a need for the program. If the community college board approves, the proposal is sent to the state governing board for higher education for their approval. If both agencies approve the request is sent to the vocational education division to request money to support the program. Although the state vocational education agency has the option of refusing the request, they have always accepted the recommendation of the governing board for higher education. Funds for new programs are allocated for a period of one to three years, after which the community college must have money within its own budget to maintain the program.

In reference to developing new programs one staff member indicated that the lack of funds was a reason for few new programs being initiated. The president responded, "That is a cop out, that's not true, we're not restricted by budget at all. There hasn't been a fullfledged proposal submitted for a new program. I've heard that excuse too damn often."

Information from the mail questionnaires. In the responses to the mail questionnaire, half (eleven of twenty-two) of the deans/directors did not know who had primary responsibility for analyzing vocational-technical program objectives for their institutions. In table 20 the data indicate that in State A either the directors or teachers had the responsibility when a response other than don't know was given. In State B the respondents indicated that advisory committee members and directors had major responsibility for analyzing institutional objectives in the low placement site whereas the respondents were not sure who had such responsibility at the high placement site. Similarly in State C low placement site respondents indicated the state agency and dean/director had responsibility for analyzing program objectives whereas the three responses from the high placement sites did not know who had the responsibility. In State D, advisory committee members, and deans/directors had responsibility for anlayzing program objectives at high placement sites while the one response from a low placement site indicated that teachers had primary responsibility for analyzing program objectives.

In table 21 the data show how frequently deans/directors who responded to the mail questionnaire believed the program objectives were analyzed. The majority (sixteen of twenty-two) of the respondents indicated the objectives were analyzed at least once a year. The exceptions were in State B where two of the low placement site deans/directors indicated their institutional program objectives were analyzed every two years. In State C the respondents from low placement sites indicated that institutional program objectives were analyzed once every two years, once every four years and once every five years in addition to one respondent indicating at least once a year. In State D one dean/director indicated program objectives were analyzed once every two years whereas the other two deans/directors from high placement sites indicated that objectives were analyzed at least once a year.

Fifty percent of the deans/directors responding to the mail questionnaire indicated they held the responsibility for allocating funds for equipment and supplies for the vocational-technical education programs. As shown in table 22 in State A all of the three respondents from high placement sites indicated that the state agency allocated the funds whereas the low placement site response indicated that the director had the responsibility. The responses from the high placement sites in State B indicated the state agency and director had responsibility for allocating funds for equipment and supplies. Directors and the school research and evaluation division were reported as having responsibility for allocating funds for equipment and supplies in the low placement sites. In State C all respondents from the low placement sites indicated that the dean/director had responsibility for allocating funds for equipment and supplies whereas 66 percent of the responses from high placement sites showed that the responsibility rested with the state agency and advisory committee. In State D, 67 percent of respondents indicated that the dean/director and 33 percent indicated that the state agency was responsible for allocating funds for equipment and supplies. The one low placement site response indicated that the advisory committee had the responsibility to allocate funds for equipment and supplies for the programs.

Of the dean/directors who responded (22) to the mail questionnaire, 32 percent indicated that the advisory committee and 27 percent indicated that the state agency held primary responsibility for determining the supply of trained workers that employers will need. In table 23 the data show that the locus of responsibility for determining the need for trained workers varied among the sites in the study. In State A deans/directors of the three high placement sites indicated that the state agency, advisory committee and school research/evaluation unit

held primary responsibility for determining the supply of trained workers that employers will need whereas the deans/directors at the low placement site indicated that the advisory committee had the primary responsibility for determining the employment needs. The two responses from the deans/ directors in the high placement sites in State B indicated that the director and teacher had the responsibility for determining the supply of trained workers that employers will need whereas the deans/directors from the five low placement sites indicated that the state agency, advisory committee, director and teacher had the responsibility. In State C deans/directors of two of the high placement sites indicated that the state agency had the responsibility for determining employer's need for trained workers whereas the one dean/director indicated that the teacher had this responsibility. The responsibility of the deans/directors from the four low placement sites were split between advisory committee and director. Deans/directors of the the high placement sites indicated that the state agency, advisory committee and school evaluation/research unit had this responsibility in State D. In State D the deans/directors at the low placement site response indicated that the state agency held the responsibility for determining the supply of trained workers needed by employers.

Employers who responded to the mail questionnaire indicated how often the schools contacted them to assess their skill needs (table 24) and also how often schools should contact them (table 25). As shown by the data in table 24, the majority of schools either contacted the employers once a year (25-48 percent) or never (28-58 percent) contacted them. In State A there was less difference between high and low placement sites than in the other states in the frequency of contact. In State B there was a greater difference between high placement sites and low placement sites, with 31 percent of the employers from high placement sites and 46 percent of the employers from low placement sites reporting they are contacted once a year. Fifty-eight percent of the employers in high placement sites indicated the postsecondary institution never contacted them whereas in the low placement sites 37 percent never contacted them. In State C the responses from the high placement site employers indicated that 48 percent of them had been contacted once a year by the postsecondary institution to assess skill needs. Thirty four percent of the employers from low placement sites indicated they were contacted at least once a year. In State D fewer (25 percent) of the high placement site employers indicated they were contacted once a year by postsecondary institution personnel to assess skill needs as compared to 48 percent in the low placement sites. In the high placement sites 50 percent of the employers indicated they were never contacted as compared to 28 percent of the employers from low placement sites.

In table 25 employers' responses indicated how frequently they would prefer to be contacted by the schools for information

about skills needed in their businesses. As the data in table 25 show, the majority of employers (64 percent in low placement sites and 80 percent in high placement sites) in all states preferred to be contacted once a year. A small number of employers (4 percent in low placement sites and 24 percent in high placement sites) indicated that every two years would be preferable, but very few employers (0 percent in low placement sites and 6 percent in high placement sites) indicated that they should never be contacted by postsecondary institutions concerning their job skill needs. No clear trends emerged distinguishing employers at high placement sites from employers at low placement sites concerning the frequency with which the postsecondary institution should contact them concerning their job- skill needs.

Deans/directors responding to the mail questionnaire indicated how frequently various methods were used by their schools to assess employers' skill needs. The responses indicated that various methods were used by all sites to assess the skill needs of employers. As the data in table 26 show, the majority of the deans/directors (twenty of twenty-two) indicated that the recommendations from advisory committees are used at least once a year. The other two deans/directors indicated that they used advisory committee recommendations once every two years. Twelve of the twenty-two dean/directors indicated that information from the Public Employment Service was used at least once a year, five dean/directors indicated every two years, and one dean/director indicated never. Written surveys were used once a year by nine of the dean/directors and once every two years by another nine, with one dean/director indicating written surveys were never used. Annual interviews of employers at their work sites were reported by ten deans/directors with three dean/directors reporting once every two years and three reporting that employers were never interviewed at the work sites. Telephone surveys of employers were conducted once a year at six sites, once every two years at eight sites and never at three of the sites.

Advisory committee members who responded to the mail questionnaire indicated how much help they provided in identifying new occupational areas for vocational-technical education program improvement. In table 27 the data show that few (3 to 13 percent) advisory committee members indicated that they provided very much help. The majority of the respondents from all four states reported that they provided some (23 to 50 percent) to much (16 to 36 percent) help in identifying new occupational areas.

Respondents to the mail questionnaire indicated whether they had received information concerning various studies conducted by the postsecondary institutions during the past five years. In table 28 the data show that the majority (67 to 100 percent) of the postsecondary institution staff in States A, B and D received

follow-up reports of former students. Postsecondary institution staff and advisory committee members from State C received less (20 to 100 percent) follow-up reports than did similar staff committee members in the other states. In all states deans/directors and job placement specialists received student follow-up information most consistently with no observable trends between high and low placement sites.

In table 28 the data also indicate whether respondents received two other reports, a survey to assess employers' job skills and labor requirements and a survey to assess employers' satisfaction with former students. Similar to the responses regarding follow-up reports, school staff indicated they received more information than did advisory council members. The responses varied more among the respondent type than among the states. In all states the 100 percent response rate was for deans/directors. Few of the counselors and job placement specialists in State C and D indicated that they received reports assessing employer needs and employer satisfaction with former students. The majority of teachers in States A, B and D received these reports, whereas a third of the teachers at high placement sites in State C received the reports. In State A, 40 to 100 percent of the postsecondary institution staff and 33 to 56 percent of the advisory committee members received reports to assess employers' job skill requirements and employer's satisfaction with former students. In State B 40 to 100 percent of the school staff and 17 to 33 percent of the advisory committee members received them. In State C zero to 100 percent of the postsecondary institution staff and 32 to 67 percent of the advisory council members received the reports. In State D zero to 100 percent of the postsecondary institution staff and 26 to 49 percent of the advisory council members received the reports.

Summary. The postsecondary institutions in the study engaged in several program planning activities. However, systematic and comprehensive program planning was the exception rather than the rule at the study sites. Some planning activities occurred on a regular basis although others occurred sporadically.

It appeared that program planning in the high job placement sites was focused more clearly upon the needs of employers and the emerging trends in the labor market. Postsecondary institutions with high job placement rates worked more closely with business and industry leaders. Administrators and teachers at high placement sites made more frequent use of advisory committees in program planning. It was apparent that the postsecondary institution staff in high job placement sites more clearly understood the role of the postsecondary institution in economic development and worked more closely with business/industry leaders in program plannning.

Business/Industry Involvement

Information from review of literature. "Programs of vocational-technical education must be an integral part of the community in which they exist and must reflect the day to day occupational life of the community" (American Vocational Association 1969). Educators have looked to industry for counsel regarding the development and content of vocational-technical education programs since their inception. The interdependence of industry and education was first recognized in the rules and regulations issued by the U.S. Department of Education in 1922 (Burt 1967). The desirability of involving industry in local vocational-technical education programs has been generally accepted by vocational-technical educators. A review of the literature indicates that one of the most effective formal means of obtaining the necessary cooperation between industry and education has been through advisory committees. Studies conducted throughout the past three decades show that vocational-technical teachers have provided more realistic and meaningful education when assisted by advisory groups.

Educators have had the burden of establishing the relationship with advisory groups. In a landmark study, Burt (1967) stated, "It is the quality of school leadership which is decisive in determining the nature and extent of industry cooperation." (p.6) Advisory groups differ in their roles, fulfilling different necessary functions at state and local levels. Typically vocational-technical education programs have at least a general advisory committee (or council) and may also form departmental and specific occupation-advisory committees (American Vocational Association 1969). In this study the questions in the mail questionnaire were oriented towards the general advisory committees whose traditional role has been to assist in the development and maintenance of the entire vocational-technical education program of the institution. The general advisory committee draws members from across the occupational spectrum represented in the program and frequently from other concerned community groups. General advisory committees help identify the vocational-technical education needs of the individuals and the community; help access labor market requirements; help establish realistic, practical programs; participate in developing community support; help with developing long and short range goals for the program (American Vocational Association 1969).

Although advisory committees have provided the primary mode of cooperation and communication between the vocational-technical programs and industry, other types of relationships have been formed. These include cooperative education programs, contracted inservice programs, cooperatively developed job placement services, apprenticeship programs and private industry council (PIC) sponsored programs (Grede 1981).

A recent role for vocational education has been the concern for state level and local level economic development. Bruno and Wright (1980) have defined economic development as expansion of productive capacity through better management of the resources of labor, land, capital, or technology. According to a recent survey by the Joint Economic Committee (1979), the most significant factor contributing to economic development is the availability of skilled workers. The educational opportunities directed at maintaining and upgrading the productive capacity of workers figure prominently in business decisions to locate or expand operations.

Information from the case study sites. At case site A (designated a high placement site in State A) the attitude of employers toward the vocational-technical education school is very positive. All employers interviewed reported that they had attended open houses and tours at the school. Most of the businesses had tours for the vocational-technical education students. Employers stated that the contact they have with the vocational-technical education staff through civic, church, and other community involvement has a positive impact on the relationship they have with the school. Typical comments by employers in the area included: "With vocational graduates, we have very good luck"; "Graduates of vocational schools are very successful"; and "Vocational students are in high demand."

The good relationship between the vocational-technical school and business and industry may exist in part due to the stated mission of the school. The mission statement in the faculty handbook (1980-81) says:

> It is the intent of this institution that the vocational-technical program shall concern itself with the welfare and interest of the people of the area and shall maintain close ties with those segments of activity contributing to an increase in the quality of life and economic development of the area.

The school has close ties with business and industry through its use of advisory committees.

At case site B (designated a low placment site in State B) a counselor stated that the primary goal of the vocational-technical education programs is to graduate students with entry level skills for local industries. On the other hand, an employment commission spokesperson said that many employers are accustomed to the results of public education and "just won't use most of the graduates who can't even spell a simple word." A task force of business and education leaders concerned with promoting the city's growth pointed out that "there is a shortage of vocational-technical trained employees to meet the growing business and industry demands."

The community college administrators appear to be in agreement about the need to serve the community through vocational-technical education to enable the population to meet current and future needs of business/industry, which is necessary for economic growth and stability. The key administrators are forward-looking and proactive in their efforts, risking criticism to attract nontraditional clients to try innovative ways to reach client groups, and to influence business/industry to interact and depend upon employing graduates. The administration is well represented in formal committees and networks established within the college, with other educational institutions, and with the economic-political factions in the community. A large portion of the interaction is informal and based upon the good will established by persons dedicated to the role the community college has in the city as a vital growing city trying to meet the needs of its citizens through carefully planned economic growth.

According to an article in the school newspaper, the recently appointed governing board will stress community involvement in the running of the college. One way that business and industry is involved is through the advisory council. A member of the state coordinating board said "The most useful advisory committees are specific to a program. They speak with more knowledge of business and industry/labor needs."

Although some negative remarks were made about the community college, the vast majority of interviewees praised the quality of vocational-technical education program. An excerpt from an employer's letter to one of the teachers was "Your school and program looks outstanding. Your reputation has reached beyond your immediate community."

At case site C (designated as a high placement site in State C) the director of training and vocational education stated in an Advisory Committee booklet that,

> The community college has a professional commitment to effectively and continuously utilize volunteer vocational education advisory committees. These committees must provide advisory direction to district coordinators, in an effort to assure a viable, up-to date vocational program -- a program that will provide students with adequate competencies and excellent opportunities for employment upon completion, in concert with the needs and desires of the business and industry of our city.

The community college has coordinators of vocational education that are responsible for continuous communication with the business and industry community. A district administrator

described the vocational coordinator's job as identifying with the community, and working with advisory committees. They are also responsible for talking to employers about the vocational students they have hired. The administrator described the coordinators as "public relations people; they are the eyes and ears of the community college." The district administrator explained that the school had at least one hundred advisory committees, each with at least ten members, which means "we can get in touch with over a thousand business/industry leaders in the community by picking up the phone."

The employers interviewed indicated that they have a close working relationship with school personnel, and particularly with the placement office director. They reported that they often hire vocational-technical education graduates rather than other applicants. One employer stated:

> I think that the community college system here has done everything they can in the last four years to improve the quality of their students, as far as vocational education is concerned. They have kept very close touch with industry.

At case site D, designated a high placement site, one of the policies for the community college as stated by a state coordinating board representative is "to cooperate with government, industry, business, and service agencies in the provision of educational services to assist in solving problems related to the development of the Commonwealth's economy and its human and natural resources."

> At the community college an administrator stated that the college faculty and staff are trying to get to the community through varied means, with representation on various committees in town, through service organizations and as elected officers in the community.

The president of the school indicated that not having enough staff limited the amount of contact they could have with business and industry.

Most interviewees had positive comments about what is happening, that the school is becoming more dynamic, more in tune with the needs of the community. However, some interviewers indicated there could be more effort made by the school to improve liaison with business and industry in order to develop entry-level positions. They said that efforts are being made, but they are scattered at this point. An example was the college-business community luncheon held recently about which a typical comment was, "You know, its nice that we have the luncheon, but then what?"

The placement director reported that he had made an effort to contact business and industry personnel in the area. He said, "I mailed letters to 125 prospective employers and only one responded out of the group. Not one person came...just one called." The letter asked employers about job openings, but also invited them to visit the school to see what they had to offer.

Information from the mail questionnaire. Advisory committee members who responded to the mail questionnaire indicated how long they had served on their respective committees. The data in table 29 show that the most frequent response was that the member had served from two to three years. The exceptions included the 26 percent of the low placement site respondents in State A who served less than a year, the 33 percent of the high placement site respondents in State B who served six to nine years and the 27 percent of the low placement site respondents in State D who had served nine to more years.

As the data in table 30 indicate, advisory committee members reported that their committees typically met between once and twice a year. Few (8 percent or less) of the respondents never had committee meetings. In States A and D over a fourth (28 to 35 percent) of the committees met at least four times a year. The data did not indicate any trends between high and low placement sites in the number of times advisory committees meet.

Advisory committee members indicated how much help they provided in their role as committee members in sponsoring career days. In table 31 the data show that the majority of the advisory committee members in States A and B indicated they provided little to very little help in sponsoring career days. Approximately a third (32 percent) of the respondents from high placement sites in State C indicated they provided some help whereas over half (55 percent) indicated they provided little to very little help. Half (50 percent) of the State C respondents from low placement sites felt they provided very little help in sponsoring career days. State D respondents from high placement sites indicated they provided much to some help (72 percent) whereas those from low placement sites either provided some (26 percent) or very little (28 percent) help.

Advisory committee members indicated that they helped more in providing occupational information than in sponsoring career days. In table 32 the information shows that the majority of responding advisory committee members gave some to much help in providing occupational information. There were no trends between high and low placement sites in the amount of help respondents felt they gave in providing occupational information.

Advisory committee members indicated they provided less help in identifying tasks to be performed by workers than in providing

occupational information. As the data in table 33 shows, the highest percentage of respondents indicated they provided some help in identifying tasks. However, over a fourth (27 percent) of the advisory committee members at the high placement sites in State A indicated that they provided very little help in identifying tasks to be performed by workers. Several committee members in low placement sites in State C (30 percent) and State D (22 percent) also indicated they provided very little help in identifying tasks to be performed by workers.

The mail questionnaires also elicited information from employers. Employers were primarily asked to indicate the frequency of contact with the school and who made the contacts. In table 34 the data show that the majority of employers in State A and State D were contacted at least once a year regarding job openings for students. In State B 60 percent of the respondents in the high placement sites and 40 percent of the respondents in the low placement sites were never contacted. There was considerable difference in the frequency of contact between high and low placement sites in State C. Eighty-three percent of the employers at low placement sites were never contacted whereas over half (55 percent) of the employers at the high placement sites were contacted by the postsecondary institution regarding job openings for students.

The employers indicated that they should be contacted more often than they apparently were being contacted. The data in table 35 show that very few (9 percent or less) employers did not want to be contacted although approximately a fourth (24 to 34 percent) of the employers wanted to be contacted once a month by the postsecondary institution about job openings. The remaining employers wanted contact between at least once a year and four times a year. Employers from low placement sites indicated that they wanted more frequent contact than those from high placement sites.

The postsecondary institution personnel most likely to contact employers were job placement specialists or vocational-technical education teachers. Employers' responses to the mail questionnaire shown in table 36, indicated that they had few contacts from deans/directors or guidance counselors regarding job openings for students. In State A, 50 percent of the employers from high placement sites indicated that the teachers contacted them and at low placement sites 31 percent were contacted by teachers and 42 percent by job placement specialists. In State B, employers at both high and low placement sites were more likely to be contacted by job placement specialists (33 and 42 percents) than by teachers (27 and 21 percents). In State C, 5 percent of the employers reported being contacted by teachers at high placement sites compared to 34 percent teacher contact at low placement sites. At the low placement sites in State D, 72 percent of the employers indicated that they were contacted by job

placement specialists compared to 8 percent by teachers. In the high placement sites in State D, the teachers made 38 percent of the contacts with employers and the job placement specialists made 25 percent of the contacts. The data in table 37 show that employers' responses were very similar regarding contact about skill needs. Employers indicated that the majority of the contacts regarding their skill needs came from teachers and job placement specialists at the postsecondary institutions.

Employers responding to the mail questionnaire reported the frequency of their participation in industry school staff exchanges and in career days. The data in table 38 indicate that the majority of employers never participated in industry-school staff exchanges. In State A a few employers (14 percent in high placement sites and 16 percent in low placment sites) indicated they participated in the exchanges very often whereas in the other states 2 percent of the employers in one high placement site indicated they participated very often. Employers indicated that they participated somewhat more frequently in career days as shown in table 39. In State A 56 percent of the employers in high placement sites rarely or never participated in career days whereas 64 percent of the low placement site employers participated sometimes to very often. In State B the majority (67 percent in high placement sites and 52 percent in low placement sites) of the respondents rarely or never participated in career days. In State C, 62 percent of the high placement site employers indicated that they were, often to very often whereas 57 percent of the low placement site employers indicated that they were rarely to never involved in career days. In State D 50 percent of the high placement site employers indicated they 'rarely' to 'never' participate in career days while 68 percent of the employers in low placement sites indicated that they participated in career days.

Employers responding to the mail questionnaire were asked if their business/industry has a union organization, and if a formal agreement for cooperation existed between the union's apprenticeship program and the school's vocational-technical education programs? As the data in table 40 show, the majority (61 to 80 percent) of employers indicated that there was no union present in their business/industry. The exception was high placement site employers from State C who indicated that 38 percent had no union present. In all four states, very few employers (8 percent or less) indicated that such an agreement exists whereas 12 to 33 percent of the employers said that an agreement does not exist for cooperation between an apprenticeship program and the vocational-technical education programs.

The teachers who responded to the mail questionnaire indicated how many employers they contacted in the past year about job openings for students. As the data in table 41 show, the majority of teachers (51 to 72 percent) contacted employers

from zero to five times during the past year. From 3 to 17 percent of the teachers indicated they contacted six to ten employers during that time. The percentage of responses between high and low placement sites were somewhat similar across the four states (64 to 82 percents) for zero to ten contacts.

In table 42 teachers indicated that many (41 to 60 percent) did not hold a second job in industry. Except for State C many teachers (42 to 55 percent) did not work during their semester off. However, many (45 to 75 percent) teachers did participate in inservice activities conducted by industry. Responses were similar between high and low placement sites within the states. Between 16 (State B, high placement) and 38 (State C, high placement) percent of the teachers held a second job in industry while teaching. In State C a larger percentage of the teachers (48 percent in high placement sites and 42 percent in low placement sites) worked during their semester off from teaching when compared to the teachers in States A, B, and D.

Summary. Findings from the case studies and mail questionnaires indicated that the amount of involvement with business/industry personnel varies among sites but tends to be greater at the high placement sites. The quality of the involvement emerged as a critical factor that was more apparent in the case study findings. The quality of the involvement of personnel from business/industry was clearly viable in advisory committee meetings. Where institutions had higher job placement rates the advisory committee meetings were focused more specifically on substantive issues concerned with program planning.

At the mail questionnaire sites there were no consistent trends in high or low placement sites regarding the frequency or types of contacts employers and advisory committee members had with postsecondary institution staff. Frequency of contact was moderate for the most part and less than employers felt was desirable. Teachers and job placement personnel tended to have more frequent contacts with business/industry personnel than did other postsecondary institution personnel.

Placement of students in jobs related to their training seemed to be enhanced when postsecondary institution personnel maintained consistent contact with business/industry personnel.

For example, at high placement sites teachers maintained ongoing communication with employers and job placement specialists and administrators. At high placement sites, employers regarded the postsecondary insitution as highly responsive, eager to plan and participate in economic development and skill upgrading of current and potential employees. At high placment sites meeting with advisory committee members were productive with members' input recorded and incorporated by school staff in planning and decision making.

Curriculum

Information from review of literature. Curriculm development focuses primarily on content and areas related to it. It represents a higher level of generalization than instructional development and always precedes it, (Kindred et al. 1976). According to Burt (1967) curriculum development is the "assembly of instructional units into courses of study and combining of courses into logical sequence (p. 153)." Burt (1967) explained that a number of factors complicate the process of curriculum development for vocational-technical education.

> The curriculum must be designed to prepare students for entry into an occupation or cluster of occupations. A further complicating factor is that job entry requirements may be different for a variety of employers within the same industry, both locally and nationally (p. 153).

Job content, in terms of skill requirements, must also meet the current needs of the majority of the employers served by the educational enterprise. As Dauwalder (1961) stated regarding vocational-technical education curriculum:

> Curricula must be developed among job requirements, skill requirements, technical and practical knowledge requirements, and must also maintain a general education balance which is flexible and adjustable to changing conditions (p. 104).

Burt (1967) further explained that the curriculum must include courses to enable students to meet the graduation requirements of local and state education authorities as well as relevant accrediting and licensing agencies. For these reasons, business and industry representation is vital for curriculum development and revision. Kissinger (1965) described the key partners for curriculum planning as the employer, the technician, and the educator. Kissinger felt that each partner has an important role that cannot be overlooked. The employer knows what the graduate should know and be able to do. The technician knows what knowledge and skills are necessary to do the job. Kissinger (1965) indicates the educator must translate the employers and technician's advice to a "series of learning experiences to which the student will be exposed, in other words, the curriculum (p. 31)."

Educators have the final responsibility for developing the curriculum. Beatty (1965) stated that a president described the curriculum development process at his technical institution as:

> Most people from industry are not good curriculum developers. Each of them has his own problems associated with his own place of

> business, and he would like to prepare people who would fit nicely into his organization. We listen attentively to all our industrial advisers, but we do not build our curriculum around exactly what they say. We take their ideas and we build the curriculum into an educational pattern which will meet their needs as well as the needs of companies not represented on the committee (p. 200).

Ultimately the success of a vocational-technical education curriculum is measured through the results of achievement that take the form of performance in the work world. Finch and Crunkilton (1979) notes that "a vocational-technical curriculum must be judged in terms of its former students' success (p. 10-11)." Although success standards vary among schools and states, they frequently reflect criteria such as employer satisfaction with graduates' skills, graduates' obtaining jobs in their fields of preparation, job satisfaction of graduates, and advancement experienced by graduates (Starr 1975).

Information from the case study sites. At the case study sites the curriculum for the various programs was primarily developed or changed by faculty members, often with input from vocational-technical education directors and advisory committee members. Procedures were not rigidly formalized, although there appeared to be a system at each site that resulted in revisions, additions or deletions from three months to a year later. Although interviewees were not always able to explain the reasons for the changes, it appeared that a combination of student interest/demand and local labor market needs were the underlying reasons. Most teachers and administrators also felt that there were state department and institutional pressure to update the curriculum for relevance and student appeal.

At case site A (designated a high placement site in State A) most programs of study were designed with an open-ended curriculum system. The curriculum was broken down into units called packets. Students progressed from packet to packet at their own speed.

Most teachers expressed support for the open-entry/open-exit system, but some had reservations. A few faculty members reported that the system was too demanding since each student was at a different place, and each needed individual attention. Other faculty stressed that the major strengths of the open-ended curriculum overcame the bad aspects. They described the strengths as allowing "students to work at their own pace," and "bright students could progress as rapidly as they wanted, whereas slower students could also move at their own rate." The teachers also indicated that this type of curriculum was more of a challange to them and to their students than the more traditional curriculum.

Faculty were relatively free to develop their own curriculum. The education agency has mandated the topics that must be included in a program, but development of the actual curriculum content has been left to the teachers. When major curriculum changes have been planned, teachers have been required to clear these changes with the program's advisory committee. Coordinators for each program area, located in the local education governing board office, typically have had input into major curriculum changes.

At case site B (designated a low placement site in State B), each vocational program area has prepared a suggested sequence of courses leading to graduation. This sequence had been drawn up by faculty members with input from the program area advisory committee.

Some interviewees indicated that occasionally students have been denied lower-level vocational-technical education courses because of limited classroom, and/or laboratory space. These students have usually been advised to enroll in the courses when they are next offered, but there is no waiting list. According to some faculty members, some students never take these programs because they fail to enroll in the class at a later date. Upper-level classes, however, which require prerequisite courses, have rarely been closed to eligible students.

Several different approaches to providing specialized training in job-seeking skills have been used. Some program areas, for example, child development, include a course in the curriculum focusing on employability skills. In one of the classes in the advertising art program, each student is required to assemble a "portfolio" for use in obtaining a job. Other programs rely upon one-day workshops conducted by counseling staff. In addition, instructors are encouraged to incorporate job-seeking training into their courses. Overall, it appeared that the curriculums include employability skills through a variety of modes to ensure that each student has skills to seek and obtain a job. All of the students interviewed related that they had received training in job-seeking skills.

In order to provide vocational-technical education program access to students who cannot attend classes during the day, the college offers an evening division, leading to the same degrees as the regular day programs. These programs are offered at twenty-four different locations throughout the city.

At case site C (designated a high placement site in State C) all persons interviewed agreed that the teachers have the greatest involvement in developing and changing curriculum. Curriculum has usually been changed because of the local labor demand or on the advice of the advisory council. There did not appear to be formalized procedures for changing the curriculum, which

seemed to be changed at the discretion of the associate dean or teachers.

The college offers a wide variety of programs including twenty-four arts and sciences, eighteen business, and forty-one technical programs. The college has a career and educational planning center that is available to students to help them with resume writing, filling out job applications, job interviewing techniques, and information about how and where to look for jobs. These services are not part of any regular curriculum, but are available to students on a "drop-in" basis.

At case site D (designated a high placement site in State D) much of the vocational-technical education curriculum was characterized as being "white collar" by many of the students and staff members. According to a counselor, "many of the vocational technical couses are billed as 'terminal' with transfer possibilities." Full-time day students have typically pursued a program designed to culminate in an associate degree from one of the four divisions: behavioral science, business administration, humanities, and natural science.

Curriculum changes are mainly the responsibility of the faculty members. One teacher who had recently been involved in changing the curriculum explained the change as:

> The director of this program who was here for the last two years had a particular interest in curriculum development. He worked with the faculty in developing the central framework and understanding the language of curriculum development. The curriculum we were using, we all liked, but it was felt that it could be communicated more effectively. Advisory council members, state board members, administration and faculty all worked together to come up with what is being used now.

Information from the mail questionnaires. In table 43 the deans/directors indicated that for the most part, the advisory committee members and deans/directors determined the specific competencies students should acquire. In the same table these data suggest that advisory committee members, deans/directors or teachers had a primary responsibility for developing and revising the vocational-technical education curriculum.

As shown in table 44 the deans/directors responding to the mail questionnaire reported that the curriculum was revised annually at most of their institutions. At the other institutions the curriculum was revised every two years, with the exception of a few institutions in State C where it was revised every four or five years.

Current and former students responding to the mail questionnaire indicated which skills were taught at their institutions. Table 45 show that approximately half of the respondents felt that training in job-seeking skills and job obtainment skills was provided at their institutions. With one exception there did not appear to be differences in opinion between current and former students within the states. The exception was at high placement sites in State C where 21 percent of the current students felt they received training in job-seeking skills compared to 45 percent of the former students. In some states the high placement sites indicated more availability of training whereas in others the low placement sites indicated more.

Summary. Findings from the study indicated that curriculum which was designed to meet labor market needs of the community enhanced job placement. At sites where advisory committee input and other labor market information was used as the basis for curriculum changes the placement rates were higher. Employers at the high placement sites appeared to be satisfied with the skills taught.

Teachers were primarily responsible for development of curriculum that typically was revised annually. The process of curriculum development varied somewhat among the sites but these processes did not appear to influence job placement rates.

Instruction

Information from review of literature. Instructional development consists of planning done in direct support for student learning. Instructional development follows curriculum development. Curriculum is explicated with specifically designed strategies to aid students in learning the content, (Kindred et al. 1976). The distinctions between curriculum and instructional development are not always clear. One way educators have clarified the issue is to view curriculum as a general framework developed by a committee whereas instruction is the operationalizing of the curriculum by individual teachers.

One emerging approach to providing quality instruction is competency-based education (CBE). According to Finch and Crunkilton (1979) several aspects of CBE distinguish it from traditional instruction. The key elements include competencies, criteria used to assess the competencies, ways that student competencies are assessed, student progress through the program, and the program's instructional intent. Finch and Crunkilton (1979) have indicated that competencies for vocational-technical education are "those tasks, skills, attitudes, values, and appreciations that are deemed critical to successful employment" (p. 220). Whereas not mandatory elements of CBE, individualization, use of instructional technology, and systematization are often

incorporated in the CBE instructional approach used by educators. The CBE approach has become synonymous with the use of instructional modules. In contrast to the traditional instructional mode, a module is the basic instructional building block instead of a subject, unit or lesson. A module, as described by Finch and Crunkilton (1979), is "a self-contained package that includes a planned series of learning experiences designed to help the student master specific objectives" (p. 225). Although there are advantages and limitations to using modules and CBE as an instructional approach, they represent alternatives to the traditional approach of lecture, demonstration and hands-on experiences at one pace to all students in a class.

Cooperative education is another mode of instruction used in vocational-technical education programs. Cooperative education has received a great deal of impetus in its growth from federal legislation which provided earmarked funds for cooperative education and demonstration programs in postsecondary institutions. In addition, project grants under Part G of the 1976 Vocational Education Amendments and Title IV-D of the Higher Education Act have helped many postsecondary institutions to develop and improve their programs.

Cooperative education is an educational process that combines work experience gained by students on the job with regular academic instruction as an integral part of the two-year postsecondary curriculum. It is designed to develop skills and knowledge and to improve students' self-understanding by integrating classroom study with planned and supervised experience outside of the formal classroom environment. Cooperative education is based on the principle that well-educated individuals develop most effectively through an educational pattern that incorporates structured experiences in business, industry, government, and human services. Cooperative education is typically included as part of regular instructional activities, with the institution assuming the responsibility for integrating work experience into the education process.

Information from the case study sites. At the case study sites the traditional instructional approach was prevalent at case sites B, C, and D. The competency-based educational approach was used at case site A (designated a high placement site in State A).

As discussed in the curriculum section, at case site A instruction was primarily individualized, with students entering programs at any time without affecting the progress of other students.

The faculty handbook states:

> Instructional facilities and equipment shall provide learning experiences comparable to those typical of the occupation. Instruction shall not be confined to the classroom. Training stations within the occupations shall be utilized whenever necessary to maximize the learning experience of the students.

Most teachers expressed their support of the individualized system, but some reservations were indicated. Some teachers reported that this system was quite demanding for them. They were expected to monitor the individual progress of their students and be available for any questions. If several students were having problems, they could dominate most of the instructor's time. On the positive side, teachers mentioned that by using the individualized approach students could work at their own pace. Bright students were allowed to progress rapidly, while slower students were also free to move at their own rate. One teacher mentioned that "it was more of a challenge, that instructors must be prepared to answer questions over all materials not just what had been covered in a lecture."

A time limit of ninety-two weeks had been instituted to prevent students from staying in a program indefinitely. According to one instructor, "this time limit is occasionally extended for students who need extra time for legitimate reasons, as determined by a committee of instructors and counselors."

Traditional methods of instruction were used at case sites B, C, and D in contrast to case site A. Lectures were used, with hands-on experiences and skill building in the vocational-technical areas where appropriate. The teachers who were interviewed felt comfortable with this approach and did not suggest major changes.

Information from the mail questionnaire. Teachers were asked in the mail questionnaire to indicate the types of instructional methods they used to teach job placement related activities. As the data show in table 46, regular class instruction and presentations by staff were used most frequently. A high percentage of respondents indicated however, that no instruction was provided for the activities listed on the questionnaire: writing resumes, locating jobs, filling out job applications, setting up job interviews, participating in job interviews, and obtaining job information. Presentations by guests and self-instructional materials were reported to be used least frequently of the types of instruction listed in the mail questionnaire. Although responses varied across the sites and types of sites, it appeared that instruction in obtaining job information was provided most frequently of all the types of activities listed in the mail questionnaire.

Postsecondary institution personnel who responded to the mail questionnaire indicated the percentage of time they spent per week in providing instruction in job obtainment skills. As shown in table 47 the majority of the teachers and counselors did not respond to the question. Teachers and counselors who did respond indicated a range of 0 or 10 percent of time spent in providing instruction in job-obtainment skills. Job placement specialists who responded indicated they spend between 0 and 20 percent of their time providing instruction for job-obtainment skills.

The majority of employers who responded to the mail questionnaire indicated, as the data show in table 48, that they rarely or never served as guest lecturers for the vocational-technical education programs. This finding is consistent with what the teachers' reported (table 46) that a minimal amount (0 to 22 percent) of instruction was provided by guest speakers.

As indicated in table 49 employers reported how often they participated with the postsecondary institution in the conduct of cooperative education programs. In States B and C approximately half (46 to 62 percent) of the employers never participated in cooperative education programs. In State A approximately a third (30 to 36 percent) never participated, whereas in State D approximately a fourth (20 to 25 percent) of the employers never participated in cooperative education programs. The responses of those employers who participated in cooperative education programs varied from very often (4 to 13 percent) to rarely (4 to 20 percent). A number of employers indicate that they sometimes participate in cooperative education programs (10 to 36 percent).

Employers who responded to the mail questionnaire indicated the amount of assistance they provided vocational-technical education student organizations. The data in table 50 show that the majority (56 to 72 percent) of the employers never assisted with vocational technical education student organizations. Those who did assist with student organizations did so sometimes (4 to 22 percent) or rarely (7 to 21 percent).

Summary. Instructional approaches commonly used in vocational-technical education are the traditional classroom lecture with some postsecondary institutions using cooperative education and individualized, competency-based methods. At three of the case study sites the traditional lecture method was used. Data from the mail questionnaire sites also indicated that the lecture is a common method of instruction in postsecondary institutions. One of the case study sites used an individualized, competency-based instructional approach. The case study site using the individualized, competency-based approach had a high job placement rate and it appeared that this approach contributed to higher job placement rates. There were no apparent differences in high and low job placement sites regarding the

amount of job-obtainment skills taught. There was considerable variation among the study sites concerning the use of cooperative education, but no clear trends emerged.

Counseling

Information from review of literature. Two-year post-secondary institutions attract diverse students whose developmental levels and needs for counseling are distinctly disparate. As part of their mission, two-year institutions provide counseling services to help students reach their goals. Harris and Rach (1977) suggested that the counseling services in two year institutions can be ambiguous and ineffective if patterned after university or secondary school counterparts. As the mission and students of the two-year schools differ from those of other settings, so must the counseling services be appropriate for this distinct level of education.

A 1965 Carnegie Commission study found the counseling services of community colleges "woefully inadequate" (McConnell 1965). Since the decade of the 1960s community colleges have grown tremendously and counseling services appear to have improved in number and type of services offered students. According to Tollefson (1975), innovative efforts have been made to reach students of all backgrounds and ages. Tollefson's survey of several hundred community colleges indicated that they employ literally hundreds of new approaches to student development.

Student development is viewed as developing academic and vocational skills, understanding personal values and goals, and realizing a role in society. As Elterick, Gable and Karr (1975) pointed out, "It is essential that each community college has a well-structured, well-developed counseling program that assists in assessing students' developmental needs and employs strategies appropriate for dealing with the identified needs within each particular institution" (p. 139)."

Information from case study sites. In the literature job placement is not typically depicted as a function of two year institutional services. Similarly, at the case study sites, job placement of students was a distinctly separate function rather than part of the counseling continuum. Although job placement counselors may often be under the administration of the counseling service, typically they often report to the vocational-technical education dean or director.

At case site A (designated a high placement site in State A) the counseling system has both formal and informal elements in its operation. All students who apply to the vocational-technical institution see an admissions counselor to discuss the

program area they have chosen, or if undecided, to discuss what programs are available. Counselors help with students' career exploration, frequently using a computerized career information system.

Once enrolled in a particular program, students are required to attend an orientation session. Orientations are held once a month, and individual orientations are held for those persons entering between formal sessions. The orientation sessions include counseling by teachers, which includes discussion about the competencies that must be acquired in order to complete a program and the skills needed in order to be successful in the program.

The counseling staff is large, with counselors offering financial aid, personal services, admissions, and placement counseling. Most of the counselors have backgrounds in vocational or other education fields, as well as degrees in counseling. All counselors agreed that vocational education is very important and very worthwhile.

The counseling staff interact frequently and often share work responsibilities when needed. All counselors felt that their ongoing contacts with students had an eventual positive effect on job placement of students. As one counselor stated, "If all counselors do their job effectively, then students will have all the assistance they need to complete the program and be qualified for placement into employment." The interviewer found that interview appointments with counselors were often delayed due to their commitment to meeting students' needs first.

At case site B (designated a low placement site in State B) both personal and career counseling are available to students. According to a self-study conducted at the college in 1975, the emphasis of the guidance and counseling department is academic and career counseling.

The counseling staff is a diverse group, with varying backgrounds in technical and academic fields. Counselors are not required to be certified, but several academic counselors had been certified by the state education agency. The technical/vocational counselors have all met the requirements of the state education agency.

Teachers reported that they spend considerable time counseling students regarding career opportunities and job-seeking skills. Teachers frequently helped students prepare resumes or discussed job openings and strategies to use in applying for the jobs. When not in class, instructors had an open door policy for students, which means that their preparation for class was usually done at home. One professor said, "My office is a three-ring circus, because students are constantly dropping in."

Interviewees indicated that minimum formal counseling was offered by the counseling department. There was only one vocational counselor available for approximately 7,000 students.

At case site C (designated a high placement site in State C) a pamphlet was distributed to students, which gave an overview of the services of the counseling department. The pamphlet stated:

> We assist YOU with decisions which affect YOUR educational, vocational, and personal goals, and provide appropriate support and instruction which will enable YOU to implement these decisions. These decisions may include career, educational, academic choice, or personal-social decisions.

The counseling staff of thirteen served both day and evening students. The director of counseling reported that the counselors are considered academic advisors and are responsible for helping students make their educational plans. The counselors are not responsible for personal counseling, which is available to students through three interns from a local university master's degree program in social work.

Students are asked to set up an appointment with the counseling staff after they have completed application for admission. The counseling office provides a group orientation session for new students. The director of counseling stated that, "This is the first contact the student has with the counseling service."

The students are not required to attend the orientation, but they are strongly encourge to do so. Students are not denied admission if they do not attend. Contact with students after orientation is largely on an individual basis, at the student's request.

Little or no vocational counseling is offered, other than providing information on what courses should be taken for a particular program. There is no contact between the placement office and the counseling office.

At case site D (designated a high placement site in State D) the college catalog listed two types of counseling: career and personal. The career counseling is described as helping students to identify career and educational goals. Emphasis is placed on individual student ability as a basis for counseling. The personal counseling was described as "assisting students in exploring their growth potential and any personal concerns encountered while in college." The counseling staff of three persons developed and now offers short seminars to students about the world of work.

Although the counseling staff is small, student interviewees felt that the "personal concern" of the teachers and other staff was one of the best things about attending the college. One former student said, "I still feel that when I have a problem, I can go to see any of the counselors or teachers and they will help."

Information from mail questionnaires. The findings from the questionnaires related to the job placement functions of counseling services are discussed in the job placement section of this report. In this section information about the types of counseling provided and used by students, the selecting and recruiting of students, admissions requirements and staff involvement in counseling is reported.

Teachers who responded to the mail questionnaire reported that they do not spend much of their time providing career counseling to students. Table 51 shows that teachers spend a minimum amount of time on career counseling. Less than a third (11 to 32 percent) of the teachers indicated that they spend up to ten hours per week on career counseling. Counselors and job placement specialists tended to spend more time than teachers on career counseling.

As table 52 shows, the majority of counselors (80 to 100 percent) who responded to the mail questionnaire felt they were very or extremely knowledgeable of the vocational-technical education program in their institutions. The data in table 53 showed that a majority of the deans/directors who responded to the mail questionnaire indicated that counselors had the primary responsibility for recruiting students for the vocational-technical education programs. In States B, C, and D the deans/directors expressed considerable support for members of the advisory committee having primary responsibility for recruiting students. Few of the deans/directors indicated that teachers have a primary responsibility for recruiting students.

When asked who had the primary responsibility for selecting students the deans/directors indicated a preference for counselors. As the data in table 54 indicated the deans/directors also considered teachers and deans/directors to be fairly important as having a primary responsibility for selecting students.

As noted in table 55, teachers who responded to the mail questionnaire (table 55) indicated that the most important criterion for admitting students to the vocational-technical education program was either anyone who wishes to enroll (33 percent to 58 percent) or student's career objective (14 to 36 percent). In States B, C, and D, 15 to 17 percent of the teachers from low placement sites indicated that minimum grade point average was the most important criterion for admitting students as compared to 0 to 8 percent of the teachers at the high placement sites. In State B almost a fourth of the

teachers from high placement sites indicated results of standardized tests as the most important criterion for admitting students to a vocatonal-technical education program.

Counselors, current students, and former students responding to the mail questionnaire indicated whether or not specific counseling services were available at their postsecondary institutions. In table 56 the responses indicated some differences of opinion between counselors and students, with less differences between current and former students. With some exceptions, most (89 to 100 percent) of the counselors at both high and low placement sites indicated that counseling on course selection, counseling for future educational opportunities, counseling for career possibilities, and counseling for career selection were all available. A slightly lower percentage of former students were aware of the available counseling services than the current students. The majority of former and current students at high and low placement sites appeared to be aware of specific counseling services available to them at their postsecondary institutions.

Students were not as likely to know that psychological counseling was available at their postsecondary institutions. As the data in table 56 show the majority (60 and 67 percent) of the counselors in State A indicated that psychological services were not available whereas the majority (50 to 100 percent) of the counselors from the other three states indicated that they were available. With few exceptions the majority of both former and current students did not believe psychological counseling services existed at their institutions.

Counselors who responded to the mail questionnaire indicated the types of conditions under which students are required to seek counseling. As the data indicate in table 57, there was no consistent pattern across responses among the states or the high and low placement sites. With the exception of State A the majority of the counselors (50 to 100 percent) in States B, C, and D indicated that students did not have to see a counselor before enrolling in a vocational-technical education program. In State A, all counselors indicated that students must see a counselor before enrolling in a vocational-technical education program. The majority (67 and 83 percent) of the counselors in low placement sites in States A and B indicated that students must see a counselor when leaving the program, whereas the majority (50 to 100 percent) of counselors at the remaining types of sites. indicated students did not have to see a counselor. In States A and D the majority of the respondents (83 to 100 percent) indicated that students must see a counselor when transferring from one program of study to another, whereas in States B and C the majority of counselors (50 to 100 percent) indicated students do not have to see a counselor when transferring from one program

of study to another. In States B and C and in low placement sites in State D the majority of the counselors (50 to 100 percent) indicated that students did not have to see a counselor before dropping out of a program. At the remaining types of sites, students were required to see a counselor before dropping out of school.

Current and former students who responded to the mail questionnaire were asked to indicate what types of counseling services they actually received at the postsecondary institution. As the data in table 58 show the majority of students did not utilize the counseling services. The least utilized service was psychological counseling, perhaps because most students did not know it existed as previously reported. The majority (81 to 100 percent) of current and former students did not have psychological counseling at the postsecondary institution. There was a slightly higher percentage of students who had counseling for course selection. In State A the majority (77 to 81 percent) did not have counseling for course selection and in State D the majority (63 to 73 perdent) did use that service. In two States B and Cthe responses were mixed, without consistant patterns between high and low placement sites in the use of counseling for course selection. However, in State B the low placement site respondents (100 percent) indicated they received no counseling on course selection.

The majority of students (50 to 100 percent) did not receive counseling regarding career possibilities, career selection, or future educational opportunities. There were slightly more current students than former students who indicated that they had received some type of counseling. For the most part, however, current and former students did not avail themselves of any of the counseling services even when they knew they were available.

Summary. At the case study site job placement was seldom regarded as a counseling function, although at some institutions it was administered through the counseling service. Findings from the study indicated that a broad range of counseling services were available, often with functions that overlapped or complemented those of the job placement services.

The contact students were required to have with counselors for course selection, and program changes varied among the participating sites. Although most traditional types of counseling were available, they were not frequently used by the students.

Teachers appeared to have a major role in providing counseling at the case study sites although that finding was not suported by the data from the mail questionnaire. At high placement case study sites teachers provided students with more career and job-oriented counseling than teachers seemed to provide at low placement sites.

Job Placement

Information from review of literature. Most postsecondary institutions have job placement specialists (Smith 1981). Job placement specialists have varying titles and concomitant responsibilities. Some of the commonly used titles are (Barrow 1976) as follows:

Placement Coordinator/Placement Director--Responsible for all aspects of placement service. May carry out total services or supervise team of full- or part-time specialized staff.

Placement Counselor--Member of regular counseling staff with designated responsibility for placement service. Can be member of placement service team with responsibility for career planning, pre-employment preparation, and job adjustment counseling students.

Placement Specialist--Member of school staff with designated responsibility for placement service area. Can be member of placement service team with responsibility for job development, employer contact, labor market information, placement referral, and/or follow-up.

Occupational Information Specialist--Liaison person from state employment service or designated member of placement service team with responsibility for labor market and occupational information as resource to students and staff.

Job Development Specialist--Member of placement service team with responsibility for initiating and maintaining regular contact with employers to identify employment opportunities. Through personal visits and other methods solicits employment opportunities, refers students, and maintains current information on outcome of referral and employment openings.

Secretary/Clerk--Carries out operational functions in placement office such as answering telephone, follow- through telephone or mail contact to verify outcome of referrals and current employment opportunities, maintains order of files and records, posts career placement notices, scheduling of appointments for placement staff.

The responsibilities and duties of job placement specialists include these:

1. Coordinate career assistance and placement services.
   a. Cooperate closely with other school departments, especially counselors, faculty, vocational administrators, and advisory committees, in developing placement service policy.

b. Develop and carry out public relations efforts in the school and community, including working with advisory committee, other local schools, and employer groups.
c. Systematically acquire and update local employment information.
d. Participate in relevant professional development activities to promote placement service improvement.

2. Prepare students for employment
a. Conduct studies as necessary to identify student needs for specific career assistance and placement services.
b. Develop methods and materials for preemployment preparation of students, both individually and in groups.
c. Advise counseling staff in acquisition and use of information on career planning and the labor market.

3. Operate placement office to effectively serve students, employers, and school staff
a. Assist students to prepare for and obtain job or educational goals through personal interviews, telephone and mail contacts, posting of opportunities, and notices to faculty.
b. Develop student job opportunities through visits to and from employers, and records of potential employers.
c. Bring students and employers together through such methods as current job orders, direct personal referral, job bulletins, candidate lists, campus recruiting, career fairs, and student placement credentials.
d. Follow through on all operations, including determining outcome of referrals, updating registrant files and job orders, and accurately recording all office activities.

4. Evaluate and improve the placement program
a. Continually evalute placement methods, policies, and activities through surveys, analysis of office activity records, and cost review.
b. Participate in the design and analysis of

school follow-up studies to obtain evaluative feedback.

c. Prepare an annual report detailing operation and evaluation of the placement service. (Barrow 1976).

Information from case study sites. At case site A (designated a high placement site in State A) job placement was a major priority. The state department of vocational education required that programs have a placement rate of 51 percent or be terminated. A state administrator said,

> If a program were approaching anything close to only a 51 percent placement rate, I would have already been on to it. The directors know what the schools are there for. They have a singular purpose, to prepare people for employment. That's their goal.

The most striking feature of the placement system at site was its flexibility. Responsibility for placement was shared equally by counselors, teachers, and a job service counselor who was employed by the state employment service and located at the school. A teacher summed up placement at the school as "a very cooperative effort."

The teachers appeared to recognize that job placement was one of their responsibilities. The teachers stated that they actively pursued job placements for their students through contacts with employers in the community or the job service counselor. They also reported that employers now contact them regarding job openings. Several teachers reported that they carefully screen students they refer to employers, so that "square pegs aren't placed in round holes."

The job service counselor viewed his role as providing the greatest number of job options to the greatest number of students. The counselor's duties included: (1) receiving job openings from employers who contact the school or from the state employment service (SES) job bank, (2) informing instructors and students of the openings, (3) matching students to jobs and arranging job interviews, (4) conducting small group workshops on job seeking skills with students, (5) conducting public relations activities with employers concerning the school, and (6) posting part-time job openings for students who desire part-time work while attending school. In addition, the counselor provides labor market information to the staff.

The teachers and counselors consistently reported high placement rates for students completing programs and also for those who did not. They maintained that eventually all the students who wanted to work in the area for which they were trained found jobs.

Employers reported satisfaction with the placement system. Some employers supported the fact that they contact teachers at the school when they had openings, others reported that they go directly to the state employment service (SES).

Several interviewees stated that, due to the recent economic slowdown, more emphasis had been placed on finding jobs outside the local area. Students were being encouraged to relocate outside the area. In addition, more use had been made of the SES job bank, which lists openings throughout the state.

At case site B (designated a low placement site in State B) the job placement office was staffed by two full-time workers. For a typical job referral, an employer called the job placement office and described the available job to a staff member. The staff member then typed the job description and placed it on the job-posting board in the vocational-technical education center. In addition to posting jobs on the job board, the job placement staff searched newspapers for job openings, conducted one-day workshops for students on how to get a job, invited and coordinated the activities of job recruiters on campus, and met with area employers to explain the program offerings at the institution. According to one job placement office staff member, "During a typical week the job placement office would be in contact with about fifty employers."

Although the job placement office was active in job placement, it appeared that the bulk of job placement was conducted by faculty members. Interviewees stressed that the strengths of the placement activities lay in the network faculty members maintained with employers. A typical statement made by one of the teachers was:

> Most of the faculty have professional contacts in town. Last week I received a phone call from an employer who said he had to have someone. He said he wasn't telling anyone else about the job and for us to send some students over.

Faculty members could not provide exact placement rates for their program, but they felt that they placed between 80 to 95 percent of their students in training-related positions. Not one interviewee said that job placement was a major problem. Most of the faculty like the informal and flexible nature of job placement at the school. They tended to feel that since job placement rates were high, there was no need to overhaul the present placement system. As one department chairman said, "It's an informal system and that's all it needs to be really, as far as we are concerned."

Placement procedures differed somewhat among the various vocational-technical education programs. In some programs there

was a heavier reliance on verbal contacts between faculty and students, in others the job board was used extensively and in others job fairs were the major placement activity.

At the time of the interviews, the position of job placement director was unfilled and applications were being accepted. The position was to be funded through the counseling office. According to the job description, the position will be filled by a doctorate level counselor with experience in business. Several interviewees disagreed indicating that the position should be filled by someone with a business background, familiar with the local area business community, rather than a counselor. The assistant director said:

> In my way of thinking it should be a business person, because we need a person who knows the community and knows the people in the community. The counseling part is very nice, and the job placement office could do career counseling, but that function is already being done. So I think we need a person who is a public relations person to get out there, talk to people, tell them about the school and the faculty.

The faculty's relationship with the job placement office varied. Some faculty members worked closely with the job placement office; others criticized it; while others did not seem to know it existed. The assistant director of the job placement office said:

> I think there is some lack of communication between the job placement office and the faculty. I think there will always be some faculty members that will not see any function in the job placement office, but I think a lot of it is a lack of not knowing what we do here.

The job placement office at site C (designated a high placement site in State C) had one full-time professional to serve 19,455 students. The placement office was considered a student service, where students could come for information about the community, the college, and jobs. The director of the job placement office described the position as :

> I'm in charge of a myriad of things, so to provide one-to-one job counseling to all students is impossible. There is just no way. I'm open for a student who wants to see me, but I just can't meet one-on-one with everybody.

Job placement activities were conducted by many teachers and support staff. The placement director stated:

> I give the instructors the credit for job placement, because they're my pipeline. The job placement office is a clearinghouse. For example, I get a phone call from a company, they have a specific need, I look through the files to see if any students are looking for positions in the area, and if they are qualified for the position. Second, I funnel the information about the job to the instructors. The instructors announce it to the class, pass it, or select a student to tell about the job, or a combination of the three. In addition if its a large demand, I start advertising the opening in the student bulletin. Occasionally, I advertise in the city newspaper and we have a job listing board in the office.

The placement director has held an employer's day annually, when employers are invited to the campus to meet the students. Approximately thirty-five or forty employers, representing all kinds of businesses, have typically attended.

Other responsibilities of the placement director include contacting employers as a public relations function, and presenting programs on the world of work in classes at the college.

The placement director said, "I feel I have done a good job. The college has the highest placement record for the community college district." According to a teacher, "The placement office does an excellent job, especially since it receives little or no support from the administration." Several interviewers observed that a major portion of the placement director's time was spent in filling out reports, that the job was almost all paper work.

At case site D (designated a high placement site in State D) the job placement function was almost nonexistent. The major activity of the person in charge of placement was helping students transfer to four-year institutions. According to the college catalog, the job placement service "assists graduating students and alumni seeking appropriate full-time employment and/or training." During group interviews students explained that the placement office is not active.

The person in charge of job placement explained his responsibility by saying:

> Right now, as far as the way we are currently operating placement, it's primarily a maintenance function where students are notified

about jobs via intercampus mail, memos posted and so forth, or announced in class. A couple of times during the year, I put up posters reminding students to come in and register with the placement office. If they do, I set up a file listing students under areas of interest, so if a position becomes available we can contact them.

Previous job placement personnel had written a booklet about job search strategies. The booklet included how to do resumes, what is an application, how to fill out applications, and how to write follow-up letters.

Most students indicated that the college had "no responsibility for job placement." Employers interviewed usually did not contact the job placement office, but called the teachers directly regarding job openings.

The job placement director stated that, "Only 150 to 200 students use the job placement service in a year, and most of those are for part-time jobs." It was evident that the college does little to place students from vocational-technical education programs in jobs in the community.

Findings from mail questionnaire. Job placement specialists who responded to the mail questionnaire reported, as shown by the data in table 59, that their institutions typically have one to three full-time persons responsible for job placement. The typical response, however, for the few respondents to the questionnaire, was that there is one full-time job placement specialist at each institution.

The teachers and job placement specialists who responded to the mail questionnaire indicated, as shown by the data in table 60, the types of support provided for job placement services in their institution. Except for respondents from high placement sites in State A and low placement sites in State D, the majority of the teachers reported that they did not have secretarial assistance with job placement responsibilities. The majority of job placement specialists reported the opposite, that they did have secretarial assistance available. In State A, high placement site teachers were again the exceptions in reporting they received mileage reimbursement for automobile use although the majority of teachers at the remaining sites reported they did not receive mileage reimbursement. The majority of the job placement specialists at all sites reported that they did receive mileage reimbursements. The majority of both teachers and job placement specialists indicated they had the use of a telephone, office supplies, access to duplicating, and postage for job placement activities. The majority of teachers reported that they had no release time for job placement activities. The responses from

the teachers and job placement specialists were mixed regarding the availability or use of inservice training. Neither teachers nor job placement specialists consistently reported they had or had not received inservice training, although it appeared that the majority had not had inservice training.

Postsecondary institution personnel, former students, and current students responding to the mail questionnaire indicated as shown in table 61 the sources that are "very much help" for vocational-technical students in providing information about job openings. Current and former student responses were compared as a group to the responses of teachers, counselors, and job placement specialists as a group. Except in State D, both the student and postsecondary institution personnel groups ranked teachers first in providing "very much help" regarding information about job openings. In State D, the respondent groups from the high placement site ranked the job placement service first in providing "very much help" about job openings information. The remaining rankings varied, especially between the groups of school personnel and students. Although most of the postsecondary institution personnel rated the job placement service second or third, most students rated it fourth or fifth. Students most frequently rated newspapers second and friends third. Postsecondary institution personnel tended to rate school-based services higher than students who indicated parents and others outside of the school were more helpful in providing information about job openings. Both students and school personnel tended to rate private employment agencies and radio/television announcements lowest as being helpful in providing information about job openings.

Current and former students who responded to the mail questionnaire indicated what placement services they believed to be available at their postsecondary institutions. To answer this question students were asked to indicate if they believed the particular service was available with the nonresponses inferring it was not available. For the most part, current and former students agreed with each other, as shown by the data in table 62. Although the majority of students in State D (65 to 73 percent) believed that assistance in advanced educational placement was available at their institution, the majority (55 to 75 percent) of the students in the remaining three states did not believe it was available. Responses were mixed regarding the availability of training in job-seeking skills. The responses tended to indicate that training in job-seeking skills was not available with the exception of the responses from students in State D. With the exception of students in State A, the majority (52 to 75 percent) of current and former students did not believe that their institution contacted employers about jobs for students. A greater proportion of students (59 to 96 percent) did not believe that their institution worked with either public or private employment agencies regarding jobs for students. With

some exceptions, most of the responding students believed that their institution does provide information about job openings and refers students to job openings.

Current and former students and school personnel who responded to the mail questionnaire rated their institutions performance in providing specific job placement services (See tables 63,64,65, and 66). The particular services rated were: providing training in job-obtainment skills, contacting employers about jobs for students, referring students to job openings, and providing information about job openings. In general, school personnel gave higher ratings than students regarding their institution's provision of job placement services. There were no consistent patterns of response in the ratings between high and low placement sites or between current and former students. The greatest difference in ratings between the groups of students and school personnel was for providing job-obtainment skills as shown by the data in table 63. The rating by school personnel were good, whereas student ratings were from failing to excellent with many "don't know's." Contacting employers about jobs, as shown in table 64, was rated "good" to "excellent" by school personnel, although more school personnel rated that service excellent, whereas students rated it fair. In table 65 the data indicate that school personnel rated referring students to job openings as good to excellent, whereas students tended to rate this service as fair to good. As shown in table 66 school personnel tended to rate providing information about job openings as good to excellent whereas most students rated it fair to good, with some ratings of excellent.

Teachers and job placement specialists who responded to the mail questionnaire indicated the kinds of activities they conducted when referring students to job openings. As the data in table 67 indicate, approximately half of the teachers did not respond to the question. The teachers and job placement specialists who did respond indicated that of the four activities listed, the most frequent activity was to provide students with information regarding jobs, such as wages or benefits; the second most frequent activity was to provide employers with student information such as class performance; the third most frequent was to make telephone calls to employers recommending students; and the least frequent activity was to send employers written recommendations concerning students.

In table 68 the data show the responses of teachers, counselors, job placement specialists, advisory committee members, and former and current students concerning their opinions of which factors increased the chances of employment for former students of vocational-technical education. The responses to this question showed similar opinions among the respondent groups regarding the five factors that were listed, which were: basic educational skills, occupational skills and competencies, human

relations skills, positive work attitudes and previous work experience. Seventy-one percent in high placement sites and 81 percent of the teachers in low placement sites indicated that the factor of occupational skills and competencies was "very much help" for students in obtaining jobs. A somewhat lower percentage of teachers indicate "very much help" responses for the factors of positive work attitudes, followed by basic skills, human relations skills, and previous work experiences. There was less consensus among counselors and job placement specialists who responded to the question than among the teachers; although the majority tended to agree that occupational skills and competencies were important for students in obtaining jobs. Advisory committee members tended to agree with the teachers' opinions, although they place somewhat more emphasis on basic skills as "very much help" for obtaining jobs. Current students also agreed with teachers, and tended to have less differences in percentages among the five factors. The responses of former students tended to mirror those of the current students but the percentages were considerably lower, possibly indicating that former students did not feel any of the five factors were as much help as perceived by the current students and other respondent groups. There were few differences in the response of current and former students by high and low placement sites.

The employers' questionnaire had a slightly different question than the other respondent groups to obtain their views about the importance of specific factors when hiring a person for an entry-level job (table 69). At both high and low placement sites, in all four states employers (52 to 76 percent) indicated that the factor of work attitude was most important when deciding to hire someone for an entry-level position. Employers indicated that the ability to get along with people was also very important. The remaining factors listed in the questionnaire item received varying percentages of "very much importance" responses. For example, school attendence and job interview performance received a high percentage of "very much important" responses in States A, B, and C. Although there were no consistent patterns there were differences within the states in opinions between high and low placement site employers. For example, in State D high placement site respondents indicated that amount of previous work experience and scores on company administered tests were very important when hiring a person for an entry-level job.

As shown in table 70, respondents to the mail questionnaire indicated how much difficulty certain factors pose for vocational-technical education graduates when they attempt to obtain jobs. The responses to the question varied within the states between high and low placement sites and among the various respondent groups although there were trends in the factors that pose considerable difficulty when attempting to obtain jobs. The factor receiving the highest percentage of posing considerable difficulty responses was "no job available." Others factors receiving high percentages of posing considerable difficulty

responses were "students must compete with experienced workers," "students unwilling to move for a job," and "students do not have specific skills."

In State A current and former students at high placement sites emphasized "age discrimination" as a factor posing considerable difficulty for obtaining jobs whereas none of the employers indicated sex discrimination as one of the factors posing "very much difficulty." Employers did not strongly indicate that any of the factors posed much difficulty, but they did place more emphasis on "no jobs available" and "students do not have specific job skills" than on other factors. In State B, "lack of transportation" was emphasized as a factor causing considerable difficulty for obtaining jobs by advisory committee members from high placement sites. In State C "entry jobs offer only minimum wage" was emphasized by teachers, counselors, and employers at low placement sites as well as current and former students from both types of sites. In State D, "entry-level jobs offer only minimum wage" was also emphasized by employers and students from high placement sites as a factor posing considerable difficulty for students when obtaining jobs.

Summary. Findings from the study indicate that two-year postsecondary institutions have a staff member functioning as the job placement specialists whose responsibilities range from posting jobs to administering a full-scale placement office. The most salient finding from the study regarding the job placement process was that a well-organized effort often coordinated by a job placement specialist who had the cooperation of faculty and administrators was necessary for high job placement. Although it appeared that the sites in the study had job placement services, the diversity of such services indicated that staff-wide cooperation and focused coordination was necessary to maintain the high level of effective communication with employers and students that was required for high job placement. Additionally, job placement was enhanced by strong ties with the public employment services and a high level of cooperation with economic developers in the community. The process of job placement appeared to be most effective where there was flexibility and responsiveness to employers, students, and school staff.

Staff Characteristics

Information from review of literature. According to the American Association of Community and Junior Colleges (AACJC: 1980), as of October 1979, there were 212,173 faculty employed in approximately 1,230 two-year postsecondary public and private institutions. In 1979, 44 percent of the faculty taught full-time with a teaching load of nine or more credit hours. Two-year teachers spent more time in the classroom than their four-year counterparts. Most faculty taught twelve to seventeen

hours per week, with an average of fifteen hours per week. The mean age of two-year institutions full-time faculty was forty-two years. Seventy-one percent had a master's degree while almost 10 percent held a doctorate (Graybeal 1979).

The average salary for full-time faculty was $17,820 for all ranks combined, with $14,800 for instructors, $16,660 for assistant professors, $19,820 for associate professors and $23,240 for full professors. The breakdown of full-time faculty was 12.6 percent full professors, 25.8 percent associate professors, 37.2 percent assistant professors, and 24.4 percent instructors.

Two states require a formal teaching certificate. The requirements are usually somewhat different for faculty teaching in academic programs than for those teaching in vocational-technical programs. Certification requirements for teachers in technical fields typically include having a bachelor's degree with experience as a technician in the field.

In addition to faculty, 16,155 other professionals, including administrators, librarians, and counselors, were employed. Almost 26 percent of the administrators held a doctorate. Approximately 14 percent of the administrators and 16 percent of the professional staff were from minority groups.

Information from case study sites. The faculty and professional staff at the case study sites appeared to reflect the national averages in terms of degrees held, hours worked and so forth. At case site A (designated a high placement site in State A) the postsecondary institution had a staff of eighty-seven. Five other administrative staff were located at the central administrative offices and rotated their visits to the postsecondary institution. The faculty all had on-the-job experience and had a teacher education degree or were working toward the degree. Two staff members were minority, one was a teacher and one was in charge of minority affairs.

Teachers appeared to be concerned about their students and dedicated to helping them make approprite career decisions. They avidly sought placement for students through their network of employers, some of whom were former students. Students, who seemed to like their teachers, made the following statements about them: "They are the best I have had in sixteen years of school," and "Teachers are concerned about students, as contrasted to the university teachers who are not."

Staff members at case site B (designated a low placement site in State B) had earned either a bachelors, masters, or doctoral degree. In the vocational-technical education area, teachers also had at least three years of job experience in their field of instruction.

The college had a full-time faculty of 475 and approximately 545 part-time faculty. There were 146 full-time vocational-technical education faculty. Forty-six percent of the faculty were women; 93 percent white; 6 percent Hispanic; and 1 percent black. Typically, the full-time faculty taught during the day, with a average load of fifteen semester hours; whereas the part-time faculty taught night classes. Department chairpersons taught twelve hours in addition to their administrative responsibilities.

A recent report (1975) conducted by a committee from the Southern Association of Colleges and Schools, the accrediting board, stated, "The college has an excellent faculty. There is a remarkable degree of faculty stability, and the affective relations such stability gives is reflected in the student-faculty relations." "Many of the faculty were retired from the military with high levels of skill and academic training received while active," according to a mid-management administrator.

Although the case study site was designated as low job placement in relation to others in the state, there was a great deal of job placement activity among the teachers. In every program area there was at least one self-appointed teacher who took pride in placing students in good jobs. The teachers viewed job placement as part of their role despite the presence of the job placement specialists. Teachers often assisted former students as well, making special efforts to contact them when a particularly good job was announced by an employer.

At case site C (designated a high placement site in State C) there were approximately 285 full-time equivalent teachers in the day and evening programs. Eighty-six percent of the evening staff were employed on an hourly basis to teach one or two classes a week. Most day teachers had a ten-month contract.

Teachers at this case study site had mixed reactions to job placement, often remarking that they "wouldn't get credit for it anyhow" since the placement figures are reported through the job placement office. Teachers did provide vocational counseling and did make job placements whenever it was opportune, but did not appear to be enthusiastic or rigorous in their efforts. Several teachers did not believe it was part of their job description and were somewhat befuddled about making contacts with employers in their large community. Other teachers indicated they should, and indeed did, make some job placements, especially, those who "moonlighted" and therefore had a network of colleagues in their field who would ask for student recommedations for employment.

At case site D (designated a high placement site in State D) there were seventy-three full-time and fourteen adjunct faculty. Most of the staff held master's degrees. The nursing staff held baccalaureate degrees, but legislation was recently passed that stipulated that all nursing faculty must hold master's degrees by

hold master's degrees by 1990. A plan was being developed to provide sabbactical leave on a rotating basis to allow nursing staff to acquire the necessary degree.

The faculty reflected the community in minority representation. The director of affirmative action stated": "Minorities are practically nonexistant in the area and college. We have one part-time black, and two full-time Asians." The president, a dean, and a division head were females, but according to an administrator, "men certainly predominate in professor and associate professor positions. One reason is that men stay on and on."

At this site teachers were academically oriented regardless of their vocational-technical field. Teachers believed, as did the administrators, that the school's purpose was to provide a two-year education that was transferable for further study at one of the numerous four-year institutions nearby. Being located in an isolated community with minimal entry-level job opportunities increased the teachers' belief that students could not be placed in related jobs. As a result, whereas job placement was desired, the reality of the situation appeared to promote the teachers' productivity to teaching transferable courses and seldom attempting to place students in viable positions in the community.

Information from mail questionnaire. School personnel who responded to the mail questionnaire reported the certificates they held in various fields. As the data show in table 71, most administrators held a certificate in administration, teachers held degrees in education or a broad range of subject fields, counselors previously held degrees in guidance/vocational counseling or administration, and job placement specialists held a variety of degrees. The fields most frequently indicated by teachers were trade and industrial or health education.

In table 72 the data show that the majority of teachers, counselors, and job placement specialists worked thirty-one to forty hours per week. There were no apparent differences in hours worked between high and low placement sites.

Respondents to the mail questionnaire indicated their highest level of education. In table 73 the data show that in State A directors of the technical schools had a master's degree or beyond. In the States B, C, and D, 20 to 100 percent of the deans/directors of the community colleges held doctorates and the remaining had a master's degree or beyond. In State A the typical respondent level of education was beyond four years of college whereas in the other states the model level was beyond a master's degree. The majority of counselors and job placement specialists had degrees above the master's level.

Teachers indicated, as shown in table 74, that they made one to three class preparations per day. With the exception of State A, the teachers in the low placement sites made slightly more preparations per day than did teachers in high placement sites.

As shown by the data in table 75, the majority (67 to 100 percent) of deans/directors who responded to the mail questionnaire indicated that teachers' ability to place students did not affect tenure, salary increases, or termination of employment. In State D, deans/directors from high placement sites indicated that promotions was affected by placement ability. In the other states promotion was not affected by placement ability according to the majority of the deans/directors (67 to 100 percent).

Summary. Teachers' commitment to job placement as their responsibility appeared to be a strong factor in attaining high job placement rates. In the state with the highest placement rates teachers' promotion were affected by their record of job placement. As the findings from the case studies indicated the level of job placement strongly related with teachers belief that it was their responsibility to place students in jobs related to thier training.

Student Characteristics

Information from Review of Literature: Enrollment figures for 1979 showed that 4,487,872 students were enrolled in two-year institutions across the nation for credit courses. This represented 39 percent of the total undergraduate enrollment nationally. Approximately 50 percent of the full-time students and 87 percent of the part-time students were employed. Over half (53 percent) of the students were women and over a quarter (27 percent) of the enrollees were minorities. The mean age of two-year institution students enrolled for credit was twenty-seven with a median of 23.3. In comparison to students at four-year institutions, students at two-year institutions were older, were more likely to be married, came from less affluent homes, and had parents with less education. Over a fourth (26.7 percent) of the students were married. Most of the two-year students commuted a median distance of 7.5 miles. Two year institutions enrolled 90 percent of their students from within the state (AACJC 1980; Gilbert 1979).

Since 1960, enrollment in vocational-technical education programs has grown at a higher rate than total enrollment because students have been interested in obtaining a job or improving their work life. By 1978, 52 percent of the enrollment was in vocational-technical education programs. The majority (79.4 percent) of full-time students cited "ability to get a better job" as their primary reason for being in postsecondary education

programs (AACJC 1980). In the 1976-77 school year 58 percent of the associate degrees were awarded for vocational-technical education programs. Over half (51 percent) of these degrees were for science or engineering related programs. The greatest numbers of vocational-technical education students were enrolled in business, commerce, management technology, nursing and allied health; electronics and machine technology, and police and corrections.

Information from case studies. The student population of the case study sites differed somewhat in ethnic makeup but otherwise they were similar to the information in the literature. Case site A (designated a high placement site in State A) had a minority population of less than 1 percent, most of those being Native Americans. Over a third of the students were receiving some type of financial aid. The largest amount came from basic education opportunity grants, with $252,246 for 450 students. Most students were married, and most planned to stay in the community when they completed the program.

The students sought admission to the vocational-technical education programs at this site because they believed their opportunities for entry-level jobs or advancement in their field would be enhanced. Students had the opportunity to advance at their pace and work toward certification in fields that virtually guaranteed them high paying jobs. Students appeared to be committed and enthusiastic about their programs, courses, and teachers, and optimistic about their chances of being placed in related jobs. At case site B (designated a low placement site in State B) approximately 1,310 more females attended the post-secondary institutions than males. The ethnic breakdown was black (8.7 percent,) white (47 percent), Hispanic (43 percent) and others (1.8 percent). The majority of students were between eighteen and twenty-four years of age and the majority were single.

A study conducted at case site B, from 1971-1979, found a significant difference between sex and the reasons that students did not return to the school. Reasons for males not returning to school included: already completed the courses needed; transportation problems, and conflicting job hours. The reasons for females not returning included personal or family reasons, financial problems and dissatisfaction with course content.

Seven percent of the students received financial aid, most through basic education opportunity grants. A number of students participated in the college work program, which paid minumum wages of $3.10 per hour for on-campus jobs.

Students believed their opportunities for job placement were high, especially in program areas such as computer technology. Students indicated they would have assistance from their program area teachers when they were ready to begin seeking jobs.

At case site C (designated a high placement site in State C) the percentage of ethnic breakdown for day student enrollment was black (29 percent), white (48 percent), Hispanic (15 percent), Pan Asian (5 percent) and other (3 percent). The ethnic distribution of night students indicated more white (55 percent) and less minority representation. Students believed that the labor market demand for entry-level jobs was low in their community, but training in certain fields would provide them with relatively high chances for employment. Most students knew about the job placement office but thought it provided help with part-time jobs while in school. Most students thought their teachers would help them find jobs but were anticipating locating such jobs on their own.

At case site D (designated a high placement site in State D) 42 percent of the students were enrolled as transfer students. The ethnic breakdown of the day school vocational-technical program was Native American (.3 percent), black (.5 percent), and Hispanic (.06 percent), with the remaining being white. The majority of the students were not planning to use their training for obtaining related jobs in the community, primarily because there were few entry-level skilled jobs available. Many students viewed their work in the vocational-technical education programs as preparation for higher education, for "getting along in the world" or for hobbies. Those who did believe they wanted to work in the field realized they would probably have to move out of the community or go into business for themselves. Although the students had high regard for the school and their teachers, the majority did not believe it was the school's responsibility to place them in jobs.

Information from mail questionnaire. Current and former students who responded to the mail questionnaire indicated (tables 76 and 77) that most of their parents had high school or less education. Students indicated that their mothers had somewhat more education than their fathers.

Students also indicated their parents occupations as shown in tables 78 and 79. Students indicated that their mothers' occupations were predominantly homemaker or clerical. Their fathers' occupations varied more, with no strong trends across occupations. The occupations of craftsperson and professional were indicated somewhat more frequently than the other categories.

Students who responded to the mail questionnaire provided information about their reasons for enrolling in a particular vocational-technical education program. As the data in table 80 show, the major reasons for enrolling in a particular program were either to acquire skills needed for obtaining a first job or to acquire new skills in order to change jobs. In States B and C a high percentage of students indicated that upgrading skills in

occupations was a major reason for enrolling in a program. Few students (0 to 11 percent) indicated that their reason was being unable to attend a four year college.

Responding students indicated in table 81 the vocational-technical education program in which they were enrolled. Of the current and former students who indicated a subject area instead of "other," the greatest percentages were enrolled in health, trade and industrial, and office occupations In table 82 the data show that the majority of current and former students held a job while going to school.

Most former students who responded to the mail questionnaire indicated that they held a job after leaving the postsecondary institution. As the data show in table 83, the majority obtained full-time jobs, except for students at low placement sites in State C and high placement sites in State D. The remaining students obtained parttime jobs or indicated they did "other" within six months of leaving their school. Very few students entered the military service or became self-employed. Former students had an unemployment rate of 4 to 11 percent within the six-month period after leaving the postsecondary institution.

Former students were asked to indicate the degree of similarity between the skills they learned in their vocational-technical programs and those used on their first jobs after leaving school. Almost half of the respondents with the exception of low placement site students in State C, indicated their job skills were the same as the ones learned in school. As shown in table 84, approximately another fourth of the former students believed their skills were somewhat related, although 2 to 14 percent believed that they were not at all related. In table 85 the data show the rating given by former students of how well their vocational-technical education programs prepared them for their first job. Between 18 and 38 percent of the former students indicated their preparation was excellent, whereas 8 percent or less indicated it was poor. Between 14 and 43 percent of the former students did not respond to the question.

Former students indicated (table 86) that in State A the most prevalent type of degree earned was a certificate of completion, whereas in states B. C, and D it was an associate degree. Former students indicate (table 87) that in State A many held clerical and sales or service jobs when they first left their postsecondary institution. In States B, C, and D the type of job held after leaving the postsecondary institution was professional, technical, or managerial, although a sizeable number of former students in these states indicated clerical and sales or service types of jobs as well.

Summary. Except for ethnic background the descriptive findings about students were consistent with the national profile of two-year postsecondary students. There was a higher proportion of Hispanics at two sites than the national averages for two-year postsecondary institutions.

At high placement sites students appeared more optimistic about their chances for employment in jobs related to their vocational-technical education program. Students at all four sites believed that they would receive assistance from the school, especially from their teachers, in job placement. At the higher placement sites however, students strongly believed they would have job placement assistance because they knew of peers who had been placed through school-based efforts.

Program Evaluation

Information from the review of literature. The status of program evaluation was reviewed in the Vocational Education Study (NIE 1981). In summary, the 1976 Amendments to the Vocational Education Act introduced new requirements for evaluating federally-funded vocational education programs at the secondary and postsecondary levels. The purpose of the requirements was to promote the planning activities and responsiveness of vocational education to the labor market. The requirements stipulated that programs be evaluated every five years. The evaluative criteria were: (1) student placement in jobs related to their training and (2) employers' satisfaction with vocational education-trained students

The information from program evaluations was to be used by the states to improve their vocational-technical education programs. Although most educators considered the evaluative criteria theoretically appropriate, they found the criteria difficult to implement. In 1976 few states had evaluation mechanisms in place that could accomplish what the requirements mandated. Between 1976 and 1978 the states developed and established evaluation procedures. By 1980 most states were routinely conducting program review and student follow-ups. The data from the student follow-up studies were reported to the Vocational Education Data System (VEDS) and aggregated at the state and federal levels.

The findings from the Vocational Education Study (NIE 1981) were that evaluations are being used to revise and improve vocational education programs in most states, although not exactly as required by the Vocational Education Amendments. More emphasis has been placed upon quantity rather than upon the effectiveness of programs. Student placement rates, as a measure of effectiveness, have not been used to a great extent. Program reviews have been providing information about quality that is being used in conjunction with placement data to make decisions and plan programs.

Information from case study sites. Program evaluation purposes and procedures varied among the four case study sites. The case study sites with the highest placement rates appeared to have more extensive progam evaluation procedures in place. Additionally, at the site with the highest job placement rate (case site A) the purpose of program evaluation was directly related to the job-placement rate.

At case site A (designated a high placement site in State A) the extensive program evaluation procedures were conducted through both internal and external processes. The primary evaluative criterion was the placement rate, which was required to be at least 51 percent for a program to be maintained.

Self-evaluation was conducted by staff members two months prior to the state evaluation unit's review. The internal evaluation team was made up of faculty, students, support personnel, and administrators. The results of the internal evaluation were used to provide information to the persons who conducted the external evaluation. The purpose of the external evaluation was to verify and validate the findings of the self-evaluation. The supervisor of each program had to be present during the external evaluation process as an observer. An exit interview was given by the outside evaluation team prior to leaving the building. The state supervisor, the school directors, and the evaluation team attended this meeting. This group clarified any existing questions about evaluation before the evaluators left.

Evaluation of each program was conducted on a five-year rotation cycle. Recommendations from the evaluations were sent to the state board of education. The board allowed the school three years to follow-up and complete the recommendations made by the evaluators. The school was required to file a report every year regarding the progress made in correcting problems. If corrections were not made, the school would lose its accreditation, which would make them ineligible for federal funds.

The state evaluation coordinator stated, "We don't care if the schools protest, they aren't allowed to disregard recommendations." He noted that the evaluation had impact on job placement with local employers in two distinct ways:

> The instant and obvious benefit is that some of the people who evaluate see that they should be hiring vocational students and second, an advertisement is always placed in the newspaper concerning the employers' participation in the evaluation. This builds that critical relationship between the school and industry.

Other methods used to evaluate were follow-up studies of employers and students. The follow-up studies were not described

as a method of evaluation by the stat[illegible]valuation coordinator, but staff believed that follow-up was [illegible]od "to check up on us."

Program evaluation at case site B (designated as a low placement site in State B) was a continuous process and included self-study, state education agency reviews of ongoing programs, state education agency staff visitations, on-site committee evaluations, and similar activities. The evaluation criteria were not explicitly related to job placement rates. The underlying philosophy strongly supported job placement as important in measuring the quality and effectiveness of the vocational-technical programs.

Postsecondary staff from the state education agency conducted on-site visits to the school to provide consulting services and to obtain information needed to determine if state education agency guidelines were being followed. The institution was required to provide any data that was requested, arrange for written materials to be made available, and otherwise, expedite the work of the person making the visit. Reports of on-site visits became a matter of record. The director of the state postsecondary programs informed the institution of any major discrepancies reported.

The vocational-technical education programs were evaluated by conducting a three-year follow-up study of g[illegible]iates, leavers, and employers. The information gathered included data about graduates' employment status, special services, programs at the college, as well as other information pertaining to how the courses had been used after leaving the institution. Placement rates were not considered in the program evaluation.

At case site C (designated a high placement site in State C) program evaluation was the responsibility of the district office. There appeared to be a well-developed system of evaluation that was mandated at the state level and conducted at the district and individual intitutions level. According to an administrator at the district office, "evaluations are reflections of the feedback from the advisory committees, the placement rates, dropout rates, and so forth." The district administrator regarded the evaluation as:

> informal communication with the community and with people, the employers that hire our students and the review of various reports that are generated on dropout rates and placement rates.

Program evaluation was initiated at the district level, but the gathering of essential information was the responsibility of the dean of instruction at the school. Six areas considered when

conducting program evaluation were: enrollment, dropout rate, placement rate, cost of program, the status of the equipment, and the available facilities in which to conduct courses. Job placement rates were not an explicit evaluative criterion. District administrators stated, however, that if a program's job placement rate dropped below an unacceptable rate which he did not specify, it would be investigated.

At case site D (designated a high placement site in State D) programs receiving federal grants were evaluated in the process of completing the federal reports that were required. Evaluators were sent from the state department periodically to evaluate programs that received federal money.

The dean of instruction reported that the programs not receiving federal monies were evaluated through an informal process. The dean said, "They are evaluated by the advisory committee members and by the staff, and changes are made as a need is felt." The evaluative criteria were vague; job-placement rates were not considered, according to the dean, as part of the evaluation of a vocational-technical program.

Information from mail questionnaire. The majority of deans/directors who responded to the mail questionnaire reported that various program evaluation activities had been conducted annually. As the data show in table 88, students who completed their programs (completers) were followed-up in all states at least every four years but most frequently once a year. Students who did not complete their programs (leavers) were followed-up as frequently with the exception of a low placement site in State C that never surveyed leavers. Student data were collected annually or semiannually in all states except State C, where it was collected every four years or never. Employers were surveyed annually or semiannually with some exceptions.

As the data in table 89 show employers who responded to the mail questionnaire were asked to rate the quality of their workers who had been vocational-technical education students. The majority of the employers in State A and D rated their workers as excellent or good, whereas the majority in States B and C rated them good or fair. Few employers rated their workers poor (0 to 8 percent) or as not meeting their business' needs (0 to 10 percent). In State B, 27 percent of the employers in the high placement sites and 18 percent of the employers in the low placement sites indicated they had no basis for rating, whereas in the other states 2 to 17 percent indicated that they had no basis for rating the quality of their employees who had been vocational-technical education students. Employers were also asked to compare workers who had been in vocational-technical education on a number of factors with those who did not have vocational-technical education. In table 90 the data show that employers believed workers who had been in vocational-technical education

programs had: (1) better reading and interpretive skills, (2) better mathematical knowledge, (3) better or same knowledge/skills dealing with safety, (4) the same personal relations skills, (5) better communication skills, (6) better or same for work attitudes, (7) better or the same supervisory skills, (8) the same psychomotor skills, and (9) better occupational skills. In States A and D, 20 to 27 percent of the employers indicated the occupational skills of workers who had been in vocational-technical education were much better than those who had not had vocational-technical education. Employers gave few (0 to 11 percent) "worse" or "much worse" (0 to 5 percent) responses, with work attitudes receiving the greatest percentage of "worse" or "much worse" responses.

Employers rated the postsecondary institutions in terms of the numbers of students trained to meet their needs (see table 91). In States A, B, and D the number of students trained was generally given a good rating by employers. At the high placement sites in State C the rating was "fair" for number of students trained with a third of the employers not responding. At the low placement sites the most typical rating for number of students trained was good. In State D a fifth of the employers felt the numbers trained were excellent. Few (0 to 6 percent) of the responding employers felt the numbers did not meet their needs, although some (2 to 24 percent) indicated that they had no basis for rating the number of students trained.

Summary. Findings from the study indicate that various program evaluation procedures were conducted at all of the participating sites. At case site A, which had the highest job placement rate, the evaluative criterion was explicitly related to the job placement rate. Although other criteria regarding the quality and objectiveness of the programs were considered, at sites with the highest job placement rates, job placement rates were clearly important in the evaluation of the vocational-technical education programs. Additionally, at these sites the recommendations resulting from the evaluations were used to improve the program in order to maintain or enhance the job placement rates. There appeared to be a strong positive relationship between high job placement rates and comprehensive program evaluation that not only used job placement rates as an evaluative criterion but followed through with the recommendations for program improvement.

Additional Results From The Analysis Of Mail Questionnaires and Selected Existing Data

Correlational Analysis

Introduction. This section reports the results of a correlational analysis of selected variables from the mail questionnaire survey. One hundred sixty-three variables were used in the

initial analysis to identify the degree of relationship with the study's independent variable--the percentage of placement in related field of training for former postsecondary vocational-technical education students. The percentage of placement was derived from the local education agencies' follow-up study of former students who were available for employment and who reported that they were employed in a job related to their training.

It must be stressed, however, that because of the large number of coefficients, and the use of aggregate data, or "ecological fallacy" (Robinson 1950) caution is offered regarding the interpretation of individual-level variables based on the analyses of data aggregated by LEA and respondent group(s). Also, since it is an exploratory study, some of the relationships between variables will defy interpretation because of a lack of pertinent information relating to the variables. It is intended that all significant relationships be further explored before strong statements are made. Borgatta and Jackson (1980) indicate that the interpretation of aggregate data, although always suspect, could suggest findings that exist at the individual level. Moreover, they add that a tempered consideration be provided if certain statistical and logical considerations are undertaken.

The identification of the 163 variables for the initial analysis was done through a consensus of the project staff. This determination was based on their analysis of information generated from the review of literature, the case studies, experience of staff in the area of job placement, and the results of the project dealing with the "Factors Relating to the Job Placement of Former Secondary Vocational Education Students."

Job placement rates were available only by postsecondary institution, therefore, it was decided that the respondents' mail survey answers to selected questions would be aggregated to derive a mean score by the postsecondary institution. Thus, the individual mean score of a mail survey item and the postsecondary institution job placement rate provided the paired scores necessary to compute the correlation coefficient. For example, teachers, counselors, job placement specialists, and directors were used in the analysis as one respondent group classified as school personnel. And the responses of those individuals to a certain item were pooled for each postsecondary institution, and then a mean was computed for the postsecondary institution and correlated with the postsecondary institution's training related placement rate. Other respondent groups used in the analysis included: current and former students, employers and advisory council members. The rationale for these groupings of respondents was based upon the project staff's decision to combine those respondent groups who had common interest, experience, or influence with regard to specific variables or categories of variables.

Findings. The results of the correlational analysis of 163 variables with the variable job placement in related field, using all respondent groups or those who were asked a common core of questions revealed that thirty-eight variables were significant at the .05 level of significance. Table 92 shows the correlations by respondent group.

Where the respondents believed that a primary goal of vocational education is training for a job or more specifically for a job in a related field there was a positive relationship (r=.55) with percentage of job placement in related field. For those respondents who perceived the goal of vocational education to be exploratory or awareness in focus a negative relationship (r=-0.48, -0.58) with the percentage of job placement in related field was found, i.e., the higher ranking of a goal for vocational education as not relating to job specific preparation the lower the placement rate in related field. Perceptions about factors helping former students to obtain jobs revealed that the greater the degree that basic skills are perceived in enhancing an individuals chance for obtaining a job the less the job placement in related field (r=-0.32). Vocational-technical education students having previous work experience was found to be a positively related (r=0.41) with job placement rate in related field.

The perceptions of factors that were considered as posing difficulties for former students in obtaining jobs included: union restrictions (r=-0.38), minimum wage (r=-0.36), not having specific job skills (r=-0.40), lack of certificate or associate degree (r=-0.52), and lack of transportation (r=-0.46). These factors were found to be negatively related to job placement in related field of training, i.e., the more these factors were perceived as difficulties in obtaining jobs the lower the placement rate in related field.

A negative correlation (r=-0.48) was found between the percentage of time spent by school personnel in providing assistance in educational placement and the percentage of job placement in related field. Moreover, a negative relationship (r=-0.56) was found between the rating of the school's performance in providing assistance in advanced educational placement and job placement in related fields. Opinions about the help received in obtaining information about jobs resulted in positive correlations that indicated that the amount of help former students received from vocational education teachers (r=0.62) and the public employment service (r=0.34) the higher the job placement rate in related field.

The frequency with which teachers and job placement specialists participate in job readiness and development activities such as identifying job openings by placing advertisements in media, (r=0.44) contacts with the public employment service (r=0.33),

and use of computerized files of job openings (r=0.35) resulted in a positive correlation with job placement rate in related field.

A negative relationship was found between using a minimum grade point average or standarized tests for admissions (r=-0.30) to vocational programs and job placement in related field. There was negative relationship (r=-0.45) between the amount of time students worked while in school, and the placement rate in related field, however this relationship did not hold for students in a job that was part of a cooperative or work study program. The degree of self-confidence in finding a job (r=0.31) expressed by vocational-technical education students was found to be positively related to job placement in related field.

Tables 93 through 99 present the correlations ($p \leq .05$) by respondent group. As stated earlier the raionale for aggregating respondent groups was based upon the project staff's decision that certain groups had common interests, experiences, or influence with regard to specific variables or categories of variables.

In examining the correlational analysis for the respondent group school personnel (teachers, counselors, job placement specialist, directors) eight correlation coefficients were statistically signficant at or beyond the .05 alpha level. From an examination of table 93 the significant correlation coefficients between the percentage of job placement in related field and the perceived ranking of the goals of vocational education were those dealing with placement in related field (r=0.62), placement in a job including nontraining related (r=0.59), creating an awareness of the various jobs for which students might prepare (r=0.59), and providing an opportunity for students to explore various occupational areas (r=-0.46). Opinions about the amount of difficulty of selected factors (union restrictions (r=-0.35), lack of transportation(r=-0.36), lack of certificate or associate degree (r=-0.44), and personal opinion about the amount of help human relations skills have in increasing the chances of employment for former vocational students (r=-0.43).

Fourteen correlation coefficients significant at or beyond the .05 alpha level were identified for the respondent group current and former students. From an examination of table 95 the significant correlation coefficients were those dealing with opinions concerning the degree of help certain factors are in obtaining a job [basic skills (r=-0.47), occupational skills and competencies (r=-0.32), human relations skills (r=-0.44), previous work experience (r=-0.32)]; opinions regarding amount of difficulty the lack of job openings poses for vocational-technical education graduates when they are attempting to obtain jobs after leaving school (r=0.40); perceptions about the amount of help selected factors [job information provided by the vocational

teacher (r=0.61), cooperative education coordinator (r=0.33), public employment service (r=0.29)] were in helping former students obtain jobs ; response to the evaluation of performance on selected employability skills activities [performance in writing resumes (r=0.38), performance in locating jobs (r=0.31), performance in filling out a job application (r=0.52), performance in setting up job interviews (r=0.44), performance in interviewing with prospective employers (r=0.32)); and number of courses completed in vocational area of study (r=-0.46)].

For the respondent group "employer and advisory council members" eight correlation coefficients were found to be significant at or beyond the .05 alpha level. In examining table 98 the significant correlation coefficients were those dealing with the perceived ranking of the goals of vocational-technical education to place former students in jobs related to their training (r=0.37), and to create an awareness of various jobs for which students might prepare (r=-0.39). Also, significant correlation coefficients were found regarding opinions about the difficulty certain factors pose for vocational students when they are attempting to obtain jobs. These factors included lack of certificate or associate degree (r=-0.47), lack of transportation (r=-0.42), job discrimination because of age (r=-0.35), union restrictions (r=-0.34), minimum wage (r=-0.30), and lack of specific job skills (r=-0.30).

Table 105 presents a summary of the significant results emerging from the correlational analysis of the mail questionnaire data. Correlations significant at or beyond the 05 alpha level by respondent group are shown.

Regression and Discriminant Function Analyses

Introduction. In this section additional information is provided about the analysis of the mail questionnaire data and selected existing data related to the local postsecondary institutions' labor market areas.

Separate regression analyses and discriminant analyses were done for the data for the thirty-one local public postsecondary institutions. Through previously mentioned procedures such as the review of literature, case studies, correlational analysis, and crosstabulation of mail questionnaire data a reduced number of variables were identified for the regression and discriminant analyses. The following respondent groups: school personnel (teachers, counselors, job placement specialists, directors), current and former students, and employer and advisory council members were used in the initial analyses effort.

As discussed previously the unit of analysis was the local

public postsecondary institution. Therefore, for each independent variable used in the analysis of the mail questionnaire data set and selected existing data pertaining to the labor market area served by the local public postsecondary institution, a mean was calculated based upon the responses of the various groups comprising the sample of each local public postsecondary institution.

Specifically this part of the analysis of the mail questionnaire data and selected existing data are reported as they pertain to the following study objective:

> To provide a detailed description of the educational and community processes which appear to influence former vocational-technical education students in jobs related to their training.

The statistical data are presented and discussed in this section only to the extent needed to interpret the meaning of the statistics used. Certain results were discussed in previous sections of this chapter. However, impressions, conclusions, and recommendations for further study are presented in a later section.

Tables 100-102 present individual respondent group regression analyses which were done to identify significant variables which were highlighted in the review of literature, project staff experience and consultation, and case studies.

After the multiple regression analyses for each separate respondent group were conducted variables common to all respondent groups and selected variables from the analysis of existing data portion of the study were combined into one common data set. Using this set, additional multiple regression and discriminant analyses were perfo,rmed to produce a reduced model (see tables 103 and 104).

Regression analysis. Using a forward (step-wise) inclusion method technique a reduced model was computed in order to identify the most unique and useful information for description. The results of the reduced model are presented in Table 103. The multiple correlation (R) obtained from this analysis was equal to appproximately 0.87. The unadjusted coefficient of determination was equal to 0.76, the adjusted coefficient of determination (R^{-2}) is equal to approximately 0.65. The significance of the total relationship as tested by the overall F-ratio is equal to 6.50 and is significant beyond the .01 alpha level.

The standardized Beta coefficient represented the amount of units of the independent variable, which was uniquely associated with the percentage of job placement, with the effect of partialing out all other independent variables. Because the

measurement units of various independent variables in a number of cases were not comparable the standardized Beta coefficients were used. Ezekiel and Fox (1967) state that for comparisons between problems where the standard deviations are much different, the standardized Beta coefficient may have value.

Examination of the standardized Beta coefficient in this reduced equation indicated that the following variables were significant beyond the .05 alpha level: the evaluation of students in regards to the job application process (employability skills), the vocational education teacher as a source of information for finding jobs, the evaluation of students in regard to writing resumes (employability skills), and the unemployment rate.

Discriminant function analyses. A discriminant function analysis was used to determine a combined discriminant strength the selected independent variables have in maximizing the total differences between the high and low placement groups. Table 104 presents the results of this analysis for the reduced model. The information contained in the six independent variables was sufficient to produce a significant discrimination between the high placement and low placement postsecondary institutions.

A step-wise selection procedure resulted in the subset of six variables being derived from a full set of sixteen variables. The Wilkes Lamba statistic was equal to approximately .49, and the chi square value was equal to 18.56 and was significant at the 0.00 level. Examining the canonical correlation (r^*), the value was equal to approximately .71. The correlation squared (r^{*2}) approximated a value of .50, which showed that a substantial relationship existed between the high and low placement groups and the discriminant function. The discriminant function correctly classified 87.10 percent of the cases. The tau statistics was equal to .77, which indicated that the classification based on the set of discriminating variables made 77 percent fewer errors than would be expected by chance alone. The specific variables used in the reduced model were: (1) evaluation of students ability on completing job applications (employability skills), (2) goal of job placement in related field, (3) unemployment rate, (4) population change between 1970-80, (5) number of business and industrial firms, and (6) numbers of large business and industrial firms located in a particular labor market area.

Summary

This phase of the data analysis using the mail questionnaire and selected variables or existing data was exploratory in nature. The type of study and statistical analyses are not appropriate to infer causal relationships.

Table 105 lists variables having significant relationships with percentage of job placement in related field of former post-secondary vocational-technical education students. The zero order correlation analysis and the regression and discriminant functions analysis were the statistical techniques used to identify those relationships.

In summary thirty-nine variables were found to be significant beyond the .05 alpha level using zero order correlational analysis. The variables found to be significantly related to the percentage of placement in related field of training included the perception of the goals of vocational-technical education; factors perceived as posing difficulties for former students in obtaining jobs such as lack of transportation, lack of associate degree and union restriction; efforts and focus of the individual institution in providing employability skills training; and the assistance of the vocational-technical education teacher.

The multiple regression analyses and discriminant function analysis provided further information in regard to the suggested relationships of certain independent variables with percentage of job placement in related field. The variables dealing with the importance of employability skills; the vocational-technical education teacher as a source of information about job; the unemployment rate; the population change 1970-80, and the type and number of business and industrial firms in the labor market apeared as major factors. However, other analysis did not provide strong support for certain variables such as unemployemnt rate, population change 1970-80, and the type and number of business and industrial firms. This lack of a congruence among and between data bases, nevertheless, should not defer further further exploratory or confirmatory study. More pertinent information relating to the variables in question is needed.

CHAPTER IV

CONCLUSIONS, RECOMMENDATIONS, AND SUGGESTIONS FOR ADDITIONAL RESEARCH

Before presenting conclusions, recommendations, and suggestions for additional research, it is appropriate to recall some of the methodological dimensions and limitations of this study. We cannot state with any degree of certainity that the sample states, postsecondary institutions, or individual respondents are representative of the respective populations from which they were drawn. A more valuable viewpoint is to consider the findings transferable to other postsecondary institutions to the extent that those postsecondary institutions possess characteristics similar to the postsecondary institutions described in this study.

One of the strengths of postsecondary education in the United States has been its diversity of goals, programs, students, staff, resources, method of instruction, and the type of community served. The attention postsecondary educators have given to the unique needs and interests of the community being served has contributed inmeasureably to the success of postsecondary education. Those who study postsecondary institutions must be keenly aware of the context specificity of the enterprise they are studying. It is these characteristics that underscore the importance of the point made earlier concerning the necessity to consider the findings of this study transferable to other postsecondary institutions only to the extent that those postsecondary institutions possess characteristics similar to the postsecondary institutions described in this study.

Multiple goals are operationalized simultaneously for many vocational-technical education programs. The dependent variable used in this study, placement in a job related to training, was not viewed by all policymakers and decision makers who participated in the study as the major criterion for planning and evaluating vocational-technical education programs. It is important to realize that there is a considerable amount of diversity in the goals for vocational-technical education programs. Such diversity about program goals makes it somewhat difficult to formulate conclusions about the factors relating to the placement of students in jobs related to training from data collected within a postsecondary institution and certainly from data collected across postsecondary institutions in different states.

This study represented an attempt to analyze qualitative and quantitative data from several different sources. In addition, the extent of the data collected and the large number of variables dealt with created special analysis problems.

It can be argued that insufficient time was spent at the case study sites. Perhaps fewer sites and longer time spent per site would be a better approach. However, the choice of at least one case study site per state provided valuable insights as the staff analyzed the data.

It should be evident to the reader that this study represents a compilation of data from many sources. The credibility of the findings is enhanced by the fact that the findings could be substantiated by data from multiple sources.

Conclusions

The conclusions that follow are based on the integration of qualitative and quantitative data. Specifically, three data bases were examined. They included the review of literature, case studies (four postsecondary institutions), and mail questionnaires (eight respondent groups in thirty-one postsecondary institutions). The following statements should not be regarded as final conclusions concerning the factors affecting the placement of former students in jobs related to their training. The statements should be considered as working hypotheses, to be tested again and again in the ever-changing context in which postsecondary vocational-technical education programs operate. If vocational-technical educators are to maximize the placement of former students in jobs related to their training, it appears that the following points should be given careful attention.

Education

Higher job placement seems to exist in those postsecondary institutions where:

- Postsecondary institution personnel and teachers are committed to the placement of students in a job related to training as the major goal for the vocational-technical education programs
- Postsecondary institution personnel are enthusiastic about the placement of students in a job related to their training as the major goal for the vocational-technical education programs

- Teachers are enthusiastic about the role they play in ensuring that students are placed in jobs related to their training
- Administrators are committed to and encourage the essential interactions among community organizations, labor, business, industry, and postsecondary institution personnel, that promote open communication to support job placement
- Teachers maintain frequent and meaningful contacts with the business and industrial community
- The vocational-technical education curriculum is relevant and responsive to the needs of employers
- Job placement specialists and counselors serve as initial sources of information about job openings for teachers and students
- Job placement specialists and counselors provide a clearinghouse function and a support function (secretarial assistance, telephone, job listings) for information about jobs
- Advisory committee input is used in planning vocational-technical education programs
- Planning in the postsecondary institutions is coordinated with community and state economic development activities, especially those activities related to labor supply and demand
- Job placement rates are used as a program evaluation criterion
- Program evalution efforts are systematic and comprehensive
- Student performance is evaluated on employability skills such as preparing resumes, and interviewing
- Teachers keep up to date with the latest trends in the occupational fields
- Programs providing students with "real world" work experiences are available to students

Labor

Higher job placement seems to exist in those postsecondary institutions where:

- There is a high demand for workers in the surrounding labor market area. However, high labor demand does not always result in high job placement. Higher job placement tends to result when the postsecondary institutions vocational-technical education programs are specifically oriented to the high-skill labor demand areas. Labor market conditions over which vocational-technical educators have no control are at least as important as the nature of vocational education itself in determining job placement

Community

Higher job placement seems to exist in those postsecondary institutions where:

- The community is supportive of vocational-technical education
- The postsecondary institution is located in middle-size communities

Recommendations

The study recommendations are directed toward agencies or policymaking groups who have historically developed and/or enforced policies and decisions regarding vocational-technical education programs.

Policymakers and decision makers interested in optimizing the placement of former postsecondary vocational-technical education students should give careful attention to the following recommendations. All of the recommendations deal with education factors over which vocational-technical educators have some control. Labor market and community characteristics that are associated with high rates of job placement are beyond the control of vocational-technical educators.

The recommendations were derived from project staff analysis of the study conclusions juxtaposed with study staff knowledge of current situations in vocational-technical education. Other individuals operating from a different frame of reference may develop additional recommendations.

Congress

It is recommended that Congress:

- Recognize that vocational-technical education programs operate with multiple goals and therefore not specify specific criteria for the evaluation of such programs
- Develop legislation that is flexible enough to allow state agencies to develop funding formulae that will encourage postsecondary institutions to conduct activities enhancing job placement

U.S. Department Education

It is recommended that the U.S. Department of Education:

- Encourage further research about the factors relating to job placement especially in isolated areas, inner cities, and areas with unique labor market or geographical locations
- Encourage the dissemination of findings regarding the factors relating to job placement through the funding of symposia, workshops, monographs, and widely-distributed publications

State Government Agencies

It is recommended that state governing agencies:

- Develop funding formulae that reward postsecondary institutions for implementing activities that enhance job placement
- Provide teacher education institutions and postsecondary institutions with funding to conduct inservice education programs for teachers and administrators concerning the factors relating to job placement
- Promote professional development activities that assist teachers in keeping up to date in their occupational skill area

Postsecondary Institutions

It is recommended that postsecondary institutions:

- Develop clear statements of the goals for postsecondary vocational-technical education programs
- Promote and reward enthusiasm for placing students in jobs related to training

- Encourage frequent and active meetings of citizen advisory committees and utilize their recommendations in program planning and evaluation

- Use job placement data as a major criterion for evaluating programs

- Recognize the importance of the role of teachers in the job placement process by including teacher performance concerning job placement in tenure, promotion, and salary adjustments

- Recognize the importance of the role played by chief administrators and deans/directors in the job placement process. Reward chief administrators and deans/directors for their leadership and allocation of resources to attain institutional goals concerning job placement

- Develop and maintain systematic processes for ensuring that the vocational-technical education curriculum is relevant and responsive to the needs of business and industry

- Develop and maintain current and relevant job placement information in a central location that is easily accessible to teachers, job placement specialists, counselors, administrators, and students

- Use local labor market information in program planning and evaluation

- Maintain close contact with other agencies involved in job development/job placement in the community

Teacher Education Institutions

It is recommended that teacher education institutions:

- Include in the courses required for postsecondary institution administrators information concerning the goals of postsecondary vocational-technical education programs, information about those factors enhancing the attainment of the goals, and information about the vital role of deans/directors in determining whether former students are placed in jobs related to their training

- Impart to future vocational-technical educators the significant role teachers play in determining the placement of former students in jobs related to their training

- Seek innovative ways to provide current education personnel with information about methods that will enhance job placement

Suggestions for Additional Research

Numerous questions arose as the project staff planned and conducted the study. The breadth and complexity of the concerns and issues surrounding a postsecondary institution's efforts to assure that students are placed in jobs related to their training needs considerable study. The following null hypotheses are presented as suggestions for additional research:

- There is no relationship between job placement rates and a clear understanding on the part of administrators and teachers regarding the primary purpose of the vocational-technical education programs in their institutions

- There is no relationship between job placement rates and consistency of belief among administrators and teachers in a postsecondary institution concerning the purpose of vocational-technical education

- There is no relationship between job placement rates and the degree of commitment on the part of deans/directors to job placement

- There is no relationship between job placement rates and the level of enthusiasm for job placement among postsecondary institution staff members

- There is no relationship between job placement rates and student admission procedures

- There is no relationship between job placement rates and the amount of responsibility teachers believe they have for placing their students in jobs

- There is no relationship between job placement rates and the degree to which cooperative education programs place students in jobs related to their training programs

- There is no relationship between job placement rates and labor market demand in the surrounding area

- There is no relationship between job placement rates and the proportion of large to small industries in the community

- There is no relationship between job placement rates and the proportion of nonwhite persons in the community

- There is no relationship between job placement rates and the frequency with which results from surveys are used to plan and evaluate vocational-technical education programs.

- There is no relationship between job placement rates and the frequency of contacts between vocational technical education teachers and employers regarding the job placement of students

- There is no relationship between job placement rates and institutional operation of a centralized job placement service

- There is no relationship between job placement rates and the degree to which institutional job placement offices include teachers in job placement activities

- There is no relationship between job placement rates and the degree to which students are provided with job readiness skills

- There is no relationship between job placement rates and student basic skill achievement

- There is no relationship between job placement rates and available transportation to and from jobs

- There is no relationship between job placement rates and the size of the community

- There is no relationship between job placement rates and the resource levels provided the vocational-technical education program

APPENDIX A

STUDY CONSULTANTS

APPENDIX A

STUDY CONSULTANTS

The following individuals provided advice regarding various phases of the study. The National Center is indebted to their assistance.

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APPENDIX B

MAIL QUESTIONNAIRES

CONFIDENTIAL:
FOR RESEARCH USE ONLY

FEDAC No. S 208
Exp. Date: 10/81

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

Conducted by:
The National Center for
Research in Vocational Education,
The Ohio State University

Sponsored by:
Office of Vocational and Adult Education
U.S. Department of Education
In cooperation with your State
Postsecondary Vocational-Technical
Education Governing Agencies

Why we need your help . . .

Your school is helping in a national study on vocational-technical education. You have been selected as a representative of your school to help with this job placement study. Your answers are very important, and will help to improve vocational-technical education. This study, authorized by P. L. 94-482, is voluntary.

How you can help . . .

On the next page, you will find questions about vocational-technical education students finding jobs. Most questions can be answered by placing an "X" or a check mark "√" in the box, or by filling in the blanks. Please answer all items as accurately as possible. If you are unsure of a response, leave that question or that part of the question blank.

Example 1: How many persons teach vocational-technical education classes in your school? 8

Example 2: In your personal opinion, how important are the following factors for vocational-technical education students in obtaining jobs? (Check the appropriate box for each of the following.)

	Extremely Important	Very Important	Somewhat Important	A Little Important	Not at All Important
1. Appearance	☐	☐	☑	☐	☐
2. Grades	☐	☑	☐	☐	☐
3. Personality	☐	☐	☐	☑	☐

Please return the completed questionnaire in the postage-paid, pre-addressed envelope provided. Thank you for your help.

We will protect your confidentiality to the fullest extent allowed by law. The code found on the last page of this instrument indicates the state in which you live, the school, and a number identifying you as the person responding to this questionnaire. However, in the analysis no information will be associated with your name.

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

SECTION I:
VOCATIONAL-TECHNICAL EDUCATION IN YOUR SCHOOL

1. What is the *most* important consideration for admission of students to your vocational-technical education program? (Check *one*.)

   - ☐ Minimum grade point average of student
   - ☐ Results of standardized tests
   - ☐ Student career objective relevant to vocational-technical education programs offered
   - ☐ Any student who wishes may enroll in the vocational-technical education program
   - ☐ Other considerations; please specify: _____

2. As Dean/Director, how much emphasis do you place on students acquiring the following while in your vocational-technical education program?

	Very Much Emphasis	Much Emphasis	Some Emphasis	Little Emphasis	Very Little Emphasis
a. Basic educational skills, such as writing, reading, and mathematics	☐	☐	☐	☐	☐
b. Occupational skills and competencies	☐	☐	☐	☐	☐
c. Human relations skills	☐	☐	☐	☐	☐
d Acceptable work attitudes and values	☐	☐	☐	☐	☐
e Work experiences	☐	☐	☐	☐	☐

3. Who has primary responsibility for the following activities for your vocational-technical education program? (Check the appropriate box(es) for each activity listed.)

	State Governing Agency/Department	Vocational-Technical Education Advisory Committee	Vocational-Technical Education Dean/Director	School Research/ Evaluation Unit	Vocational-Technical Education Teachers	Guidance/Vocational Counselor	Other	No One	Don't Know
a Determining supply of trained workers that employers will need	☐	☐	☐	☐	☐	☐	☐	☐	☐
b. Determining specific competencies students should acquire	☐	☐	☐	☐	☐	☐	☐	☐	☐
c. Developing vocational-technical education curriculum	☐	☐	☐	☐	☐	☐	☐	☐	☐
d. Revising vocational-technical education curriculum	☐	☐	☐	☐	☐	☐	☐	☐	☐
e. Recruiting students for vocational-technical education programs	☐	☐	☐	☐	☐	☐	☐	☐	☐
f. Selecting students for entry into vocational-technical education programs	☐	☐	☐	☐	☐	☐	☐	☐	☐
g. Allocating funds for equipment and supplies	☐	☐	☐	☐	☐	☐	☐	☐	☐

4. Who has primary responsibility for conducting the following activities? (Check the appropriate box for each activity.)

	State Governing Agency/Department	Vocational-Technical Education Advisory Committee	Vocational-Technical Education Dean/Director	School Research/ Evaluation Unit	Vocational-Technical Education Teachers	Guidance/Vocational Counselor	Other	No One	Don't Know
a. Conducting follow-up of former vocational-technical education students	☐	☐	☐	☐	☐	☐	☐	☐	☐
b. Conducting surveys of employers to determine satisfaction with former vocational-technical education students	☐	☐	☐	☐	☐	☐	☐	☐	☐
c. Collecting student data (e.g., aptitude, background, career goals, etc.)	☐	☐	☐	☐	☐	☐	☐	☐	☐
d. Identifying and critiquing philosophy for vocational-technical education	☐	☐	☐	☐	☐	☐	☐	☐	☐
e. Analyzing program objectives	☐	☐	☐	☐	☐	☐	☐	☐	☐
f. Determining effectiveness of teachers	☐	☐	☐	☐	☐	☐	☐	☐	☐
g. Identifying adequacy of facilities and equipment	☐	☐	☐	☐	☐	☐	☐	☐	☐

5. How frequently are the following activities conducted for your vocational-technical education program? (Check the appropriate box for each activity listed.)

	At Least Once Every Year	At Least Once Every Two Years	At Least Once Every Three Years	At Least Once Every Five Years	Never
a. Revision of vocational-technical education curriculum	☐	☐	☐	☐	☐
b. Follow-up of vocational-technical education completers	☐	☐	☐	☐	☐
c Follow-up of vocational-technical education leavers	☐	☐	☐	☐	☐
d. Survey of employer satisfaction with former vocational-technical education students	☐	☐	☐	☐	☐
e. Collecting student data (e.g., aptitude, personal background, career goals, etc.)	☐	☐	☐	☐	☐
f. Identifying and critiquing philosophy for vocational-technical education	☐	☐	☐	☐	☐
g. Analyzing program objectives	☐	☐	☐	☐	☐
h Determining effectiveness of teachers	☐	☐	☐	☐	☐
i. Identifying adequacy of facilities and equipment	☐	☐	☐	☐	☐

6. How frequently does your school use the following methods to assess employers' skill needs and labor requirements? (Check the appropriate box for each of the following.)

	At Least Once Every Year	At Least Once Every Two Years	At Least Once Every Three Years	At Least Once Every Five Years	Never
a. Written survey sent to employers	☐	☐	☐	☐	☐
b Interviews of employers at their work sites	☐	☐	☐	☐	☐
c. Telephone survey of employers	☐	☐	☐	☐	☐
d. Recommendations by vocational-technical education advisory committee members	☐	☐	☐	☐	☐
e Department of Labor and/or Public Employment Service labor surveys	☐	☐	☐	☐	☐

7. Within the last five years, have you ever received information regarding the results of any of the following studies conducted by your school?
(Check the appropriate box for each of the following.)

	Yes	No
a. Survey of employers regarding their skill needs and labo[illegible]requirements	☐	☐
b. Follow-up of former students of your vocational-technical education program	☐	☐
c Survey of employers' satisfaction with employees who are former vocational-technical education students	☐	☐

If you responded "yes" to any of the above, please answer the following question. If not, skip to question # 9.

8. Have decisions you have made regarding the teaching of your vocational-technical education program been importantly influenced by any of the following?
(Check all boxes that apply for each decision.)

	Survey of employers regarding their skill needs and labor requirements	Follow-up of former students of your vocational-technical education program	Survey of employer satisfaction with employees who are former vocational-technical education students
a To revise minimum competencies required of students for program completion	☐	☐	☐
b To use different text books in classes	☐	☐	☐
c To revise course content	☐	☐	☐
d. To request new equipment	☐	☐	☐
e To request additional facilities	☐	☐	☐
f Other, please specify	☐	☐	☐

9 In your personal opinion, how *should* the following goals of vocational-technical education programs be ranked in importance?

Rank the *most* important goal as "1", the next most important "2", the next most important "3", the next most important "4", and the *least* important "5". (Place the number in the blank to the right of the goal.)

a. To place students as they leave school in jobs related to their training _____

b. To provide the students with competencies needed to obtain jobs _____

c. To place students as they leave school in jobs including nontraining-related jobs _____

d. To create an awareness of the various jobs for which students might prepare _____

e. To provide an opportunity for students to explore various occupational areas _____

SECTION II:
JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

10. Who primarily conducts the following placement activities for your school? (Check the most appropriate person/agency for each of the following activities.)

	Private Employment Agency	Public Employment Agency	Vocational-Technical Education Advisory Committee	Vocational-Technical Education Dean/ Director	School Job Placement Coordinator	Vocational-Technical Education Teacher	Guidance/Vocational Counselor	Other	No One	Don't Know
a. Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
b. Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
d. Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
e. Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
f. Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
g. Referring students to job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
h Providing counseling about careers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
i. Providing information about job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
j Working with labor unions regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
k Working with vocational-technical education advisory committee regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
l Other placement activities, please specify	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

11. In your vocational-technical education program, does a teacher's ability to place his/her students in jobs related to training affect the following decisions? (Check the appropriate box for each of the following.)

	Yes	No
a. Tenure	☐	☐
b. Salary increases	☐	☐
c. Promotion	☐	☐
d. Termination of employment	☐	☐
e. Other; please specify:	☐	☐

12. In your personal opinion, how much difficulty does each of the following factors pose for vocational-technical education graduates when they are attempting to obtain jobs? (Check the appropriate box for each of the following factors.)

	Very Much Difficulty	Much Difficulty	Some Difficulty	Little Difficulty	Very Little Difficulty	No Opinion
a Students acquired job skills that are too specific	☐	☐	☐	☐	☐	☐
b Students do not have specific job skills	☐	☐	☐	☐	☐	☐
c Students must compete with experienced workers for jobs	☐	☐	☐	☐	☐	☐
d Students are unwilling to move to a different location for jobs	☐	☐	☐	☐	☐	☐
e Lack of job openings	☐	☐	☐	☐	☐	☐
f Job discrimination because of age	☐	☐	☐	☐	☐	☐
g Job discrimination because of sex	☐	☐	☐	☐	☐	☐
h Job discrimination because of racial/ethnic background	☐	☐	☐	☐	☐	☐
i Union restrictions	☐	☐	☐	☐	☐	☐
j Entry level jobs offer only minimum wage	☐	☐	☐	☐	☐	☐
k Lack of transportation to jobs	☐	☐	☐	☐	☐	☐
l Lack of certificate or associate degree	☐	☐	☐	☐	☐	☐
m Other, please specify: _____	☐	☐	☐	☐	☐	☐

13. In your personal opinion, which of the following persons/agencies *should* have primary responsibility for the following placement activities?
(Check *one* box for each of the following.)

	Private Employment Agency	Public Employment Agency	School Vocational-Technical Education Advisory Committee	Vocational-Technical Education Dean or Director	School Job Placement Coordinator	Vocational-Technical Education Teacher	Guidance/Vocational Counselor	Other	No One	Don't Know
a. Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
b. Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
d. Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
e. Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
f. Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
g. Referring students to job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
h. Providing counseling about careers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
i. Providing information about job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
j. Working with labor unions regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
k. Working with vocational-technical education advisory committee regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
l. Other placement activities, please specify:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SECTION III:

BACKGROUND INFORMATION

14. In wnat year were you born? (Write the year on the blank.)

_____
Year

15. What is your sex? ☐ Female ☐ Male

16. What is your ethnic origin? (Check *one*.)

- ☐ American Indian or Alaskan Native
- ☐ Asian American or Pacific Islander
- ☐ Black, not of Hispanic Origin
- ☐ Hispanic
- ☐ White, not of Hispanic Origin
- ☐ Other; please specify: _____

17. What is your highest educational level? (Check *one*.)

- ☐ High school graduate
- ☐ Course credit in vocational-technical education beyond high school
- ☐ Associate's Degree
- ☐ 1-3 years college
- ☐ Four-year college graduate (B.A., B.S., etc.)
- ☐ Course credit beyond undergraduate degree
- ☐ Master's Degree (M.A., M.S., etc.)
- ☐ Course credit beyond Master's Degree
- ☐ Doctorate Degree (Ph.D., Ed.D., etc.)
- ☐ Other; please specify: _____

18. Please indicate the approximate amount of time you spend participating in the following activities at your school. (For each activity, place a check in the appropriate box.) Also, if you have been certified for any of these activities, please place a check in the box to the right of the appropriate activity.

	Full time	Half time	Quarter time	Less than Quarter time	Not Applicable	Holding Certificate
a. ADMINISTRATION	☐	☐	☐	☐	☐	☐
b. TEACHING	☐	☐	☐	☐	☐	☐
Agriculture Education	☐	☐	☐	☐	☐	☐
Cooperative Education	☐	☐	☐	☐	☐	☐
Distributive Education	☐	☐	☐	☐	☐	☐
Health Education	☐	☐	☐	☐	☐	☐
Occupational Home Economics	☐	☐	☐	☐	☐	☐
Office Education	☐	☐	☐	☐	☐	☐
Technical Education	☐	☐	☐	☐	☐	☐
Trade and Industrial Education	☐	☐	☐	☐	☐	☐
c. GUIDANCE/VOCATIONAL COUNSELING	☐	☐	☐	☐	☐	☐
d. JOB PLACEMENT	☐	☐	☐	☐	☐	☐
e Other, please specify	☐	☐	☐	☐	☐	☐

19. Please indicate the length of time that you have been involved in the following activities. (Write the number of years on the blanks; if an item does not apply to you, write zero [0].)

a. Total years of teaching experience in vocational-technical education _____ Year(s)

b. Total years of teaching experience in nonvocational-technical education _____ Year(s)

c. Total years in your present position _____ Year(s)

d. Total years in work experiences related to but not including your present position _____ Year(s)

e. Total years in work experiences *not* related to your present position _____ Year(s)

SECTION IV:

ADDITIONAL COMMENTS

20. Briefly indicate specific recommendations you would make to help your school system increase its job placement rates.

THANK YOU FOR YOUR HELP

CONFIDENTIAL:
FOR RESEARCH USE ONLY

FEDAC No. S 208
Exp. Date: 10/81

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

Conducted by:
The National Center for
Research in Vocational Education,
The Ohio State University

Sponsored by:
Office of Vocational and Adult Education
U.S. Department of Education
In cooperation with your State
Postsecondary Vocational-Technical
Education Governing Agencies

Why we need your help ...

- Your school is helping in a national study on vocational-technical education. You have been selected as a representative of your school to help with this job placement study. Your answers are very important, and will help to improve vocational-technical education. This study, authorized by P.L. 94-482, is voluntary.

How you can help ...

On the next page, you will find questions about vocational-technical education students finding jobs. Most questions can be answered by placing an "X" or a check mark "√" in the box, or by filling in the blanks. Please answer all items as accurately as possible. If you are unsure of a response, leave that question or that part of the question blank.

Example 1: How many persons teach vocational-technical education classes in your school? 8

Example 2: In your personal opinion, how important are the following factors for vocational-technical education students in obtaining jobs? (Check the appropriate box for each of the following.)

	Extremely Important	Very Important	Somewhat Important	A Little Important	Not at All Important
1. Appearance	☐	☐	☑	☐	☐
2. Grades	☐	☑	☐	☐	☐
3. Personality	☐	☐	☐	☑	☐

Please return the completed questionnaire in the postage-paid, pre-addressed envelope provided. Thank you for your help.

We will protect your confidentiality to the fullest extent allowed by law. The code found on the last page of this instrument indicates the state in which you live, the school, and a number identifying you as the person responding to this questionnaire. However, in the analysis no information will be associated with your name.

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

SECTION I:
TEACHING VOCATIONAL-TECHNICAL EDUCATION

1. How many hours per week do you work for the school?

   Total hours working per week: _____

2. Please indicate the approximate amount of time you spend participating in the following activities at your school. (For each activity, place a check in the appropriate box.) Also, if you have been certified for any of these activities, please place a check in the box to the right of the appropriate activity.

	Full time	Half time	Quarter time	Less than Quarter time	Not Applicable	Holding Certificate
a. ADMINISTRATION	☐	☐	☐	☐	☐	☐
b. TEACHING	☐	☐	☐	☐	☐	☐
Agriculture Education	☐	☐	☐	☐	☐	☐
Cooperative Education	☐	☐	☐	☐	☐	☐
Distributive Education	☐	☐	☐	☐	☐	☐
Health Education	☐	☐	☐	☐	☐	☐
Occupational Home Economics	☐	☐	☐	☐	☐	☐
Office Education	☐	☐	☐	☐	☐	☐
Technical Education	☐	☐	☐	☐	☐	☐
Trade and Industrial Education	☐	☐	☐	☐	☐	☐
c. GUIDANCE/VOCATIONAL COUNSELING	☐	☐	☐	☐	☐	☐
d. JOB PLACEMENT	☐	☐	☐	☐	☐	☐
e. Other, please specify	☐	☐	☐	☐	☐	☐

3. Over the past three academic years, what has been the average *number* of students per year that you have taught? _____

4. What is the *most* important consideration for admission of students to the vocational-technical education program(s) you teach? (Check *one*.)

   - ☐ Minimum grade point average of student
   - ☐ Results of standardized tests
   - ☐ Student's career objective relevant to vocational-technical education program you teach
   - ☐ Any student who wishes may enroll in the vocational-technical education program
   - ☐ Other considerations; please specify: _____

5. How many class preparations do you make each day? _____

6. Do you engage in any of the following activities to upgrade your skills in the occupational area you teach? (Check the appropriate box for each of the following.)

	Yes	No
a. Hold second job in industry/business	☐	☐
b. Work in industry/business during quarter or semester off from teaching	☐	☐
c. Participate in in-service(s) in industry/business	☐	☐
d Perform consultant work in industry/Business	☐	☐
e. Take course work at an accredited institution	☐	☐

7. What methods do you use if you provide instruction to students in the following activities? (Check the appropriate boxes for each activity.)

	Presentations made by placement coordinator, counselor, or other school staff	Presentations by guest lecturer (e g , employers, employment agency personnel)	Self-instructional materials	Regular class instruction by vocational-technical education teacher	No instruction provided
a Writing resumes	☐	☐	☐	☐	☐
b. Locating available jobs	☐	☐	☐	☐	☐
c. Filling out a job application	☐	☐	☐	☐	☐
d. Setting up job interviews	☐	☐	☐	☐	☐
e. Participating in interviews with prospective employers	☐	☐	☐	☐	☐
f Obtaining job information (e g , salary, benefits)	☐	☐	☐	☐	☐

8. Do you evaluate students on their ability to perform the following activities? (Check the appropriate box for each activity.)

	Yes	No
a. Writing resumes	☐	☐
b. Locating available jobs	☐	☐
c. Filling out a job application	☐	☐
d. Setting up job interviews	☐	☐
e. Interviewing with prospective employers	☐	☐
f. Obtaining job information (e.g., salary, benefits)	☐	☐

9. Within the last five years, have you ever received information regarding the results of any of the following studies conducted by your school? (Check the appropriate box for each of the following.)

	Yes	No
a. Survey of employers regarding their skill needs and labor requirements	☐	☐
b. Follow-up of former students of your vocational-technical education program	☐	☐
c. Survey of employers' satisfaction with employees who are former vocational-technical education students	☐	☐

If you responded "yes" to any of the above, please answer the following question. If not, skip to question #11.

10. Have decisions you have made regarding the teaching of your vocational-technical education classes been importantly influenced by any of the following?
(Check *all* boxes that apply for each decision.)

	Survey of employers regarding their skill needs and labor requirements	Follow-up of former students of your vocational-technical education program	Survey of employer satisfaction with employees who are former vocational-technical education students
a. To revise minimum competencies required of students for program completion	☐	☐	☐
b. To use different text books in classes	☐	☐	☐
c. To revise course content	☐	☐	☐
d. To request new equipment	☐	☐	☐
e. To request additional facilities	☐	☐	☐
f. Other; please specify _____	☐	☐	☐

11. In your personal opinion, how *should* the following goals of vocational-technical education programs be ranked in importance?

Rank the *most* important goal as "1", the next most important "2", the next most important "3", the next most important "4", and the *least* important "5". (Place the number in the blank to the right of the goal.)

a. To place students as they leave school in jobs related to their training _____

b. To provide the students with competencies needed to obtain jobs _____

c. To place students as they leave school in jobs including nontraining-related jobs _____

d. To create an awareness of the various jobs for which students might prepare _____

e. To provide an opportunity for students to explore various occupational areas _____

12. How do you rate the adequacy of your program's curriculum in serving the skill needs of employers in the occupational area that you teach?

☐ Excellent ☐ Good ☐ Fair ☐ Poor

SECTION II:
JOB PLACEMENT ACTIVITIES IN YOUR SCHOOL

13. Who primarily conducts the following placement activities for your school? (Check the most appropriate person/agency for each of the following activities.)

	Private Employment Agency	Public Employment Agency	Vocational-Technical Education Advisory Committee	Vocational-Technical Education Dean/ Director	School Job Placement Coordinator	Vocational-Technical Education Teacher	Guidance/Vocational Counselor	Other	No One	Don't Know
a. Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
b Providing training in job seeking skills (e g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
c. Providing training in job obtainment skills (e.g , preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
d Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
e Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
f. Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
g Referring students to job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
h Providing counseling about careers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
i Providing information about job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
j Working with labor unions regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
k Working with vocational-technical education advisory committee regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
l Other placement activities, please specify	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

14 How would you rate your school's performance in providing the following placement activities to vocational-technical education students?
(Check the appropriate box for each of the following activities.)

	Excellent	Good	Fair	Poor	Failing	Don't Know
a. Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐
b. Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐
c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐
d. Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐
e. Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐
f. Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐
g. Referring students to job openings	☐	☐	☐	☐	☐	☐
h. Providing counseling about careers	☐	☐	☐	☐	☐	☐
i. Providing information about job openings	☐	☐	☐	☐	☐	☐
j. Working with labor unions regarding job placement of students	☐	☐	☐	☐	☐	☐
k. Working with vocational-technical education advisory committee regarding job placement of students	☐	☐	☐	☐	☐	☐
l. Other placement activities, please specify _____	☐	☐	☐	☐	☐	☐

15. Approximately how many hours per week do *you* spend on job placement activities (e.g., referring students to jobs, contacting employers about job openings)?

_____ hours per week

If zero (0) hours, skip to question # 21.

Of the time you spend on *job placement* activities per week, approximately what percent is spent:

a. Providing assistance in advanced educational placement _____ %

b. Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs) _____ %

c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews) _____ %

d. Contacting employers about jobs for students _____ %

e. Working with public employment services regarding job placement of students _____ %

f. Working with private employment agencies regarding job placement of students _____ %

g. Referring students to job openings _____ %

h. Providing counseling about careers _____ %

i. Providing information about job openings _____ %

j. Keeping records and reporting activities _____ %

k. Other job placement activities; please specify _____ %

_____

16. Over the past three academic years, what is the average *number* of vocational-technical education students per year to whom you give some kind of job placement assistance (e.g., job referral, contacting employer about job openings)?

_____ students per year

17. How frequently do you participate in the following activities to identify job openings for your students? (Check the appropriate box for each of the following activities)

	At least once a month	At least four times a year	At least twice a year	At least once a year	Never
a. Place telephone calls to employers	☐	☐	☐	☐	☐
b Contact employers at work site	☐	☐	☐	☐	☐
c. Send form letters/announcements to employers	☐	☐	☐	☐	☐
d. Send individualized letters to employers	☐	☐	☐	☐	☐
e. Read newspaper ads	☐	☐	☐	☐	☐
f. Place ads in local media	☐	☐	☐	☐	☐
g Contact local public employment service(s)	☐	☐	☐	☐	☐
h. Use computerized/microfiche files of job openings	☐	☐	☐	☐	☐
i. Other activities, please specify	☐	☐	☐	☐	☐

18. In the last academic year, approximately how many of your vocational-technical education students did you refer to job openings?

_____ students

If zero (0), skip to question # 21.

19. Of that number, approximately how many were successfully placed in a job to which you referred them?

_____ students

20. When you refer students to job openings, do you typically (Check the appropriate box for each of the following)

	Yes	No
a Send employer a written recommendation concerning the student?		
b Make telephone call to employer recommending student?		
c Provide student with information regarding the job (e.g., wages associated with the job, benefits included in the job)		
d Provide employer with information regarding student (e.g. student's age, student's class performance, courses taken by student)		

21. Of what help are the following as sources of information about job openings for your vocational-technical education graduates? (Check the appropriate box for each of the following.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help	Don't Know
a. Vocational-technical education teacher	☐	☐	☐	☐	☐	☐
b. Cooperative education coordinator/teacher	☐	☐	☐	☐	☐	☐
c. Guidance/vocational counselor	☐	☐	☐	☐	☐	☐
d. School job placement service	☐	☐	☐	☐	☐	☐
e. Parents	☐	☐	☐	☐	☐	☐
f. Relatives other than parents	☐	☐	☐	☐	☐	☐
g. Friends	☐	☐	☐	☐	☐	☐
h. Former vocational-technical education students who have jobs	☐	☐	☐	☐	☐	☐
i. Newspapers	☐	☐	☐	☐	☐	☐
j. TV and radio	☐	☐	☐	☐	☐	☐
k. Public employment service	☐	☐	☐	☐	☐	☐
l. Private employment service	☐	☐	☐	☐	☐	☐
m. Other sources, please specify	☐	☐	☐	☐	☐	☐

22. In the last academic school year, approximately how many *different* employers did you contact regarding current job openings for which vocational-technical education students might qualify?

_____ employers

23. In the last academic year, approximately how many employers *contacted you* regarding job openings for which your vocational-technical education students would have qualified?

_____ employers

24. Does your school provide you with the following kinds of support for job placement activities? (Check the appropriate box for each of the following.)

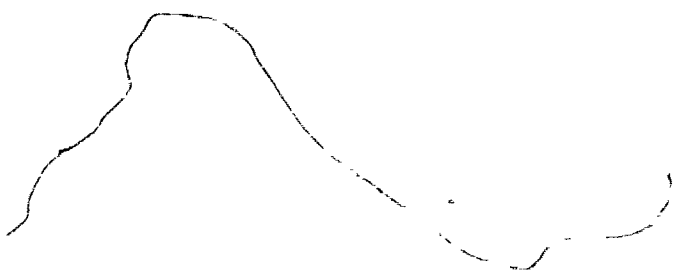
	Yes	No
a. Secretarial assistance	☐	☐
b. Mileage reimbursement for automobile use	☐	☐
c. Telephone use	☐	☐
d. Office supplies	☐	☐
e. Printing/duplicating	☐	☐
f. Funds for information collection regarding job openings	☐	☐
g. Postage	☐	☐
h. Release time	☐	☐
i. Inservice training, please specify	☐	☐
j. Other, please specify	☐	☐

25. When the school job placement office is attempting to place one of your students, does it contact you regarding the following information? (Check the appropriate box for each of the following.)

	Yes	No
a. Student's occupational skill level	☐	☐
b. Student's ability to relate to others	☐	☐
c. Student's work attitudes	☐	☐
d. Student's expressed career interests	☐	☐
e. Student's class performance	☐	☐
f. Other, please specify	☐	☐

26. In your personal opinion, how much help are the following factors in increasing the chances of employment for former students of vocational-technical education? (Check the appropriate box for each of the following factors.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help	No Opinion
a Basic educational skills, such as writing, reading, and mathematics	☐	☐	☐	☐	☐	☐
b Occupational skills and competencies	☐	☐	☐	☐	☐	☐
c Human relations skills	☐	☐	☐	☐	☐	☐
d Acceptable work attitudes and values	☐	☐	☐	☐	☐	☐
e Previous work experiences	☐	☐	☐	☐	☐	☐
f Other factors, please specify. _____	☐	☐	☐	☐	☐	☐



27. In your personal opinion, how much difficulty does each of the following factors pose for vocational-technical education graduates when they are attempting to obtain jobs? (Check the appropriate box for each of the following factors.)

	Very Much Difficulty	Much Difficulty	Some Difficulty	Little Difficulty	Very Little Difficulty	No Opinion
a Students acquired job skills that are too specific	☐	☐	☐	☐	☐	☐
b Students do not have specific job skills	☐	☐	☐	☐	☐	☐
c Students must compete with experienced workers for jobs	☐	☐	☐	☐	☐	☐
d. Students are unwilling to move to a different location for jobs	☐	☐	☐	☐	☐	☐
e Lack of job openings	☐	☐	☐	☐	☐	☐
f Job discrimination because of age	☐	☐	☐	☐	☐	☐
g Job discrimination because of sex	☐	☐	☐	☐	☐	☐
h Job discrimination because of racial/ethnic background	☐	☐	☐	☐	☐	☐
i. Union restrictions	☐	☐	☐	☐	☐	☐
j Entry level jobs offer only minimum wage	☐	☐	☐	☐	☐	☐
k Lack of transportation to jobs	☐	☐	☐	☐	☐	☐
l Lack of certificate or associate degree	☐	☐	☐	☐	☐	☐
m Other, please specify	☐	☐	☐	☐	☐	☐

28. In your personal opinion, which of the following persons/agencies *should* have primary responsibility for the following placement activities?
(Check *one* box for each of the following.)

	Private Employment Agency	Public Employment Agency	School Vocational-Technical Education Advisory Committee	Vocational-Technical Education Dean or Director	School Job Placement Coordinator	Vocational-Technical Education Teacher	Guidance/Vocational Counselor	Other	No One	Don't Know
a Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
b Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
d. Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
e Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
f. Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
g Referring students to job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
h Providing counseling about careers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
i Providing information about job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
j Working with labor unions regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
k Working with vocational-technical education advisory committee regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
l Other placement activities, please specify	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SECTION III:

BACKGROUND INFORMATION

29. In what year were you born? (Write the year on the blank.)

_____
Year

30. What is your sex? ☐ Female ☐ Male

31. What is your ethnic origin? (Check *one*.)

- ☐ American Indian or Alaskan Native
- ☐ Asian American or Pacific Islander
- ☐ Black, not of Hispanic Origin
- ☐ Hispanic
- ☐ White, not of Hispanic Origin
- ☐ Other; please specify: _____

32. What is your highest educational level? (Check *one*.)

- ☐ High school graduate
- ☐ Course credit in vocational-technical education beyond high school
- ☐ Associate's Degree
- ☐ 1-3 years college
- ☐ Four-year college graduate (B.A., B.S., etc.)
- ☐ Course credit beyond undergraduate degree
- ☐ Master's Degree (M.A., M.S., etc.)
- ☐ Course credit beyond Master's Degree
- ☐ Doctorate Degree (Ph.D., Ed.D., etc.)
- ☐ Other; please specify: _____

33. Please indicate the length of time that you have been involved in the following activities. (Write the number of years on the blanks, if an item does not apply to you, write zero [0].)

a. Total years of teaching experience in vocational-technical education _____ year(s)

b. Total years of teaching experience in nonvocational-technical education _____ year(s)

c. Total years in your present position _____ year(s)

d Total years working in occupational area you currently teach _____ year(s)

SECTION IV:

ADDITIONAL COMMENTS

34. Briefly indicate specific recommendations you would make to help your school system increase its job placement rates.

THANK YOU FOR YOUR HELP.

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CONFIDENTIAL:
FOR RESEARCH USE ONLY

FEDAC No. S 208
Exp. Date: 10/81

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

Conducted by:
The National Center for
Research in Vocational Education,
The Ohio State University

Sponsored by:
Office of Vocational and Adult Education
U.S. Department of Education
In cooperation with your State
Postsecondary Vocational-Technical
Education Governing Agencies

Why we need your help . . .

Your school is helping in a national study on vocational-technical education. You have been selected as a representative of your school to help with this job placement study. Your answers are very important, and will help to improve vocational-technical education. This study, authorized by P.L. 94-482, is voluntary.

How you can help . . .

On the next page, you will find questions about vocational-technical education students finding jobs. Most questions can be answered by placing an "X" or a check mark "√" in the box, or by filling in the blanks. Please answer all items as accurately as possible. If you are unsure of a response, leave that question or that part of the question blank.

Example 1: How many persons teach vocational-technical education classes in your school? 8

Example 2: In your personal opinion, how important are the following factors for vocational-technical education students in obtaining jobs? (Check the appropriate box for each of the following.)

	Extremely Important	Very Important	Somewhat Important	A Little Important	Not at All Important
1 Appearance	[ ]	[ ]	[✓]	[ ]	[ ]
2. Grades	[ ]	[✓]	[ ]	[ ]	[ ]
3. Personality	[ ]	[ ]	[ ]	[✓]	[ ]

Please return the completed questionnaire in the postage-paid, pre-addressed envelope provided. Thank you for your help.

We will protect your confidentiality to the fullest extent allowed by law. The code found on the last page of this instrument indicates the state in which you live, the school, and a number identifying you as the person responding to this questionnaire. However, in the analysis no information will be associated with your name.

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

SECTION I:
JOB PLACEMENT ACTIVITIES IN YOUR SCHOOL

1. Who primarily conducts the following placement activities for your school? (Check the most appropriate person/agency for each of the following activities.)

	Private Employment Agency	Public Employment Agency	Vocational-Technical Education Advisory Committee	Vocational-Technical Education Dean/Director	School Job Placement Coordinator	Vocational-Technical Education Teacher	Guidance/Vocational Counselor	Other	No One	Don't Know
a. Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
b Providing training in job seeking skills (e g , seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
c Providing training in job obtainment skills (e g , preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
d Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
e. Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
f Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
g Referring students to job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
h. Providing counseling about careers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
i Providing information about job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
j Working with labor unions regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
k Working with vocational-technical education advisory committee regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
l Other placement activities, please specify	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

2. Approximately how many hours per week do y' spend on job placement activities (e.g., referring students to jobs, contacting employers about job openings)?

_____ hours

3. Of the time you spend on *job placement* activities per week, approximately what percent is spent:

a. Providing assistance in advanced educational placement _____%

b. Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs) _____%

c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews) _____%

d Contacting employers about jobs for students _____%

e Working with public employment services regarding job placement of students _____%

f. Working with private employment agencies regarding job placement of students _____%

g. Referring students to job openings _____%

h. Providing counseling about careers _____%

i. Providing information about job openings _____%

j. Keeping records and reporting activities _____%

k. Other job placement activities; please specify _____%

_____

4. How many individuals work in the job placement office in your school?

_____ work full time, _____ work part time

5. Does your school provide you with the following kinds of support for job placement activities? (Check the appropriate box for each of the following.)

	Yes	No
a Secretarial assistance	☐	☐
b Mileage reimbursement for automobile use	☐	☐
c. Telephone use	☐	☐
d Office supplies	☐	☐
e Printing/duplicating	☐	☐
f Funds for information collection regarding job openings	☐	☐
g Postage	☐	☐
h In-service training, please specify _____	☐	☐
i Other, please specify _____	☐	☐

6. Over the past three academic years, what is the average *number* of vocational-technical education students per year to whom you have given some kind of job placement assistance (e.g., job referral, contacting employers about job openings)?

_____ students per year

7. How frequently do you participate in the following activities to identify job openings for your students? (Check the appropriate box for each of the following activities.)

	At least once a month	At least four times a year	At least twice a year	At least once a year	Never
a. Place telephone calls to employers	☐	☐	☐	☐	☐
b. Contact employers at work site	☐	☐	☐	☐	☐
c Send form letters/announcements to employers	☐	☐	☐	☐	☐
d Send individualized letters to employers	☐	☐	☐	☐	☐
e. Read newspaper ads	☐	☐	☐	☐	☐
f. Place ads in local media	☐	☐	☐	☐	☐
g Contact local public employment service(s)	☐	☐	☐	☐	☐
h Use computerized/microfiche files of job openings	☐	☐	☐	☐	☐
i Other activities, please specify	☐	☐	☐	☐	☐

8. When you refer students to job openings, do you typically: (Check the appropriate box for each of the following.)

	Yes	No
a Send employer a written recommendation concerning the student?	☐	☐
b Make telephone call to employer recommending student?	☐	☐
c Provide student with information regarding the job (e.g., wages associated with the job, benefits included in the job)	☐	☐
d Provide employer with information regarding student (e.g., student's age, student's class performance, courses taken by student)	☐	☐

9 Do you typically provide students with the following types of information regarding jobs to which you refer them? (Check the appropriate box for each of the following.)

	Yes	No
a Salary/wage range	☐	☐
b Fringe benefits	☐	☐
c Promotion opportunities	☐	☐
d Working conditions	☐	☐
e Union membership requirements	☐	☐
f Other information, please specify _____	☐	☐

10 How frequently do you conduct the following promotional activities to increase employers' awareness of the job placement office in your school? (Check the appropriate box for each activity.)

	Very Frequently	Frequently	Sometimes	Rarely	Never
a Make personal visits to employers	☐	☐	☐	☐	☐
b Send out news releases	☐	☐	☐	☐	☐
c Send out brochures/fliers to employers	☐	☐	☐	☐	☐
d Send form letters, announcements to employers	☐	☐	☐	☐	☐
e Place telephone calls to employers	☐	☐	☐	☐	☐
f Send individualized letters to employers	☐	☐	☐	☐	☐
g Give presentations to employer associations/civic groups	☐	☐	☐	☐	☐
h Sponsor career days	☐	☐	☐	☐	☐
i Other activities, please specify _____	☐	☐	☐	☐	☐

11. Within the last five years, have you ever received information regarding the results of any of the following studies conducted by your school?
(Check the appropriate box for each of the following.)

	Yes	No
a Survey of employers regarding their skill needs and labor requirements	☐	☐
b Follow-up of former students of your vocational-technical education program	☐	☐
c Survey of employers' satisfaction with employees who are former vocational-technical education students	☐	☐

SECTION II:

YOUR OPINIONS REGARDING JOB PLACEMENT OF VOCATIONAL-TECHNICAL EDUCATION STUDENTS

12. In your personal opinion, how *should* the following goals of vocational-technical education programs be ranked in importance?

Rank the *most* important goal as "1", the next most important "2", the next most important "3", the next most important "4", and the *least* important "5". (Place the number in the blank to the right of the goal.)

a. To place students as they leave school in jobs related to their training _____

b. To provide the students with competencies needed to obtain jobs _____

c. To place students as they leave school in jobs including nontraining-related jobs _____

d. To create an awareness of the various jobs for which students might prepare _____

e. To provide an opportunity for students to explore various occupational areas _____

13. In your personal opinion, which of the following persons/agencies *should* have primary responsibility for the following placement activities? (Check *one* box for each of the following.)

	Private Employment Agency	Public Employment Agency	School Vocational-Technical Education Advisory Committee	Vocational-Technical Education Dean or Director	School Job Placement Coordinator	Vocational-Technical Education Teacher	Guidance/Vocational Counselor	Other	No One	Don't Know
a Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
b Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
d. Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
e Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
f. Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
g Referring students to job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
h. Providing counseling about careers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
i. Providing information about job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
j Working with labor unions regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
k Working with vocational-technical education advisory committee regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
l. Other placement activities, please specify	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

14. How would you rate your school's performance in providing the following placement activities to vocational-technical education students?
(Check the appropriate box for each of the following activities.)

	Excellent	Good	Fair	Poor	Failing	Don't Know
a. Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐
b Providing training in job seeking skills (e g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐
c Providing training in job obtainment skills (e g , preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐
d Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐
e Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐
f Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐
g. Referring students to job openings	☐	☐	☐	☐	☐	☐
h. Providing counseling about careers	☐	☐	☐	☐	☐	☐
i. Providing information about job openings	☐	☐	☐	☐	☐	☐
j Working with labor unions regarding job placement of students	☐	☐	☐	☐	☐	☐
k Working with vocational-technical education advisory committee regarding job placement of students	☐	☐	☐	☐	☐	☐
l Other placement activities, please specify	☐	☐	☐	☐	☐	☐

15. Of what help are the following as sources of information about job openings for your vocational-technical education graduates? (Check the appropriate box for each of the following.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help	Don't Know
a Vocational-technical education teacher	☐	☐	☐	☐	☐	☐
b. Cooperative education teacher/coordinator	☐	☐	☐	☐	☐	☐
c Guidance/vocational counselor	☐	☐	☐	☐	☐	☐
d School job placement service	☐	☐	☐	☐	☐	☐
e Parents	☐	☐	☐	☐	☐	☐
f Relatives other than parents	☐	☐	☐	☐	☐	☐
g. Friends	☐	☐	☐	☐	☐	☐
h Former vocational-technical education students who have jobs	☐	☐	☐	☐	☐	☐
i. Newspapers	☐	☐	☐	☐	☐	☐
j. TV and radio	☐	☐	☐	☐	☐	☐
k. Public employment service	☐	☐	☐	☐	☐	☐
l. Private employment service	☐	☐	☐	☐	☐	☐
m Other sources, please specify _____	☐	☐	☐	☐	☐	☐

16. In your personal opinion, how much help are the following factors in increasing the chances of employment for former students of vocational-technical education? (Check the appropriate box for each of the following factors.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help	No Opinion
a Basic educational skills, such as writing, reading, and mathematics	☐	☐	☐	☐	☐	☐
b Occupational skills and competencies	☐	☐	☐	☐	☐	☐
c Human relations skills	☐	☐	☐	☐	☐	☐
d Acceptable work attitudes and values	☐	☐	☐	☐	☐	☐
e Previous work experiences	☐	☐	☐	☐	☐	☐
f Other factors, please specify _____	☐	☐	☐	☐	☐	☐

17. In your personal opinion, how much difficulty does each of the following factors pose for vocational-technical education graduates when they are attempting to obtain jobs? (Check the appropriate box for each of the following factors.)

	Very Much Difficulty	Much Difficulty	Some Difficulty	Little Difficult,	Very Little Difficulty	No Opinion
a Students acquired job skills that are too specific	☐	☐	☐	☐	☐	☐
b Students do not have specific job skills	☐	☐	☐	☐	☐	☐
c Students must compete with experienced workers for jobs	☐	☐	☐	☐	☐	☐
d Students are unwilling to move to a different location for jobs	☐	☐	☐	☐	☐	☐
e Lack of job openings.	☐	☐	☐	☐	☐	☐
f Job discrimination because of age	☐	☐	☐	☐	☐	☐
g Job discrimination because of sex	☐	☐	☐	☐	☐	☐
h Job discrimination because of racial ethnic background	☐	☐	☐	☐	☐	☐
i Union restrictions	☐	☐	☐	☐	☐	☐
j Entry level jobs offer only minimum wage	☐	☐	☐	☐	☐	☐
k Lack of transportation to jobs	☐	☐	☐	☐	☐	☐
l Lack of certificate or associate degree	☐	☐	☐	☐	☐	☐
m Other, please specify	☐	☐	☐	☐	☐	☐

SECTION III:
BACKGROUND INFORMATION

18. In what year were you born? (Write the year on the blank.)

_____
Year

19. What is your sex? ☐ Female ☐ Male

20. What is your ethnic origin? (Check *one*.)

- ☐ American Indian or Alaskan Native
- ☐ Asian American or Pacific Islander
- ☐ Black, not of Hispanic Origin
- ☐ Hispanic
- ☐ White, not of Hispanic Origin
- ☐ Other; please specify: _____

21. What is your highest educational level? (Check *one*.)

- ☐ Four-year college graduate (B.A., B.S., etc.)
- ☐ High school course credit in vocational-technical education beyond high school
- ☐ Associate's Degree
- ☐ Course credit beyond undergraduate degree
- ☐ Master's Degree (M.A., M.S., etc.)
- ☐ Course credit beyond Master's Degree
- ☐ Doctorate Degree (Ph.D., Ed.D., etc.)
- ☐ Other; please specify: _____

22. How many hours per week do you work for the school?

Total hours working per week _____

23. Please indicate the approximate amount of time you spend participating in the following activities at your school. (For each activity, place a check in the appropriate box.) Also, if you have been certified for any of these activities, please place a check in the box to the right of the appropriate activity

	Full time	Half time	Quarter time	Less than Quarter time	Not Applicable	Holding Certificate
a ADMINISTRATION	☐	☐	☐	☐	☐	☐
b TEACHING	☐	☐		☐	☐	☐
Agriculture Education	☐	☐	☐	☐	☐	☐
Cooperative Education		☐	☐	☐	☐	☐
Distributive Education		☐	☐	☐	☐	☐
Health Education	☐	☐	☐	☐	☐	☐
Occupational Home Economics	☐	☐	☐	☐	☐	☐
Office Education	☐	☐	☐	☐	☐	☐
Technical Education	☐	☐	☐	☐	☐	☐
Trade and Industrial Education	☐	☐	☐	☐	☐	☐
c GUIDANCE-VOCATIONAL COUNSELING	☐	☐	☐	☐	☐	☐
d JOB PLACEMENT		☐	☐	☐	☐	☐
e Other, please specify	☐	☐	☐	☐	☐	☐

24. Please indicate the length of time that you have been involved in the following activities. (Write the number of years on the blanks, if an item does not apply to you, write zero [0].)

a. Total years of teaching experience in vocational-technical education _____ Year(s)

b. Total years of teaching experience in nonvocational-technical education _____ Year(s)

c. Total years in your present position _____ Year(s)

d. Total years working in occupational area you currently teach _____ Year(s)

SECTION IV:
ADDITIONAL COMMENTS

25. Briefly indicate specific recommendations you would make to help your school increase its job placement rates.

THANK YOU FOR YOUR HELP

CONFIDENTIAL:
FOR RESEARCH USE ONLY

FEDAC No S 208
Exp Date 10/81

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

Conducted by:
The National Center for
Research in Vocational Education
The Ohio State University

Sponsored by
Office of Vocational and Adult Education
U S Department of Education
In cooperation with your State
Postsecondary Vocational-Technical
Education Governing Agencies

Why we need your help . . .

Your school is helping in a national study on vocational-technical education. You have been selected as a representative of your school to help with this job placement study Your answers are very important, and will help to improve vocational-technical education This study, authorized by P.L 94-482, is voluntary.

How you can help .

On the next page, you will find questions about vocational-technical education students finding jobs Most questions can be answered by placing an "X" or a check mark "✓" in the box, or by filling in the blanks. Please answer all items as accurately as possible If you are unsure of a response, leave that question or that part of the question blank

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Example 1 How many persons teach vocational-technical education classes in your school? 8

Example 2 In your personal opinion, how important are the following factors for vocational-technical education students in obtaining jobs? (Check the appropriate box for each of the following)

	Extremely Important	Very Important	Somewhat Important	A Little Important	Not at All Important
1. Appearance			✓		
2 Grades .		✓			
3 Personality				✓	

Please return the completed questionnaire in the postage paid, pre addressed envelope provided Thank you for your help .

We will protect your confidentiality to the fullest extent allowed by law The code found on the last page of this instrument indicates the state in which you live, the school, and a number identifying you as the person responding to this questionnaire. However, in the analysis no information will be associated with your name

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

SECTION I:
COUNSELING ACTIVITIES IN YOUR SCHOOL

1. Which of the following counseling services do counselors provide students in your school? (Check *all* that apply.)

   - ☐ a. Psychological counseling
   - ☐ b. Counseling on course selection
   - ☐ c. Counseling on future educational opportunities
   - ☐ d. Counseling on career possibilities
   - ☐ e. Counseling on career selection
   - ☐ f. Providing recommendations for students to employers
   - ☐ g. Other; please specify: _____

2 In which of the following situations are students required to consult with a guidance/vocational counselor? (Check *all* that apply.)

   - ☐ a. Before enrolling in a vocational-technical education program
   - ☐ b. When transferring from one program of study to another
   - ☐ c. When planning to transfer to a different school
   - ☐ d. Before dropping out of school
   - ☐ e. Upon leaving the vocational-technical education program
   - ☐ f. Other; please specify: _____

3: Over the past three academic years, what has been the average *number* of vocational-technical education students per year to whom you have given some kind of counseling service?

_____ students per year

4. Within the last five years, have you ever received information regarding the results of any of the following studies conducted by your school?
(Check the appropriate box for each of the following.)

	Yes	No
a Survey of employers regarding their skill needs and labor requirements	☐	☐
b Follow-up of former students of your vocational-technical education program	☐	☐
c Survey of employers' satisfaction with employees who are former vocational-technical education students	☐	☐

5 When the school job placement office is attempting to place one of the students you have counseled, does it contact you regarding the following information?
(Check the appropriate box for each of the following.)

	Yes	No
a Student's occupational skill level	☐	☐
b. Student's ability to relate to others	☐	☐
c Student's work attitudes	☐	☐
d Student's expressed career interests	☐	☐
e. Student's class performance	☐	☐
f. Other, please specify	☐	☐

SECTION II

JOB PLACEMENT IN YOUR SCHOOL

6 How knowledgeable are you about the vocational-technical education programs offered in your school? (Check *one*.)

Extremely Knowledgeable	Very Knowledgeable	Somewhat Knowledgeable	A Little Knowledgeable	Not at All Knowledgeable
[ ]	[ ]	[ ]	[ ]	[ ]

7 How many hours per week do you work for the school?

Total hours working per week _____

8 Approximately how many hours per week do you spend on job placement activities (e.g., referring students to jobs, contacting employers about job openings)?

_____ hours per week

If zero (0) hours, skip to question # 9.

Of the time you spend on *job placement* activities per week, approximately what percent is spent.

a. Providing assistance in advanced educational placement _____ %

b. Providing training in job seeking skills (e.g., seeking sources of job information identifying available jobs) _____ %

c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews) _____ %

d. Contacting employers about jobs for students _____ %

e. Working with public employment services regarding job placement of students _____ %

f. Working with private employment agencies regarding job placement of students _____ %

g. Referring students to job openings _____ %

h. Providing counseling about careers _____ %

i. Providing information about job openings _____ %

j. Keeping records and reporting activities _____ %

k. Other job placement activities, please specify. _____ %

_____

9. Who primarily conducts the following placement activities for your school? (Check the most appropriate person/agency for each of the following activities.)

	Private Employment Agency	Public Employment Agency	Vocational-Technical Education Advisory Committee	Vocational-Technical Education Dean/Director	School Job Placement Coordinator	Vocational-Technical Education Teacher	Guidance/Vocational Counselor	Other	No One	Don't Know
a. Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
b Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
d. Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
e Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
f. Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
g Referring students to job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
h Providing counseling about careers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
i. Providing information about job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
j Working with labor unions regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
k. Working with vocational-technical education advisory committee regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
l Other placement activities, please specify _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

10. In your personal opinion, which of the following persons/agencies *should* have primary responsibility for the following placement activities? (Check *one* box for each of the following.)

	Private Employment Agency	Public Employment Agency	Vocational-Technical Education Advisory Committee	Vocational-Technical Education Dean/ Director	School Job Placement Coordinator	Vocational-Technical Education Teacher	Guidance/Vocational Counselor	Other	No One	Don't Know
a. Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
b. Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐	☐	☑	☐	☐
c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
d. Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
e. Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
f. Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
g. Referring students to job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
h. Providing counseling about careers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
i. Providing information about job openings	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
j. Working with labor unions regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
k. Working with vocational-technical education advisory committee regarding job placement of students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
l. Other placement activities, please specify _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

11. Of what help are the following as sources of information about job openings for your vocational-technical education graduates? (Check the appropriate box for each of the following.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help	Don't Know
a. Vocational-technical education teacher	☐	☐	☐	☐	☐	☐
b. Cooperative education coordinator/teacher	☐	☐	☐	☐	☐	☐
c. Guidance/vocational counselor	☐	☐	☐	☐	☐	☐
d. School's job placement service	☐	☐	☐	☐	☐	☐
e. Parents	☐	☐	☐	☐	☐	☐
f. Relatives other than parents	☐	☐	☐	☐	☐	☐
g. Friends	☐	☐	☐	☐	☐	☐
h. Former vocational-technical education students who have jobs	☐	☐	☐	☐	☐	☐
i. Newspapers	☐	☐	☐	☐	☐	☐
j. TV and radio	☐	☐	☐	☐	☐	☐
k. Public employment service	☐	☐	☐	☐	☐	☐
l. Private employment service	☐	☐	☐	☐	☐	☐
m. Other sources, please specify _____	☐	☐	☐	☐	☐	☐

12. In your personal opinion, how much help are the following factors in increasing the chances of employment for former students of vocational-technical education? (Check the appropriate box for each of the following.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help	No Opinion
a. Basic educational skills, such as writing, reading, and mathematics	☐	☐	☐	☐	☐	☐
b. Occupational skills and competencies	☐	☐	☐	☐	☐	☐
c. Human relations skills	☐	☐	☐	☐	☐	☐
d. Acceptable work attitudes and values	☐	☐	☐	☐	☐	☐
e. Previous work experiences	☐	☐	☐	☐	☐	☐
f. Other factors, please specify _____	☐	☐	☐	☐	☐	☐

13. In your personal opinion, how much difficulty does each of the following factors pose for vocational-technical education graduates when they are attempting to obtain jobs? (Check the appropriate box for each of the following factors.)

	Very Much Difficulty	Much Difficulty	Some Difficulty	Little Difficulty	Very Little Difficulty	No Opinion
a. Students acquired job skills that are too specific	☐	☐	☐	☐	☐	☐
b. Students do not have specific job skills	☐	☐	☐	☐	☐	☐
c. Students must compete with experienced workers for jobs	☐	☐	☐	☐	☐	☐
d Students are unwilling to move to a different location for jobs	☐	☐	☐	☐	☐	☐
e Lack of job openings	☐	☐	☐	☐	☐	☐
f. Job discrimination because of age	☐	☐	☐	☐	☐	☐
g Job discrimination because of sex	☐	☐	☐	☐	☐	☐
h. Job discrimination because of racial/ethnic background	☐	☐	☐	☐	☐	☐
i. Union restrictions	☐	☐	☐	☐	☐	☐
j. Entry level jobs offer only minimum wage	☐	☐	☐	☐	☐	☐
k Lack of transportation to jobs	☐	☐	☐	☐	☐	☐
l Lack of certificate or associate degree	☐	☐	☐	☐	☐	☐
m Other, please specify _____	☐	☐	☐	☐	☐	☐

14. How would you rate your school's performance in providing the following placement activities to vocational-technical education students?
(Check the appropriate box for each of the following activities.)

	Excellent	Good	Fair	Poor	Failing	Don't Know
a. Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐
b. Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐
c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐
d. Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐
e. Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐
f. Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐
g. Referring students to job openings	☐	☐	☐	☐	☐	☐
h. Providing counseling about careers	☐	☐	☐	☐	☐	☐
i. Providing information about job openings	☐	☐	☐	☐	☐	☐
j. Working with labor unions regarding job placement of students	☐	☐	☐	☐	☐	☐
k. Working with vocational-technical education advisory committees regarding job placement of students	☐	☐	☐	☐	☐	☐
l. Other placement activities, please specify	☐	☐	☐	☐	☐	☐

15. In your personal opinion, how *should* the following goals of vocational-technical education programs be ranked in importance?

Rank the *most* important goal as "1", the next most important "2", the next most important "3", the next most important "4", and the *least* important "5". (Place the number in the blank to the right of the goal.)

a. To place students as they leave school in jobs related to their training _____

b. To provide the students with competencies needed to obtain jobs _____

c. To place students as they leave school in jobs including nontraining-related jobs _____

d. To create an awareness of the various jobs for which students might prepare _____

e. To provide an opportunity for students to explore various occupational areas _____

SECTION III:
BACKGROUND INFORMATION

16. In what year were you born? (Write the year on the blank.)

_____
Year

17. What is your sex? ☐ Female ☐ Male

18. What is your ethnic origin? (Check *one*.)

- ☐ American Indian or Alaskan Native
- ☐ Asian American or Pacific Islander
- ☐ Black, not of Hispanic Origin
- ☐ Hispanic
- ☐ White, not of Hispanic Origin
- ☐ Other; please specify: _____

19. What is your highest educational level? (Check *one*.)

- ☐ Four-year college graduate (B.A , B.S., etc.)
- ☐ Course credit beyond undergraduate degree
- ☐ Master's Degree (M.A., M.S., etc.)
- ☐ Course credit beyond Master's Degree
- ☐ Doctorate Degree (Ph.D , Ed D., etc.)
- ☐ Other, please specify. _____

20. Please indicate the approximate amount of time you spend participating in the following activities at your school. (For each activity, place a check in the appropriate box.) Also, if you have been certified for any of these activities, please place a check in the box to the right of the appropriate activity.

	Full time	Half time	Quarter time	Less than Quarter time	Not Applicable	Holding Certificate
a. ADMINISTRATION	☐	☐	☐	☐	☐	☐
b. TEACHING	☐	☐	☐	☐	☐	☐
Agriculture Education	☐	☐	☐	☐	☐	☐
Cooperative Education	☐	☐	☐	☐	☐	☐
Distributive Education	☐	☐	☐	☐	☐	☐
Health Education	☐	☐	☐	☐	☐	☐
Occupational Home Economics	☐	☐	☐	☐	☐	☐
Office Education	☐	☐	☐	☐	☐	☐
Technical Education	☐	☐	☐	☐	☐	☐
Trade and Industrial Education	☐	☐	☐	☐	☐	☐
c GUIDANCE/VOCATIONAL COUNSELING	☐	☐	☐	☐	☐	☐
d. JOB PLACEMENT	☐	☐	☐	☐	☐	☐
e Other, please specify _____	☐	☐	☐	☐	☐	☐

21. Please indicate the length of time that you have been involved in the following activities. (Write the number of years on the blanks; if an item does not apply to you, write zero [0].)

a. Total years of teaching experience in vocational-technical education _____ Year(s)

b. Total years of teaching experience in nonvocational-technical education _____ Year(s)

c. Total years in your present position _____ Year(s)

d. Total years in work experiences related to but not including your present position _____ Year(s)

e. Total years in work experiences *not* related to your present position _____ Year(s)

SECTION IV:
ADDITIONAL COMMENTS

22 Briefly indicate specific recommendations you would make to help your school increase its job placement rates.

THANK YOU FOR YOUR HELP.

ADVISORY COMMITTEE MEMBER

CONFIDENTIAL:
FOR RESEARCH USE ONLY

FEDAC No. S 208
Exp. Date: 10/81

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

Conducted by:
The National Center for Research in Vocational Education, The Ohio State University

Sponsored by:
Office of Vocational and Adult Education
U.S. Department of Education
In cooperation with your State Postsecondary Vocational-Technical Education Governing Agencies

Why we need your help . . .

Your school is helping in a national study on vocational-technical education. You have been selected as a representative of your school to help with this job placement study. Your answers are very important, and will help to improve vocational-technical education. This study, authorized by P.L. 94-482, is voluntary.

How you can help . . .

On the next page, you will find questions about vocational-technical education students finding jobs. Most questions can be answered by placing an "X" or a check mark "√" in the box, or by filling in the blanks. Please answer all items as accurately as possible. If you are unsure of a response, leave that question or that part of the question blank.

Example 1: How many persons are members of your vocational-technical education advisory committee? 5

Example 2: In your personal opinion, how important are the following factors for vocational-technical education students in obtaining jobs? (Check the appropriate box for each of the following.)

	Extremely Important	Very Important	Somewhat Important	A Little Important	Not at All Important
1. Appearance	☐	☐	☑	☐	☐
2. Grades	☐	☑	☐	☐	☐
3. Personality	☐	☐	☐	☑	☐

Please return the completed questionnair in the postage-paid, pre-addressed envelope provided. Thank you for your help.

We will protect your confidentiality to the fullest extent allowed by law. The code found on the last page of this instrument indicates the state in which you live, the school, and a number identifying you as the person responding to this questionnaire. However, in the analysis no information will be associated with your name.

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

SECTION I:
YOUR INVOLVEMENT IN VOCATIONAL-TECHNICAL EDUCATION

1. How long have you been a member of the school's vocational-technical education advisory committee?

_____ year(s)

2. How often does your vocational-technical education advisory committee meet? (Check *one*.)

- ☐ Once a month
- ☐ Four times a year
- ☐ Twice a year
- ☐ Once a year
- ☐ Never
- ☐ Other, please specify _____

3. As an advisory committee member, how much do you help in assisting the vocational-technical education programs in performing the following activities?
(Check the appropriate box for each of the following activities.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help
a. Identifying job tasks/skills performed by workers	☐	☐	☐	☐	☐
b. Evaluating vocational-technical education programs for program improvement	☐	☐	☐	☐	☐
c. Providing occupational information for vocational guidance	☐	☐	☐	☐	☐
d. Identifying new occupational areas for vocational technical education program improvement	☐	☐	☐	☐	☐
e. Identifying program, facility, and equipment needs	☐	☐	☐	☐	☐
f. Sponsoring career days or job fair	☐	☐	☐	☐	☐
g. Other, please specify	☐	☐	☐	☐	☐

4. Within the last five years, have you ever received information regarding the results of any of the following studies conducted by the school?
(Check the appropriate box for each of the following.)

	Yes	No
a. Survey of employers regarding their skill needs and labor requirements	☐	☐
b. Follow-up of former students of the vocational-technical education program	☐	☐
c. Survey of employers' satisfaction with employees who are former vocational-technical education students	☐	☐

5. In your personal opinion, how *should* the following goals of vocational-technical education programs be ranked in importance?

Rank the *most* important goal as "1", the next most important "2", the next most important "3", the next most important "4", and the *least* important "5". (Place the number in the blank to the right of the goal.)

a. To place students as they leave school in jobs related to their training _____

b. To provide the students with competencies needed to obtain jobs _____

c. To place students as they leave school in jobs including non-training-related jobs _____

d. To create an awareness of the various jobs for which students might prepare _____

e. To provide an opportunity for students to explore various occupational areas _____

6. In your personal opinion, how much help are the following factors in increasing the chances of employment for former students of vocational-technical education?
(Check the appropriate box for each of the following factors.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help	No Opinion
a. Basic educational skills, such as writing, reading, and mathematics	☐	☐	☐	☐	☐	☐
b. Occupational skills and competencies	☐	☐	☐	☐	☐	☐
c. Human relations skills	☐	☐	☐	☐	☐	☐
d. Acceptable work attitudes and values	☐	☐	☐	☐	☐	☐
e. Previous work experiences	☐	☐	☐	☐	☐	☐
f. Other factors, please specify	☐	☐	☐	☐	☐	☐

7 In your personal opinion, how much difficulty does each of the following factors pose for vocational-technical education graduates when they are attempting to obtain jobs? (Check the appropriate box for each of the following factors.)

	Very Much Difficulty	Much Difficulty	Some Difficulty	Little Difficulty	Very Little Difficulty	No Opinion
a Students acquired job skills that are too specific	☐	☐	☐	☐	☐	☐
b Students do not have specific job skills	☐	☐	☐	☐	☐	☐
c Students must compete with experienced workers for jobs	☐	☐	☐	☐	☐	☐
d Students are unwilling to move to a different location for jobs	☐	☐	☐	☐	☐	☐
e Lack of job openings	☐	☐	☐	☐	☐	☐
f Job discrimination because of age	☐	☐	☐	☐	☐	☐
g Job discrimination because of sex	☐	☐	☐	☐	☐	☐
h Job discrimination because of racial-ethnic background	☐	☐	☐	☐	☐	☐
i. Union restrictions	☐	☐	☐	☐	☐	☐
j Entry level jobs offer only minimum wage	☐	☐	☐	☐	☐	☐
k Lack of transportation to jobs	☐	☐	☐	☐	☐	☐
l Lack of certificate or associate degree	☐	☐	☐	☑	☐	☐
m Other, please specify _____	☐	☐	☐	☐	☐	☐

8. As an advisory committee member, how much involvement do you have in the following job placement-related activities? (Check the appropriate box for each of the following activities.)

	Very Much Involvement	Much Involvement	Some Involvement	Little Involvement	Very Little Involvement
a. Locating available job openings	☐	☐	☐	☐	☐
b. Contacting other employers regarding students as potential employees	☐	☐	☐	☐	☐
c. Encouraging other employers to contact the vocational-technical education program for potential employees	☐	☐	☐	☐	☐
d. Working with students to help them develop job interviewing and application skills	☐	☐	☐	☐	☐
e. Other job placement activities, please specify _____	☐	☐	☐	☐	☐

SECTION III:

BACKGROUND INFORMATION

9. In what year were you born? (Write the year on the blank.)

_____
Year

10 What is your sex? ☐ Female ☐ Male

11. What is your ethnic origin? (Check *one*.)

- ☐ American Indian or Alaskan Native
- ☐ Asian American or Pacific Islander
- ☐ Black, not of Hispanic Origin
- ☐ Hispanic
- ☐ White, not of Hispanic Origin
- ☐ Other; please specify: _____

12. What is your highest educational level? (Check *one*.)

- ☐ High school graduate
- ☐ Course credit in vocational-technical education beyond high school
- ☐ Associate's Degree
- ☐ 1-3 years college
- ☐ Four-year college graduate (B.A., B.S., etc.)
- ☐ Course credit beyond undergraduate degree
- ☐ Master's Degree (M.A., M.S., etc.)
- ☐ Course credit beyond Master's Degree
- ☐ Doctorate Degree (Ph.D., Ed.D. etc.)
- ☐ Other, please specify: _____

13. Currently, what is your occupation? (Check *one*.)

- ☐ CLERICAL (such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent)
- ☐ CRAFTSPERSON (such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter)
- ☐ FARMER, FARM MANAGER
- ☐ HOMEMAKER
- ☐ LABORER (such as construction worker, car washer, sanitary worker, farm laborer)
- ☐ MANAGER, ADMINISTRATOR (such as sales manager, office manager, school administrator, buyer, restaurant manager, government official)
- ☐ MILITARY (such as career officer, enlisted man or woman in the Armed Forces)
- ☐ OPERATIVE (such as meat cutter, assembler, machine operator, welder, taxicab, bus or truck driver, gas station attendant)
- ☐ PROFESSIONAL (such as accountant, artist, member of the clergy, dentist, physician, registered nurse, engineer, lawyer, librarian, teacher, writer, scientist, social worker, actor, actress)
- ☐ PROPRIETOR OR OWNER (such as owner of a small business, contractor, restaurant owner)
- ☐ PROTECTIVE SERVICE (such as detective, police officer or guard, sheriff, firefighter)
- ☐ SERVICE (such as barber, beautician, practical nurse, private household worker, janitor, waiter or waitress)
- ☐ SALES (such as salesperson, advertising or insurance agent, real estate broker)
- ☐ TECHNICAL (such as draftsperson, medical or dental technician, computer programmer)

SECTION III:
ADDITIONAL COMMENTS

14. Briefly indicate specific recommendations you would make to help your school increase its job placement rates.

THANK YOU FOR YOUR HELP.

CONFIDENTIAL:
FOR RESEARCH USE ONLY

FEDAC No. S 208
Exp. Date: 10/81

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

Conducted by:
The National Center for
Research in Vocational Education,
The Ohio State University

Sponsored by:
Office of Vocational and Adult Education
U.S. Department of Education
In cooperation with your State
Postsecondary Vocational-Technical
Education Governing Agencies

Why we need your help . . .

You have been selected as a participant in a national study on job placement of vocational-technical education graduates. Your answers are very important, and will help to improve vocational-technical education. This study, authorized by P. L. 94-482, is voluntary.

How you can help . . .

On the next page, you will find questions about vocational-technical education students finding jobs. Most questions can be answered by placing an "X" or a check mark "√" in the box, or by filling in the blanks. Please answer all items as accurately as possible. If you are unsure of a response, leave that question or that part of the question blank.

Example 1: How many persons are employed in your business/industry? 10

Example 2: In your personal opinion, how important are the following factors for vocational-technical education students in obtaining jobs? (Check the appropriate box for each of the following.)

	Extremely Important	Very Important	Somewhat Important	A Little Important	Not at All Important
1. Appearance	☐	☐	☑	☐	☐
2. Grades	☐	☑	☐	☐	☐
3. Personality	☐	☐	☐	☑	☐

Please return the completed questionnaire in the postage-paid, pre-addressed envelope provided. Thank you for your help.

We will protect your confidentiality to the fullest extent allowed by law. The code found on the last page of this instrument indicates the state in which you live, the school, and a number identifying you as the person responding to this questionnaire. However, in the analysis no information will be associated with your name.

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

SECTION I:
YOUR INVOLVEMENT IN VOCATIONAL-TECHNICAL EDUCATION

1. How often do you contact a representative of the school's vocational-technical education program when your business/industry has job openings for which vocational-technical education graduates would qualify? (Check *one*.)

   - ☐ I always contact the school
   - ☐ I usually contact the school
   - ☐ I seldom contact the school
   - ☐ I never contact the school
   - ☐ Don't know

2. How often does a representative of the school's vocational-technical education program contact you regarding the following? (Check the appropriate box for each of the following.)

	At least once a month	At least four times a year	At least twice a year	At least once a year	Never
a. Job openings in your business/industry for which vocational-technical education graduates might qualify	☐	☐	☐	☐	☐
b. The performance of the school's former vocational-technical education students within the students' first year of work	☐	☐	☐	☐	☐
c. The job performance of the school's former vocational-technical education students after the students' first year of work	☐	☐	☐	☐	☐

3. Which of the following representatives of the school's vocational-technical education program would most likely contact you regarding the following?
(Check the *one* appropriate representative for each of the following.)

	Dean/Director of Vocational-Technical Education	Vocational-Technical Education Teachers	Guidance/Vocational Counselor	Placement Office Coordinator/Staff	Other
a. Job openings in your business/industry for which vocational-technical education graduates might qualify	☐	☐	☐	☐	☐
b. The performance of the school's former vocational-technical education students within the students' first year of work	☐	☐	☐	☐	☐
c. The job performance of the school's former vocational-technical education students after the students' first year of work	☐	☐	☐	☐	☐

4. How often does a representative of the school's vocational-technical education program request information from you about skills needed by the workers in your business/industry? (Check *one*.)

- ☐ At least once a year
- ☐ At least every two years
- ☐ At least every three years
- ☐ At least every five years
- ☐ Never

5. Which of the following representatives of the school's vocational-technical education program would most likely request information from you about skills needed by the workers in your business/industry? (Check *one*.)

- ☐ Dean/Director of Vocational-Technical Education
- ☐ Vocational-Technical Education Teacher
- ☐ Guidance/Vocational Counselor
- ☐ Placement Office Coordinator/Staff
- ☐ Other; please specify: _____

6. How often do you participate in the following activities with the school's vocational-technical education program? (Check the appropriate box for each of the following activities.)

	Very Often	Often	Sometimes	Rarely	Never
a Career days	☐	☐	☐	☐	☐
b Cooperative education program	☐	☐	☐	☐	☐
c Industry-school staff exchange	☐	☐	☐	☐	☐
d Providing or serving as guest lecturer	☐	☐	☐	☐	☐
e Assisting in vocational education student organizations or clubs	☐	☐	☐	☐	☐

7. In your personal opinion, how should the following goals of vocational-technical education programs be ranked in importance?

Rank the *most* important goal as "1", the next most important "2", the next most important "3", the next most important "4", and the *least* important "5". (Place the number in the blank to the right of the goal.)

a. To place students as they leave school in jobs related to their training _____

b. To provide the students with skills needed to obtain jobs _____

c. To place students as they leave school in jobs including nontraining-related jobs _____

d. To create an awareness of the various jobs for which students might prepare _____

e. To provide an opportunity for students to explore various occupational areas _____

8. How often *should* a representative of the school's vocational-technical education program contact you about job openings for their former vocational-technical education students? (Check *one*.)

☐ At least once a month

☐ At least four times a year

☐ At least twice a year

☐ At least once a year

☐ Never

9. How often *should* a representative of the school's vocational-technical education program request information about skills needed for workers in your business/industry? (Check *one*.)

- ☐ At least once a year
- ☐ At least every two years
- ☐ At least every three years
- ☐ At least every five years
- ☐ Never

10. How do you rate the school's vocational-technical education program in meeting your business/industry's employment needs? (Please check *one* box in *each* column.)

Quality of Students' Skills		*Number* of Students Trained
☐	Excellent	☐
☐	Good	☐
☐	Fair	☐
☐	Poor	☐
☐	Does not meet your business/ industry's employment needs	☐
☐	No basis for rating; please specify why: _____	☐

11. Of what importance are the following factors in your decision to employ a person for entry-level jobs? (Check the appropriate box for each factor.)

		Very Much Importance	Much Importance	Some Importance	Little Importance	Very Little Importance
a	Job interview performance	☐	☐	☐	☐	☐
b	Types of previous work experience	☐	☐	☐	☐	☐
c.	Amount of previous work experience	☐	☐	☐	☐	☐
d	Vocational-technical education experience	☐	☐	☐	☐	☐
e	Specific types of occupational skills	☐	☐	☐	☐	☐
f	Scores on company-administered tests	☐	☐	☐	☐	☐
g	School grade records	☐	☐	☐	☐	☐
h	School attendance	☐	☐	☐	☐	☐
i.	Personal recommendations from school staff	☐	☐	☐	☐	☐
j	Health (physical)	☐	☐	☐	☐	☐
k	Ability to get along with people	☐	☐	☐	☐	☐
l	Work attitude	☐	☐	☐	☐	☐
m	Other, please specify	☐	☐	☐	☐	☐

12. In your personal opinion, how much difficulty does each of the following factors pose for vocational-technical education graduates when they are attempting to obtain jobs? (Check the appropriate box for each of the following factors.)

	Very Much Difficulty	Much Difficulty	Some Difficulty	Little Difficulty	Very Little Difficulty	No Opinion
a. Students acquired job skills that are too specific	☐	☐	☐	☐	☐	☐
b. Students do not have specific job skills	☐	☐	☐	☐	☐	☐
c. Students must compete with experienced workers for jobs	☐	☐	☐	☐	☐	☐
d. Students are unwilling to move to a different location for jobs	☐	☐	☐	☐	☐	☐
e. Lack of job openings	☐	☐	☐	☐	☐	☐
f. Job discrimination because of age	☐	☐	☐	☐	☐	☐
g. Job discrimination because of sex	☐	☐	☐	☐	☐	☐
h. Job discrimination because of racial/ethnic background	☐	☐	☐	☐	☐	☐
i. Union restrictions	☐	☐	☐	☐	☐	☐
j. Entry level jobs offer only minimum wage	☐	☐	☐	☐	☐	☐
k. Lack of transportation to jobs	☐	☐	☐	☐	☐	☐
l. Lack of certificate or associate degree	☐	☐	☐	☐	☐	☐
m. Other, please specify _____	☐	☐	☐	☐	☐	☐

13 How would you rate your employees with post-high school vocational-technical education training from the school, compared to your employees who have had no post-high school vocational-technical education training? Your employees with post-high school vocational-technical education training are. (Check the appropriate box for each of the following.)

	Much Better	Better	Same	Worse	Much Worse
a. Reading and interpretive skills	☐	☐	☐	☐	☐
b. Mathematical knowledge	☐	☐	☐	☐	☐
c. Knowledge and skills dealing with safety	☐	☐	☐	☐	☐
d. Personal relations skills	☐	☐	☐	☐	☐
e. Communication skills	☐	☐	☐	☐	☐
f. Work attitudes	☐	☐	☐	☐	☐
g. Supervisory skills	☐	☐	☐	☐	☐
h. Psycho motor skills	☐	☐	☐	☐	☐
i. Occupational skills	☐	☐	☐	☐	☐
j. Other, please specify _____	☐	☐	☐	☐	☐

SECTION II:
BACKGROUND INFORMATION ABOUT Y . BUSINESS/INDUSTRY

14. Which of the following categories best describes your business/industry? (Check *one*.)

- ☐ Agriculture
- ☐ Manufacturing
- ☐ Contract Construction
- ☐ Transportation
- ☐ Public Utilities
- ☐ Wholesale Trade
- ☐ Retail Trade
- ☐ Finance, Insurance, and Real Estate
- ☐ Services and Miscellaneous
- ☐ Government: Federal
- ☐ Government: State or Local
- ☐ Other; please specify.

_____

15. Please indicate the total number of employees (full-time and part-time) in your local business/industry. (Check *one*.)

- ☐ Less than 10
- ☐ 10-99
- ☐ 100-499
- ☐ 500-999
- ☐ 1000-2499
- ☐ 2500 and over

16. Of your employees hired over the past two years, what is the approximate percentage of these employees who are former vocational-technical education students from the school?

_____ percent ☐ Don't know

17. If your business/industry has a union organization, does a formal agreement for cooperation exist between the union's apprenticeship program and the school's vocational-technical education program? (Check *one*.)

☐ Yes ☐ No ☐ Don't Know ☐ Do not have a union organization

SECTION III:

BACKGROUND INFORMATION

18. In what year were you born? (Write the year on the blank.)

_____
Year

19. What is your sex? ☐ Female ☐ Male

20. What is your ethnic origin? (Check *one*.)

- ☐ American Indian or Alaskan Native
- ☐ Asian American or Pacific Islander
- ☐ Black, not of Hispanic Origin
- ☐ Hispanic
- ☐ White, not of Hispanic Origin
- ☐ Other; please specify: _____

21. What is your highest educational level? (Check *one*.)

- ☐ Under 12 years of school
- ☐ High school graduate
- ☐ Course credit in vocational-technical education beyond high school
- ☐ Associate's Degree
- ☐ 1 to 3 years college
- ☐ Four year college graduate (B.A , B.S., etc.)
- ☐ Professional (beyond four year degree)

SECTION IV:
ADDITIONAL COMMENTS

22. Briefly indicate specific recommendations you would make to help the school increase its job placement rates.

THANK YOU FOR YOUR HELP.

CONFIDENTIAL:
FOR RESEARCH USE ONLY

FEDAC No. S 208
Exp. Date: 10/81

JOB PLACEMENT
IN VOCATIONAL-TECHNICAL EDUCATION

Conducted by:
The National Center for
Research in Vocational Education,
The Ohio State University

Sponsored by:
Office of Vocational and Adult Education
U.S. Department of Education
In cooperation with your State
Postsecondary Vocational-Technical
Education Governing Agencies

Why we need your help . . .

Your school is helping in a national study on vocational-technical education. You have been selected as a representative of your school to help wi[th] this job placement study. Your answers are very important, and will help to improve vocational-tech[nical] education. This study, authorized by P.L. 94-482, is voluntary.

How you can help . . .

On the next page, you will find questions about vocational-technical education students finding jobs. Most questions can be answered by placing an "X" or a check mark "√" in the box, or by filling in the blanks. Please answer all items as accurately as possible. If you are unsure of an answer, leave that question or that part of the question blank.

Example 1: In how many full-time jobs did you work before enrolling in your current vocational-technical education program? ___1___

Example 2: In your personal opinion, how important are the following factors for vocational-technical students in obtaining jobs? (Check the appropriate box for each of the following.)

	Extremely Important	Very Important	Somewhat Important	A Little Important	Not at All Important
1. Appearance	☐	☐	☑	☐	☐
2 Grades	☐	☑	☐	☐	☐
3. Personality	☐	☐	☐	☑	☐

Please return the completed questionnaire in the postage-paid, pre-addressed envelope provided. Thank you for your help.

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FACTORS AFFECTING JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

SECTION I:
YOUR EXPERIENCES IN VOCATIONAL-TECHNICAL EDUCATION

1. In which vocational-technical education program area are you currently enrolled? (Check *one*.) If you are in more than one program, check the one in which you have had the most courses.)

   - ☐ Agriculture
   - ☐ Distribution
   - ☐ Health Occupations
   - ☐ Occupational Home Economics
   - ☐ Office Occupations
   - ☐ Technical (engineering, computer programming)
   - ☐ Trade and Industrial (e.g., welding, drafting, electronics, printing)
   - ☐ Other; please specify: _____

2. How many courses will you have completed in the program area checked in question #1 after this term?

   _____

3. How many more courses in this program area do you plan to take?

   _____

4. What was your major reason for enrolling in the program area you checked in question #1? (Check *one*.)

   - ☐ To acquire skills you need for obtaining first job
   - ☐ To upgrade skills in occupation where previously or currently employed
   - ☐ To acquire new skills in order to change occupations
   - ☐ Was unable to attend a 4-year college or university
   - ☐ Parents encouraged enrollment in program area
   - ☐ Had no definite reason for enrolling in program area
   - ☐ Other reason; please specify: _____

5. The majority of classes you attend are held during:

- ☐ Daytime hours (8:00 a.m.-5:00 p.m.)
- ☐ Evening hours (after 5:00 p.m.)
- ☐ Other; please specify: _____

6. During your last year in high school, your grades usually were: (Check *one*.)

☐ Outstanding ("A") ☐ Above average ("B") ☐ Average ("C")
☐ Below average ("D") ☐ Not passing ("F")

7. In *all* courses in which you are presently enrolled, your grades usually are: (Check *one*.)

☐ Outstanding ("A") ☐ Above average ("B") ☐ Average ("C")
☐ Below average ("D") ☐ Not passing ("F")

8. In the *vocational-technical* education courses in which you are presently enrolled, your grades usually are: (Check *one*.)

☐ Outstanding ("A") ☐ Above average ("B") ☐ Average ("C")
☐ Below average ("D") ☐ Not passing ("F")

9. In your vocational-technical education program, what methods are used to instruct you in the following activities? (Check all that apply.)

	Presentations made by placement coordinator, counselor, or other school staff	Presentations by guest lecturer (e.g., employers, employment agency personnel)	Self-instructional materials	Regular class instruction by vocational-technical education teacher	No instruction provided
a Writing resumes	☐	☐	☐	☐	☐
b Locating available jobs	☐	☐	☐	☐	☐
c Filling out a job application	☐	☐	☐	☐	☐
d. Setting up job interviews	☐	☐	☐	☐	☐
e Participating in interviews with prospective employers	☐	☐	☐	☐	☐
f Obtaining job information (e.g., salary, benefits)	☐	☐	☐	☐	☐

10. While enrolled in vocational-technical education classes have you ever been tested on your ability to perform the following activities? (Check the appropriate box for each of the following.)

	Yes	No
a. Writing resumes	☐	☐
b Locating available jobs	☐	☐
c. Filling out a job application	☐	☐
d Setting up job interviews	☐	☐
e. Interviewing with prospective employers	☐	☐
f Obtaining job information (e g , salary, benefits)	☐	☐

11. *While in school,* did you or do you hold a part-time or full-time job, including work-study or cooperative education program (CO-OP)? (Check *one.*)

☐ Yes, ANSWER THE FOLLOWING QUESTIONS
☐ No, SKIP TO QUESTION #12

11a. ☐ *Work-Study:*

Job Title	Average hours per week	Length of time at job	Wage per hour before taxes
		year(s) / month(s)	. /hr.
		year(s) / month(s)	. /hr.
		year(s) / month(s)	. /hr.

11b. ☐ *Cooperative Education Program (CO-OP):*

Job Title	Average hours per week	Length of time at job	Wage per hour before taxes
		year(s) / month(s)	. /hr.
		year(s) / month(s)	. /hr.
		year(s) / month(s)	. /hr.

11c. ☐ *Part-time/Full-time Job,* other than work-study or cooperative education jobs:

Job Title	Average hours per week	Length of time at job	Wage per hour before taxes
		year(s) / month(s)	/hr.
		year(s) / month(s)	. /hr.
		year(s) / month(s)	. /hr.

12. Which of the following counseling services are available to students in your school? (Check *all* that apply.)

- ☐ a. Psychological counseling
- ☐ b. Counseling on course selection
- ☐ c. Counseling on future educational opportunities
- ☐ d. Counseling on career possibilities
- ☐ e. Counseling on career selection
- ☐ f. Providing recommendations for students to employers
- ☐ g. Other counseling services; please specify: _____

13. Have you obtained assistance from any of the following counseling services in your school? (Check *all* that apply.)

- ☐ a. Psychological counseling
- ☐ b. Counseling on course selection
- ☐ c. Counseling on future educational opportunities
- ☐ d. Counseling on career possibilities
- ☐ e. Counseling on career selection
- ☐ f. Providing recommendations for students to employers
- ☐ g. Other counseling services; please specify: _____

14. Which of the following placement services are available to students in your school? (Check *all* that apply.)

- ☐ a. Assistance in advanced educational placement
- ☐ b. Training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)
- ☐ c. Training in job obtainment skills (e.g., preparing job applications, participating in job interviews)
- ☐ d. Contacting employers about jobs for students
- ☐ e. Working with public employment services regarding job placement of students
- ☐ f. Working with private employment agencies regarding job placement of students
- ☐ g. Referring students to job openings
- ☐ h. Information about job openings

15. Have you obtained assistance from any of the following placement services in your school? (Check *all* that apply.)

- ☐ a. Assistance in advanced educational placement
- ☐ b. Training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)
- ☐ c. Training in job obtainment skills (e.g., preparing job applications, participating in job interviews)
- ☐ d. Contacting employers about jobs for students
- ☐ e. Working with public employment services regarding job placement of students
- ☐ f. Working with private employment agencies regarding job placement of students
- ☐ g. Referring students to job openings
- ☐ h. Information about job openings

16. How would you rate your school's performance in providing the following placement activities to vocational-technical education students?
(Please check the appropriate box for each of the following activities.)

	Excellent	Good	Fair	Poor	Failing	Don't Know
a. Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐
b. Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐
c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐
d. Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐
e. Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐
f. Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐
g. Referring students to job openings	☐	☐	☐	☐	☐	☐
h. Providing counseling about careers	☐	☐	☐	☐	☐	☐
i. Providing information about job openings	☐	☐	☐	☐	☐	☐
j Other placement activities, please specify _____	☐	☐	☐	☐	☐	☐

SECTION II:
YOUR PLANS AFTER LEAVING VOCATIONAL EDUCATION

17. What do you plan to do after leaving school (within six months after leaving)? (Check *all* that apply.)

- ☐ a. Obtain a part-time job
- ☐ b. Obtain a full-time job
- ☐ c. Become self employed (or become employed in family-owned business)
- ☐ d. Enroll in a vocational-technical education program in a different school
- ☐ e. Enroll in a nonvocational-technical education program in a different school
- ☐ f. Enter the military service
- ☐ Other; please specify: _____

If you DO plan to obtain a job (full-time or part-time) after leaving, answer the following questions. If not, skip to question #21.

18. Of what help do you think each of the following will be to you in finding your first job after leaving school? (Check the appropriate box for each of the following.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help	Don't Know
a. Vocational-technical education teacher	☐	☐	☐	☐	☐	☐
b. Cooperative education coordinator/teacher	☐	☐	☐	☐	☐	☐
c Guidance/vocational counselor	☐	☐	☐	☐	☐	☐
d School job placement service	☐	☐	☐	☐	☐	☐
e. Parents	☐	☐	☐	☐	☐	☐
f Relatives other than parents	☐	☐	☐	☐	☐	☐
g Friends	☐	☐	☐	☐	☐	☐
h. Former vocational-technical education students who have jobs	☐	☐	☐	☐	☐	☐
i. Newspapers	☐	☐	☐	☐	☐	☐
j TV and radio	☐	☐	☐	☐	☐	☐
k. Public employment service	☐	☐	☐	☐	☐	☐
l Private employment service	☐	☐	☐	☐	☐	☐
m. Other sources please specify	☐	☐	☐	☐	☐	☐

19. Of what help do you think the following factors will be in obtaining your first job after leaving school? (Check the appropriate box for each factor.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help	Don't Know
a Basic educational skills, such as writing, reading, and mathematics	☐	☐	☐	☐	☐	☐
b Occupational skills and competencies	☐	☐	☐	☐	☐	☐
c. Human relations skills	☐	☐	☐	☐	☐	☐
d Acceptable work attitudes and values	☐	☐	☐	☐	☐	☐
e. Previous work experiences	☐	☐	☐	☐	☐	☐
f Other factors, please specify	☐	☐	☐	☐	☐	☐

20. How confident are you that you will be able to get a job in a field related to your training when you leave school? (Check *one*.)

Very Confident	Somewhat Confident	Not at all Confident
☐	☐	☐

21. In your personal opinion, how much difficulty does each of the following factors pose for vocational-technical education graduates when they are attempting to obtain jobs? (Check the appropriate box for each of the following factors.)

	Very Much Difficulty	Much Difficulty	Some Difficulty	Little Difficulty	Very Little Difficulty	No Opinion
a. Students acquired job skills that are too specific	☐	☐	☐	☐	☐	☐
b Students do not have specific job skills	☐	☐	☐	☐	☐	☐
c. Students must compete with experienced workers for jobs	☐	☐	☐	☐	☐	☐
d Students are unwilling to move to a different location for jobs	☐	☐	☐	☐	☐	☐
e Lack of job openings	☐	☐	☐	☐	☐	☐
f Job discrimination because of age	☐	☐	☐	☐	☐	☐
g. Job discrimination because of sex	☐	☐	☐	☐	☐	☐
h Job discrimination because of racial/ethnic background	☐	☐	☐	☐	☐	☐
i Union restrictions	☐	☐	☐	☐	☐	☐
j Entry level jobs offer only minimum wage	☐	☐	☐	☐	☐	☐
k Lack of transportation to jobs	☐	☐	☐	☐	☐	☐
l Lack of certificate or associate degree	☐	☐	☐	☐	☐	☐
m Other, please specify	☐	☐	☐	☐	☐	☐

SECTION III:

BACKGROUND INFORMATION

22. In what year were you born? (Write the year on the blank.)

_____
Year

23. What is your sex? ☐ Female ☐ Male

24. What is your ethnic origin? (Check *one*.)

- ☐ American Indian or Alaskan Native
- ☐ Asian American or Pacific Islander
- ☐ Black, not of Hispanic Origin
- ☐ Hispanic
- ☐ White, not of Hispanic Origin
- ☐ Other; please specify: _____

25. Your present marital status is: (Check *one*.)

- ☐ Married
- ☐ Separated
- ☐ Divorced
- ☐ Widowed
- ☐ Single, never married

26. Please check the highest level of education your father (or male head of family) and mother (or female head of family) completed.

Father	Mother	
☐	☐	Under 7 years of school
☐	☐	7 to 9 years of school
☐	☐	10 to 11 years of school (part high school)
☐	☐	High school graduate
☐	☐	1 to 3 years of college (also business school)
☐	☐	Four-year college graduate
☐	☐	Professional (beyond four-year college)
☐	☐	Don't know

27. Please check the kind of job your father (or male head of family) and mother (or female head of family) have. If you are not sure of the job category, please check "OTHER" and write the name of the job in the blank.

Father	Mother	
☐	☐	CLERICAL (such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent)
☐	☐	CRAFTSPERSON (such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter)
☐	☐	FARMER, FARM MANAGER
☐	☐	HOMEMAKER
☐	☐	LABORER (such as construction worker, car washer, sanitary worker, farm laborer)
☐	☐	MANAGER, ADMINISTRATOR (such as sales manager, office manager, school administrator, buyer, restaurant manager, government official)
☐	☐	MILITARY (such as career officer, enlisted man or woman in the Armed Forces)
☐	☐	OPERATIVE (such as meat cutter, assembler, machine operator, welder, taxicab, bus or truck driver, gas station attendant)
☐	☐	PROFESSIONAL (such as accountant, artist, member of the clergy, dentist, physician, registered nurse, engineer, lawyer, librarian, teacher, writer, scientist, social worker, actor, actress)
☐	☐	PROPRIETOR OR OWNER (such as owner of a small business, contractor, restaurant owner)
☐		PROTECTIVE SERVICE (such as detective, police officer or guard, sheriff, firefighter)
☐		SERVICE (such as barber, beautician, practical nurse, private household worker, janitor, waiter or waitress)
☐	☐	SALES (such as salesperson, advertising or insurance agent, real estate broker)
☐		TECHNICAL (such as draftsperson, medical or dental technician, computer programmer)
☐	☐	OTHER Father _____
		Mother _____
		DON'T KNOW

SECTION IV:
ADDITIONAL COMMENTS

28. Briefly indicate specific recommendations you would make to help your school increase its job placement rates.

THANK YOU FOR YOUR HELP.

U.S. GOVERNMENT PRINTING OFFICE: 981 '58 383 79

CONFIDENTIAL:
FOR RESEARCH USE ONLY

FEDAC No. S 208
Exp. Date: 10/81

JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

Conducted by:
The National Center for
Research in Vocational Education,
The Ohio State University

Sponsored by:
Office of Vocational and Adult Education
U.S Department of Education
In cooperation with your State
Postsecondary Vocational-Technical
Education Governing Agencies

Why we need your help . .

Your school is helping in a national study on vocational-technical education. You have been selected as a representative of your school to help with this job placement study Your answers are very important, and will help to improve vocational-technical education. This study, authorized by P. L. 94-482, is voluntary.

How you can help . . .

On the next page, you will find questions about vocational-technical education students finding jobs. Most questions can be answered by placing an "X" or a check mark "√" in the box, or by filling in the blanks. Please answer all items as accurately as possible. If you are unsure of an answer, leave that question or that part of the question blank.

Example 1 How many full-time jobs have you had since leaving your vocational-technical education program? 2

Example 2 In your personal opinion, how important are the following factors for vocational-technical education students in obtaining jobs? (Check the appropriate box for each of the following.)

	Extremely Important	Very Important	Somewhat Important	A Little Important	Not at All Important
1 Appearance					
2. Grades					
3 Personality					

Please return the completed questionnaire in the postage-paid, pre-addressed envelope provided. Thank you for your help

We will protect your confidentiality to the fullest extent allowed by law The code found on the last page of this instrument indicates the state in which you live, the school, and a number identifying you as the person responding to this questionnaire However, in the analysis no information will be associated with your name

ED752-8
FEDAC No S 208
Exp Date 10 81

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JOB PLACEMENT IN VOCATIONAL-TECHNICAL EDUCATION

SECTION I:
YOUR EXPERIENCES IN VOCATIONAL-TECHNICAL EDUCATION

1. In which vocational-technical education program area were you enrolled during the school year 1978-1979? (Check *one*. If you were in more than one program area, check the one in which you had the most courses.)

   - ☐ Agriculture
   - ☐ Distribution
   - ☐ Health Occupations
   - ☐ Occupational Home Economics
   - ☐ Office Occupations
   - ☐ Technical (e.g., engineering, computer programming)
   - ☐ Trade and Industrial (e.g., welding, drafting, electronics, printing)
   - ☐ Other; please specify: _____

2. How many courses did you complete while in the above program area?

   _____

3. What was your major reason for enrolling in the program area you checked in question #1?

   - ☐ To acquire skills needed for obtaining first job
   - ☐ To upgrade skills in occupation where previously or currently employed
   - ☐ To acquire new skills in order to change occupations
   - ☐ Was unable to attend a 4-year college or university
   - ☐ Parents encouraged enrollment in program area
   - ☐ Had no definite reason for enrolling in program area
   - ☐ Other reason, please specify. _____

If you completed the program of study you checked in question # 1, answer the following question. If not, skip to question #5.

4. Upon completion of the program checked in question # 1, you received: (Check *one*.)

   - ☐ Associate Degree
   - ☐ Certificate of Completion
   - ☐ Program completed but no formal award was given
   - ☐ Other; please specify: _____

5. The majority of classes you attended during the school year 1978-1979 were held during: (Check *one*.)

   - ☐ Daytime hours (8 00 a.m -5·00 p.m.)
   - ☐ Evening hours (after 5.00 p.m.)
   - ☐ Other; please specify: _____

6. During your last year in high school your grades usually were: (Check *one*)

   ☐ Outstanding ("A") ☐ Above average ("B") ☐ Average ("C")

   ☐ Below average ("D") ☐ Not passing ("F")

7. In *all* courses in which you were enrolled in 1978-1979, your grades usually were: (Check *one*.)

   Outstanding ("A") ☐ Above average ("B") ☐ Average ("C")

   Below average ("D") ☐ Not passing ("F")

8. In the *vocational-technical* education courses in which you were enrolled in 1978-1979, your grades usually were (Check *one*)

   Outstanding ("A") Above average ("B") ☐ Average ("C")

   Below average ("D") Not passing ("F")

9. In your vocational-technical education program, what methods were used to instruct you in the following activities? (Check *all* that apply.)

	Presentations made by placement coordinator, counselor, or other school staff	Presentations by guest lecturer (e.g., employers, employment agency personnel)	Self-instructional materials	Regular class instruction by vocational-technical education teacher	No instruction provided
a. Writing resumes	☐	☐	☐	☐	☐
b. Locating available jobs	☐	☐	☐	☐	☐
c. Filling out a job application	☐	☐	☐	☐	☐
d. Setting up job interviews	☐	☐	☐	☐	☐
e. Participating in interviews with prospective employers	☐	☐	☐	☐	☐
f. Obtaining job information (e.g., salary, benefits)	☐	☐	☐	☐	☐

10. When enrolled in vocational-technical education classes in 1978-1979, were you ever tested on your ability to perform the following activities?
(Check the appropriate box for each of the following.)

	Yes	No
a. Writing resumes	☐	☐
b. Locating available jobs	☐	☐
c Filling out a job application	☐	☐
d. Setting up job interviews	☐	☐
e Interviewing with prospective employers	☐	☐
f Obtaining job information (e g , salary, benefits)	☐	☐

11. *While in school* in 1978-1979, did you hold a part-time or full-time job, including work-study or cooperative education program (CO-OP)? (Check *one*.)

☐ Yes, ANSWER THE FOLLOWING QUESTIONS

☐ No, SKIP TO QUESTION # 12.

PLEASE CHECK THE KINDS OF WORK EXPERIENCES YOU HAD WHILE IN SCHOOL IN 1978-1979. FILL IN THE BLANKS FOR EACH WORK EXPERIENCE YOU CHECK. (LIST YOUR MOST RECENT THREE JOBS BEGINNING WITH YOUR *MOST* RECENT JOB FIRST.)

11a. ☐ *Work-Study:*

Job Title	Average hours per week	Length of time at job	Wage per hour before taxes
		year(s) / month(s)	/hr.
		year(s) / month(s)	/hr.
		year(s) / month(s)	/hr.

11b. ☐ *Cooperative Education Program (CO-OP):*

Job Title	Average hours per week	Length of time at job	Wage per hour before taxes
		year(s) / month(s)	/hr.
		year(s) / month(s)	/hr.
		year(s) / month(s)	/hr.

11c. ☐ *Part-time/Full-time Job,* other than work-study or cooperative education jobs:

Job Title	Average hours per week	Length of time at job	Wage per hour before taxes
		year(s) / month(s)	/hr.
		year(s) / month(s)	/hr.
		year(s) / month(s)	/hr.

12. Which of the following counseling services are available to students in your school? (Check *all* that apply.)

- ☐ a. Psychological counseling
- ☐ b. Counseling on course selection
- ☐ c. Counseling on future educational opportunities
- ☐ d. Counseling on career possibilities
- ☐ e. Counseling on career selection
- ☐ f. Providing recommendations for students to employers
- ☐ g. Other counseling services; please specify: _____

13. Have you obtained assistance from any of the following counseling services in your school? (Check *all* that apply.)

- ☐ a. Psychological counseling
- ☐ b. Counseling on course selection
- ☐ c. Counseling on future educational opportunities
- ☐ d. Counseling on career possibilities
- ☐ e. Counseling on career selection
- ☐ f. Providing recommendations for students to employers
- ☐ g. Other counseling services; please specify: _____

14. Which of the following placement services are available to students in your school? (Check *all* that apply.)

- ☐ a. Assistance in advanced educational placement
- ☐ b. Training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)
- ☐ c. Training in job obtainment skills (e.g., preparing job applications, participating in job interviews)
- ☐ d. Contacting employers about jobs for students
- ☐ e. Working with public employment services regarding job placement of students
- ☐ f. Working with private employment agencies regarding job placement of students
- ☐ g. Referring students to job openings
- ☐ h. Information about job openings

15. Did you obtain assistance from any of the following placement services in your school? (Check *all* that apply.)

- ☐ a. Assistance in advanced educational placement
- ☐ b. Training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)
- ☐ c. Training in job obtainment skills (e.g., preparing job applications, participating in job interviews)
- ☐ d. Contacting employers about jobs for students
- ☐ e. Working with public employment services regarding job placement of students
- ☐ f. Working with private employment agencies regarding job placement of students
- ☐ g. Referring students to job openings
- ☐ h. Information about job openings

16. How would you rate your school's performance in providing the following placement activities to vocational-technical education students?
(Check the appropriate box for each of the following activities.)

	Excellent	Good	Fair	Poor	Failing	Don't Know
a. Providing assistance in advanced educational placement	☐	☐	☐	☐	☐	☐
b. Providing training in job seeking skills (e.g., seeking sources of job information, identifying available jobs)	☐	☐	☐	☐	☐	☐
c. Providing training in job obtainment skills (e.g., preparing job applications, participating in job interviews)	☐	☐	☐	☐	☐	☐
d. Contacting employers about jobs for students	☐	☐	☐	☐	☐	☐
e. Working with public employment services regarding job placement of students	☐	☐	☐	☐	☐	☐
f. Working with private employment agencies regarding job placement of students	☐	☐	☐	☐	☐	☐
g. Referring students to job openings	☐	☐	☐	☐	☐	☐
h. Providing counseling about careers	☐	☐	☐	☐	☐	☐
i. Providing information about job openings	☐	☐	☐	☐	☐	☐
j. Other placement activities, please specify	☐	☐	☐	☐	☐	☐

17. Has anyone from your school contacted you regarding your employment status since you left school?

Yes No

SECTION II:
YOUR EXPERIENCES AFTER LEAVING VOCATIONAL-TECHNICAL EDUCATION

18. What did you do within six months after leaving school? (Check *all* that apply.)

a. Obtained a part-time job

b. Obtained a full-time job

c. Became self-employed (or became employed in family-owned business)

d. Enrolled in a vocational-technical education program in a different school

e. Enrolled in a nonvocational-technical education program in a different school

f. Entered the military service

g. Was unemployed

h. Other; please specify: _____

19. **If you DID obtain a job (full-time or part-time) after leaving school, answer the following questions. If not, skip to question #25.**

Please list the first three jobs you had after leaving school. (List your *first* job *first*.)

Job Title	Average hours per week	Length of time at job	Wage per hour before taxes
1st Job _____	_____	_____ year(s) / month(s)	. /hr.
2nd Job _____	_____	_____ year(s) / month(s)	. /hr.
3rd Job _____	_____	_____ year(s) / month(s)	. /hr.

20. When you obtained your first job, did school staff perform any of the following activities? (Check the appropriate box for each activity.)

	Vocational-Technical Education Teacher	School Job Placement Office	School Guidance/ Vocational Counselor	Dean/Director of Vocational-Technical Education Program	Teachers other than Vocational-Technical Education Teachers	No One
a. Send employer a written recommendation	☐	☐	☐	☐	☐	☐
b. Make telephone call to employer recommending you	☐	☐	☐	☐	☐	☐
c. Provide you with information regarding the job (e.g., wages associated with the job, benefits included in the job)	☐	☐	☐	☐	☐	☐
d. Provide employer with information regarding you (e.g., your age, your class performance, courses taken by you)	☐	☐	☐	☐	☐	☐

21. Of what help was each of the following to you in finding your first job after leaving school? (Check the appropriate box for each of the following.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help	Don't Know
a. Vocational-technical education teacher	☐	☐	☐	☐	☐	☐
b. Cooperative education coordinator/teacher	☐	☐	☐	☐	☐	☐
c. Guidance/vocational counselor	☐	☐	☐	☐	☐	☐
d. School job placement service	☐	☐	☐	☐	☐	☐
e. Parents	☐	☐	☐	☐	☐	☐
f. Relatives other than parents	☐	☐	☐	☐	☐	☐
g. Friends	☐	☐	☐	☐	☐	☐
h. Former vocational-technical education students who have jobs	☐	☐	☐	☐	☐	☐
i. Newspapers	☐	☐	☐	☐	☐	☐
j. TV and radio	☐	☐	☐	☐	☐	☐
k. Public employment service	☐	☐	☐	☐	☐	☐
l. Private employment service	☐	☐	☐	☐	☐	☐
m. Other sources, please specify	☐	☐	☐	☐	☐	☐

22. How similar were the work skills you learned in your vocational-technical education program to the work skills you used in your *first* job after leaving school? (Check *one*.)

- ☐ Same as skills learned
- ☐ Somewhat related
- ☐ Slightly related
- ☐ Not at all related

23. How well did your vocational-technical education program prepare you for your *first* job? (Check *one*.)

- ☐ Excellent preparation
- ☐ Good preparation
- ☐ Fair preparation
- ☐ Poor preparation

24. Of what help were the following factors in obtaining your first job after leaving school? (Check the appropriate box for each factor.)

	Very Much Help	Much Help	Some Help	Little Help	Very Little Help	Don't Know
a. Basic educational skills, such as writing, reading, and mathematics	☐	☐	☐	☐	☐	☐
b. Occupational skills and competencies	☐	☐	☐	☐	☐	☐
c. Human relations skills	☐	☐	☐	☐	☐	☐
d. Acceptable work attitudes and values	☐	☐	☐	☐	☐	☐
e. Previous work experiences	☐	☐	☐	☐	☐	☐
f. Other factors, please specify	☐	☐	☐	☐	☐	☐

25. If you did *not* obtain employment after leaving school, what were your reasons for not getting a job? (Check *all* that apply.)

- ☐ a. Transferred to a 4-year college curriculum
- ☐ b. Could not find employment
- ☐ c. Did not want employment
- ☐ d. Other, please specify. _____

26. In your personal opinion, how much difficulty does each of the following factors pose for vocational-technical education graduates when they are attempting to obtain jobs? (Check the appropriate box for each of the following factors.)

	Very Much Difficulty	Much Difficulty	Some Difficulty	Little Difficulty	Very Little Difficulty	No Opinion
a Students acquired job skills that are too specific	☐	☐	☐	☐	☐	☐
b. Students do not have specific job skills	☐	☐	☐	☐	☐	☐
c. Students must compete with experienced workers for jobs	☐	☐	☐	☐	☐	☐
d Students are unwilling to move to a different location for jobs	☐	☐	☐	☐	☐	☐
e Lack of job openings	☐	☐	☐	☐	☐	☐
f Job discrimination because of age	☐	☐	☐	☐	☐	☐
g Job discrimination because of sex	☐	☐	☐	☐	☐	☐
h Job discrimination because of racial/ethnic background	☐	☐	☐	☐	☐	☐
i Union restrictions	☐	☐	☐	☐	☐	☐
j Entry level jobs offer only minimum wage	☐	☐	☐	☐	☐	☐
k Lack of transportation to jobs	☐	☐	☐	☐	☐	☐
l Lack of certificate or associate degree	☐	☐	☐	☐	☐	☐
m Other please specify _____	☐	☐	☐	☐	☐	☐

SECTION III:

BACKGROUND INFORMATION

27. In what year were you born? (Write the year on the blank.)

_____
Year

28. What is your sex? ☐ Female ☐ Male

29. What is your ethnic origin? (Check *one*.)

- ☐ American Indian or Alaskan Native
- ☐ Asian American or Pacific Islander
- ☐ Black, not of Hispanic Origin
- ☐ Hispanic
- ☐ White, not of Hispanic Origin
- ☐ Other; please specify: _____

30. Your present marital status is: (Check *one*.)

- ☐ Married
- ☐ Separated
- ☐ Divorced
- ☐ Widowed
- ☐ Single, never married

31. Please check the highest level of education your father (or male head of family) and mother (or female head of family) completed

Father	Mother	
☐	☐	Under 7 years of school
☐	☐	7 to 9 years of school
☐	☐	10 to 11 years of school (part high school)
☐	☐	High school graduate
☐	☐	1 to 3 years of college (also business school)
☐	☐	Four-year college graduate
☐	☐	Professional (beyond four-year college)
☐	☐	Don't know

32. Please check the kind of job your father (or male head of family) and mother (or female head of family) have. If you are not sure of the job category, please check "OTHER" and write the name of the job in the blank.

Father	Mother	
☐	☐	CLERICAL (such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent)
☐	☐	CRAFTSPERSON (such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter)
☐	☐	FARMER, FARM MANAGER
☐	☐	HOMEMAKER
☐	☐	LABORER (such as construction worker, car washer, sanitary worker, farm laborer)
☐	☐	MANAGER, ADMINISTRATOR (such as sales manager, office manager, school administrator, buyer, restaurant manager, government official)
☐	☐	MILITARY (such as career officer, enlisted man or woman in the Armed Forces)
☐	☐	OPERATIVE (such as meat cutter, assembler, machine operator, welder, taxicab, bus or truck driver, gas station attendant)
☐	☐	PROFESSIONAL (such as accountant, artist, member of the clergy, dentist, physician, registered nurse, engineer, lawyer, librarian, teacher, writer, scientist, social worker, actor, actress)
		PROPRIETOR OR OWNER (such as owner of a small business, contractor, restaurant owner)
		PROTECTIVE SERVICE (such as detective, police officer or guard, sheriff, firefighter)
		SERVICE (such as barber, beautician, practical nurse, private household worker, janitor, waiter or waitress)
		SALES (such as salesperson, advertising or insurance agent, real estate broker)
		TECHNICAL (such as draftsperson, medical or dental technician, computer programmer)
☐	☐	OTHER Father _____
		Mother _____
		DON'T KNOW

SECTION IV:
ADDITIONAL COMMENTS

33 Briefly indicate specific recommendations you would make to help your school increase its job placement rates.

THANK YOU FOR YOUR HELP

APPENDIX C

SELECTED TABLES FROM THE ANALYSIS OF DATA FROM THE MAIL QUESTIONNAIRES

TABLE 1

JOB PLACEMENT RATES OF THE POSTSECONDARY INSTITUTIONS PARTICIPATING IN THE STUDY

Mail Questionnaire Site Number	Placement Rate Designation	Mail Questionnaire Site Number	Placement Rate Designation
State A[a]		State C[a]	
1	High	17	Low
2	High	18	Low
3	Low	19	Low
4	Low	20	Low
5	Low	21	High
6[b]	Low	22[b]	High
7	High	23	Low
8	High	24	High
State B[a]		State D[a]	
9	Low	25[b]	High
10	High	26	Low
11	High	27	Low
12	Low	28	High
13[b]	Low	29	High
14	Low	30	High
15	High	31	High
16	Low		

[a] The median placement rate was calculated individually for each state in the study. Postsecondary schools with rates below the median split were classified as low placement sites while those above were classified as high placement sites. Placement rates were those reported by the state vocational education agencies for 1979. The median for the states was: A = 96, B = 83, C = 68, and D = 55.

[b] Also served as case study site.

TABLE 2

ENROLLMENTS REPORTED FOR PARTICIPATING POSTSECONDARY INSTITUTIONS

Type of Site	Site No.	1979 Enrollment[a] Fulltime	Parttime	Enrollment in Vocational-Technical Programs at Case Study Site
		State A		
High Job Placement	1	1,664	(c)	1,774 in 25 programs
	2	425	(c)	
	4	1,774	(c)	
	6[b]	574	(c)	
	7	2,353	(c)	
Low Job Placement	3	710	(c)	
	5	146	(c)	
	8	571	(c)	
		State B		
High Job Placement	10	604	952	
	11	3,207	7,592	
	15	1,159	2,381	
Low Job Placement	9	194	325	
	12	1,602	2,048	
	13[b]	7,893	12,871	8,600 in 21 programs
	14	1,257	1,393	
	16	3,096	8,007	
		State C		
High Job Placement	21	2,388	6,977	555 in 28 day programs
	22[b]	2,509	2,479	623 in 25 night programs
	23	6,519	16,333	
	24	1,951	3,929	
Low Job Placement	17	861	2,348	
	18	4,306	10,004	
	19	1,798	3,250	
	20	637	947	
		State D		
High Job Placement	25[b]	1,123	1,128	258 in 16 programs
	28	2,299	2,645	
	30	2,026	4,345	
Low Job Placement	26	2,504	4,030	
	27	2,399	3,831	
	29	1,897	2,275	
	31	2,456	2,444	

[a] American Association of Community and Junior Colleges 1980 Community, Junior, and Technical College Directory. Washington, D.C.: AACJC, 1980.

[b] Served as both case study and mail questionnaire site.

[c] Not available.

TABLE 3

CHARACTERISTICS OF CASE STUDY SITES

Case Site	State/Mail Questionnaire Site	Description	Enrollment	Vocational Technical Programs Offered
A Area Vocational Technical School	State A Site 6	single building in downtown area	total students: 1,774 vocational technical students	25 programs: accounting, data processing, agribusiness, transportation, construction, drafting, secretarial, health care, communications and media, manufacturing, marketing and distribution, commercial goods, and public service.
B Community College	State B Site 13	multi-building spacious campus in downtown area; vocational-technical located in two buildings	total students: 7,893 fulltime, 12,871 parttime students, 8,600 vocational technical students	21 vocational programs: management, fire science, law enforcement, real estate, nursing, engineering technology, drafting, data processing, home building, radio-TV, mortuary science, dental assisting, business technology.
C Community College	State C Site 22	concentrated multi-building campus in inner city area; vocational-technical programs located in several buildings	total students: 2,509 fulltime, 2,479 parttime, 555 day vocational, 623 night vocational	16 programs: accounting, early childhood education, fire science, graphic design, industrial technology, recreation management, marketing, communication, nursing, secretarial, production management, etc.
D Community College	State D Site 25	single energy-saving building on edge of town; vocational-technical program located throughout the building	total students: 1,123 fulltime, 1,128 parttime, 258 vocational technical students	28 day and 25 night programs: business, including accounting mgmt., secretarial, real estate, data processing, etc. Technical education, including art, auto body, cabinet making, diesel technology, electronics, fast-food, nursing, telecommunication, welding, etc.

TABLE 4

POPULATION OF THE STUDY SITES

Type of Site	Site No.	Population 1970[a]	Population 1980[b]	Percent Change
		State A		
High Job Placement	1	154,712	195,998	27
	2	26,373	30,982	18
	4	38,826	41,722	8
	6*	220,693	222,229	>1
	7	16,821	19,871	18
Mean		91,485	102,160	14
Low Job Placement	3	44,409	46,256	4
	5	24,372	29,336	20
	8	960,080	941,411	2
Mean		342,954	339,001	9
		State B		
High Job Placement	10	169,812	195,940	15
	11	1,327,695	1,556,549	17
	15	83,225	89,796	8
Mean		526,911	614,095	14
Low Job Placement	9	359,291	479,899	34
	12	68,909	75,301	9
	13*	830,460	988,800	10
	14	26,466	42,606	61
	16	295,516	419,335	42
Mean		316,128	401,188	31

TABLE 4
(continued)
POPULATION OF THE STUDY SITES

Type of Site	Site No.	Population 1970[a]	Population 1980[b]	Percent Change
		State C		
High	21	1,071,446	1,105,379	3
Place-	22*	1,357,854	1,861,846	37
ment	23	7,041,980	7,477,657	6
	24	7,041,980	7,477,657	6
Mean		4,128,315	4,480,635	14
Low	17	682,233	893,157	31
Place-	18	1,357,854	1,861,846	37
ment	19	105,690	155,345	47
	20	33,225	39,732	20
Mean		544,751	737,520	34
		State D		
High	25*	59,210	64,317	9
Place-	28	735,190	650,142	12
ment	30	637,887	633,632	>1
	31	459,050	443,018	4
Mean		472,834	465,940	2
Low	26	537,887	633,632	18
Place-	27	333,314	405,437	22
ment	29	444,301	474,641	7
Mean		438,501	504,507	15

* Case study site.

[a]U.S. Bureau of the Census. 1980 Census of Population and Housing, Advance Reports. Washington, DC: GPO, March, 1981

[b]U.S. Bureau of the Census. County and City Data Book, 1977. Washington, DC: GPO, 1978.

TABLE 5

ETHNIC ORIGIN DISTRIBUTION
OF POPULATION OF STUDY SITE COUNTIES

Type of Site	Site No.	Total Population 1980[a]	Percent of Population by Ethnic Origin[b]					
			Whites	Blacks	American Indians, Eskimos or Aleutes	Asians & Pacific Islanders	Spanish Origin[c]	Other
					STATE A			
High	1	195,998	98	>1	1	1	1	>1
Job	2	30,982	87	>1	13	>1	>1	>1
Place-	4	41,722	99	>1	>1	>1	>1	>1
ment	6[d]	222,229	98	>1	1	>1	>1	>1
	7	19,871	97	1	1	1	>1	>1
	Mean	102,160	96					
Low	3	46,256	99	>1	>1	>1	>1	>1
Job	5	29,336	94	>1	6	>1	>1	>1
Place-	8	941,411	94	4	1	1	1	1
ment	Mean	339,001	96					
					STATE B			
High	10	195,940	76	19	>1	5	12	1
Job	11	1,556,549	74	18	>1	1	10	8
Place-	15	89,796	91	7	1	>1	2	1
ment	Mean	614,095	80					
Low	9	479,899	59	4	>1	1	62	36
Job	12	75,301	77	22	>1	>1	1	>1
Place-	13[d]	988,800	81	7	>1	1	47	11
ment	14	42,606	88	11	>1	>1	15	1
	16	419,335	78	11	>1	1	17	10
	Mean	401,188	77					
					STATE C			
High	21	1,105,379	67	18	1	8	12	6
Job	22[d]	1,861,846	81	6	1	5	15	7
Place-	23	7,477,657	68	13	1	6	28	13
ment	24	7,477,657	68	13	1	6	28	13
	Mean	4,480.635	71					
Low	17	893,157	82	5	1	2	19	9
Job	18	1,861,846	81	6	1	5	15	7
Place-	19	155,345	90	2	1	2	10	5
ment	20	39,732	92	2	4	>1	5	2
	Mean	737,520	87					
					STATE D			
High	25[d]	64,317	99	>1	>1	>1	1	>1
Job	28	650,142	74	20	>1	2	6	4
Place-	30	633,632	97	1	>1	>1	3	2
ment	Mean	465,940	90					
Low	26	633,632	97	1	>1	>1	3	2
Job	27	405,437	96	2	>1	>1	1	1
Place-	29	474,641	96	1	>1	>1	2	2
ment	31	443,018	89	6	>1	>1	5	4
	Mean	504,570	95					

[a]United States Bureau of the Census. 1980 Census of Population and Housing: Advance Reports. Washington, DC: Government Printing Office, March, 1981.

[b]Percentages do not always total 100 due to rounding.

[c]The individuals included in this category are also included in previous classification, such as 'white' or 'other'.

[d]Served as both case study and mail questionnaire site.

TABLE 6

1979 UNEMPLOYMENT
RATES FOR THE STUDY SITES

Type of Site	Site No.	Unemployment Rate[a]	Type of Site	Site No.	Unemployment Rate[a]
	State A			State B	
High Job Placement	1	1.8	High Job Placement	10	5.2
	2	6.4		11	3.4
	4	7.1		15	4.5
	6[b]	5.8			
	7	7.5			
Mean		5.7	Mean		4.4
Low Job Placement	3	5.3	Low Job Placement	9	7.9
	5	8.0		12	7.1
	8	3.3		13[b]	5.7
				14	6.0
				16	3.1
Mean		5.5	Mean		6.0
	State C			State D	
High Placement	21	5.9	High Placement	25[b]	4.7
	22[b]	6.3		28	6.5
	23	5.5		30	6.2
	24	5.5		31	5.0
Mean		5.8	Mean		5.6
Low Placement	17	6.2	Low Placement	26	6.2
	18	6.3		27	6.7
	19	5.0		29	6.9
	20	12.1			
Mean		7.8	Mean		6.6

[a]Source: 1979 annual average unemployment rates for counties published by state employment agencies.
[b]Served as both case study site and mail questionnaire site.

TABLE 7

PER CAPITA INCOME FOR THE STUDY SITES

Type of Site	Site No.	Per Capita Income[a] 1977	Site No.	Per Capita Income 1977
		State A		State B
High Job Placement	1	$5,896	10	
	2	4,411	11	$5,742
	4	5,072	15	6,845
	6[b]	5,769		5,220
	7	4,267		
Mean		$5,083		$5,936
Low Job Placement	3	$4,822	9	$4,326
	5	4,764	12	5,195
	8	6,569	13[b]	4,681
			14	4,117
			16	5,766
Mean		$5,385		$4,817
		State C		State D
High Job Placement	21	6,397	25[b]	$5,488
	22[b]	6,308	28	5,088
	23	6,661	30	6,272
	24	$3,431	31	4,925
Mean		$5,699		$5,443
Low Job Placement	17	$6,676	26	$5,326
	18	5,101	27	5,053
	19	5,972	29	4,403
	20	4,861		
Mean		$5,653		$4,927

[a]Source: U.S. Bureau of the Census. 1977 Statistical Update of the 1970 Census, Based on the 1975 Income Tax Returns. Washington, DC: Government Printing Office, 1978.
[b]Case study sites

TABLE 8

DISTRIBUTION OF PARTICIPATING POSTSECONDARY INSTITUTIONS AND RESPONDENTS BY STATE FOR THE MAIL QUESTIONNAIRE

Type of Site	Number of Postsecondary Institutions	Number of Questionnaires Mailed[a]	Number of Respondents	Percent Responding	Percent of Total Respondents[c]
			State A		
HPS	5	1,916	564	29	22
LPS	3	1,419	436	31	17
			State B		
HPS	3	580	194	33	7
LPS	5	2,171	501	23	19
			State C		
HPS	4	841	206	24	8
LPS	4	2,244	244	11	9
			State D		
HPS	4	1,015	272	27	10
LPS	3	797	182	23	7
Totals	31	10,983	2,599	24[b]	99[d]

[a] Numbers do not include questionnaires that were undeliverable by the post office department

[b] Mean of percents returned

[c] Percent of returns for this group divided by 2,599

[d] Total may not equal 100 percent due to rounding.

TABLE 9

DISTRIBUTION OF RESPONSES TO THE
MAIL QUESTIONNAIRE BY RESPONDENT TYPES

Type of Respondent	Number of Questionnaires Mailed	Percent of Total Mailed[a]	Number of Questionnaires Returned	Percent of Total Returned[b]	Percent Returned[c]
Deans/Directors	31	.3	22	1	71
Teachers	1,925	18	646	25	34
Counselors	142	1	64	2	45
Job Placement Specialists	26	.2	18	1	69
Advisory Committee Members	730	7	308	12	42
Employers	915	8	338	13	37
Current Students	2,764	25	568	22	21
Former Students	4,450	41	635	24	14
Totals	10,983	100	2,599	100	24

[a]The number of questionnaires mailed to a respondent group divided by the total mailed, 10,983.

[b]The number of questionnaires returned by a respondent group divided by the total, 2,599, returned.

[c]The number of questionnaires returned for each respondent group, divided by the number sent to the respondent group.

TABLE 10

NUMBER OF RESPONSES TO THE MAIL QUESTIONNAIRE BY TYPE OF SITE

Type of Site	Respondent Groups							
	Dean/ Director	Teachers	Counselors	Job Placement Specialist	Advisory Council	Employers	Current Students	Former Students
					State A			
HPS	3	146	10	5	77	66	132	125
LPS	1	124	6	0	27	45	70	163
Total	4	270	16	5	104	111	202	288
					State B			
HPS	2	31	1	1	12	55	62	30
LPS	5	153	10	5	55	67	147	59
Total	7	184	11	6	67	122	209	89
					State C			
HPS	3	58	18	2	31	21	24	49
LPS	4	53	5	1	30	35	29	87
Total	7	111	23	3	61	56	53	136
					State D			
HPS	3	52	6	1	39	24	71	76
LPS	1	29	8	3	37	25	33	46
Total	4	81	14	4	76	49	104	122

Table 11

NUMBER AND TYPES OF INDIVIDUALS INTERVIEWED AT THE CASE STUDY SITES

State/Site	Total Individuals	State Level Individuals	School Personnel	Current/ Former Students	Employers/ Community Members
State A, #6	55	10	17	12	16
State B, #13	55	4	22	15	14
State C, #22	48	5	18	10	15
State D, #25	103	5	42	42	14
Total	261	24	99	79	59

TABLE 12

SELECTED INFORMATION ABOUT
THE BUSINESSES AT THE STUDY SITES

Type of Site	Site No.	Total Businesses 1979[a]	Businesses Having 10-19 Employees 1979[a]	Businesses Having 100-249 Employees[a]
		State A		
High Job Placement	1	2,558	327	40
	2	659	101	7
	4	968	110	3
	6[b]	4,307	624	50
	7	312	42	2
Low Job Placement	3	968	149	19
	5	537	71	10
	8	23,692	3,430	639
		State B		
High Job Placement	10	3,451	444	37
	11	40,741	5,282	834
	15	1,916	193	32
		15,369	1,973	301
Low Job Placement	9	7,831	1,120	137
	12	1,549	189	20
	13[b]	17,750	2,317	266
	14	634	64	7
	16	9,510	1,263	127

TABLE 12
(continued)
SELECTED INFORMATION ABOUT
THE BUSINESSES AT THE STUDY SITES

Type of Site	Site No.	Total Businesses 1979[a]	Businesses Having 10-19 Employees 1979[a]	Businesses Having 100-249 Employees[a]
		State C		
High Placement	21	23,420	3,126	347
	22[b]	36,066	4,558	458
	23	164,389	21,196	3,147
	24	164,389	21,196	3,147
Low Placement	17	14,068	1,806	156
	18	36,066	4,558	458
	19	3,459	416	22
	20	1,063	82	5
		State D		
High Placement	25[b]	1,252	145	23
	28	16,755	2,264	413
	30	12,313	1,600	226
	31	8,745	1,116	178
Low Placement	26	12,313	1,600	226
	27	6,634	808	96
	29	8,677	1,032	184

[a]U. S. Bureau of the Census. County Business Patterns 1979. Washington, D.C.: Government Printing Office, 1981.
[b]Served As both case study site and mail questionnaire site.

TABLE 13

DISTRIBUTION OF SIZES OF FIRMS REPRESENTED BY EMPLOYERS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Firms by Number of Employees							
		>10	10-99	100-499	500-999	1000-2499	<2500	No Response	Totals[a]
					State A				
HPS	66	21	41	26	6	6	0	0	100
LPS	45	16	33	18	7	16	11	0	101
					State B				
HPS	55	7	16	36	13	11	16	0	99
LPS	67	13	34	21	8	8	16	0	100
					State C				
HPS	21	19	0	14	10	29	24	5	101
LPS	35	29	51	17	3	0	0	0	100
					State D				
HPS	24	13	42	21	8	17	0	0	101
LPS	25	8	20	36	16	8	8	4	100

[a] Totals may not equal 100 percent due to rounding

TABLE 14

DISTRIBUTION OF TYPES OF FIRMS REPRESENTED BY EMPLOYERS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Firm	Percent of Responses[a]							
	State A		State B		State C		State D	
	HPS	LPS	HPS	LPS	HPS	LPS	HPS	LPS
Agricultural	5	11	0	3	0	6	0	0
Manufacturing	15	13	31	19	5	9	17	24
Construction	2	7	0	3	5	0	0	0
Transportation	3	2	0	5	0	9	0	0
Utilities	3	2	6	5	5	0	0	0
Wholesale Trade	5	2	0	3	0	0	0	0
Retail Trade	15	11	4	12	19	0	21	4
Finance	8	4	18	9	10	14	0	16
Services	20	22	7	8	19	6	29	16
Fed. Govt.	0	0	6	6	5	3	0	0
Local/State Govt.	11	0	2	8	19	29	4	8
Other	11	18	27	18	10	0	29	28
No Response	5	7	0	3	5	26	0	4
Total[b]	103	99	101	102	103	102	100	100

[a] High Placement Sites:

State	N
A	66
B	55
C	21
D	24

Low Placement Sites:

State	N
A	45
B	67
C	35
D	25

[b] Totals may not equal 100 percent due to rounding.

TABLE 15

TYPES OF FIRMS IN CASE STUDY COMMUNTIES

Case Study	State/Mail Questionnaire Site	Major Types of Firms
Case A	State A, Site 6	Shipping, mining, railroads, steel construction
Case B	State B, Site 13	Manufacturing, agribusiness, electronics
Case C	State C Site 22	Shipping, fishing, tourism, federal government, military, manufacturing, construction, ship building, higher education
Case D	State D Site 25	Diversified tool and die, paper mills, insurance, utility companies, small craft businesses, higher education

TABLE 16

COMMUNITY FACTORS AT THE CASE STUDY SITES

Case Site	State/ Site	Community Description	Population and Mix	Attitude Toward Vocational Technical Education	Other Postsecondary Opportunities in the Community
Case A (Vocational Technical School)	State A Site 6	Urban; middle-sized city	95,000; declining; 99% white.	Strong work ethic; strongly valued vocational technical education	No other public postsecondary two-year institutions; two four-year postsecondary institutions.
Case B (Community College)	State B Site 13	Urban; fast-growing city with casual suburban atmosphere	900,000 city; 1,040,000 SMSA 61% Minority	Casual work ethic; valued vocational technical education for upward mobility	Another branch of this community college; no other public postsecondary two-year institutions; several four-year institutions institutions.
Case C (Community College)	State C Site 22	Urban; fast-growing. Concentrates much of state's population.	1,800,000; 79% white	Casual work ethic; Vocational-technical education one of several options to achieve goals	Numerous public two-year and four-year postsecondary institutions.
Case D (Community College)	State D Site 25	Rural town; largest in sparsely populated section of state	20,000; 99% white	Strong work ethic however oriented towards four-year postsecondary education. Placed relatively low value on vocational education	No other postsecondary institutions in the town. Several four-year postsecondary institutions in the surrounding region.

TABLE 17

RANKING OF GOALS FOR POSTSECONDARY VOCATIONAL-TECHNICAL EDUCATION BY POSTSECONDARY INSTITUTION STAFF AND EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondent	Type of Site	Number of Respondents	Place Students in Training Related Job		Provide Students With Skills Needed to Obtain A Job		Place Students in Job Not Necessarily Related to Training		Create Awareness of Various Occupations		Provide Opportunity to Explore Various Jobs		Percent of Non-Respondents *
			Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	
						State A							
Dean/Director	HPS	3	0	0	67	1	33	2	0	0	0	0	0
	LPS	1	0	0	100	0	0	0	0	0	0	0	0
Teacher	HPS	146	6	2	84	1	0	0	2	3	1	0	6
	LPS	124	20	2	69	1	1	5	3	4	5	3	0
Counselor	HPS	10	0	0	100	1	0	0	0	0	0	0	0
	LPS	6	33	2	67	1	0	0	0	0	0	0	0
Job Placement Specialist	HPS	5	40	2	60	1	0	0	0	0	0	0	0
	LPS	0	0	0	0	0	0	0	0	0	0	0	0
Advisory Council Member	HPS	77	10	3	66	1	0	5	14	2	5	4	4
	LPS	27	8	2	4	3	4	3	12	1	8	2	67
Employers	HPS	66	3	3	0	0	0	0	8	1	6	2	83
	LPS	45	0	0	74	1	3	4	13	2	4	3	7

TABLE 17

(continued)

RANKING OF GOALS FOR POSTSECONDARY VOCATIONAL-TECHNICAL EDUCATION BY POSTSECONDARY INSTITUTION STAFF AND EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondent	Type of Site	Number of Respondents	Place Students in Training Related Job		Provide Students With Skills Needed to Obtain A Job		Place Students in Job Not Necessarily Related to Training		Create Awareness of Various Occupations		Provide Opportunity to Explore Various Jobs		Percent of Non-Respondents [a]
			Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	
						State B							
Dean/Director	HPS	2	0	0	100	1	0	0	0	0	0	0	0
	LPS	5	20	2	80	1	0	0	0	0	0	0	0
Teacher	HPS	31	6	3	77	1	0	0	0	0	16	2	0
	LPS	153	6	2	76	1	0	0	6	2	3	3	0
Counselor	HPS	1	0	0	100	1	0	0	0	0	0	0	0
	LPS	10	20	2	40	1	0	0	20	2	20	2	0
Job Placement Specialist	HPS	2	0	0	100	1	0	0	0	0	0	0	0
	LPS	5	0	0	40	1	0	0	0	0	20	2	60
Advisory Council Member	HPS	12	17	3	58	1	0	0	25	2	0	0	0
	LPS	55	4	4	64	1	0	0	13	2	11	3	8
Employers	HPS	55	2	3	65	1	2	3	18	2	2	3	11
	LPS	67	10	4	49	1	2	5	16	3	19	2	4

TABLE 17
(continued)
RANKING OF GOALS FOR POSTSECONDARY VOCATIONAL-TECHNICAL EDUCATION BY POSTSECONDARY INSTITUTION STAFF AND EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondent	Type of Site	Number of Respondents	Place Students in Training Related Job: Percent Who Ranked "Most Important"	Place Students in Training Related Job: Overall Ranking	Provide Students With Skills Needed to Obtain A Job: Percent Who Ranked "Most Important"	Provide Students With Skills Needed to Obtain A Job: Overall Ranking	Place Students in Job Not Necessarily Related to Training: Percent Who Ranked "Most Important"	Place Students in Job Not Necessarily Related to Training: Overall Ranking	Create Awareness of Various Occupations: Percent Who Ranked "Most Important"	Create Awareness of Various Occupations: Overall Ranking	Provide Opportunity to Explore Various Jobs: Percent Who Ranked "Most Important"	Provide Opportunity to Explore Various Jobs: Overall Ranking	Percent of Non-Respondents [a]
						State C							
Dean/Director	HPS	3	0	0	67	1	0	0	0	0	0	0	33
	LPS	4	0	0	50	1	0	0	0	0	50	1	0
Teacher	HPS	58	10	2	72	1	0	0	10	2	0	0	7
	LPS	53	0	0	68	1	0	0	9	2	6	3	17
Counselor	HPS	18	11	2	72	1	0	0	6	3	6	3	5
	LPS	5	0	0	40	1	0	0	0	0	20	2	40
Job Placement Specialist	HPS	2	0	0	50	1	0	0	50	1	0	0	0
	LPS	1	0	0	0	0	0	0	100	1	0	0	0
Advisory Council Member	HPS	31	3	4	77	1	0	0	10	2	6	3	4
	LPS	30	10	3	53	1	0	0	27	2	3	4	7
Employers	HPS	21	10	3	48	1	5	4	24	2	0	0	13
	LPS	35	6	3	77	1	0	0	6	3	9	2	18

TABLE 17
(continued)
RANKING OF GOALS FOR POSTSECONDARY VOCATIONAL-TECHNICAL EDUCATION BY POSTSECONDARY INSTITUTION STAFF AND EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondent	Type of Site	Number of Respondents	Place Students in Training Related Job		Provide Students With Skills Needed to Obtain A Job		Place Students in Job Not Necessarily Related to Training		Create Awareness of Various Occupations		Provide Opportunity to Explore Various Jobs		Percent of Non-Respondents [a]
			Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	Percent Who Ranked "Most Important"	Overall Ranking	
						State D							
Dean/Director	HPS	3	0	0	100	1	0	0	0	0	0	0	0
	LPS	1	0	0	0	0	0	0	0	0	100	1	0
Teacher	HPS	52	2	4	81	1	13	2	0	0	0	0	0
	LPS	29	0	0	86	1	0	0	0	0	14	2	0
Counselor	HPS	6	0	0	50	1	0	0	17	3	33	2	0
	LPS	8	0	0	88	1	13	2	0	0	0	0	0
Job Placemnt Specialist	HPS	1	0	0	0	0	0	0	100	1	0	0	0
	LPS	3	0	0	50	1	0	0	50	1	0	0	0
Advisory Council Member	HPS	39	1	5	51	1	3	4	18	2	13	3	14
	LPS	37	8	4	70	1	1	3	16	2	3	5	2
Employers	HPS	24	4	4	46	1	0	0	17	3	21	2	12
	LPS	25	8	3	71	1	0	0	8	3	13	2	0

[a] Indicates that this goal is favored equally with one or more additional goals by this respondent group.

TABLE 18

WHO HAS MAJOR RESPONSIBILITY FOR IDENTIFYING AND CRITIQUING PHILOSOPHY FOR VOCATIONAL-TECHNICAL EDUCATION AS INDICATED BY DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	No. Respondents	Percent of Responses: State Governing Agency	Advisory Committee	Dean/Director	School Research Evaluation Unit	VoTech Teachers	Guidance/Vocational Counselor	Other	No One	Don't Know	Totals[a]
					State A						
HPS	3	33	0	33	0	0	0	0	0	33	99
LPS	1	0	0	100	0	0	0	0	0	0	100
					State B						
HPS	2	0	0	100	0	0	0	0	0	0	100
LPS	5	0	20	20	0	0	0	0	0	60	100
					State C						
HPS	3	0	0	33	0	0	0	0	0	67	100
LPS	4	25	0	50	0	0	0	0	0	25	100
					State D						
HPS	3	0	0	67	0	0	0	0	0	33	100
LPS	1	0	100	0	0	0	0	0	0	0	100

[a]Total may not equal 100 percent due to rounding.

TABLE 19

FREQUENCY WITH WHICH THE VOCATIONAL-TECHNICAL EDUCATION PHILOSOPHY IS IDENTIFIED AND CRITIQUED AS INDICATED BY THE DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	No. Respondents	Percent of Responses: Once A Year	Once Every 2 years	Once Every 4 years	Once Every 5 years	Never	Don't Know	Totals[a]
				State A				
HPS	3	0	0	33	33	0	33	99
LPS	1	100	0	0	0	0	0	100
				State B				
HPS	2	50	50	0	0	0	0	100
LPS	5	0	40	0	0	0	0	
				State C				
HPS	3	100	0	0	0	0	0	100
LPS	4	25	25	25	25	0	0	100
				State D				
HPS	3	33	33	0	0	0	33	99
LPS	1	0	100	0	0	0	0	100

[a] Total may not equal 100 percent due to rounding

TABLE 20

WHO HAS PRIMARY RESPONSIBILITY FOR ANALYZING VOCATIONAL-TECHNICAL EDUCATION PROGRAM OBJECTIVES AS INDICATED BY DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses									
		State Agency	Advisory Committee	Vocational Technical Director	School Research Evaluation Unit	Vocational Technical Teachers	Guidance Counselor	Other	No One	Don't Know	Total[a]
State A											
HPS	3	0	0	33	0	33	0	0	0	33	99
LPS	1	0	0	100	0	0	0	0	0	0	100
State B											
HPS	2	0	0	0	0	50	0	0	0	50	100
LPS	5	0	40	40	0	0	0	0	0	20	100
State C											
HPS	3	0	0	0	0	0	0	0	0	100	100
LPS	4	25	0	25	0	0	0	0	0	50	100
State D											
HPS	3	0	33	33	0	0	0	0	0	33	99
LPS	1	0	0	0	0	100	0	0	0	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 21

FREQUENCY WITH WHICH THE VOCATIONAL-TECHNICAL EDUCATION PROGRAM OBJECTIVES ARE ANALYZED AS INDICATED BY THE DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses							
		At Least Once/Year	At Least Once Every Two Years	At least Once Every Three Years	At Least Once Every Four Years	At Least Once Every Five Years	Never	No Response	Total
				State A					
HPS	3	100	0	0	0	0	0	0	100
LPS	1	100	0	0	0	0	0	0	100
				State B					
HPS	2	100	0	0	0	0	0	0	100
LPS	5	60	40	0	0	0	0	0	100
				State C					
HPS	3	100	0	0	0	0	0	0	100
LPS	4	25	25	0	25	25	0	0	100
				State D					
HPS	3	67	33	0	0	0	0	0	100
LPS	1	100	0	0	0	0	0	0	100

TABLE 22

WHO HAS RESPONSIBILITY FOR ALLOCATING FUNDS FOR EQUIPMENT AND SUPPLIES AS INDICATED BY THE DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses									
		State Agency	Advisory Committee	Vocational Technical Director	School Research/ Evaluation Unit	Vocational Technical Teacher	Guidance Counselor	Other	No One	Don't Know	Total[a]
State A											
HPS	3	100	0	0	0	0	0	0	0	0	100
LPS	1	0	0	100	0	0	0	0	0	0	100
State B											
HPS	2	50	0	50	0	0	0	0	0	0	100
LPS	5	0	0	60	20	0	0	20	0	0	100
State C											
HPS	3	33	33	0	0	0	0	0	0	33	99
LPS	4	0	0	100	0	0	0	0	0	0	100
State D											
HPS	3	33		67	0	0	0	0	0	0	100
LPS	1	0	100	0	0	0	0	0	0	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 23

WHO HAS PRIMARY RESPONSIBILITY FOR DETERMINING THE SUPPLY OF TRAINED WORKERS THAT EMPLOYERS WILL NEED AS INDICATED BY DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses									
		State Agency	Advisory Committee	Vocational Technical Director	School Research/ Evaluation Unit	Vocational Technical Teachers	Guidance Counselor	Other	No One	Don't Know	Total[a]
State A											
HPS	3	33	33	0	33	0	0	0	0	0	99
LPS	1	0	100	0	0	0	0	0	0	0	100
State B											
HPS	2	0	0	50	0	50	0	0	0	0	100
LPS	5	20	40	20	0	20	0	0	0	0	100
State C											
HPS	3	67	0	0	0	33	0	0	0	0	100
LPS	4	0	50	50	0	0	0	0	0		100
State D											
HPS	3	33	33	0	33	0	0	0	0	0	99
LPS	1	100	0	0	0	0	0	0	0	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 24

FREQUENCY OF CONTACT BY POSTSECONDARY INSTITUTIONS TO ASSESS SKILL NEEDS AS INDICATED BY EMPLOYERS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses						
		Once A Year	Every Two Years	Every Three Years	Every Five Years	Never	No Response	Total[a]
				State A				
HPS	66	42	15	5	2	33	3	100
LPS	45	47	7	0	4	40	2	100
				State B				
HPS	55	31	4	2	4	58	2	101
LPS	67	46	2	3	5	37	7	100
				State C				
HPS	21	48	0	5	0	38	10	101
LPS	35	34	0	9	3	54	0	100
				State D				
HPS	24	25	13	4	4	50	4	100
LPS	25	48	12	4	8	29	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 25

FREQUENCY WITH WHICH EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE INDICATED THEY SHOULD BE CONTACTED BY POSTSECONDARY INSTITUTIONS REGARDING JOB SKILL REQUIREMENTS

Type of Site	Number of Respondents	Percent of Responses: Once a Year	Every Two Years	Every Three Years	Every Four Years	Every Five Years	Never	No Response	Total[a]
				State A					
HPS	66	74	9	5	0	8	2	3	101
LPS	45	69	20	7	0	2	2	0	100
				State B					
HPS	55	64	24	2	0	2	6	4	102
LPS	67	75	13	2	0	3	3	5	101
				State C					
HPS	21	71	0	5	0	5	5	5	101
LPS	35	71	20	6	0	0	3	0	99
				State D					
HPS	24	75	13	0	0	8	0	4	100
LPS	25	80	4	12	0	0	4	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 26

FREQUENCY WITH WHICH VARIOUS METHODS ARE USED TO ASSESS EMPLOYER SKILL NEEDS AS INDICATED BY DEANS/DIRECTORS RESPONDING TO THE MAIL QUESTIONNAIRE

Method Used to Assess Skill Needs	Type of Site	Number of Respondents	Percent of Responses: Once A Year	Once Every Two Years	Once Every Three Years	Once Every Four Years	Once Every Five Years	Never	No Response	Total[a]
State A										
Written Survey Sent To Employers	HPS	3	100	0	0	0	0	0	0	100
	LPS	1	0	0	0	100	0	0	0	100
Interviews of Employers At Work Sites	HPS	3	0	0	0	0	33	33	33	99
	LPS	1	0	0	0	100	0	0	0	100
Telephone Survey of Employers	HPS	3	0	0	0	67	0	0	33	100
	LPS	1	0	0	0	0	0	100	0	100
Recommendation of Advisory Committee	HPS	3	100	0	0	0	0	0	0	100
	LPS	1	100	0	0	0	0	0	0	100
Dept. of Labor and/or Public Employment Service	HPS	3	67	33	0	0	0	0	0	100
	LPS	1	100	0	0	0	0	0	0	100

TABLE 26
(continued)

FREQUENCY WITH WHICH VARIOUS METHODS ARE USED TO ASSESS EMPLOYER SKILL NEEDS AS INDICATED BY DEANS/DIRECTORS RESPONDING TO THE MAIL QUESTIONNAIRE

Method Used to Assess Skill Needs	Type of Site	Number of Respondents	Percent of Responses: Once A Year	Once Every Two Years	Once Every Three Years	Once Every Four Years	Once Every Five Years	Never	No Response	Total[a]
State B										
Written Survey Sent To Employers	HPS	2	50	0	0	50	0	0	0	100
	LPS	5	20	80	0	0	0	0	0	100
Interviews of Employers At Work Sites	HPS	2	50	0	0	50	0	0	0	100
	LPS	5	60	20	0	0	0	20	0	100
Telephone Survey of Employers	HPS	2	50	0	0	0	0	50	0	100
	LPS	5	20	60	0	0	0	20	0	100
Recommendation of Advisory Committee.	HPS	2	100	0	0	0	0	0	0	100
	LPS	5	100	0	0	0	0	0	0	100
Dept. of Labor and/or Public Employment Service	HPS	2	0	0	0	100	0	0	0	100
	LPS	5	40	60	0	0	0	0	0	100

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TABLE 26
(continued)
FREQUENCY WITH WHICH VARIOUS METHODS ARE USED TO ASSESS EMPLOYER SKILL NEEDS AS INDICATED BY DEANS/DIRECTORS RESPONDING TO THE MAIL QUESTIONNAIRE

Method Used to Assess Skill Needs	Type of Site	Number of Respondents	Percent of Responses: Once A Year	Once Every Two Years	Once Every Three Years	Once Every Four Years	Once Every Five Years	Never	No Response	Total[a]
State C										
Written Survey Sent To Employers	HPS	3	100	0	0	0	0	0	0	100
	LPS	4	25	50	0	0	25	0	0	100
Interviews of Employers At Work Sites	HPS	3	100	0	0	0	0	0	0	100
	LPS	4	50	25	0	25	0	0	0	100
Telephone Survey of Employers	HPS	3	100	0	0	0	0	0	0	100
	LPS	4	25	25	0	0	25	25	0	100
Recommendation of Advisory Committee	HPS	3	100	0	0	0	0	0	0	100
	LPS	4	75	25	0	0	0	0	0	100
Dept. of Labor and/or Public Employment Service	HPS	3	67	0	0	0	0	0	33	100
	LPS	4	50	25	0	0	0	25	0	100

TABLE 26

(continued)

FREQUENCY WITH WHICH VARIOUS METHODS ARE USED TO ASSESS EMPLOYER SKILL NEEDS AS INDICATED BY DEANS/DIRECTORS RESPONDING TO THE MAIL QUESTIONNAIRE

Method Used to Assess Skill Needs	Type of Site	Number of Respondents	Percent of Responses: Once A Year	Once Every Two Years	Once Every Three Years	Once Every Four Years	Once Every Five Years	Never	No Response	Total[a]
State D										
Written Survey Sent To Employers	HPS	3	0	67	0	0	0	33	0	100
	LPS	1	0	100	0	0	0	0	0	100
Interviews of Employers At Work Sites	HPS	3	33	0	0	0	0	33	33	100
	LPS	1	0	100	0	0	0	0	0	100
Telephone Survey of Employers	HPS	3	0	33	0	33	0	33	0	99
	LPS	1	0	100	0	0	0	0	0	100
Recommendation of Advisory Committee	HPS	3	100	0	0	0	0	0	0	100
	LPS	1	0	100	0	0	0	0	0	100
Dept. of Labor and/or Public Employment Service	HPS	3	67	33	0	0	0	0	0	100
	LPS	1	100	0	0	0	0	0	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 27

EXTENT OF HELP PROVIDED BY ADVISORY COMMITTEE MEMBERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE IN IDENTIFYING NEW OCCUPATIONAL AREAS

Type of Site	Number of Respondents	Percent of Responses						
		Very Much Help	Much Help	Some Help	Little Help	Very Little Help	No Response	Total[a]
				State A				
HPS	77	8	17	36	17	16	7	101
LPS	27	7	26	41	11	7	7	99
				State B				
HPS	12	8	17	50	25	0	0	100
LPS	67	6	22	36	13	18	6	101
				State C				
HPS	31	10	35	23	16	13	3	101
LPS	30	13	27	27	13	17	3	100
				State D				
HPS	39	3	31	23	13	18	13	101
LPS	37	8	16	30	16	22	8	100

[a]Totals may not equal 100 percent due to rounding

TABLE 28

INFORMATION RECEIVED REGARDING STUDIES CONDUCTED BY POSTSECONDARY INSTITUTIONS DURING THE PAST FIVE YEARS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE

Type of Respondents	Type of Site	N	Percent of Responses: Survey of Employers Regarding Job Skills, Labor Requirements — Yes	No	No Response	Total[a]	Follow-up of Former Students — Yes	No	No Response	Total[a]	Survey of Employers' Satisfaction with Former Students — Yes	No	No Response	Total[a]
State A														
Deans/ Directors	HPS	3	100	0	0	100	100	0	0	100	100	0	0	100
	LPS	1	100	0	0	100	100	0	0	100	100	0	0	100
Teachers	HPS	146	59	39	2	100	82	16	2	100	58	39	3	100
	LPS	124	51	43	7	101	92	6	2	100	59	35	7	101
Counselors	HPS	10	40	50	10	100	90	10	0	100	90	10	0	100
	LPS	6	67	33	0	100	100	0	0	100	50	50	0	100
Job Placement Specialists	HPS	5	40	60	0	100	100	0	0	100	40	60	0	100
	LPS	0	0	0	0	0	0	0	0	0	0	0	0	0
Advisory Committee Members	HPS	77	38	60	3	101	46	52	3	101	33	65	3	101
	LPS	27	56	41	4	101	59	37	4	100	44	48	7	99
State B														
Dean/ Director	HPS	2	100	0	0	100	100	0	0	100	100	0	0	100
	LPS	5	100	0	0	100	100	0	0	100	100	0	0	100
Teachers	HPS	31	68	29	3	100	77	23	0	100	65	36	0	101
	LPS	153	62	33	5	100	77	22	1	100	63	33	4	100
Counselors	HPS	1	100	0	0	100	100	0	0	100	100	0	0	100
	LPS	10	50	50	0	100	70	30	0	100	40	60	0	100
Job Placement Specialists	HPS	1	100	0	0	100	100	0	0	100	100	0	0	100
	LPS	5	40	40	20	100	80	20	0	100	80	20	0	100
Advisory Council Members	HPS	12	33	58	8	99	17	75	8	100	17	75	8	100
	LPS	55	27	71	2	100	29	69	2	100	26	73	2	101

TABLE 28

(continued)

INFORMATION RECEIVED REGARDING STUDIES CONDUCTED BY POSTSECONDARY INSTITUTIONS DURING THE PAST FIVE YEARS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE

Type of Respondents	Type of Site	N	Percent of Responses: Survey of Employers Regarding Job Skills, Labor Requirements — Yes	No	No Response	Total[a]	Follow-up of Former Students — Yes	No	No Response	Total[a]	Survey of Employers' Satisfaction with Former Students — Yes	No	No Response	Total[a]
							State C							
Deans/ Directors	HPS	3	67	33	0	100	100	0	0	100	100	0	0	100
	LPS	4	100	0	0	100	100	0	0	100	75	25	0	100
Teachers	HPS	58	35	64	2	101	52	47	2	101	35	62	3	100
	LPS	53	62	34	4	100	74	25	2	101	47	47	6	100
Counselors	HPS	18	33	67	0	100	39	61	0	100	11	89	0	100
	LPS	5	0	100	0	100	20	80	0	100	20	80	0	100
Job Placement Specialists	HPS	2	50	50	0	100	100	0	0	100	0	100	0	100
	LPS	1	0	100	0	100	0	100	0	100	0	100	0	100
Advisory Committee Members	HPS	30	37	53	10	100	48	45	7	100	32	58	10	100
	LPS	30	67	33	0	100	57	43	0	100	33	67	0	100
							State D							
Deans/ Directors	HPS	3	100	0	0	100	67	0	33	100	67	33	0	100
	LPS	1	100	0	0	100	100	0	0	100	100	0	0	100
Teachers	HPS	52	60	37	4	101	81	14	6	101	44	50	6	100
	LPS	29	59	31	10	100	69	24	7	100	48	45	7	100
Counselors	HPS	6	33	67	0	100	67	33	0	100	0	83	17	100
	LPS	8	38	63	0	101	75	25	0	100	13	88	0	101
Job Placement Specialists	HPS	1	0	100	0	100	100	0	0	100	0	100	0	100
	LPS	3	0	100	0	100	100	0	0	100	33	67	0	100
Advisory Council Members	HPS	39	28	64	8	100	46	49	5	100	26	69	5	100
	LPS	37	49	51	0	100	51	46	3	100	27	70	3	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 29

LENGTH OF SERVICE BY ADVISORY COMMITTEE MEMBERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Response						
		0-1 Year	2-3 Years	4-5 Years	6-9 Years	9+ Years	No Response	Totals[a]
				State A				
HPS	77	7	42	22	14	12	4	101
LPS	27	26	22	15	11	22	4	100
				State B				
HPS	12	8	8	25	33	0	25	99
LPS	55	15	60	15	4	5	2	101
				State C				
HPS	31	10	48	7	13	16	7	101
LPS	30	3	33	7	30	20	7	100
				State D				
HPS	39	8	36	15	13	13	15	100
LPS	37	8	16	22	16	27	11	100

[a] Total may not equal 100 percent due to rounding.

TABLE 30

FREQUENCY OF ADVISORY COMMITTEE
MEETINGS AS INDICATED BY COMMITTEE MEMBERS

Type of Site	Number of Respondents	Percent of Responses							
		Once a Month	4 times a year	Twice a year	Once a year	Never	Other	No Response	Total[a]
				State A					
HPS	77	7	25	21	27	1	17	4	102
LPS	27	0	33	30	26	0	4	7	100
				State B					
HPS	12	0	0	42	42	0	8	8	100
LPS	55	0	18	42	18	2	18	2	100
				State C					
HPS	31	16	3	36	36	3	7	0	101
LPS	30	0	17	40	37	0	3	3	100
				State D					
HPS	39	5	23	28	28	8	3	5	100
LPS	37	19	16	32	19	0	8	5	99

[a] Totals may not equal 100 percent due to rounding.

TABLE 31

EXTENT OF HELP PROVIDED BY ADVISORY COMMITTEE MEMBERS IN SPONSORING CAREER DAYS AS INDICATED BY ADVISORY COMMITTEE MEMBERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses						
		Very Much Help	Much Help	Some Help	Little Help	Very Little Help	No Response	Total[a]
				State A				
HPS	77	0	8	13	31	40	8	100
LPS	27	7	0	19	26	37	11	100
				State B				
HPS	12	0	0	17	42	42	0	101
LPS	55	2	15	20	11	47	6	101
				State C				
HPS	31	3	7	32	26	29	3	100
LPS	30	7	3	30	7	50	3	100
				State D				
HPS	39	0	33	39	8	8	13	101
LPS	37	0	15	26	13	28	18	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 32

EXTENT OF HELP PROVIDED BY ADVISORY COMMITTEE MEMBERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE IN PROVIDING OCCUPATIONAL INFORMATION

Type of Site	Number of Respondents	Percent of Responses						
		Very Much Help	Much Help	Some Help	Little Help	Very Little Help	No Response	Total[a]
				State A				
HPS	77	7	22	38	12	14	8	101
LPS	27	4	30	33	11	19	4	101
				State B				
HPS	12	0	33	50	8	8	0	99
LPS	55	9	18	47	9	9	7	99
				State C				
HPS	31	10	52	23	13	0	3	101
LPS	30	17	30	27	10	13	3	100
				State D				
HPS	39	0	33	39	8	8	13	101
LPS	37	22	16	27	19	8	8	100

[a]Totals may not equal 100 percent due to rounding.

TABLE 33

EXTENT OF HELP PROVIDED BY ADVISORY COMMITTEE MEMBERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE IN IDENTIFYING TASKS TO BE PERFORMED BY WORKERS

Type of Site	Number of Respondents	Percent of Responses						
		Very Much Help	Much Help	Some Help	Little Help	Very Little Help	No Response	Total[a]
				State A				
HPS	77	8	9	33	16	27	8	101
LPS	27	4	15	37	19	22	4	101
				State B				
HPS	12	0	25	58	17	0	0	100
LPS	55	7	18	40	16	13	6	100
				State C				
HPS	31	7	26	26	19	19	3	100
LPS	30	7	17	27	17	30	3	101
				State D				
HPS	39	3	26	33	10	18	10	100
LPS	37	16	14	30	8	22	11	101

[a] Totals may not equal 100 percent due to rounding.

TABLE 34

FREQUENCY WITH WHICH EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE INDICATED THEY WERE CONTACTED BY POSTSECONDARY INSTITUTIONS REGARDING JOB OPENINGS FOR STUDENTS

Type of Site	Number of Respondents	Percent of Employers							
		Once A Month	Four Times A Year	Twice A Year	Once A Year	Never	Other	No Response	Total[a]
				State A					
HPS	77	0	7	26	41	23	0	5	102
LPS	45	2	7	24	33	31	0	2	99
				State B					
HPS	55	0	7	6	22	60	0	6	101
LPS	67	1.0	10	19	18	40	0	2	99
				State C					
HPS	21	0	5	24	19	38	0	14	100
LPS	35	3	6	6	40	83	0	3	101
				State D					
HPS	24	0	0	13	50	33	0	4	100
LPS	25	0	12	24	36	24	0	4	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 35

FREQUENCY WITH WHICH THE POSTSECONDARY INSTITUTION SHOULD CONTACT EMPLOYERS ABOUT JOB OPENINGS AS INDICATED BY EMPLOYERS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses						
		Once A Month	Four Times A Year	Two Times A Year	Once A Year	Never	No Response	Total[a]
State A								
HPS	66	8	27	24	33	6	2	100
LPS	45	9	31	33	18	9	0	100
State B								
HPS	55	2	24	31	31	9	4	101
LPS	67	13	34	27	18	5	3	100
State C								
HPS	21	19	24	14	33	0	10	100
LPS	35	7	29	29	37	0	0	102
State D								
HPS	24	4	25	21	38	8	4	100
LPS	25	0	28	48	16	8	0	100

[a]Totals may not equal 100 percent due to rounding.

TABLE 36

POSTSECONDARY INSTITUTION STAFF MEMBER MOST LIKELY TO CONTACT EMPLOYERS ABOUT JOB OPENINGS AS INDICATED BY EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses: Dean/Director	VoEd Teacher	Guidance Vocational Counselor	Job Specialist	Other	No Response	Total[a]
				State A				
HPS	66	6	50	9	15	5	15	100
LPS	45	2	31	9	42	4	11	99
				State B				
HPS	55	4	27	9	33	6	23	102
LPS	67	6	21	10	42	3	18	100
				State C				
HPS	21	0	5	14	67	5	10	101
LPS	35	6	34	11	34	3	11	99
				State D				
HPS	24	8	38	8	25	4	17	100
LPS	25	8	8	8	72	4	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 37

POSTSECONDARY INSTITUTION STAFF MEMBER MOST LIKELY TO CONTACT EMPLOYERS ABOUT SKILL NEEDS AS INDICATED BY EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number Respondents	Percent of Responses						
		VoEd Director	VoEd Teacher	Guidance Counselor	Job Placement Specialist	Other	No Response	Total[a]
State A								
HPS	66	11	50	11	6	5	18	101
LPS	45	13	33	4	33	2	13	98
State B								
HPS	55	13	38	15	22	6	7	101
LPS	77	10	25	13	36	3	12	99
State C								
HPS	21	5	14	19	43	5	14	100
LPS	35	11	46	17	17	3	6	100
State D								
HPS	24	17	25	13	13	8	25	101
LPS	25	16	12	28	36	8	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 38

FREQUENCY OF PARTICIPATION
IN INDUSTRY-SCHOOL STAFF EXCHANGES AS INDICATED
BY EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses						
		Very Often	Often	Sometimes	Rarely	Never	No Response	Total[a]
				State A				
HPS	66	2	14	12	11	56	6	99
LPS	45	0	16	9	4	62	9	100
				State B				
HPS	55	2	2	7	6	73	11	101
LPS	67	0	6	6	13	66	9	100
				State C				
HPS	21	0	5	19	10	62	5	101
LPS	35	0	3	17	9	69	3	101
				State D				
HPS	24	0	0	13	21	54	13	101
LPS	25	0	0	12	8	72	8	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 39

FREQUENCY OF PARTICIPATION IN [illegible]ER DAYS AS INDICATED BY EMPLOYERS WHO RESPONDED TO [illegible]IL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses						
		Very Often	Often	Sometimes	Rarely	Never	No Response	Total[a]
				State A				
HPS	66	3	14	21	24	32	6	100
LPS	45	18	22	24	9	22	4	99
				State B				
HPS	55	2	11	13	9	58	7	100
LPS	67	9	13	21	9	43	5	100
				State C				
HPS	21	24	38	10	19	10	0	101
LPS	35	6	14	20	14	43	3	100
				State D				
HPS	24	0	21	25	4	46		100
LPS	25	4	32	36	8	20	0	100

[a] Total may not equal 100 percent due to rounding.

TABLE 40

PRESENCE OF AN AGREEMENT FOR COOPERATION BETWEEN UNION'S APPRENTICESHIP PROGRAM AND THE POSTSECONDARY INSTITUTION'S VOCATIONAL-TECHNICAL EDUCATION PROGRAM AS INDICATED BY EMPLOYERS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses				
		Agreement Exists	Agreement Does Not Exist	No Union Present	No Response	Total[a]
			State A			
HPS	66	8	26	61	6	101
LPS	45	7	16	62	16	101
			State B			
HPS	55	2	20	64	15	101
LPS	67	2	12	72	15	101
			State C			
HPS	21	5	33	38	24	100
LPS	45	7	16	62	16	101
			State D			
HPS	24	4	17	79	0	100
LPS	25	4	12	80	4	100

[a] Total may not equal 100 percent due to rounding.

TABLE 41

EMPLOYERS CONTACTED DURING PAST YEAR ABOUT JOB OPENINGS FOR STUDENTS AS INDICATED BY TEACHERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses												
		0-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-50	51-100	101-800	No Responses	Total[a]
State A														
HPS	66	51	13	5	7	1	1	1	1	2	1	1	16	101
LPS	58	52	17	3	7	3	3	2	2	0	0	2	7	98
State B														
HPS	31	61	13	10	0	7	3	0	0	0	0	0	7	101
LPS	153	56	12	3	3	1	3	1	1	3	0	3	13	99
State C														
HPS	58	52	17	3	7	3	3	2	2	0	0	2	7	98
LPS	53	55	17	6	0	2	6	0	2	0	8	0	2	98
State D														
HPS	52	67	3	8	4	0	4	2	0	2	0	0	10	100
LPS	29	72	10	3	0	0	0	0	0	0	3	0	10	98

[a] Totals may not equal 100 percent due to rounding.

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TABLE 42

ACTIVITIES TEACHERS ENGAGED IN TO UPGRADE THEIR SKILLS
AS INDICATED BY TEACHERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents		Percent of Responses: Hold 2nd Job In Industry	Work In Industry During Quarter or Semester Off	Participate In In-Service Business/Industry
			State A		
HPS	146	Yes	21	27	75
		No	52	45	11
		No Response	27	27	14
		Total	100	99	100
LPS	124	Yes	28	26	69
		No	43	42	18
		No Response	29	32	14
		Total	100	100	101
			State B		
HPS	31	Yes	16	36	52
		No	65	55	29
		No Response	19	10	19
		Total[a]	100	101	100
LPS	153	Yes	20	24	54
		No	52	49	25
		No Response	28	28	22
		Total[a]	100	101	101
			State C		
HPS	58	Yes	38	48	55
		No	41	29	21
		No Response	21	21	11
		Total[a]	100	99	100
LPS	53	Yes	26	42	70
		No	53	38	19
		No Response	21	21	11
		Total[a]	100	101	100
			State D		
HPS	52	Yes	21	27	44
		No	60	54	40
		No Response	19	19	15
		Total[a]	100	100	99
LPS	29	Yes	21	21	41
		No	55	48	21
		No Response	24	31	38
		Total[a]	100	100	100

[a] Total may not equal 100 percent due to rounding.

TABLE 43

PRIMARY RESPONSIBILITY FOR CURRICULUM ACTIVITIES AS INDICATED BY DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Activity	Type of Site	Number of Respondents	Percent of Responses: State Governing Agency	Advisory Committee	Dean/ Director	School Research/ Evaluation Unit	Teacher	Counselor	Other	No One	Don't Know	Total
Determing Specific Competency Students Should Acquire							State A					
	HPS	3	33	67	0	0	0	0	0	0	0	100
	LPS	1	0	100	0	0	0	0	0	0	0	100
							State B					
	HPS	2	0	0	50	0	50	0	0	0	0	100
	LPS	5	0	40	60	0	0	0	0	0	0	100
							State C					
	HPS	3	33	67	0	0	0	0	0	0	0	100
	LPS	4	0	75	0	0	25	0	0	0	0	100
							State D					
	HPS	3	0	67	33	0	0	0	0	0	0	100
	LPS	1	0	0	100	0	0	0	0	0	0	100
							State A					
Developing Vocational Technical-Education Curriculum	HPS	3	33	0	0	0	67	0	0	0	0	100
	LPS	1	0	100	0	0	0	0	0	0	0	100
							State B					
	HPS	2	0	100	0	0	0	0	0	0	0	100
	LPS	5	0	40	40	0	20	0	0	0	0	100
							State C					
	HPS	3	33	67	0	0	0	0	0	0	0	100
	LPS	4	0	50	25	0	25	0	0	0	0	100
							State D					
	HPS	3	0	100	0	0	0	0	0	0	0	100
	LPS	1	0	100	0	0	0	0	0	0	0	100

TABLE 43
(continued)
PRIMARY RESPONSIBILITY FOR CURRICULUM ACTIVITIES AS
INDICATED BY DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Activity	Type of Site	Number of Respondents	Percent of Responses: State Governing Agency	Advisory Committee	Dean/ Director	School Research/ Evaluation Unit	Teacher	Counselor	Other	No One	Don't Know	Total
Revising Vocational Technical-Education Curriculum							State A					
	HPS	3	0	0	33	0	67	0	0	0	0	100
	LPS	1	0	0	0	0	100	0	0	0	0	100
							State B					
	HPS	2	0	100	0	0	0	0	0	0	0	100
	LPS	5	0	0	20	0	40	20	0	20	0	100
							State C					
	HPS	3	0	100	0	0	0	0	0	0	0	100
	LPS	4	0	25	50	0	25	0	0	0	0	100
							State D					
	HPS	3	0	100	0	0	0	0	0	0	0	100
	LPS	1	0	0	0	0	0	100	0	0	0	100

TABLE 44

FREQUENCY OF CURRICULUM REVISION AS INDICATED
BY DEANS/DIRECTORS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses							
		Annually	Every Two Years	Every Three Years	Every Four Years	Every Five Years	Never	No Response	Total[a]
				State A					
HPS	3	67	33	0	0	0	0	0	100
LPS	1	100	0	0	0	0	0	0	100
				State B					
HPS	2	50	50	0	0	0	0	0	100
LPS	5	60	40	0	0	0	0	0	100
				State C					
HPS	3	33	0	0	33	33	0	0	99
LPS	4	25	25	0	25	25	0	0	100
				State D					
HPS	3	33	67	0	0	0	0	0	100
LPS	1	100	0	0	0	0	0	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 45

SKILLS TAUGHT AT THE POSTSECONDARY INSTITUTION AS INDICATED BY FORMER AND CURRENT STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Skill	Type of Site	Number of Respondents	Percent of Current Students Indicating "Yes"		Number of Respondents	Percent of Former Students Indicating "Yes"
				State A		
Training In Job Seeking Skills	HPS	132	47		125	46
	LPS	70	63		163	57
				State B		
	HPS	62	47		30	53
	LPS	147	44		59	42
				State C		
	HPS	24	21		49	45
	LPS	29	69		87	47
				State D		
	HPS	71	63		76	57
	LPS	33	58		46	48
				State A		
Training In Job Obtainment Skills	HPS	132	52		125	47
	LPS	70	59		163	53
				State B		
	HPS	62	39		30	47
	LPS	147	35		59	32
				State C		
	HPS	24	21		49	37
	LPS	29	59		87	36
				State D		
	HPS	71	58		76	41
	LPS	33	39		46	39

TABLE 46

METHODS USED TO TEACH VARIOUS JOB PLACEMENT-RELATED ACTIVITIES AS INDICATED BY TEACHERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Activity	Type of Site	Number of Respondents	Percent of Responses: Presentation by Staff	Presentation By Guest	Self Instructional Materials	Regular Class Instruction	No Instruction Provided	No Response	Total[a]
Writing Resumes					State A				
	HPS	146	32	7	10	31	12	10	102
	LPS	124	38	7	17	27	4	7	100
					State B				
	HPS	31	29	3	7	29	23	10	101
	LPS	153	21	5	8	27	26	14	101
					State C				
	HPS	58	14	7	14	22	29	14	100
	LPS	53	34	4	2	17	36	8	101
					State D				
	HPS	52	40	0	2	14	33	12	101
	LPS	29	55	0	0	28	0	17	100
					State A				
Locating Available Jobs	HPS	146	43	12	5	21	10	10	101
	LPS	124	34	10	12	28	9	7	100
					State B				
	HPS	31	42	7	3	26	19	3	100
	LPS	153	31	16	5	22	15	12	101
					State C				
	HPS	58	14	10	10	21	35	10	100
	LPS	53	26	15	8	32	13	6	100
					State D				
	HPS	52	40	12	2	17	23	6	100
	LPS	29	45	10	0	31	0	14	100

TABLE 46
(continued)
METHODS USED TO TEACH VARIOUS JOB PLACEMENT-RELATED
ACTIVITIES AS INDICATED BY TEACHERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Activity	Type of Site	Number of Respondents	Percent of Responses: Presentation by Staff	Presentation By Guest	Self Instructional Materials	Regular Class Instruction	No Instruction Provided	No Response	Total[a]
					State A				
Filling Out Job Application	HPS	146	30	8	9	32	12	9	100
	LPS	124	32	2	18	33	6	9	100
					State B				
	HPS	31	29	3	10	26	23	10	101
	LPS	153	21	3	9	26	27	14	100
					State C				
	HPS	58	22	9	5	22	33	9	100
	LPS	53	28	0	4	23	38	8	101
					State D				
	HPS	52	39	0	2	8	40	12	101
	LPS	29	52	3	3	14	3	24	99
					State A				
Setting Up Job Interview	HPS	146	34	10	6	23	19	10	102
	LPS	124	31	11	11	29	11	8	101
					State B				
	HPS	31	32	0	3	29	26	10	100
	LPS	153	31	8	6	19	23	14	101
					State C				
	HPS	58	16	3	2	21	41	17	100
	LPS	53	26	8	2	17	40	8	101
					State D				
	HPS	52	37	4	0	15	35	10	101
	LPS	29	52	7	0	17	7	17	100

TABLE 46

(continued)

METHODS USED TO TEACH VARIOUS JOB PLACEMENT-RELATED ACTIVITIES AS INDICATED BY TEACHERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Activity	Type of Site	Number of Respondents	Percent of Responses: Presentation by Staff	Presentation By Guest	Self Instructional Materials	Regular Class Instruction	No Instruction Provided	No Response	Total[a]
Instruction In Participating In An Interview					State A				
	HPS	146	23	8	3	25	27	14	100
	LPS	124	23	13	13	23	18	11	101
					State B				
	HPS	31	13	13	3	26	39	7	101
	LPS	153	19	11	5	22	28	16	101
					State C				
	HPS	58	16	3	2	21	41	17	100
	LPS	53	19	11	4	11	45	9	99
					State D				
	HPS	52	27	6	0	10	48	10	101
	LPS	29	24	0	3	21	28	24	100
Instruction In Obtaining Job Information					State A				
	HPS	146	31	16	3	30	10	10	100
	LPS	124	26	14	11	32	11	7	101
					State B				
	HPS	31	26	10	13	29	19	3	100
	LPS	153	30	16	4	25	13	12	100
					State C				
	HPS	58	21	22	2	29	19	7	100
	LPS	53	25	15	6	28	21	6	101
					State D				
	HPS	52	39	8	0	19	27	8	101
	LPS	29	48	3	3	28	3	14	99

[a] Totals may not equal 100 percent due to rounding.

TABLE 47

PERCENT OF TIME PER WEEK SPENT IN PROVIDING INSTRUCTION IN JOB OBTAINMENT SKILLS AS INDICATED BY POSTSECONDARY INSTITUTION PERSONNEL WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondent	Type of Site	N	Percent of Responses										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	No Response	Total[a]
State A														
Teachers	HPS	146	14	9	2	2	0	0	1	0	1	0	71	100
	LPS	124	27	6	2	1	5	0	0	2	0	0	59	102
Counselors	HPS	10	30	0	0	0	0	0	0	0	0	0	70	100
	LPS	6	33	0	0	0	17	0	0	0	0	0	50	100
Job Placement Specialists	HPS	5	100	0	0	0	0	0	0	0	0	0	0	100
	LPS	0	0	0	0	0	0	0	0	0	0	0	0	0
State B														
Teachers	HPS	31	36	3	0	0	0	0	0	0	0	0	61	100
	LPS	153	17	7	3	1	1	0	0	1	0	0	72	102
Counselors	HPS	1	0	0	0	0	0	0	0	0	0	0	100	100
	LPS	10	30	0	0	0	0	0	0	0	0	0	70	100
Job Placement Specialists	HPS	1	100	0	0	0	0	0	0	0	0	0	0	100
	LPS	5	20	40	0	0	0	0	0	0	0	0	40	100

TABLE 47

(continued)

PERCENT OF TIME PER WEEK SPENT IN PROVIDING INSTRUCTION IN JOB OBTAINMENT SKILLS AS INDICATED BY POSTSECONDARY INSTITUTION PERSONNEL WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondent	Type of Site	N	Percent of Responses											
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	No Response	Total[a]
State C														
Teachers	HPS	58	21	10	2	0	2	0	0	0	0	0	66	100
	LPS	53	23	4	2	0	2	0	0	0	0	0	68	99
Counselors	HPS	18	6	0	0	0	0	0	0	0	0	0	94	100
	LPS	5	0	0	0	0	0	0	0	0	0	0	0	100
Job Placement Specialists	HPS	2	100	0	0	0	0	0	0	0	0	0	0	100
	LPS	1	0	0	0	0	0	0	0	0	0	0	0	100
State D														
Teachers	HPS	52	23	2	4	0	0	0	0	0	0	0	71	100
	LPS	29	17	0	3	0	0	0	0	0	0	0	79	99
Counselors	HPS	6	33	0	0	0	0	0	0	0	0	0	67	100
	LPS	8	50	0	13	0	0	0	0	0	0	0	38	101
Job Placement Specialists	HPS	1	100	0	0	0	0	0	0	0	0	0	0	100
	LPS	67	0	0	0	0	0	0	0	0	0	0	33	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 48

FREQUENCY WITH WHICH EMPLOYERS SERVE AS GUEST LECTURERS FOR THE POSTSECONDARY INSTITUTION VOCATIONAL-TECHNICAL EDUCATION PROGRAMS AS INDICATED BY EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses						
		Very Often	Often	Sometimes	Rarely	Never	No Response	Total[a]
				State A				
HPS	66	0	11	21	21	41	6	100
LPS	45	0	11	22	18	40	9	100
				State B				
HPS	55	2	4	16	7	64	7	100
LPS	67	5	5	15	13	55	8	101
				State C				
HPS	21	10	10	29	14	33	5	101
LPS	35	3	0	26	14	54	3	100
				State D				
HPS	24	13	13	13	13	42	8	102
LPS	25	4	4	28	20	44	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 49

EXTENT OF PARTICIPATION IN VOCATIONAL-TECHNICAL EDUCATION COOPERATIVE PROGRAMS AS INDICATED BY EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses						
		Very Often	Often	Sometimes	Rarely	Never	No Response	Total[a]
				State A				
HPS	66	0	14	30	11	30	15	100
LPS	45	11	22	18	4	36	9	100
				State B				
HPS	55	4	6	22	9	49	11	101
LPS	67	6	15	15	9	46	9	100
				State C				
HPS	21	5	19	10	5	62	0	101
LPS	35	6	9	20	17	46	3	101
				State D				
HPS	24	13	21	17	17	25	8	101
LPS	25	8	12	36	20	20	4	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 50

FREQUENCY WITH WHICH EMPLOYERS ASSIST
VOCATIONAL-TECHNICAL EDUCATION STUDENT ORGANIZATIONS
AS INDICATED BY EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses						
		Very Often	Often	Sometimes	Rarely	Never	No Response	Total[a]
				State A				
HPS	66	2	3	15	15	59	6	100
LPS	45	0	7	22	7	56	9	101
				State B				
HPS	55	2	4	13	7	67	7	100
LPS	67	2	6	9	12	64	8	101
				State C				
HPS	21	0	5	0	19	62	5	101
LPS	35	6	3	6	11	69	6	101
				State D				
HPS	24	0	8	4	21	58	8	99
LPS	25	0	0	12	12	72	4	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 51

PERCENT OF TIME SPENT PER WEEK IN PROVIDING COUNSELING ABOUT CAREERS AS INDICATED BY INSTITUTION PERSONNEL WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Respondents	Type of Site	N	Percent of Responses by Hours per Week											
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	No Response	Total[a]
								State A						
Teachers	HPS	146	23	4	0	0	1	0	0	1	0	0	69	98
	LPS	124	28	10	2	1	2	0	0	0	0	0	56	99
Counselors	HPS	10	10	0	10	0	10	10	0	0	0	0	60	100
	LPS	6	17	0	0	17	0	0	0	0	0	0	67	101
Job Placement Specialists	HPS	5	60	0	20	0	0	0	0	0	0	0	20	100
	LPS	0	0	0	0	0	0	0	0	0	0	0	0	0
								State B						
Teachers	HPS	31	32	7	10	3	0	3	0	0	0	0	45	100
	LPS	153	18	9	3	3	2	0	0	0	0	0	65	100
Counselors	HPS	1	0	0	0	0	0	0	0	0	0	0	100	100
	LPS	10	30	0	0	0	0	0	0	0	0	0	70	100
Job Placement Specialists	HPS	1	0	0	0	0	100	0	0	0	0	0	0	100
	LPS	5	60	0	20	0	0	0	0	0	0	0	20	100
								State C						
Teachers	HPS	58	28	5	2	0	0	3	0	2	0	0	59	99
	LPS	53	19	13	2	2	2	2	0	0	0	0	60	100
Counselors	HPS	18	0	0	0	6	0	0	0	0	0	0	94	100
	LPS	5	0	0	0	0	0	0	0	0	0	0	100	100
Job Placement Specialists	HPS	2	100	0	0	0	0	0	0	0	0	0	0	100
	LPS	1	0	0	0	0	0	0	0	0	0	0	0	100

TABLE 51
(continued)
PERCENT OF TIME SPENT PER WEEK IN PROVIDING COUNSELING ABOUT CAREERS AS INDICATED BY INSTITUTION PERSONNEL WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Respondents	Type of Site	N	Percent of Responses by Hours per Week											
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	No Response	Total[a]
								State D						
Teachers	HPS	52	11	10	6	0	4	0	0	2	0	0	67	100
	LPS	29	24	10	3	0	0	0	0	0	0	0	62	99
Counselors	HPS	6	0	0	0	17	0	0	0	0	0	0	83	100
	LPS	8	13	25	0	0	0	0	13	0	13	0	38	102
Job Placement Specialists	HPS	1	100	0	0	0	0	0	0	0	0	0	0	100
	LPS	3	33	0	0	0	0	0	0	0	0	0	67	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 52

COUNSELOR KNOWLEDGE OF VOCATIONAL-TECHNICAL EDUCATION
PROGRAMS AS INDICATED BY COUNSELORS WHO RESPONDED TO MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses					
		Extremely Knowledgeable	Very Knowledgeable	Somewhat Knowledgeable	A Little Knowledgeable	Not at all Knowledgeable	Total
				State A			
HPS	10	50	50	0	0	0	100
LPS	6	50	50	0	0	0	100
				State B			
HPS	1	100	0	0	0	0	100
LPS	10	40	50	10	0	0	100
				State C			
HPS	18	11	78	11	0	0	100
LPS	5	40	40	20	0	0	100
				State D			
HPS	6	17	83	0	0	0	100
LPS	8	50	50	0	0	0	100

TABLE 53

LOCUS OF PRIMARY RESPONSIBILITY FOR RECRUITING STUDENTS AS INDICATED BY DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses						
		VoTech Education Advisory Committee	Dean/ Director	VdTech Teachers	Guidance/ Vocational Counselors	Other	No One	Total[a]
				State A				
High Placement	3	0	33	0	67	0	0	100
Low Placement	1	0	0	0	100	0	0	100
				State B				
High Placement	2	50	0	0	50	0	0	100
Low Placement	5	0	20	40	20	0	20	100
				State C				
High Placement	3	100	0	0	0	0	0	100
Low Placement	4	75	0	0	25	0	0	100
				State D				
High Placement	3	33	0	33	0	33	0	99
Low Placement	1	0	0	0	100	0	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 54

LOCUS OF PRIMARY RESPONSIBILITY FOR SELECTING STUDENTS AS INDICATED BY DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses: VoTech Education Advisory Committee	Dean/ Director	School Research Evaluation	VoTech Teachers	Guidance/ Vocational Counselors	Other	No One	Total[a]
				State A					
High Placement	3	0	33	0	0	33	0	33	99
Low Placement	1	0	0	0	0	100	0	0	100
				State B					
High Placement	2	0	0	0	50	50	0	0	100
Low Placement	5	0	0	20	20	40	0	20	100
				State C					
High Placement	3	0	33	0	33	33	0	0	99
Low Placement	4	25	0	0	0	25	0	50	100
				State D					
High Placement	3	0	0	0	33	0	33	33	99
Low Placement	1	0	100	0	0	0	0	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 55

MOST IMPORTANT CONSIDERATION GOVERNING ADMISSION TO A VOCATIONAL-TECHNICAL EDUCATION PROGRAM AS INDICATED BY TEACHERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Minimum Grade Point Average	Result of Standardized Test	Student's Career Objective	Anyone Who Wishes to Enroll	Other Considerations	No Response	Total[a]
				State A				
HPS	146	4	1	34	53	4	3	99
LPS	124	0	6	33	58	0	3	100
				State B				
HPS	31	0	23	36	42	0	0	101
LPS	153	15	7	26	43	7	3	101
				State C				
HPS	58	5	7	26	52	5	5	100
LPS	53	15	6	21	49	2	8	101
				State D				
HPS	52	8	12	29	33	15	4	99
LPS	29	17	3	14	52	10	3	99

[a] Totals may not equal 100 percent due to rounding.

TABLE 56

COUNSELING SERVICES AVAILABLE AT POSTSECONDARY INSTITUTIONS AS INDICATED BY COUNSELORS AND CURRENT/FORMER STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Services Available	Type of Site	Guidance Counselors[a] Yes	No	Total[b]	Former Students[a] Yes	No	Total[b]	Current Students[a] Yes	No	Total[b]
Psychological Counselling					STATE A					
	HPS	40	60	100	13	87	100	28	72	100
	LPS	33	67	100	23	77	100	27	73	100
					STATE B					
	HPS	100	0	100	30	70	100	31	69	100
	LPS	50	50	100	25	75	100	25	76	101
					STATE C					
	HPS	67	33	100	47	53	100	50	50	100
	LPS	80	20	100	31	69	100	62	38	100
					STATE D					
	HPS	83	17	100	43	57	100	63	37	100
	LPS	50	50	100	37	63	100	52	49	100
Counseling on Course Selection					STATE A					
	HPS	100	0	100	60	40	100	72	28	100
	LPS	100	0	100	74	26	100	67	33	100
					STATE B					
	HPS	100	0	100	90	10	100	87	13	100
	LPS	100	0	100	88	12	100	92	8	100
					STATE C					
	HPS	100	0	100	88	13	101	92	8	100
	LPS	100	0	100	77	23	100	100	0	100
					STATE D					
	HPS	100	0	100	91	9	100	94	7	100
	LPS	88	13	101	96	4	100	64	36	100
Counselling on Future Educational Opportunities					STATE A					
	HPS	0	100	100	45	55	100	58	42	100
	LPS	50	50	100	63	37	100	64	36	100
					STATE B					
	HPS	100	0	100	77	23	100	66	34	100
	LPS	100	0	100	66	34	100	76	24	100
					STATE C					
	HPS	94	6	100	82	18	100	75	25	100
	LPS	100	0	100	72	28	100	93	7	100
					STATE D					
	HPS	100	0	100	21	79	100	86	14	100
	LPS	100	0	100	89	11	100	76	24	100

TABLE 56
(continued).
COUNSELING SERVICES AVAILABLE AT POSTSECONDARY INSTITUTIONS AS INDICATED BY COUNSELORS AND CURRENT/FORMER STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Services Available	Type of Site	Guidance Counselors[a] Yes	No	Total[b]	Former Students[a] Yes	No	Total[b]	Current Students[a] Yes	No	Total[b]
Counseling on Career Possibilities					STATE A					
	HPS	100	0	100	63	37	100	70	30	100
	LPS	100	0	100	77	23	100	80	20	100
					STATE B					
	HPS	0	100	100	77	23	100	68	32	100
	LPS	100	0	100	71	29	100	74	27	101
					STATE C					
	HPS	89	11	100	74	27	101	75	25	100
	LPS	100	0	100	70	30	100	100	0	100
					STATE D					
	HPS	100	0	100	83	17	100	85	16	101
	LPS	100	0	100	85	15	100	77	33	100
Counseling on Career Selection					STATE A					
	HPS	100	0	100	46	54	100	55	46	101
	LPS	100	0	100	80	20	100	77	33	100
					STATE B					
	HPS	100	0	100	77	23	100	67	33	100
	LPS	100	0	100	71	29	100	70	30	100
					STATE C					
	HPS	89	11	100	63	37	100	67	33	100
	LPS	100	0	100	60	40	100	93	7	100
					STATE D					
	HPS	100	0	100	68	32	100	83	17	100
	LPS	100	0	100	80	20	100	73	27	100
Providing Student Recommendation to Employers					STATE A					
	HPS	60	40	100	46	54	100	61	39	100
	LPS	50	50	100	59	41	100	54	46	100
					STATE B					
	HPS	100	0	100	50	50	100	48	52	100
	LPS	100	0	100	42	58	100	45	55	100
					STATE C					
	HPS	56	44	100	63	37	100	67	33	100
	LPS	80	20	100	39	61	100	38	62	100
					STATE D					
	HPS	50	50	100	45	55	100	66	34	100
	LPS	33	67	100	4	96	100	4	96	100

TABLE 56
(continued)
COUNSELING SERVICES AVAILABLE AT POSTSECONDARY INSTITUTIONS AS INDICATED BY COUNSELORS AND CURRENT/FORMER STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Services Available	Type of Site	Guidance Counselors[a] Yes	No	Total[b]	Former Students[a] Yes	No	Total[b]	Current Students[a] Yes	No	Total[b]
Other										
					STATE A					
	HPS	60	40	100	89	11	100	10	90	100
	LPS	33	67	100	4	96	100	4	96	100
					STATE B					
	HPS	100	0	100	0	100	100	7	94	101
	LPS	100	0	100	0	100	100	100	0	100
					STATE C					
	HPS	28	72	100	6	94	100	0	100	100
	LPS	20	80	100	8	92	100	0	100	100
					STATE D					
	HPS	33	67	100	5	95	100	9	92	101
	LPS	63	38	100	61	39	100	55	46	101

[a]State A:

High Placement Sites

Counselors, N = 10
Former Students, N = 125
Current Students, N = 132

Low Placement Sites

Counselors, N = 6
Former Students, N = 163
Current Students, N = 70

State B:

High Placement Sites

Counselors, N = 10
Former Students, N = 147
Current Students, N = 59

Low Placement Sites

Counselors, N = 1
Former Students, N = 62
Current Students, N = 30

State C:

High Placement Sites

Counselors, N = 18
Former Students, N = 49
Current Students, N = 24

Low Placement Sites

Counselors, N = 5
Former Students, N = 87
Current Students, N = 29

State D:

High Placement Sites

Counselors, N = 6
Former Students, N = 76
Current Students, N = 71

Low Placement Sites

Counselors, N = 8
Former Students, N =46
Current Students, N = 33

[b]Totals may not equal 100 percent due to rounding.

TABLE 57

CONDITIONS UNDER WHICH STUDENTS ARE REQUIRED TO SEEK COUNSELING AS INDICATED BY COUNSELORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Conditions	Type of Site	Number of Respondents	Percent of Responses Yes	No	Total[a]
			STATE A		
Before Enrolling In Vocational Technical Education Program	HPS	10	100	0	100
	LPS	6	100	0	100
			STATE B		
	HPS	1	0	100	100
	LPS	10	50	50	100
			STATE C		
	HPS	18	28	72	100
	LPS	5	40	60	100
			STATE D		
	HPS	6	33	67	100
	LPS	8	38	63	101
When Planning To Transfer From One Program Study To Another			STATE A		
	HPS	10	90	10	100
	LPS	6	100	0	100
			STATE B		
	HPS	1	0	100	100
	LPS	10	50	50	100
			STATE C		
	HPS	18	22	78	100
	LPS	5	0	100	100
			STATE D		
	HPS	6	83	17	100
	LPS	8	88	13	101

TABLE 57
(continued)
CONDITIONS UNDER WHICH STUDENTS ARE
REQUIRED TO SEEK COUNSELING AS INDICATED BY
COUNSELORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Conditions	Type of Site	Number of Respondents	Percent of Responses		
			Yes	No	Total[a]
				STATE A	
When Planning To Transfer To A Different School	HPS	10	90	10	100
	LPS	6	33	67	100
				STATE B	
	HPS	1	0	100	100
	LPS	10	40	60	100
				STATE C	
	HPS	18	22	78	100
	LPS	5	20	80	100
				STATE D	
	HPS	6	33	67	100
	LPS	8	50	50	100
				STATE A	
Before Dropping Out	HPS	10	90	10	100
	LPS	6	67	33	100
				STATE B	
	HPS	1	0	100	100
	LPS	10	50	50	100
				STATE C	
	HPS	18	17	83	100
	LPS	5	40	60	100
				STATE D	
	HPS	6	100	0	100
	LPS	8	25	75	100

TABLE 57
(continued)
CONDITIONS UNDER WHICH STUDENTS ARE
REQUIRED TO SEEK COUNSELING AS INDICATED BY
COUNSELORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Conditions	Type of Site	Number of Respondents	Percent of Responses		
			Yes	No	Total[a]
			STATE A		
When Leaving The VoTech Education Program	HPS	10	50	50	100
	LPS	6	67	33	100
			STATE B		
	HPS	1	0	100	100
	LPS	10	83	17	100
			STATE C		
	HPS	18	0	100	100
	LPS	5	0	100	100
			STATE D		
	HPS	6	17	83	100
	LPS	8	25	75	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 58

TYPES OF COUNSELING SERVICES RECEIVED BY STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Service	Type of Site	Number of Respondents and Percent of Responses: Current Students N	Yes	No	Total[a]	Former Students N	Yes	No	Total[a]
				STATE A					
Psychological Counseling	HPS	132	2	98	100	125	0	100	100
	LPS	70	3	97	100	163	1	99	100
				STATE B					
	HPS	62	5	95	100	30	0	100	100
	LPS	147	0	100	100	59	0	100	100
				STATE C					
	HPS	24	0	100	100	49	4	96	100
	LPS	29	7	93	100	87	0	100	100
				STATE D					
	HPS	71	6	94	100	76	4	96	100
	LPS	33	19	81	100	163	22	79	101
Counseling On Course Selection				STATE A					
	HPS	132	23	77	100	125	20	80	100
	LPS	70	19	81	100	163	22	79	101
				STATE B					
	HPS	62	58	42	100	30	63	37	100
	LPS	147	0	100	100	59	0	100	100
				STATE C					
	HPS	24	42	58	100	49	59	41	100
	LPS	29	69	31	100	87	46	54	100
				STATE D					
	HPS	71	67	32	99	76	63	37	100
	LPS	33	73	27	100	46	65	35	100

TABLE 58
(continued)
TYPES OF COUNSELING SERVICES RECEIVED BY
STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Service	Type of Site	Number of Respondents and Percent of Responses: Current Students N	Yes	No	Total[a]	Former Students N	Yes	No	Total[a]
Counseling on Career selection				STATE A					
	HPS	132	13	87	100	123	15	85	100
	LPS	70	24	76	100	163	21	79	100
				STATE B					
	HPS	62	0	100	100	30	0	100	100
	LPS	147	0	100	100	59	0	100	100
				STATE C					
	HPS	24	17	83	100	49	6	94	100
	LPS	29	21	79	100	46	22	78	100
				STATE D					
	HPS	71	23	98	101	76	21	79	100
	LPS	33	21	79	100	46	22	78	100
Counseling on Future Education Opportunities				STATE A					
	HPS	132	12	88	100	125	10	90	100
	LPS	70	21	79	100	163	17	83	100
				STATE B					
	HPS	62	27	73	100	30	23	77	100
	LPS	147	0	100	100	59	0	100	100
				STATE C					
	HPS	24	25	75	100	49	20	80	100
	LPS	29	35	66	101	87	23	77	100
				STATE D					
	HPS	71	4	59	100	76	41	59	100
	LPS	33	36	64	100	46	50	50	100

TABLE 58
(continued)
TYPES OF COUNSELING SERVICES RECEIVED BY
STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Service	Type of Site	Number of Respondents and Percent of Responses							
		Current Students				Former Students			
		N	Yes	No	Total[a]	N	Yes	No	Total[a]
Counseling on Career Possibilities				STATE A					
	HPS	132	27	73	100	125	17	83	100
	LPS	70	29	71	100	163	25	76	100
				STATE B					
	HPS	62	23	77	100	30	13	87	100
	LPS	147	0	100	100	59	0	100	100
				STATE C					
	HPS	24	17	83	100	49	10	90	100
	LPS	29	35	66	101	87	24	76	100
				STATE D					
	HPS	71	47	54	101	76	33	67	100
	LPS	33	49	52	101	46	30	70	100
Recommendation for Student to Employer				STATE A					
	HPS	132	18	82	100	125	21	79	100
	LPS	70	20	80	100	163	0	100	100
				STATE B					
	HPS	62	19	81	100	30	7	93	100
	LPS	147	0	100	100	59	0	100	100
				STATE C					
	HPS	24	13	88	101	49	12	88	100
	LPS	29	7	93	100	87	8	92	100
				STATE D					
	HPS	71	42	58	100	76	21	79	100
	LPS	33	21	79	100	46	24	76	100

TABLE 58
(continued)
TYPES OF COUNSELING SERVICES RECEIVED BY
STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Service	Type of Site	Number of Respondents and Percent of Responses							
		Current Students				Former Students			
		N	Yes	No	Total[a]	N	Yes	No	Total[a]
				STATE A					
Obtained Other Counseling Service	HPS	132	8	93	101	125	7	93	100
	LPS	70	9	91	100	163	3	98	101
				STATE B					
	HPS	62	5	95	100	30	0	100	100
	LPS	147	0	100	100	59	0	100	100
				STATE C					
	HPS	24	4	96	100	49	0	100	100
	LPS	29	3	97	100	87	3	97	100
				STATE D					
	HPS	71	6	94	100	76	4	96	100
	LPS	33	9	91	100	46	7	94	101

[a] Total may not total 100 percent due to rounding.

TABLE 59

INDIVUDUALS WORKING FULL-TIME IN JOB PLACEMENT AS INDICATED BY JOB PLACEMENT SPECIALISTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses					
		None	One Person	Two Persons	Three Persons	No Response	Total
				State A			
HPS	5	0	100	0	0	0	100
LPS	0	0	0	0	0	0	0
				State B			
HPS	1	0	0	0	100	0	100
LPS	5	20	0	60	0	20	100
				State C			
HPS	2	0	0	50	50	0	100
LPS	1	0	0	0	0	100	100
				State D			
HPS	1	0	100	0	0	0	100
LPS	3	0	67	0	0	33	100

TABLE 60

TYPE OF SUPPORT FOR JOB PLACEMENT ACTIVITIES AS INDICATED BY TEACHERS AND JOB PLACEMENT SPECIALISTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Job Placement Activity	Type of Respondents	Type of Site	Number of Respondents	Percent of Respondents			
				Yes	No	No Response	Total[a]
			State A				
Secretarial Assistance	Teachers	HPS	146	53	38	10	101
		LPS	124	40	54	6	100
	Job Placement Specialists	HPS	5	80	20	0	100
		LPS	0	0	0	0	0
			State B				
	Teachers	HPS	31	39	61	0	100
		LPS	153	36	55	9	100
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	5	80	20	0	100
			State C				
	Teachers	HPS	58	26	72	2	100
		LPS	53	47	47	6	100
	Job Placement Specialists	HPS	2	100	0	0	100
		LPS	1	100	0	0	100
			State D				
	Teachers	HPS	52	42	44	14	100
		LPS	29	52	41	7	100
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	3	100	0	0	100

TABLE 60

(continued)

TYPE OF SUPPORT FOR JOB PLACEMENT ACTIVITIES AS INDICATED BY TEACHERS AND JOB PLACEMENT SPECIALISTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Job Placement Activity	Type of Respondents	Type of Site	Number of Respondents	Percent of Respondents			
				Yes	No	No Response	Total[a]
				State A			
Mileage Reimbursement for Automobile Use	Teachers	HPS	146	51	36	13	100
		LPS	124	36	56	8	100
	Job Placement Specialists	HPS	5	60	40	0	100
		LPS	0	0	0	0	0
				State B			
	Teachers	HPS	31	32	68	0	100
		LPS	153	39	50	11	100
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	5	80	20	0	100
				State C			
	Teachers	HPS	58	24	74	2	100
		LPS	53	34	58	8	101
	Job Placement Specialists	HPS	2	100	0	0	100
		LPS	1	100	0	0	100
				State D			
	Teachers	HPS	52	39	50	12	100
		LPS	29	31	59	10	100
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	3	100	0	0	100

TABLE 60

(continued)

TYPE OF SUPPORT FOR JOB PLACEMENT ACTIVITIES AS INDICATED BY TEACHERS AND JOB PLACEMENT SPECIALISTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Job Placement Activity	Type of Respondents	Type of Site	Number of Respondents	Percent of Respondents			
				Yes	No	No Response	Total[a]
Telephone Use				State A			
	Teachers	HPS	146	86	5	9	100
		LPS	124	83	10	7	100
	Job Placement Specialists	HPS	5	100	0	0	100
		LPS	0	0	0	0	0
				State B			
	Teachers	HPS	31	81	19	0	100
		LPS	153	77	14	9	100
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	5	100	0	0	100
				State C			
	Teachers	HPS	58	81	17	2	100
		LPS	53	83	11	6	100
	Job Placement Specialists	HPS	2	100	0	0	100
		LPS	1	100	0	0	100
				State D			
	Teachers	HPS	52	73	15	12	100
		LPS	29	90	7	3	100
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	3	100	0	0	100

TABLE 60

(continued)

TYPE OF SUPPORT FOR JOB PLACEMENT ACTIVITIES AS INDICATED BY TEACHERS AND JOB PLACEMENT SPECIALISTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Job Placement Activity	Type of Respondents	Type of Site	Number of Respondents	Percent of Respondents			
				Yes	No	No Response	Total[a]
Office Suppli-				State A			
	Teachers	HPS	146	34	6	10	100
		LPS	124	83	10	7	100
	Job Placement Specialists	HPS	5	100	0	0	100
		LPS	0	0	0	0	0
				State B			
	Teachers	HPS	31	71	29	0	100
		LPS	153	71	19	10	100
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	5	100	0	0	100
				State C			
	Teachers	HPS	58	72	22	5	99
		LPS	53	83	11	6	100
	Job Placement Specialists	HPS	2	100	0	0	100
		LPS	1	100	0	0	100
				State D			
	Teachers	HPS	52	77	12	12	101
		LPS	29	86	10	3	99
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	3	100	0	0	100

TABLE 60

(continued)

TYPE OF SUPPORT FOR JOB PLACEMENT ACTIVITIES AS INDICATED BY TEACHERS AND JOB PLACEMENT SPECIALISTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Job Placement Activity	Type of Respondents	Type of Site	Number of Respondents	Percent of Respondents			
				Yes	No	No Response	Total[a]
Printing/ Duplicating				State A			
	Teachers	HPS	146	82	8	10	100
		LPS	124	84	10	6	100
	Job Placement Specialists	HPS	5	100	0	0	100
		LPS	0	0	0	0	0
				State B			
	Teachers	HPS	31	68	32	0	100
		LPS	153	70	20	11	101
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	5	100	0	0	100
				State C			
	Teachers	HPS	58	72	21	7	100
		LPS	53	81	13	6	100
	Job Placement Specialists	HPS	2	100	0	0	100
		LPS	1	100	0	0	100
				State D			
	Teachers	HPS	52	77	10	14	101
		LPS	29	79	14	7	100
	Job Placement Specialists	HPS	1	0	0	100	100
		LPS	3	100	0	0	100

TABLE 60

(continued)

TYPE OF SUPPORT FOR JOB PLACEMENT ACTIVITIES AS INDICATED BY TEACHERS AND JOB PLACEMENT SPECIALISTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Job Placement Activity	Type of Respondents	Type of Site	Number of Respondents	Percent of Respondents			
				Yes	No	No Response	Total[a]
Funds for Information Collection Regarding Job Openings				State A			
	Teachers	HPS	146	29	57	14	100
		LPS	124	26	65	10	101
	Job Placement Specialists	HPS	5	40	40	20	100
		LPS	0	0	0	0	0
				State B			
	Teachers	HPS	31	13	87	0	100
		LPS	153	14	71	16	101
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	5	40	60	0	100
				State C			
	Teachers	HPS	58	10	86	3	99
		LPS	53	17	76	8	101
	Job Placement Specialists	HPS	2	100	0	0	100
		LPS	1	0	0	100	100
				State D			
	Teachers	HPS	52	19	62	19	100
		LPS	29	38	55	7	100
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	3	67	0	33	100

Table 60
(continued)
TYPE OF SUPPORT FOR JOB PLACEMENT ACTIVITIES AS INDICATED BY TEACHERS AND JOB PLACEMENT SPECIALISTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Job Placement Activity	Type of Respondents	Type of Site	Number of Respondents	Percent of Respondents			
				Yes	No	No Response	Total[a]
Postage				State A			
	Teachers	HPS	146	80	12	9	101
		LPS	124	82	12	6	100
	Job Placement Specialists	HPS	5	100	0	0	100
		LPS	0	0	0	0	0
				State B			
	Teachers	HPS	31	71	29	0	100
		LPS	153	63	24	12	99
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	5	100	0	0	100
				State C			
	Teachers	HPS	58	55	41	3	99
		LPS	53	77	17	6	100
	Job Placement Specialists	HPS	2	100	0	0	100
		LPS	1	100	0	0	100
				State D			
	Teachers	HPS	52	75	15	10	100
		LPS	29	76	17	7	100
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	3	100	0	0	100

TABLE 60
(continued)
TYPE OF SUPPORT FOR JOB PLACEMENT ACTIVITIES AS INDICATED BY TEACHERS AND JOB PLACEMENT SPECIALISTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Job Placement Activity	Type of Respondents	Type of Site	Number of Respondents	Percent of Respondents			
				Yes	No	No Response	Total[a]
Release Time				State A			
	Teachers	HPS	146	40	47	13	100
		LPS	124	30	63	7	100
	Job Placement Specialists	HPS	5	0	0	100	100
		LPS	0	0	0	0	0
				State B			
	Teachers	HPS	31	13	81	7	101
		LPS	153	24	63	13	100
	Job Placement Specialists	HPS	1	0	0	100	100
		LPS	5	0	0	100	100
				State C			
	Teachers	HPS	58	14	81	5	100
		LPS	53	11	81	8	100
	Job Placement Specialists	HPS	2	0	0	100	100
		LPS	1	0	0	100	100
				State D			
	Teachers	HPS	52	25	62	14	101
		LPS	29	21	69	10	100
	Job Placement Specialists	HPS	1	0	0	100	100
		LPS	3	0	0	100	100

TABLE 60

(continued)

TYPE OF SUPPORT FOR JOB PLACEMENT ACTIVITIES AS INDICATED BY TEACHERS AND JOB PLACEMENT SPECIALISTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Job Placement Activity	Type of Respondents	Type of Site	Number of Respondents	Percent of Respondents			
				Yes	No	No Response	Total[a]
Inservice Training				State A			
	Teachers	HPS	146	12	46	42	100
		LPS	124	9	65	26	100
	Job Placement Specialists	HPS	5	20	40	40	100
		LPS	0	0	0	0	0
				State B			
	Teachers	HPS	31	7	65	29	101
		LPS	153	7	62	31	100
	Job Placement Specialists	HPS	1	0	100	0	100
		LPS	5	40	40	20	100
				State C			
	Teachers	HPS	58	14	64	22	100
		LPS	53	15	68	17	100
	Job Placement Specialists	HPS	2	50	0	50	100
		LPS	1	100	0	0	100
				State D			
	Teachers	HPS	52	14	54	33	101
		LPS	29	17	45	38	100
	Job Placement Specialists	HPS	1	0	100	0	100
		LPS	3	33	67	0	100

TABLE 60

(continued)

TYPE OF SUPPORT FOR JOB PLACEMENT ACTIVITIES AS INDICATED BY TEACHERS AND JOB PLACEMENT SPECIALISTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Job Placement Activity	Type of Respondents	Type of Site	Number of Respondents	Percent of Respondents			
				Yes	No	No Response	Total[a]
Other				State A			
	Teachers	HPS	146	1	12	87	100
		LPS	124	2	20	77	99
	Job Placement Specialists	HPS	5	20	20	60	100
		LPS	0	0	0	0	0
				State B			
	Teachers	HPS	31	0	29	71	100
		LPS	153	5	16	80	101
	Job Placement Specialists	HPS	1	0	0	100	100
		LPS	5	0	20	80	100
				State C			
	Teachers	HPS	58	5	16	79	100
		LPS	53	2	23	76	101
	Job Placement Specialists	HPS	2	50	0	50	100
		LPS	1	100	0	0	100
				State D			
	Teachers	HPS	52	6	23	71	100
		LPS	29	3	0	97	100
	Job Placement Specialists	HPS	1	100	0	0	100
		LPS	3	0	100	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 61

RANK ORDER OF SOURCES THAT ARE "VERY MUCH HELP" FOR VOCATIONAL-TECHNICAL EDUCATION STUDENTS IN PROVIDING INFORMATION ABOUT JOB OPENINGS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE

Sources	Type of Site	School Personnel[a]	Former and Current Students
		State A	
Teacher	HPS	1	1
	LPS	1	1
Cooperative Education Coordinator	HPS	5	5
	LPS	5	9
Guidance/ Vocational Counselor	HPS	5	9
	LPS	8	8
Job Placement Service	HPS	2	3
	LPS	2	5
Parents	HPS	9	6
	LPS	10	4
Relatives Other Than Parents	HPS	10	7
	LPS	10	7
Friends	HPS	8	4
	LPS	7	4
Former Vocational-Technical Students	HPS	4	8
	LPS	2	7
Newspapers	HPS	6	2
	LPS	3	2
TV and Radio	HPS	10	11
	LPS	10	8
Public Employment Agencies	HPS	3	3
	LPS	4	6
Private Employment Agencies	HPS	8	10
	LPS	9	9
Other Sources	HPS	7	3
	LPS	6	3

TABLE 61

(continued)

RANK ORDER OF SOURCES THAT ARE "VERY MUCH HELP" FOR VOCATIONAL-TECHNICAL EDUCATION STUDENTS IN PROVIDING INFORMATION ABOUT JOB OPENINGS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE

Sources	Type of Site	School Personnel[a]	Former and Current Students
		State B	
Teacher	HPS	1	1
	LPS	1	1
Cooperative Education Coordinator	HPS	2	3
	LPS	4	6
Guidance/ Vocational Counselor	HPS	6	5
	LPS	5	9
Job Placement Service	HPS	3	5
	LPS	2	4
Parents	HPS	0	4
	LPS	9	6
Relatives Other Than Parents	HPS	0	6
	LPS	9	7
Friends	HPS	5	2
	LPS	6	3
Former Vocational-Technical Students	HPS	4	3
	LPS	3	8
Newspapers	HPS	7	2
	LPS	5	2
TV and Radio	HPS	7	8
	LPS	7	10
Public Employment Agencies	HPS	0	4
	LPS	8	5
Private Employment Agencies	HPS	0	7
	LPS	7	8
Other Sources	HPS	6	9
	LPS	3	10

TABLE 61
(continued)

RANK ORDER OF SOURCES THAT ARE "VERY MUCH HELP" FOR VOCATIONAL-TECHNICAL EDUCATION STUDENTS IN PROVIDING INFORMATION ABOUT JOB OPENINGS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE

Sources	Type of Site	School Personnel[a]	Former and Current Students
		State C	
Teacher	HPS	1	1
	LPS	1	3
Cooperative Education Coordinator	HPS	3	6
	LPS	2	7
Guidance/ Vocational Counselor	HPS	5	6
	LPS	4	8
Job Placement Service	HPS	2	4
	LPS	3	5
Parents	HPS	9	5
	LPS	7	1
Relatives Other Than Parents	HPS	9	6
	LPS	0	4
Friends	HPS	8	3
	LPS	0	2
Former Vocational-Technical Students	HPS	5	4
	LPS	2	6
Newspapers	HPS	4	2
	LPS	2	3
TV and Radio	HPS	6	6
	LPS	7	8
Public Employment Agencies	HPS	8	6
	LPS	5	5
Private Employment Agencies	HPS	9	5
	LPS	6	5
Other Sources	HPS	7	3
	LPS	4	7

TABLE 61
(continued)
RANK ORDER OF SOURCES THAT ARE "VERY MUCH HELP" FOR VOCATIONAL-TECHNICAL EDUCATION STUDENTS IN PROVIDING INFORMATION ABOUT JOB OPENINGS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE

Sources	Type of Site	School Personnel[a]	Former and Current Students
		State D	
Teacher	HPS	1	5
	LPS	2	2
Cooperative Education Coordinator	HPS	3	7
	LPS	3	6
Guidance/ Vocational Counselor	HPS	5	6
	LPS	4	4
Job Placement Service	HPS	1	1
	LPS	1	4
Parents	HPS	0	4
	LPS	6	4
Relatives Other Than Parents	HPS	0	8
	LPS	6	6
Friends	HPS		3
	LPS	6	3
Former Vocational-Technical Students	HPS	4	10
	LPS	5	7
Newspapers	HPS	2	2
	LPS	5	1
TV and Radio	HPS	7	10
	LPS	0	6
Public Employment Agencies	HPS	7	10
	LPS	5	5
Private Employment Agencies	HPS	6	9
	LPS	6	5
Other Sources	HPS	4	7
	LPS	4	2

[a] School Personnel includes teachers, counselors, and job placement specialists

TABLE 62

PLACEMENT SERVICES AVAILABLE AT POSTSECONDARY INSTITUTIONS AS INDICATED BY FORMER AND CURRENT STUDENTS

Service	Type of Respondents	Type of Site	Number of Respondents	Yes	No Response (Generally Indicates No)	Total[a]
				State A		
Assistance in Advanced Education Placement	Current Students	HPS	132	32	68	100
		LPS	70	33	67	101
	Former Students	HPS	125	25	75	100
		LPS	163	34	66	100
				State B		
	Current Students	HPS	62	37	63	100
		LPS	147	42	59	101
	Former Students	HPS	30	37	63	100
		LPS	59	51	49	100
				State C		
	Current Students	HPS	24	43	58	101
		LPS	29	45	55	100
	Former Students	HPS	49	43	57	100
		LPS	87	43	58	101
				State D		
	Current Students	HPS	71	70	30	100
		LPS	33	73	27	100
	Former Students	HPS	76	70	30	100
		LPS	46	65	35	100

TABLE 62
(continued)
PLACEMENT SERVICES AVAILABLE AT POSTSECONDARY INSTITUTIONS AS INDICATED BY FORMER AND CURRENT STUDENTS

Service	Type of Respondents	Type of Site	Number of Respondents	Yes	No Response (Generally Indicates No)	Total[a]
				State A		
Training In Job Seeking Skills	Current Students	HPS	132	47	53	100
		LPS	70	63	37	100
	Former Students	HPS	125	46	54	100
		LPS	163	34	66	100
				State B		
	Current Students	HPS	62	38	61	99
		LPS	147	44	56	100
	Former Students	HPS	30	47	53	100
		LPS	59	42	58	100
				State C		
	Current Students	HPS	24	21	79	100
		LPS	29	69	31	100
	Former Students	HPS	49	45	55	100
		LPS	87	47	53	100
				State D		
	Current Students	HPS	71	63	37	100
		LPS	33	58	42	100
	Former Students	HPS	76	57	43	100
		LPS	46	48	52	100

TABLE 62
(continued)
PLACEMENT SERVICES AVAILABLE AT POSTSECONDARY INSTITUTIONS AS INDICATED BY FORMER AND CURRENT STUDENTS

Service	Type of Respondents	Type of Site	Number of Respondents	Yes	No Response (Generally Indicates No)	Total[a]
				State A		
Training In Job Obtainment Skills	Current Students	HPS	132	52	48	100
		LPS	70	59	41	100
	Former Students	HPS	125	47	53	100
		LPS	153	53	47	100
				State B		
	Current Students	HPS	62	32	68	100
		LPS	147	35	65	100
	Former Students	HPS	30	37	63	100
		LPS	59	32	68	100
				State C		
	Current Students	HPS	24	21	79	100
		LPS	29	59	41	100
	Former Students	HPS	49	36	63	99
		LPS	87	36	64	100
				State D		
	Current Students	HPS	71	58	42	100
		LPS	33	39	61	100
	Former Students	HPS	76	41	59	100
		LPS	46	39	61	100

TABLE 62
(continued)
PLACEMENT SERVICES AVAILABLE AT POSTSECONDARY INSTITUTIONS AS INDICATED BY FORMER AND CURRENT STUDENTS

Service	Type of Respondents	Type of Site	Number of Respondents	Yes	No Response (Generally Indicates No)	Total[a]
				State A		
Contacting Employers About Jobs for Students	Current Students	HPS	132	55	46	101
		LPS	70	53	47	100
	Former Students	HPS	125	43	57	100
		LPS	163	53	47	100
				State B		
	Current Students	HPS	62	34	66	100
		LPS	147	40	60	100
	Former Students	HPS	30	33	67	100
		LPS	59	29	71	100
				State C		
	Current Students	HPS	24	25	75	100
		LPS	29	38	62	100
	Former Students	HPS	49	35	65	100
		LPS	87	35	66	101
				State D		
	Current Students	HPS	71	52	48	100
		LPS	33	49	52	101
	Former Students	HPS	76	43	57	100
		LPS	46	48	52	100

TABLE 62
(continued)
PLACEMENT SERVICES AVAILABLE AT POSTSECONDARY INSTITUTIONS AS INDICATED BY FORMER AND CURRENT STUDENTS

Service	Type of Respondents	Type of Site	Number of Respondents	Yes	No Response (Generally Indicates No)	Total[a]
				State A		
Working with Public Employment Service Regarding Jobs For Students	Current Students	HPS	132	39	61	100
		LPS	70	46	54	100
	Former Students	HPS	125	28	72	100
		LPS	163	39	61	100
				State B		
	Current Students	HPS	62	11	89	100
		LPS	147	29	71	100
	Former Students	HPS	30	20	80	100
		LPS	59	29	71	100
				State C		
	Current Students	HPS	24	8	92	100
		LPS	29	28	72	100
	Former Students	HPS	49	12	88	100
		LPS	87	18	82	100
				State D		
	Current Students	HPS	71	41	59	100
		LPS	33	21	79	100
	Former Students	HPS	76	30	70	100
		LPS	46	33	67	100

TABLE 62
(continued)
PLACEMENT SERVICES AVAILABLE AT POSTSECONDARY INSTITUTIONS AS INDICATED BY FORMER AND CURRENT STUDENTS

Service	Type of Respondents	Type of Site	Number of Respondents	Yes	No Response (Generally Indicates No)	Total[a]
				State A		
Working with Private Employment Agencies Regarding Jobs for Students	Current Students	HPS	132	22	78	100
		LPS	70	17	83	100
	Former Students	HPS	125	14	86	100
		LPS	163	20	80	100
				State B		
	Current Students	HPS	62	10	90	100
		LPS	147	18	82	100
	Former Students	HPS	30	10	90	100
		LPS	59	19	81	100
				State C		
	Current Students	HPS	24	21	79	100
		LPS	29	17	83	100
	Former Students	HPS	49	4	96	100
		LPS	87	21	79	100
				State D		
	Current Students	HPS	71	34	66	100
		LPS	33	15	85	100
	Former Students	HPS	76	25	75	100
		LPS	46	39	61	100

TABLE 62
(continued)
PLACEMENT SERVICES AVAILABLE AT POSTSECONDARY
INSTITUTIONS AS INDICATED BY FORMER AND CURRENT STUDENTS

Service	Type of Respondents	Type of Site	Number of Respondents	Yes	No Response (Generally Indicates No)	Total[a]
				State A		
Referring Students to Job Openings	Current Students	HPS	132	73	27	100
		LPS	70	70	30	100
	Former Students	HPS	125	59	41	100
		LPS	163	77	23	100
				State B		
	Current Students	HPS	62	42	58	100
		LPS	147	18	82	100
	Former Students	HPS	30	50	50	100
		LPS	59	19	81	100
				State C		
	Current Students	HPS	24	58	42	100
		LPS	29	69	31	100
	Former Students	HPS	49	51	49	100
		LPS	87	46	54	100
				State D		
	Current Students	HPS	71	72	28	100
		LPS	33	15	85	100
	Former Students	HPS	76	61	40	101
		LPS	46	39	61	100

TABLE 62
(continued)
PLACEMENT SERVICES AVAILABLE AT POSTSECONDARY
INSTITUTIONS AS INDICATED BY FORMER AND CURRENT STUDENTS

Service	Type of Respondents	Type of Site	Number of Respondents	Yes	No Response (Generally Indicates No)	Total[a]
				State A		
Information about Job Openings	Current Students	HPS	132	78	22	100
		LPS	70	70	30	100
	Former Students	HPS	125	65	35	100
		LPS	163	77	23	100
				State B		
	Current Students	HPS	62	52	48	100
		LPS	147	68	32	100
	Former Students	HPS	30	57	43	100
		LPS	59	66	34	100
				State C		
	Current Students	HPS	24	67	33	100
		LPS	29	86	14	100
	Former Students	HPS	49	65	35	100
		LPS	87	48	52	100
				State D		
	Current Students	HPS	71	85	16	101
		LPS	33	73	27	100
	Former Students	HPS	76	79	21	100
		LPS	46	70	30	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 63

POSTSECONDARY INSTITUTIONS' PERFORMANCE IN PROVIDING TRAINING IN JOB OBTAINMENT SKILLS AS RATED BY SCHOOL PERSONNEL AND STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Respondent	Type of Site	Number of Respondents	Percent of Responses							
			Excellent	Good	Fair	Poor	Failing	Don't Know	No Response	Total[a]
					State A					
Teachers	HPS	146	21	46	22	3	1	4	3	100
	LPS	124	33	44	14	4	1	2	2	100
Counselors	HPS	10	20	70	10	0	0	0	0	100
	LPS	6	33	50	17	0	0	0	0	100
Job Placement Specialists	HPS	5	0	80	20	0	0	0	0	100
	LPS	0	0	0	0	0	0	0	0	0
Current Students	HPS	132	21	30	18	10	2	13	6	101
	LPS	170	20	27	31	7	1	7	6	99
Former Students	HPS	125	16	26	24	12	6	13	4	101
	LPS	163	18	36	20	7	2	11	7	101
					State B					
Teachers	HPS	29	10	41	21	3	3	21	0	99
	LPS	152	12	43	18	7	1	15	6	102
Counselors	HPS	1	0	0	0	100	0	0	0	100
	LPS	10	20	30	40	10	0	0	0	100
Job Placement Specialists	HPS	1	0	100	0	0	0	0	0	100
	LPS	5	20	40	20	20	0	0	0	100
Current Students	HPS	62	11	24	10	8	5	31	11	100
	LPS	147	10	14	9	10	7	42	9	101
Former Students	HPS	30	3	17	27	10	13	20	10	100
	LPS	59	7	14	17	17	9	19	19	102

TABLE 63

(continued)

POSTSECONDARY INSTITUTIONS' PERFORMANCE IN PROVIDING TRAINING IN JOB-OBTAINMENT SKILLS AS RATED BY SCHOOL PERSONNEL AND STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Respondent	Type of Site	Number of Respondents	Percent of Responses							
			Excellent	Good	Fair	Poor	Failing	Don't Know	No Response	Total[a]
					State C					
Teachers	HPS	58	10	36	22	12	2	10	7	99
	LPS	53	15	30	28	9	2	13	2	99
Counselors	HPS	18	11	28	50	6	6	0	0	101
	LPS	5	40	0	60	0	0	0	0	100
Job Placement Specialists	HPS	2	0	0	50	50	0	0	0	100
	LPS	1	0	100	0	0	0	0	0	100
Current Students	HPS	24	0	17	13	17	17	33	4	101
	LPS	29	24	17	14	10	3	24	7	99
Former Students	HPS	49	8	14	18	12	6	37	4	99
	LPS	87	9	15	15	7	2	33	18	99
					State D					
Teachers	HPS	52	23	52	15	0	0	10	0	100
	LPS	29	21	35	38	3	0	3	0	100
Counselors	HPS	6	0	67	17	0	0	17	0	101
	LPS	8	13	38	25	25	0	0	0	101
Job Placement Specialists	HPS	1	100	0	0	0	0	0	0	100
	LPS	3	0	100	0	0	0	0	0	100
Current Students	HPS	71	23	28	16	4	3	18	9	101
	LPS	33	3	27	30	15	6	18	0	99
Former Students	HPS	76	15	25	17	11	1	20	12	101
	LPS	46	7	17	20	17	7	26	7	101

[a] Totals may not equal 100 percent due to rounding.

TABLE 64

POSTSECONDARY INSTITUTIONS' PERFORMANCE IN CONTACTING EMPLOYERS ABOUT JOBS FOR STUDENTS AS RATED BY SCHOOL PERSONNEL AND STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Respondent	Type of Site	Number of Respondents	Percent of Responses							
			Excellent	Good	Fair	Poor	Failing	Don't Know	No Response	Total[a]
					State A					
Teachers	HPS	146	24	34	17	8	1	12	4	100
	LPS	124	29	33	23	3	3	7	2	100
Counselors	HPS	10	10	70	20	0	0	0	0	100
	LPS	6	33	50	17	0	0	0	0	100
Job Placement Specialists	HPS	5	0	60	40	0	0	0	0	100
	LPS	0	0	0	0	0	0	0	0	0
Current Students	HPS	132	14	27	24	12	5	13	5	100
	LPS	70	14	27	20	9	6	20	4	100
Former Students	HPS	125	8	25	21	13	10	18	6	101
	LPS	163	12	30	23	7	4	17	7	100
					State B					
Teachers	HPS	30	10	33	23	10	3	20	0	99
	LPS	152	20	32	17	3	3	18	7	100
Counselors	HPS	1	0	100	0	0	0	0	0	100
	LPS	10	10	40	30	10	0	10	0	100
Job Placement Specialists	HPS	1	0	100	0	0	0	0	0	100
	LPS	5	20	60	20	0	0	0	0	100
Current Students	HPS	62	8	24	10	2	8	34	15	101
	LPS	47	10	16	10	7	8	41	9	101
Former Students	HPS	30	13	10	23	13	13	20	7	99
	LPS	59	14	9	19	14	2	29	15	102

TABLE 64

(continued)

POSTSECONDARY INSTITUTIONS' PERFORMANCE IN CONTACTING EMPLOYERS ABOUT JOBS FOR STUDENTS AS RATED BY SCHOOL PERSONNEL AND STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Respondent	Type of Site	Number of Respondents	Percent of Responses							
			Excellent	Good	Fair	Poor	Failing	Don't Know	No Response	Total[a]
					State C					
Teachers	HPS	58	10	36	22	12	2	12	5	99
	LPS	53	11	21	26	13	6	21	4	100
Counselors	HPS	18	11	61	17	6	0	6	0	101
	LPS	5	20	20	0	40	20	0	0	100
Job Placement Specialists	HPS	2	0	50	0	50	0	0	0	100
	LPS	1	0	0	100	0	0	0	0	100
Current Students	HPS	24	13	4	4	8	17	50	4	100
	LPS	29	14	17	10	7	10	31	10	99
Former Students	HPS	49	10	18	18	6	6	37	4	99
	LPS	87	6	12	7	8	8	39	21	101
					State D					
Teachers	HPS	52	19	33	17	10	2	15	4	100
	LPS	29	21	24	35	7	3	3	7	100
Counselors	HPS	6	0	50	33	0	0	17	0	100
	LPS	8	13	38	50	0	0	0	0	101
Job Placement Specialists	HPS	1	0	0	100	0	0	0	0	100
	LPS	3	33	67	0	0	0	0	0	100
Current Students	HPS	71	14	24	14	11	3	25	9	100
	LPS	33	12	30	15	12	12	18	0	99
Former Students	HPS	76	13	20	16	7	7	24	15	102
	LPS	46	4	35	15	9	7	26	4	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 65

POSTSECONDARY INSTITUTIONS' PERFORMANCE IN REFERRING STUDENTS TO JOB OPENINGS AS RATED BY SCHOOL PERSONNEL AND STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Respondent	Type of Site	Number of Respondents	Percent of Responses							
			Excellent	Good	Fair	Poor	Failing	Don't Know	No Response	Total[a]
					State A					
Teachers	HPS	146	40	40	9	3	0	6	3	101
	LPS	124	50	36	9	2	0	2	2	101
Counselors	HPS	10	40	50	10	0	0	0	0	100
	LPS	6	50	50	0	0	0	0	0	100
Job Placement Specialists	HPS	5	40	60	0	0	0	0	0	100
	LPS	0	0	0	0	0	0	0	0	0
Current Students	HPS	132	27	35	20	8	2	6	4	102
	LPS	70	34	27	19	3	1	11	4	99
Former Students	HPS	125	22	30	18	8	6	12	4	100
	LPS	163	30	35	18	3	2	9	4	101
					State B					
Teachers	HPS	30	20	37	17	7	0	20	0	101
	LPS	152	27	34	14	4	1	13	7	100
Counselors	HPS	1	100	0	0	0	0	0	0	100
	LPS	10	20	30	40	0	0	10	0	100
Job Placement Specialists	HPS	1	0	100	0	0	0	0	0	100
	LPS	5	60	20	20	0	0	0	0	100
Current Students	HPS	62	10	23	18	2	7	27	15	102
	LPS	147	14	16	10	10	5	36	9	100
Former Students	HPS	30	17	13	17	13	13	13	13	99
	LPS	59	17	12	29	12	0	17	14	101

TABLE 65

(continued)

POSTSECONDARY INSTITUTIONS' PERFORMANCE IN REFERRING STUDENTS TO JOB OPENINGS AS RATED BY SCHOOL PERSONNEL AND STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Respondent	Type of Site	Number of Respondents	Percent of Responses							
			Excellent	Good	Fair	Poor	Failing	Don't Know	No Response	Total[a]
					State C					
Teachers	HPS	58	26	38	19	5	2	7	3	100
	LPS	53	21	38	25	4	0	9	4	101
Counselors	HPS	18	17	61	17	0	0	6	0	101
	LPS	5	20	20	40	0	20	0	0	100
Job Placement Specialists	HPS	2	0	100	0	0	0	0	0	100
	LPS	1	100	0	0	0	0	0	0	100
Current Students	HPS	24	21	4	17	13	4	38	4	101
	LPS	29	35	28	10	10	0	10	7	100
Former Students	HPS	49	18	31	10	6	4	27	4	100
	LPS	87	13	16	9	6	7	29	21	101
					State D					
Teachers	HPS	52	29	44	10	4	0	8	6	101
	LPS	29	24	38	24	3	0	3	7	99
Counselors	HPS	6	0	50	33	0	0	17	0	100
	LPS	8	38	38	25	0	0	0	0	101
Job Placement Specialists	HPS	1	0	100	0	0	0	0	0	100
	LPS	3	67	33	0	0	0	0	0	100
Current Students	HPS	71	27	28	13	6	1	17	9	101
	LPS	33	15	39	18	9	9	9	0	99
Former Students	HPS	76	16	28	13	9	4	18	12	100
	LPS	46	15	24	20	11	4	20	7	101

[a] Totals may not equal 100 percent due to rounding.

TABLE 66

POSTSECONDARY INSTITUTIONS' PERFORMANCE IN PROVIDING INFORMATION ABOUT JOB OPENINGS AS RATED BY SCHOOL PERSONNEL AND STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Respondent	Type of Site	Number of Respondents	Percent of Responses							
			Excellent	Good	Fair	Poor	Failing	Don't Know	No Response	Total[a]
State A										
Teachers	HPS	146	34	45	12	1	1	6	3	102
	LPS	124	43	43	11	1	0	1	2	101
Counselors	HPS	10	40	50	10	0	0	0	0	100
	LPS	6	50	50	0	0	0	0	0	100
Job Placement Specialists	HPS	5	20	80	0	0	0	0	0	100
	LPS	0	0	0	0	0	0	0	0	0
Current Students	HPS	132	23	36	20	8	4	5	5	101
	LPS	70	34	30	17	3	3	9	4	100
Former Students	HPS	125	23	30	19	8	6	10	4	100
	LPS	163	28	37	16	4	4	7	5	101
State B										
Teachers	HPS	30	20	37	10	10	3	20	0	100
	LPS	152	26	35	13	4	1	13	7	99
Counselors	HPS	1	0	0	100	0	0	0	0	100
	LPS	10	10	40	30	10	0	10	0	100
Job Placement Specialists	HPS	1	100	0	0	0	0	0	0	100
	LPS	5	40	40	20	0	0	0	0	100
Current Students	HPS	62	7	29	19	2	7	24	13	101
	LPS	147	14	24	13	8	6	27	8	100
Former Students	HPS	30	13	17	27	7	7	20	10	101
	LPS	59	15	24	29		0	15	12	100

TABLE 66

(continued)

POSTSECONDARY INSTITUTIONS' PERFORMANCE IN PROVIDING INFORMATION ABOUT JOB OPENINGS AS RATED BY SCHOOL PERSONNEL AND STUDENTS RESPONDING TO THE MAIL QUESTIONNAIRE

Type of Respondent	Type of Site	Number of Respondents	Percent of Responses							
			Excellent	Good	Fair	Poor	Failing	Don't Know	No Response	Total[a]
					State C					
Teachers	HPS	58	21	40	21	9	2	5	3	101
	LPS	53	25	34	23	6	2	9	2	101
Counselors	HPS	18	17	50	28	0	0	0	6	101
	LPS	5	20	20	40	0	20	0	0	100
Job Placement Specialists	HPS	2	0	100	0	0	0	0	0	100
	LPS	1	0	100	0	0	0	0	0	100
Current Students	HPS	24	17	21	13	8	8	29	4	100
	LPS	29	38	24	14	10	0	7	7	100
Former Students	HPS	49	18	33	16	4	4	18	6	99
	LPS	87	12	17	9	10	5	28	20	101
					State D					
Teachers	HPS	52	39	40	14	2	0	2	4	101
	LPS	29	28	35	28	3	0	3	3	100
Counselors	HPS	6	0	67	17	0	0	17	0	101
	LPS	8	38	25	38	0	0	0	0	101
Job Placement Specialists	HPS	1	0	100	0	0	0	0	0	100
	LPS	3	33	67	0	0	0	0	0	100
Current Students	HPS	71	32	24	16	1	3	16	9	101
	LPS	33	24	42	15	3	6	9	0	99
Former Students	HPS	76	18	29	13	7	4	17	12	100
	LPS	46	17	33	26	4	2	11	7	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 67

ACTIVITIES PERFORMED WHEN REFERRING STUDENTS TO JOB OPENINGS AS INDICATED BY POSTSECONDARY TEACHERS AND JOB PLACEMENT SPECIALISTS RESPONDING TO THE MAIL QUESTIONNAIRE

Activity	Type of Site	Number of Respondents and Percent of Responses									
		Teachers					Job Placement Specialists				
		Number of Respondents	Yes	No	No Response	Total[a]	Number of Respondents	Yes	No	No Response	Total[a]
		State A									
Send Employer Written Recommendations Concerning Student	HPS	145	13	38	49	100	5	20	80	0	100
	LPS	123	8	55	37	100	0	0	0	0	0
Make Telephone Call to Employer Recommending Student	HPS	145	36	16	48	100	5	80	20	0	100
	LPS	123	43	49	39	101	0	0	0	0	0
Provide Student with Information Regarding the Job (i.e. wages, benefits)	HPS	145	45	8	47	100	5	100	0	0	100
	LPS	123	59	7	34	100	0	0	0	0	0
Provide Employer with Student Information (i.e. age, class performance)	HPS	145	41	12	47	100	5	50	40	0	100
	LPS	123	46	20	34	100	0	0	0	0	0

TABLE 67

(continued)

ACTIVITIES PERFORMED WHEN REFERRING STUDENTS TO JOB OPENINGS AS INDICATED BY POSTSECONDARY TEACHERS AND JOB PLACEMENT SPECIALISTS RESPONDING TO THE MAIL QUESTIONNAIRE

Activity	Type of Site	Number of Respondents and Percent of Responses									
		Teachers					Job Placement Specialists				
		Number of Respondents	Yes	No	No Response	Total[a]	Number of Respondents	Yes	No	No Response	Total[a]
		State B.									
Send Employer Written Recommendations Concerning Student	HPS	31	13	42	45	100	1	0	100	0	100
	LPS	153	22	28	50	100	5	20	80	0	100
Make Telephone Call to Employer Recommending Student	HPS	31	32	23	45	100	1	100	0	0	100
	LPS	153	36	12	52	100	5	20	80	0	100
Provide Student with Information Regarding the Job (i.e. wages, benefits)	HPS	31	48	10	42	100	1	100	0	0	100
	LPS	153	46	4	50	100	5	80	20	0	100
Provide Employer with Student Information (i.e. age, class performance)	HPS	31	42	16	42	100	1	0	100	0	100
	LPS	153	43	7	50	100	5	40	60	0	100

TABLE 67
(continued)

ACTIVITIES PERFORMED WHEN REFERRING STUDENTS TO JOB OPENINGS AS INDICATED BY POSTSECONDARY TEACHERS AND JOB PLACEMENT SPECIALISTS RESPONDING TO THE MAIL QUESTIONNAIRE

Activity	Type of Site	Number of Respondents and Percent of Responses									
		Teachers					Job Placement Specialists				
		Number of Respondents	Yes	No	No Response	Total[a]	Number of Respondents	Yes	No	No Response	Total[a]
		State C									
Send Employer Written Recommendations Concerning Student	HPS	58	29	33	38	100	2	0	100	0	100
	LPS	53	32	30	38	100	1	0	100	0	100
Make Telephone Call to Employer Recommending Student	HPS	58	40	19	41	100	2	50	50	0	100
	LPS	53	47	15	38	100	1	0	100	0	100
Provide Student with Information Regarding the Job (i.e. wages, benefits)	HPS	58	55	9	36	100	2	100	0	0	100
	LPS	53	53	8	40	101	1	100	0	0	100
Provide Employer with Student Information (i.e. age, class performance)	HPS	58	47	16	38	101	2	0	100	0	100
	LPS	53	47	15	38	100	1	0	0	100	100

TABLE 67

(continued)

ACTIVITIES PERFORMED WHEN REFERRING STUDENTS TO JOB OPENINGS AS INDICATED BY POSTSECONDARY TEACHERS AND JOB PLACEMENT SPECIALISTS RESPONDING TO THE MAIL QUESTIONNAIRE

Activity	Type of Site	Number of Respondents and Percent of Responses									
		Teachers					Job Placement Specialists				
		Number of Respondents	Yes	No	No Response	Total[a]	Number of Respondents	Yes	No	No Response	Total[a]
		State D									
Send Employer Written Recommendations Concerning Student	HPS	52	14	25	62	101	1	0	100	0	100
	LPS	29	38	17	45	100	3	0	33	67	100
Make Telephone Call to Employer Recommending Student	HPS	52	15	21	63	99	1	100	0	0	100
	LPS	29	38	14	49	101	3	67	0	33	100
Provide Student with Information Regarding the Job (i.e. wages, benefits)	HPS	52	39	0	62	101	1	100	0	0	100
	LPS	29	48	10	41	99	3	67	33	0	100
Provide Employer with Student Information (i.e. age, class performance)	HPS	52	29	10	62	101	1	100	0	0	100
	LPS	29	45	14	41	100	3	33	33	33	99

[a] Totals may not equal 100 percent due to rounding.

TABLE 68

FACTORS THAT ARE CONSIDERED VERY HELPFUL FOR VOCATIONAL-TECHNICAL EDUCATION STUDENTS IN OBTAINING JOBS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE

Type of Respondents	Type of Site	Number of Respondents	Percent of Responses: Basic Education Skills	Occupational Skills and Competencies	Human Relations Skills	Positive Work Attitude	Previous Work Experiences
State A							
Teachers	HPS	146	58	71	53	71	56
	LPS	124	61	81	51	72	32
Counselors	HPS	10	60	60	20	40	20
	LPS	6	33	100	67	83	50
Job Placement Specialists	HPS	5	100	100	80	80	40
	LPS	0	0	0	0	0	0
Advisory Committee Members	HPS	77	51	64	29	60	12
	LPS	27	48	63	22	59	11
Current Students	HPS	132	35	53	36	55	33
	LPS	70	37	57	46	59	39
Former Students	HPS	125	21	34	28	28	18
	LPS	163	23	41	25	30	23

TABLE 68

(continued)

FACTORS THAT ARE CONSIDERED VERY HELPFUL FOR VOCATIONAL-TECHNICAL EDUCATION STUDENTS IN OBTAINING JOBS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE

Type of Respondents	Type of Site	Number of Respondents	Percent of Responses: Basic Education Skills	Occupational Skills and Competencies	Human Relations Skills	Positive Work Attitude	Previous Work Experience
			State B				
Teachers	HPS	31	61	84	58	68	23
	LPS	153	65	79	50	62	39
Counselors	HPS	1	100	100	100	100	100
	LPS	10	70	100	60	80	60
Job Placement Specialists	HPS	1	0	100	0	100	0
	LPS	5	80	80	80	80	20
Advisory Committee Members	HPS	12	75	75	25	25	17
	LPS	55	60	64	40	64	16
Current Students	HPS	62	29	48	40	42	29
	LPS	147	41	53	35	47	31
Former Students	HPS	30	30	37	40	37	27
	LPS	59	22	39	32	34	15

TABLE 68

(continued)

FACTORS THAT ARE CONSIDERED VERY HELPFUL FOR VOCATIONAL-TECHNICAL EDUCATION STUDENTS IN OBTAINING JOBS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE

Type of Respondents	Type of Site	Number of Respondents	Percent of Responses: Basic Education Skills	Occupational Skills and Competencies	Human Relations Skills	Positive Work Attitude	Previous Work Experiences
			State C				
Teachers	HPS	58	72	81	50	71	47
	LPS	53	57	72	66	79	30
Counselors	HPS	18	44	78	28	44	22
	LPS	5	100	100	40	100	40
Job Placement Specialists	HPS	2	0	50	50	50	50
	LPS	1	100	100	100	100	100
Advisory Committee Members	HPS	31	52	68	29	58	13
	LPS	30	53	53	37	70	7
Current Students	HPS	24	46	54	50	50	54
	LPS	29	55	76	69	55	55
Former Students	HPS	49	29	41	27	35	25
	LPS	87	29	24	30	32	26

TABLE 68

(continued)

FACTORS THAT ARE CONSIDERED VERY HELPFUL FOR VOCATIONAL-TECHNICAL EDUCATION STUDENTS IN OBTAINING JOBS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE

Type of Respondents	Type of Site	Number of Respondents	Percent of Responses: Basic Education Skills	Occupational Skills and Competencies	Human Relations Skills	Positive Work Attitude	Previous Work Experience
			State D				
Teachers	HPS	52	67	81	69	67	35
	LPS	29	72	73	59	55	45
Counselors	HPS	6	67	50	50	50	67
	LPS	8	75	50	50	88	38
Job Placement Specialists	HPS	1	100	100	100	100	100
	LPS	3	67	33	67	0	33
Advisory Committee Members	HPS	39	44	64	33	54	10
	LPS	37	60	57	41	49	16
Current Students	HPS	71	44	69	45	62	48
	LPS	33	49	67	36	46	49
Former Students	HPS	76	21	28	29	24	18
	LPS	46	35	44	30	37	26

TABLE 69

FACTORS CONSIDERED VERY IMPORTANT
WHEN HIRING A PERSON FOR AN ENTRY-LEVEL JOB
BY EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Factors Considered When Hiring	High Placement Site		Low Placement Site	
	Number	Percent	Number	Percent
		State A		
Job Interview Performance	66	23	45	24
Types of Previous Work Experience	66	23	45	16
Amount of Previous Work Experience	66	11	45	9
Vo-Tech Experience	66	18	45	11
Specific Occupational Skills	66	20	45	22
Scores on Company Administered Tests	66	2	45	9
School Grade Records	66	3	45	8
School Attendance	66	33	45	27
Personal Recommendations from School Staff	66	24	45	22
Health (Physical)	66	23	45	13
Ability to Get Along With People	66	47	45	47
Work Attitude	66	70	45	76
Other	66	3	45	11

TABLE 69
(continued)
FACTORS CONSIDERED VERY IMPORTANT
WHEN HIRING A PERSON FOR AN ENTRY-LEVEL JOB
BY EMPLOYERS WHO RESPONDED TO THE-MAIL QUESTIONNAIRE

Factors Considered When Hiring	High Placement Site		Low Placement Site	
	Number	Percent	Number	Percent
		State B		
Job Interview Performance	55	24	67	24
Types of Previous Work Experience	55	16	67	16
Amount of Previous Work Experience	55	6	67	16
Vo-Tech Experience	55	7	67	24
Specific Occupational Skills	55	16	67	19
Scores on Company Administered Tests	55	7	67	6
School Grade Records	55	24	67	10
School Attendance	55	18	67	34
Personal Recommendations from School Staff	55	7	67	18
Health (Physical)	55	18	67	22
Ability to Get Along With People	55	33	67	46
Work Attitude	55	69	67	64
Other	>5	6	67	5

TABLE 69
(continued)
FACTORS CONSIDERED VERY IMPORTANT
WHEN HIRING A PERSON FOR AN ENTRY-LEVEL JOB
BY EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Factors Considered When Hiring	High Placement Site		Low Placement Site	
	Number	Percent	Number	Percent
		State C		
Job Interview Performance	21	43	35	20
Types of Previous Work Experience	21	33	35	20
Amount of Previous Work Experience	21	24	35	17
Vo-Tech Experience	21	10	35	14
Specific Occupational Skills	21	19	35	4
Scores on Company Administered Tests	21	24	35	6
School Grade Records	21	10	35	3
School Attendance	21	19	35	20
Personal Recommendations from School Staff	21	10	35	14
Health (Physical)	21	24	35	37
Ability to Get Along With People	21	48	35	60
Work Attitude	21	62	35	71
Other	21	14	35	14

TABLE 69
(continued)
FACTORS CONSIDERED VERY IMPORTANT
WHEN HIRING A PERSON FOR AN ENTRY-LEVEL JOB
BY EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Factors Considered When Hiring	High Placement Site		Low Placement Site	
	Number	Percent	Number	Percent
		State D		
Job Interview Performance	24	25	25	16
Types of Previous Work Experience	24	4	25	20
Amount of Previous Work Experience	24	29	25	4
Vo-Tech Experience	24	13	25	12
Specific Occupational Skills	24	17	25	24
Scores on Company Administered Tests	24	25	25	14
School Grade Records	24	4	25	20
School Attendance	24	13	25	12
Personal Recommendations from School Staff	24	13	25	4
Health (Physical)	24	17	25	4
Ability to Get Along With People	24	33	25	28
Work Attitude	24	58	25	52
Other	24	8	25	4

TABLE 70

FACTORS POSING "CONSIDERABLE DIFFICULTY" FOR VOCATIONAL-TECHNICAL EDUCATION GRADUATES OBTAINING JOBS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE

Type of Respondents	Type of Site	Number of Respondents	Percent of Responses: Students Acquired Too Specific Job Skills	Students Do Not Have Specific Job Skills	Students Must Compete with Experienced Workers	Students Unwilling to Move for a Job	No Jobs Available	Age Discrimination	Sex Discrimination	Race/Ethnic Background Discrimination	Union Restrictions on Hiring	Entry Jobs Offer only Minimum Wage	Lack of Transportation to Jobs	Lack of High School Diploma
State A														
Dean/	HPS	3	0	33	0	33	0	0	0	0	0	0	0	0
Directors	LPS	1	0	0	0	0	0	0	0	0	0	0	0	0
	HPS	146	0	12	8	21	25	0	0	1	2	12	0	2
Teachers	LPS	124	0	16	7	22	9	2	1	0	2	14	2	3
	HPS	10	0	20	10	30	20	0	10	10	0	10	0	0
Counselors	LPS	6	0	33	0	17	17	0	0	0	0	17	0	0
Job	HPS	5	0	0	0	40	40	0	0	20	0	20	0	0
Placement Specialists	LPS	0	0	0	0	0	0	0	0	0	0	0	0	0
Advisory	HPS	77	3	16	12	21	34	3	1	3	7	9	4	3
Committee	LPS	27	0	15	4	20	23	4	4	4	0	4	0	0
Members														
	HPS	66	2	15	11	5	11	0	2	2	3	5	2	2
Employers	LPS	45	2	8	7	6	11	0	0	0	2	0	4	9
Current	HPS	132	1	9	20	10	42	54	5	1	1	16	4	14
Students	LPS	70	1	7	26	19	46	6	7	6	4	13	4	14
Former	HPS	125	1	6	26	7	30	31	2	1	5	14	5	7
Students	LPS	163	2	9	18	10	20	4	3	3	3	14	2	7

TABLE 70
(continued)

FACTORS POSING "CONSIDERABLE DIFFICULTY" FOR VOCATIONAL-TECHNICAL EDUCATION GRADUATES OBTAINING JOBS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE[a]

Type of Respondents	Type of Site	Number of Respondents	Percent of Responses: Students Acquired Too Specific Job Skills	Students Do Not Have Specific Job Skills	Students Must Compete with Experienced Workers	Students Unwilling to Move for a Job	No Jobs Available	Age Discrimination	Sex Discrimination	Race/Ethnic Background Discrimination	Union Restrictions on Hiring	Entry Jobs Offer only Minimum Wage	Lack of Transportation to Jobs	Lack of High School Diploma
State B														
Dean/ Directors	HPS	2	0	0	0	0	0	0	0	0	50	0	0	0
	LPS	5	0	40	0	40	0	0	0	0	0	0	0	0
Teachers	HPS	31	0	7	3	10	0	0	0	3	0	13	0	7
	LPS	153	1	15	13	21	8	0	0	1	1	12	3	11
Counselors	HPS	1	0	0	0	0	0	0	0	0	0	0	0	0
	LPS	10	10	20	30	60	20	0	10	0	0	10	10	0
Job Placement Specialists	HPS	1	0	0	0	0	0	0	0	0	0	0	0	0
	LPS	5	0	0	0	20	0	0	0	0	0	0	0	0
Advisory Committee Members	HPS	12	0	33	17	8	25	0	0	0	8	0	25	0
	LPS	55	2	13	20	15	29	2	4	4	4	6	4	4
Employers	HPS	55	2	11	16	7	15	0	0	0	2	4	11	6
	LPS	67	3	13	24	13	25	0	0	0	3	5	10	2
Current Students	HPS	62	3	16	18	10	18	5	7	11	2	15	11	18
	LPS	147	1	20	22	14	17	9	7	6	4	10	6	12
Former Students	HPS	30	0	17	10	13	17	10	0	3	3	13	7	10
	LPS	59	3	9	29	20	34	0	7	2	3	19	7	9

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TABLE 70
(continued)

FACTORS POSING "CONS[illegible] DIFFICULTY" FOR VOCATIONAL-TECHNICAL EDUCATION GRADUATES OBTAINING JO[illegible] INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE[a]

Type of Respondents	Type of Site	Number of Respondents	Percent of Responses: Students Acquired Too Specific Job Skills	Students Do Not Have Specific Job Skills	Students Must Compete with Experienced Workers	Students Unwilling to Move for a Job	No Jobs Available	Age Discrimination	Sex Discrimination	Race/Ethnic Background Discrimination	Union Restrictions on Hiring	Entry Jobs Offer only Minimum Wage	Lack of Transportation to Jobs	Lack of High School Diploma
State C														
Dean/ Directors	HPS	3	33	0	33	33	33	0	0	0	33	0	0	0
	LPS	4	0	0	25	50	50	0	0	0	25	0	0	0
Teachers	HPS	58	5	21	17	10	16	2	2	2	5	12	10	9
	LPS	53	2	21	15	17	17	2	4	2	9	26	11	8
Counselors	HPS	18	0	11	6	6	11	11	0	11	11	0	11	0
	LPS	5	0	0	40	20	40	0	0	0	0	20	20	0
Job Placement Specialists	HPS	2	0	50	50	100	0	0	0	0	50	50	50	0
	LPS	1	0	0	0	100	100	0	0	0	0	0	0	0
Advisory Committee Members	HPS	31	0	20	29	13	[illegible]	3	7	3	10	10	7	7
	LPS	30	0	30	17	10	[illegible]	[illegible]	0	7	13	0	13	0
Employers	HPS	21	0	29	29	19	38	5	5	5	0	5	14	10
	LPS	35	3	14	6	14	20	0	0	3	3	14	17	9
Current Students	HPS	24	4	21	21	21	29	8	8	4	4	29	0	4
	LPS	29	0	17	38	7	35	10	10	10	10	24	3	35
Former Students	HPS	49	0	8	27	4	18	4	0	6	4	25	12	2
	LPS	87	2	15	22	9	22	7	2	5	9	20	3	6

TABLE 70

(continued)

FACTORS POSING "CONSIDERABLE DIFFICULTY" FOR VOCATIONAL-TECHNICAL EDUCATION GRADUATES OBTAINING JOBS AS INDICATED BY RESPONDENTS TO THE MAIL QUESTIONNAIRE[a]

Type of Respondents	Type of Site	Number of Respondents	Percent of Responses											
			Students Acquired Too Specific Job Skills	Students Do Not Have Specific Job Skills	Students Must Compete with Experienced Workers	Students Unwilling to Move for a Job	No Jobs Available	Age Discrimination	Sex Discrimination	Race/Ethnic Background Discrimination	Union Restrictions on Hiring	Entry Jobs Offer only Minimum Wage	Lack of Transportation to Jobs	Lack of High School Diploma
State D														
Dean/ Directors	HPS	3	0	0	0	0	0	0	0	0	0	0	0	33
	LPS	1	0	100	0	100	0	0	0	0	0	0	0	0
Teachers	HPS	52	33	19	4	25	19	4	4	4	0	10	8	14
	LPS	29	3	14	10	24	7	0	0	0	0	10	0	14
Counselors	HPS	6	0	0	0	17	0	0	0	0	0	0	0	17
	LPS	8	0	0	38	50	25	0	0	0	0	13	13	25
Job Placement Specialists	HPS	1	0	0	0	0	100	0	0	0	0	0	100	0
	LPS	3	0	0	33	0	0	0	0	0	0	0	0	0
Advisory Committee Members	HPS	39	0	13	13	8	31	5	8	4	10	13	3	10
	LPS	37	5	21	11	30	38	0	3	0	0	14	8	16
Employers	HPS	24	0	4	8	0	25	4	4	0	4	20	4	4
	LPS	25	0	4	16	0	20	0	0	0	4	0	4	8
Current Students	HPS	71	1	17	27	10	32	7	6	4	1	20	13	13
	LPS	33	3	12	36	6	30	9	9	2	0	12	16	25
Former Students	HPS	76	1	13	25	13	38	5	3	4	3	16	4	9
	LPS	46	0	7	15	11	26	2	2	1	0	13	2	13

[a] Respondents were allowed to select as many factors as desired.

TABLE 71

CERTIFICATES HELD BY POSTSECONDARY INSTITUTION PERSONNEL WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondents	Type of Site	Number of Respondents	Percent of Respondents by Types of Certificates*												
			Administration	Teaching	Agriculture Education	Cooperative Education	Distributive Education	Health Education	Occupational Home Economics	Office Education	Technical Education	Trade and Industrial Education	Vocational Counseling	Job Placement	Other
STATE A															
Deans/ Directors	HPS	3	100	0	0	0	0	0	0	0	0	0	0	0	0
	LPS	1	100	0	0	0	0	0	0	0	0	0	0	0	0
Teachers	HPS	146	6	22	4	1	7	14	1	10	8	16	3	1	4
	LPS	124	4	33	4	2	7	7	2	12	19	26	1	0	0
Counselors	HPS	10	10	10	0	0	0	0	0	0	10	0	50	0	0
	LPS	6	33	17	0	0	0	0	0	0	0	0	67	0	33
Job Placement Specialists	HPS	5	20	20	0	0	0	0	0	0	0	20	20	0	0
	LPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STATE B															
Deans/ Directors	HPS	2	50	0	0	0	0	0	0	0	50	50	100	0	50
	LPS	5	40	20	0	0	20	0	0	20	0	0	0	0	0
Teachers	HPS	31	0	16	3	3	3	7	0	7	10	7	10	3	3
	LPS	153	3	15	0	1	1	8	1	9	12	3	3	1	2
Counselors	HPS	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	LPS	10	10	40	0	0	0	0	0	10	10	10	60	0	0
Job Placement Specialists	HPS	1	0	0	0	0	0	0	0	0	0	0	100	100	0
	LPS	15	0	40	0	0	0	0	0	20	20	0	60	0	0

TABLE 71
(continued)
CERTIFICATES HELD BY POSTSECONDARY INSTITUTION
PERSONNEL WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondents	Type of Site	Number of Respondents	Percent of Respondents by Types of Certificates[a]												
			Administration	Teaching	Agriculture Education	Cooperative Education	Distributive Education	Health Education	Occupational Home Economics	Office Education	Technical Education	Trade and Industrial Education	Vocational Counseling	Job Placement	Other
STATE C															
Deans/ Directors	HPS	3	67	33	0	0	0	0	0	0	0	0	0	0	0
	LPS	4	100	0	0	50	0	0	0	25	25	25	0	0	0
Teachers	HPS	58	5	33	9	0	2	3	0	7	10	24	3	2	3
	LPS	53	9	42	0	4	0	23	8	6	17	17	6	0	0
Counselors	HPS	18	22	28	0	0	0	6	0	0	0	0	50	0	7
	LPS	5	80	40	0	0	0	0	0	0	0	0	60	0	20
Job Placement Specialists	HPS	2	50	0	0	50	0	50	0	0	0	0	50	50	0
	LPS	1	0	0	0	0	0	0	0	0	0	0	0	0	0
STATE D															
Deans/ Directors	HPS	3	0	0	0	0	0	0	0	0	0	0	0	0	0
	LPS	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Teachers	HPS	52	2	10	0	2	2	12	0	8	2	0	2	0	2
	LPS	29	0	0	0	0	0	7	0	7	0	0	0	0	0
Counselors	HPS	6	0	0	0	0	0	0	0	0	0	0	17	17	0
	LPS	8	0	0	0	0	0	0	0	0	0	0	13	0	13
Job Placement Specialists	HPS	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	LPS	3	0	0	0	0	0	0	0	0	0	0	0	0	0

[a]Individuals may hold certificates in more than one field.

TABLE 72

HOURS WORKED PER WEEK AT POSTSECONDARY INSTITUTION
AS REPORTED BY STAFF WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Respondent	Type of Site	Number of Respondents	Percent of Responses 0-10	11-20	21-30	31-40	40+	No Response	Total[a]
					State A				
Teachers	HPS	146	1	6	12	64	10	7	100
	LPS	124	1	2	3	61	23	10	100
Counselors	HPS	10	0	0	0	90	10	0	100
	LPS	6	0	0	0	100	0	0	100
Job Placement Specialists	HPS	5	0	0	0	80	20	0	100
	LPS	0	0	0	0	0	0	0	0
					State B				
Teachers	HPS	31	0	3	0	78	13	7	101
	LPS	153	1	1	3	74	17	6	102
Counselors	HPS	1	0	0	0	100	0	0	100
	LPS	10	0	0	0	100	0	0	100
Job Placement Specialists	HPS	1	0	0	0	100	0	0	100
	LPS	5	0	0	20	80	0	0	100
					State C				
Teachers	HPS	58	17	7	21	40	3	12	100
	LPS	53	0	9	13	51	21	6	100
Counselors	HPS	18	0	0	17	83	0	0	100
	LPS	5	0	0	0	80	20	0	100
Job Placement Specialists	HPS	2	0	0	50	50	0	0	100
	LPS	1	0	0	0	100	0	0	100
					State D				
Teachers	HPS	52	2	6	6	67	15	4	100
	LPS	29	0	10	3	66	14	7	100
Counselors	HPS	6	0	0	0	83	17	0	100
	LPS	8	0	13	0	75	13	0	101
Job Placement Specialists	HPS	1	0	0	0	100	0	0	100
	LPS	3	0	0	0	100	0	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 73

HIGHEST LEVEL OF EDUCATION REPORTED BY
SELECTED GROUPS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Level of Education	Percent of Responses									
	Director		Teacher		Counselor		Job Placement Specialist		Advisory Committee	
	HP (n=3)	LP (n=1)	HP (n=144)	LP (n=124)	HP (n=10)	LP (n=6)	HP (n=5)	LP (n=0)	HP (n=77)	LP (n=27)
State A										
Less than H.S. Grad.	0	0	1	1	0	0	0	0	0	4
H.S. Grad.	0	0	0	0	0	0	0	0	10	11
Voc Ed Credit	0	0	9	13	0	0	0	0	5	11
Associate Degree	0	0	3	7	0	0	0	0	4	0
1 to 3 Years College	0	0	10	17	0	0	0	0	25	11
4 Yr. Degree	0	0	11	12	0	17	20	0	17	26
Beyond 4 yr.col	0	0	28	28	0	0	20	0	20	7
Master's	33	0	11	7	10	67	40	0	4	4
Beyond Master's	67	100	21	12	80	17	20	0	5	15
Doctorate	0	0	1	0	0	0	0	0	5	0
Other	0	0	3	1	10	0	0	0	5	0
No Response	0	0	1	2	0	0	0	0	0	11
Total[a]	100	100	99	100	100	101	100	0	100	101

TABLE 73
(continued)
HIGHEST LEVEL OF EDUCATION REPORTED BY
SELECTED GROUPS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Level of Education	Percent of Responses									
	Director		Teacher		Counselor		Job Placement Specialist		Advisory Committee	
	HP (n=2)	LP (n=5)	HP (n=31)	LP (n=153)	HP (n=1)	LP (n=10)	HP (n=1)	LP (n=5)	HP (n=12)	LP (n=55)
State B										
Less than H.S. Grad.	0	0	0	0	0	0	0	0	0	0
H.S. Grad.	0	0	7	1	0	0	0	0	8	9
Voc Ed Credit	0	0	0	3	0	0	0	0	0	4
Associate Degree	0	0	0	1	0	0	0	0	8	7
1 to 3 Years College	0	0	0	4	0	0	0	0	17	26
4 Yr. Degree	0	0	3	7	0	0	0	0	8	24
Beyond 4 yr.col	0	0	13	16	0	0	0	20	25	9
Master's	0	20	26	14	0	0	0	0	8	6
Beyond Master's	100	60	39	46	100	90	0	40	8	6
Doctorate	0	20	13	6	0	0	100	40	17	6
Other	0	0	0	2	0	10	0	0	0	4
No Response	0	0	0	1	0	0	0	0	0	2
Total[a]	100	100	101	100	100	100	100	100	99	103

TABLE 73
(continued)
HIGIEST LEVEL OF EDUCATION REPORTED BY
SELECTED GROUPS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Level of Education	Percent of Responses									
	Director		Teacher		Counselor		Job Placement Specialist		Advisory Committee	
	HP (n=3)	LP (n=4)	HP (n=58)	LP (n=53)	HP (n=18)	LP (n=5)	HP (n=2)	LP (n=1)	HP (n=30)	LP (n=30)
State C										
Less than H.S. Grad.	0	0	0	0	0	0	0	0	0	0
H.S. Grad.	0	0	0	0	0	0	0	0	10	3
Voc Ed Credit	0	0	5	0	0	0	0	0	7	0
Associate Degree	0	0	3	0	0	0	0	0	7	3
1 to 3 Years College	0	0	3	4	0	0	0	0	10	17
4 Yr. Degree	0	0	9	6	0	0	0	0	17	27
Beyond 4 yr.col	0	0	9	9	0	0	50	0	17	10
Master's	0	0	22	17	17	0	50	0	10	3
Beyond Master's	33	75	36	53	67	80	0	0	10	23
Doctorate	67	26	9	11	17	20	0	0	10	10
Other	0	0	0	0	0	0	0	100	3	3
No Response	0	0	3	0	0	0	0	0	0	0
Total[a]	100	100	99	100	101	100	100	100	101	99

TABLE 73
(continued)
HIGHEST LEVEL OF EDUCATION REPORTED BY
SELECTED GROUPS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Level of Education	Percent of Responses									
	Director		Teacher		Counselor		Job Placement Specialist		Advisory Committee	
	HP (n=3)	LP (n=1)	HP (n=52)	LP (n=29)	HP (n=6)	LP (n=8)	HP (n=1)	LP (n=3)	HP (n=39)	LP (n=37)
	State D									
Less than H.S. Grad.	0	0	0	0	0	0	0	0	0	0
H.S. Grad.	0	0	0	0	0	0	0	0	5	3
Voc Ed Credit	0	0	0	0	0	0	0	0	8	3
Associate Degree	0	0	0	0	0	0	0	0	8	5
1 to 3 Years College	0	0	0	0	0	0	0	0	8	3
4 Yr. Degree	0	0	4	7	0	13	0	0	21	14
Beyond 4 yr.col	0	0	19	7	0	0	0	0	18	3
Master's	33	0	35	28	50	13	0	33	15	30
Beyond Master's	33	0	37	45	50	38	100	0	10	3
Doctorate	33	100	2	10	0	38	0	33	5	32
Other	0	0	2	0	0	0	0	0	0	5
No Response	0	0	2	3	0	0	0	33	3	0
Total[a]	99	100	101	97	100	102	100	99	101	101

[a]Totals may not equal 100 percent due to rounding.

TABLE 74

NUMBER OF CLASS PREPARATIONS MADE EACH DAY AS INDICATED BY TEACHERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondents	Type of Site	Number of Respondents	Percent of Responses								
			0	1	2	3	4	5	6	No Response	Total[a]
State A											
Teachers	HPS	146	5	24	24	16	8	8	1	14	100
	LPS	124	2	36	19	16	8	8	2	10	101
State B											
Teachers	HPS	31	0	32	23	23	7	3	0	13	101
	LPS	153	1	22	26	22	7	7	1	15	101
State C											
Teachers	HPS	58	0	38	41	0	0	0	0	21	100
	LPS	53	0	26	53	0	0	0	0	21	101
State D											
Teachers	HPS	52	0	40	27	21	4	0	0	8	100
	LPS	29	3	21	31	31	4	0	0	10	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 75

EFFECT THAT A TEACHER'S ABILITY TO PLACE STUDENTS IN TRAINING-RELATED JOBS HAS ON TENURE, SALARY, PROMOTION, AND TERMINATION AS INDICATED BY DEANS/DIRECTORS

Type of Site	Number of Respondents	Response Categories	Percent of Responses				
			Tenure	Salary Increases	Promotion	Termination of Employment	Other
					State A		
HPS	3	Yes	33	33	33	33	0
		No	67	67	67	33	0
		No Response	0	0	0	33	100
		Totals[a]	100	100	100	99	100
LPS	5	Yes	0	0	0	0	100
		No	100	100	100	100	0
		No Response	0	0	0	0	0
		Totals[a]	100	100	100	100	100
					State B		
HPS	2	Yes	0	0	0	0	50
		No	100	100	100	100	0
		No Response	0	0	0	0	50
		Totals[a]	100	100	100	100	100
LPS	1	Yes	20	40	40	20	0
		No	60	60	60	60	0
		No Response	20	0	0	20	100
		Totals[a]	100	100	100	100	100
					State C		
HPS	4	Yes	0	0	0	0	0
		No	100	100	100	100	33
		No Response	0	0	0	0	67
		Totals[a]	100	100	100	100	100
LPS	4	Yes	0	0	0	0	0
		No	100	100	100	100	0
		No Response	0	0	0	0	100
		Totals[a]	100	100	100	100	100
					State D		
HPS	3	Yes	0	0	67	0	0
		No	100	100	33	67	0
		No Response	0	0	0	33	100
		Totals[a]	100	100	100	100	100
LPS	1	Yes	0	0	0	0	100
		No	100	100	100	100	0
		No Response	0	0	0	0	0
		Totals[a]	100	100	100	100	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 76

HIGHEST LEVEL OF EDUCATION OBTAINED BY FATHERS AS INDICATED BY STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondents	Type of Site	Number of Respondents	Percent of Responses									
			Under 7 Years	7-9 Years	10-11 Years	High School Graduate	1-3 Years College	4-Year Degree	Beyond 4 Years College	Master's Degree	No Response	Total[a]
							State A					
Current Students	HPS	132	6	23	14	30	11	5	0	1	11	101
	LPS	70	1	23	7	36	13	10	0	3	7	100
Former Students	HPS	125	1	24	7	42	11	5	0	4	6	100
	LPS	163	3	19	9	32	15	10	0	7	6	101
							State B					
Current Students	HPS	62	15	10	15	26	16	3	2	2	13	102
	LPS	147	10	12	7	26	14	8	0	11	14	102
Former Students	HPS	30	23	13	10	20	13	3	0	7	10	99
	LPS	59	15	19	14	22	7	3	0	7	14	101
							State C					
Current Students	HPS	24	0	8	4	58	21	4	0	17	8	100
	LPS	29	7	7	10	17	17	10	0	17	14	99
Former Students	HPS	49	10	10	6	22	20	16	0	8	6	98
	LPS	87	9	13	6	17	18	14	0	18	5	100
							State D					
Current Students	HPS	71	4	11	11	32	13	10	0	10	8	99
	LPS	33	9	3	12	27	15	12	0	6	15	99
Former Students	HPS	6	7	11	11	40	13	9	0	7	4	102
	LPS	46	13	17	11	44	4	2	0	2	7	100

[a]Totals may not equal 100 percent due to rounding.

TABLE 77

HIGHEST LEVEL OF EDUCATION OBTAINED BY MOTHERS AS INDICATED BY STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondents	Type of Site	Number of Respondents	Percent of Responses									
			Under 7 Years	7-9 Years	10-11 Yeers	High School Graduate	1-3 Years College	4-Year Degree	Beyond 4 Years College	Master's Degree	No Response	Total[a]
Current Students	HPS	132	2	11	10	50	13	4	0	2	8	100
	LPS	70	3	10	9	43	17	4	0	1	13	100
Former Students	HPS	125	2	9	12	48	14	6	0	2	7	100
	LPS	163	1	10	9	48	20	5	0	4	4	101
Current Students	HPS	62	11	5	10	31	27	2	0	2	13	101
	LPS	147	7	10	13	37	17	7	0	2	9	100
Former Students	HPS	30	10	20	27	27	10	0	0	0	7	100
	LPS	59	19	14	10	27	15	5	0	5	5	100
Current Students	HPS	24	8	13	17	33	8	13	0	0	8	100
	LPS	29	0	10	7	45	10	3	0	7	17	99
Former Students	HPS	49	4	8	6	27	37	4	0	6	8	100
	LPS	87	8	8	9	28	23	15	0	5	5	101
Current Students	HPS	71	3	9	9	53	10	7	0	3	7	101
	LPS	33	0	6	15	36	12	12	0	3	15	99
Former Students	HPS	76	7	11	17	43	12	4	0	1	5	100
	LPS	46	4	2	13	63	11	2	0	0	4	99

[a]Totals may not equal 100 percent due to rounding.

TABLE 78

OCCUPATION OF FATHERS AS INDICATED BY
STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Occupations	Percent of Responses			
	Current Students		Former Students	
	High Placement Sites (N=132)	Low Placement Sites (N=70)	High Placement Sites (N=125)	Low Placement Sites (N=163)
		State A		
Clerical	2	1	5	2
Craftsperson	11	6	13	12
Farmer	8	16	7	14
Homemaker	0	0	0	0
Laborer	13	10	10	8
Administrator	6	6	7	10
Military	2	1	1	1
Operative	12	10	10	5
Professional	3	6	10	14
Proprietor	5	4	4	9
Protective Services	1	0	2	0
Service	2	1	2	1
Sales	1	10	3	5
Technical	1	1	2	3
Other	17	14	17	10
No Response	13	13	6	6
Total[a]	102	99	99	100

TABLE 78
(continued)
OCCUPATION OF FATHERS AS INDICATED BY
STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Occupations	Percent of Responses			
	Current Students		Former Students	
	High Placement Sites (N=62)	Low Placement Sites (N=147)	High Placement Sites (N=30)	Low Placement Sites (N=59)
		State B		
Clerical	0	4	0	0
Craftsperson	13	17	20	19
Farmer	13	3	0	9
Homemaker	2	0	0	0
Laborer	3	7	23	14
Administrator	8	6	10	2
Military	2	3	0	9
Operative	7	8	10	7
Professional	8	11	7	2
Proprietor	7	6	7	7
Protective Services	3	2	0	2
Service	3	2	0	0
Sales	3	2	0	3
Technical	3	3	0	5
Other	8	17	17	15
No Response	18	10	7	9
Total[a]	101	101	101	103

TABLE 78
(continued)
OCCUPATION OF FATHERS AS INDICATED BY
STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Occupations	Percent of Responses			
	Current Students		Former Students	
	High Placement Sites (N=24)	Low Placement Sites (N=29)	High Placement Sites (N=49)	Low Placement Sites (N=87)
		State C		
Clerical	0	0	0	3
Craftsperson	21	21	18	12
Farmer	4	0	2	8
Homemaker	0	0	0	0
Laborer	0	0	6	6
Administrator	13	10	8	9
Military	8	7	4	5
Operative	4	0	10	2
Professional	17	17	20	17
Proprietor	0	7	6	12
Protective Services	0	10	0	0
Service	0	3	2	3
Sales	0	3	4	5
Technical	0	0	0	3
Other	17	7	12	13
No Response	14	14	6	2
Total[a]	98	99	98	100

TABLE 78
(continued)
OCCUPATION OF FATHERS AS INDICATED BY
STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Occupations	Percent of Responses			
	Current Students		Former Students	
	High Placement Sites (N=71)	Low Placement Sites (N=33)	High Placement Sites (N=76)	Low Placement Sites (N=46)
	State D			
Clerical	1	6	3	0
Craftsperson	10	21	20	22
Farmer	3	3	1	0
Homemaker	0	0	0	0
Laborer	4	0	9	17
Administrator	14	9	15	4
Military	3	0	0	4
Operative	10	9	5	11
Professional	21	21	11	7
Proprietor	3	9	8	4
Protective Services	1	0	4	4
Service	0	0	3	2
Sales	4	3	3	4
Technical	6	3	4	2
Other	13	3	9	13
No Response	7	12	7	4
Total[a]	100	99	102	98

[a] Totals may not equal 100 percent due to rounding.

TABLE 79

OCCUPATIONS OF MOTHERS AS INDICATED BY
STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Occupations	Percent of Responses			
	Current Students		Former Students	
	High Placement Sites (N=132)	Low Placement Sites (N=70)	High Placement Sites (N=125)	Low Placement Sites (N=163)
			State A	
Clerical	13	13	19	18
Craftsperson	2	0	0	0
Farmer	2	4	2	1
Homemaker	34	29	26	31
Laborer	4	4	1	2
Administrator	4	1	1	4
Military	0	0	3	0
Operative	3	0	11	6
Professional	5	7	1	11
Proprietor	4	4	9	0
Protective Services	0	0	2	0
Service	11	7	2	7
Sales	3	1	2	3
Technical	1	1	2	0
Other	8	9	10	9
No Response	8	19	11	9
Total[a]	102	99	102	99

TABLE 79
(continued)
OCCUPATIONS OF MOTHERS AS INDICATED BY
STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Occupations	Percent of Responses			
	Current Students		Former Students	
	High Placement Sites (N=62)	Low Placement Sites (N=147)	High Placement Sites (N=30)	Low Placement Sites (N=59)
		State B		
Clerical	24	16	13	17
Craftsperson	3	1	0	5
Farmer	27	34	40	39
Homemaker	0	0	0	0
Laborer	0	1	3	0
Administrator	0	3	3	0
Military	0	0	0	0
Operative	2	1	3	0
Professional	16	6	0	5
Proprietor	2	1	0	0
Protective Services	0	0	0	0
Service	7	9	13	10
Sales	2	3	0	3
Technical	0	0	0	0
Other	5	13	10	12
No Response	13	12	13	9
Total[a]	101	100	98	100

TABLE 79
(continued)
OCCUPATIONS OF MOTHERS AS INDICATED BY
STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Occupations	Percent of Responses			
	Current Students		Former Students	
	High Placement Sites (N=24)	Low Placement Sites (N=29)	High Placement Sites (N=49)	Low Placement Sites (N=87)
			State C	
Clerical	17	24	27	16
Craftsperson	0	0	2	0
Farmer	0	0	0	1
Homemaker	58	28	29	32
Laborer	0	3	0	0
Administrator	4	10	2	6
Military	0	0	0	0
Operative	0	3	2	7
Professional	0	3	16	12
Proprietor	0	0	2	5
Protective Services	0	0	0	0
Service	0	7	2	7
Sales	0	0	6	1
Technical	0	3	0	1
Other	8	3	4	10
No Response	13	14	8	7
Total[a]	100	98	100	100

TABLE 79

(continued)

OCCUPATIONS OF MOTHERS AS INDICATED BY
STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Occupations	Percent of Responses			
	Current Students		Former Students	
	High Placement Sites (N=71)	Low Placement Sites (N=33)	High Placement Sites (N=76)	Low Placement Sites (N=46)
		State D		
Clerical	23	21	13	22
Craftsperson	0	0	3	2
Farmer	0	15	1	22
Homemaker	21	0	41	7
Laborer	3	0	4	0
Administrator	6	0	3	0
Military	0	0	0	0
Operative	4	12	4	4
Professional	10	18	8	9
Proprietor	1	0	0	2
Protective Services	0	0	1	0
Service	4	9	5	13
Sales	7	0	4	4
Technical	3	0	0	0
Other	13	12	9	4
No Response	6	12	4	11
Total[a]	101	99	100	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 80

MAJOR REASONS FOR ENROLLING IN PARTICULAR PROGRAM AREAS AS INDICATED BY STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Reasons for Choosing Particular Program	Percent of Responses			
	Current Students		Former Students	
	High Placement Site (N = 132)	Low Placement Site (N = 70)	High Placement Site (N = 125)	Low Placement Site (N = 163)
	State A			
To acquire skills needed for obtaining first job	33	40	45	44
To upgrade skills in occupations where previously or currently employed	13	17	14	12
To acquire new skill in order to change occupations	39	31	30	32
Was unable to attend four-year college	2	1	1	0
Parents encouraged enrollment in program area	1	3	1	3
No definite reasons	2	4	2	7
Other	6	1	6	1
No Response	3	3	1	1
Totals[a]	99	100	100	100

TABLE 80
(continued)
MAJOR REASONS FOR ENROLLING IN PARTICULAR PROGRAM AREAS AS INDICATED BY STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Reasons for Choosing Particular Program	Percent of Responses			
	Current Students		Former Students	
	High Placement Site (N = 62)	Low Placement Site (N = 142)	High Placement Site (N = 30)	Low Placement Site (N = 59)
	State B			
To acquire skills needed for obtaining first job	15	17	13	31
To upgrade skills in occupations where previously or currently employed	32	27	30	24
To acquire new skill in order to change occupations	31	35	33	24
Was unable to attend four-year college	2	3	3	5
Parents encouraged enrollment in program area	3	0	0	2
No definite reasons	0	1	3	3
Other	5	13	13	10
No Response	13	3	3	2
Totals[a]	101	99	98	99

TABLE 80
(continued)
MAJOR REASONS FOR ENROLLING IN PARTICULAR PROGRAM AREAS AS INDICATED BY STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Reasons for Choosing Particular Program	Percent of Responses			
	Current Students		Former Students	
	High Placement Site (N = 24)	Low Placement Site (N = 29)	High Placement Site (N = 49)	Low Placement Site (N = 87)
	State C			
To acquire skills needed for obtaining first job	0	35	35	17
To upgrade skills in occupations where previously or currently employed	33	24	20	39
To acquire new skill in order to change occupations	46	24	31	20
Was unable to attend four-year college	8	3	2	2
Parents encouraged enrollment in program area	0	0	0	0
No definite reasons	0	3	0	3
Other	8	10	10	15
No Response	4	0	2	3
Totals[a]	99	99	100	99

TABLE 80
(continued)
MAJOR REASONS FOR ENROLLING IN PARTICULAR PROGRAM AREAS AS INDICATED BY STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Reasons for Choosing Particular Program	Percent of Responses			
	Current Students		Former Students	
	High Placement Site (N = 71)	Low Placement Site (N = 33)	High Placement Site (N = 76)	Low Placement Site (N = 46)
	State D			
To acquire skills needed for obtaining first job	34	9	36	22
To upgrade skills in occupations where previously or currently employed	20	9	21	28
To acquire new skill in order to change occupations	31	42	20	47
Was unable to attend four-year college	4	6	5	11
Parents encouraged enrollment in program area	0	0	1	4
No definite reasons	3	27	1	15
Other	4	3	12	2
No Response	4	3	4	0
Totals[a]	100	99	100	99

[a]Totals may not equal 100 percent due to rounding.

TABLE 81

VOCATIONAL-TECHNICAL EDUCATION PROGRAMS
IN WHICH CURRENT AND FORMER STUDENTS ENROLLED

Type of Respondent	Number of Respondents	Type of Site	Percent of Responses: Agriculture Education	Distributive Education	Health Occupations	Occupational Home Economics	Office Occupations	Technical	Trade and Industrial	Other	No Response	Total[a]
						State A						
Current Student	132	HPS	8	6	14	0	25	3	21	19	4	100
	70	LPS	1	9	9	0	16	3	27	31	4	100
Former Student	125	HPS	4	4	21	0	24	5	18	23	1	100
	163	LPS	3	1	13	1	14	9	29	28	2	100
						State B						
Current Student	62	HPS	0	0	36	0	5	24	10	21	5	101
	147	LPS	1	0	16	0	12	19	19	29	4	100
Former Student	30	HPS	0	0	27	0	10	13	7	43	0	100
	59	LPS	2	0	25	0	15	17	12	29	0	100
						State C						
Current Student	24	HPS	0	0	33	0	13	0	25	25	4	100
	29	LPS	3	0	41	0	14	3	7	31	0	99
Former Student	49	HPS	2	0	26	0	6	16	20	31	0	101
	87	LPS	0	0	7	0	17	13	15	46	2	100
						State D						
Current Student	71	HPS	1	0	31	0	21	16	4	20	7	100
	33	LPS	0	0	27	0	24	21	3	24	0	99
Former Student	76	HPS	0	1	20	0	26	4	4	45	0	100
	46	LPS	0	0	26	0	17	17	0	29	0	99

[a] Totals may nor equal 100 percent due to rounding.

TABLE 82

EXTENT TO WHICH STUDENTS HELD A JOB IN 1978-79 DURING THE TIME THEY WERE ENROLLED IN A POSTSECONDARY INSTITUTION AS INDICATED BY STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Respondents	Type of Site	Number of Respondents	Percent of Responses			
			Yes	No	No Response	Totals
		State A				
Current Students	HPS	132	50	45	5	100
	LPS	70	67	27	6	100
Former Students	HPS	125	63	34	3	100
	LPS	163	68	30	2	100
		State B				
Current Students	HPS	62	55	40	5	100
	LPS	147	68	28	4	100
Former Students	HPS	30	80	20	0	100
	LPS	59	61	37	2	100
		State C				
Current Students	HPS	24	92	8	0	100
	LPS	29	72	28	0	100
Former Students	HPS	49	76	20	4	100
	LPS	87	69	28	3	100
		State D				
Current Students	HPS	71	83	14	3	100
	LPS	33	70	30	0	100
Former Students	HPS	76	71	28	1	100
	LPS	46	83	17	0	100

TABLE 83

PLACEMENT STATUS WITHIN SIX MONTHS OF LEAVING THEIR POSTSECONDARY INSTITUTION AS INDICATED BY FORMER STUDENTS

Type of Site	Number of Respondents	Percent of Responses[a]							
		Obtained Part-time Job	Obtained Full-time Job	Became Self-Employed	Enrolled In Vo-Tech Program In Different School	Enrolled In Non-Vo-Tech Program In Different School	Entered Military Service	Was Unemployed	Other
					STATE A				
HPS	125	21	66	6	6	2	0	11	10
LPS	163	12	72	13	3	3	1	4	13
					STATE B				
HPS	30	3	60	3	0	10	0	7	17
LPS	59	10	64	5	2	5	0	7	22
					STATE C				
HPS	49	27	53	8	2	4	4	6	18
LPS	87	12	38	7	2	2	0	8	31
					STATE D				
HPS	76	25	42	4	11	11	0	5	16
LPS	46	15	54	2	7	17	0	7	17

[a] Categories are not mutually exclusive: respondents could select as many as necessary.

TABLE 84

DEGREE OF SIMILARITY BETWEEN SKILLS LEARNED IN VOCATIONAL-TECHNICAL EDUCATION AND WORK SKILLS USED ON FIRST JOB AFTER LEAVING POSTSECONDARY INSTITUTION AS INDICATED BY FORMER STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses					
		Same As Skills Learned	Somewhat Related	Slightly Related	Not At All Related	No Response	Totals[a]
				STATE A			
HPS	125	45	22	9	14	11	101
LPS	163	49	26	7	6	13	101
				STATE B			
HPS	30	37	33	7	3	20	100
LPS	59	37	24	5	9	25	100
				STATE C			
HPS	49	41	22	12	8	16	99
LPS	87	20	25	9	10	36	100
				STATE D			
HPS	76	30	26	4	9	30	99
LPS	46	48	22	4	2	24	100

[a]Totals may not equal 100 percent due to rounding.

TABLE 85

RATING OF VOCATIONAL-TECHNICAL EDUCATION PREPARATION FOR FIRST JOB BY FORMER STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses: Excellent Preparation	Good Preparation	Fair Preparation	Poor Preparation	No Response	Totals[a]
			STATE A				
HPS	125	22	32	20	8	18	100
LPS	163	38	31	14	3	14	100
			STATE B				
HPS	30	30	30	17	3	20	100
LPS	59	27	27	12	5	29	100
			STATE C				
HPS	49	25	35	14	8	18	100
LPS	87	18	20	15	5	43	101
			STATE D				
HPS	76	22	33	9	5	30	99
LPS	46	24	39	9	2	26	100

[a]Totals may not equal 100 percent due to rounding.

TABLE 86

DEGREES EARNED BY FORMER STUDENTS
WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses: Associate Degree	Certificate of Completion	Program Completed No Formal Award	Other	No Response	Total[a]
			State A				
HPS	125	8	59	4	18	10	100
LPS	163	7	74	1	7	11	100
			State B				
HPS	30	67	27	3	0	3	100
LPS	59	78	12	0	10	0	100
			State C				
HPS	49	76	22	0	2	0	100
LPS	87	23	20	20	14	24	101
			State D				
HPS	76	97	0	0	1	1	99
LPS	46	98	2	0	0	0	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 87

FIRST JOB HELD AFTER LEAVING POSTSECONDARY INSTITUTION
AS INDICATED BY FORMER STUDENTS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses: Professional, Technical or Managerial	Clerical and Sales	Service	Agriculture, Fishing, Forestry, etc.	Processing	Machine Trades	Bench Work	Structural	Misc.	No Response	Total[a]
					State A							
HPS	125	12	32	18	4	0	6	1	3	2	22	100
LPS	163	12	26	14	3	1	14	2	4	5	18	99
					State B							
HPS	30	20	17	17	0	0	7	0	3	3	33	100
LPS	59	25	24	12	0	0	2	0	5	2	31	101
					State C							
HPS	49	33	10	12	4	0	6	2	0	0	33	100
LPS	87	21	18	5	1	0	1	0	5	2	47	100
					State D							
HPS	76	22	25	11	0	0	0	0	0	1	41	100
LPS	46	26	24	11	0	0	0	0	2	0	37	100

[a] Totals may not equal 100 percent due to rounding.

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TABLE 88

PROGRAM EVALUATION ACTIVITIES CONDUCTED IN POSTSECONDARY INSTITUTIONS AS INDICATED BY DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Activity	Type of Site	Number of Respondents	Percent of Responses: Once A Year	Once Every Two Years	Once Every Three Years	Once Every Four Years	Once Every Five Years	Never	No Response	Total
					State A					
Follow-up of Completers	HPS	3	67	33	0	0	0	0	0	100
	LPS	1	100	0	0	0	0	0	0	100
Follow-up of Leavers	HPS	3	100	0	0	0	0	0	0	100
	LPS	1	100	0	0	0	0	0	0	100
Survey of Employers	HPS	3	33	33	0	0	0	33	0	99
	LPS	1	100	0	0	0	0	0	0	100
Collection of Student Data	HPS	3	100	0	0	0	0	0	0	100
	LPS	1	100	0	0	0	0	0	0	100
					State B					
Follow-up of Completers	HPS	2	50	50	0	0	0	0	0	100
	LPS	5	100	0	0	0	0	0	0	100
Follow-up of Leavers	HPS	2	100	0	0	0	0	0	0	100
	LPS	5	100	0	0	0	0	0	0	100
Survey of Employers	HPS	2	100	0	0	0	0	0	0	100
	LPS	5	60	40	0	0	0	0	0	100
Collection of Student Data	HPS	2	50	50	0	0	0	0	0	100
	LPS	5	40	40	0	0	0	20	0	100

TABLE 88
(continued)
PROGRAM EVALUATION ACTIVITIES CONDUCTED IN POSTSECONDARY INSTITUTIONS
AS INDICATED BY DEANS/DIRECTORS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Activity	Type of Site	Number of Respondents	Percent of Responses: Once A Year	Once Every Two Years	Once Every Three Years	Once Every Four Years	Once Every Five Years	Never	No Response	Total
					State C					
Follow-up of Completers	HPS	3	100	0	0	0	0	0	0	100
	LPS	4	50	0	0	25	25	0	0	100
Follow-up of Leavers	HPS	3	67	0	0	0	33	0	0	100
	LPS	4	50	0	0	25	25	0	0	100
Survey of Employers	HPS	3	67	0	0	0	33	0	0	100
	LPS	4	25	0	25	25	25	0	0	100
Collection of Student Data	HPS	3	0	0	0	33	0	67	0	100
	LPS	4	0	0	0	25	0	75	0	100
					State D					
Follow-up of Completers	HPS	3	67	0	0	33	0	0	0	100
	LPS	1	100	0	0	0	0	0	0	100
Follow-up of Leavers	HPS	3	67	33	0	0	0	0	0	100
	LPS	1	0	100	0	0	0	0	0	100
Survey of Employers	HPS	3	33	0	0	0	0	0	67	100
	LPS	1	0	0	0	0	0	100	0	100
Collection of Student Data	HPS	3	100	0	0	0	0	0	0	100
	LPS	1	0	100	0	0	0	0	0	100

TABLE 89

RATING OF THE QUALITY OF VOCATIONAL-TECHNICAL EDUCATION STUDENT WORKERS AS INDICATED BY EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses: Excellent	Good	Fair	Poor	Does Not Meet My Business's Needs	No Basis for Rating	No Response	Total[a]
					State A				
HPS	66	24	46	15	3	0	8	5	101
LPS	45	18	62	11	0	4	2	2	99
					State B				
HPS	55	11	26	22	4	0	27	11	101
LPS	67	10	34	15	8	5	18	10	100
					State C				
HPS	21	10	24	38	0	10	14	5	101
LPS	35	11	37	20	3	6	14	9	100
					State D				
HPS	24	25	25	21	4	0	17	8	100
LPS	25	24	48	8	4	4	4	8	100

[a]Totals may not equal 100 percent due to rounding

TABLE 90

WORKERS WHO HAVE BEEN VOCATIONAL-TECHNICAL EDUCATION STUDENTS COMPARED WITH WORKERS WHO HAVE NOT BEEN VOCATIONAL-TECHNICAL EDUCATION STUDENTS AS INDICATED BY EMPLOYERS WHO HAVE RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Activity	Type of Site	Number of Respondents	Percent of Responses						
			Much Better	Better	Same	Worse	Much Worse	No Response	Totals
State A									
Reading and Interpretive Skills	HPS	66	9	46	38	2	0	6	101
	LPS	45	11	47	29	0	0	13	100
Mathematical Knowledge	HPS	66	5	41	42	3	0	9	100
	LPS	45	13	42	27	4	0	13	99
Knowledge and Skills Dealing with Safety	HPS	66	8	41	38	2	0	12	101
	LPS	45	9	29	47	2	0	13	100
Personal Relations Skills	HPS	66	6	36	49	0	0	9	100
	LPS	45	13	31	38	4	0	13	99
Communication Skills	HPS	66	8	39	42	2	0	9	100
	LPS	45	16	40	29	2	0	13	100
Work Attitudes	HPS	66	12	38	38	5	2	6	101
	LPS	45	13	38	29	7	0	13	100
Supervisory Skills	HPS	66	11	30	46	6	0	8	101
	LPS	45	13	33	36	2	0	16	100
Psychomotor Skills	HPS	66	2	36	52	0	0	11	101
	LPS	45	4	20	62	0	0	13	99
Occupational Skills	HPS	66	21	55	15	2	0	8	101
	LPS	45	27	42	16	0	0	17	102
Other	HPS	66	0	0	3	0	0	97	100
	LPS	45	4	2	4	0	2	87	99

TABLE 90

(continued)

WORKERS WHO HAVE BEEN VOCATIONAL-TECHNICAL EDUCATION STUDENTS COMPARED WITH WORKERS WHO HAVE NOT BEEN VOCATIONAL-TECHNICAL EDUCATION STUDENTS AS INDICATED BY EMPLOYERS WHO HAVE RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Activity	Type of Site	Number of Respondents	Percent of Responses						
			Much Better	Better	Same	Worse	Much Worse	No Response	Totals[a]
			State B						
Reading and Interpretive Skills	HPS	55	16	56	13	6	0	9	100
	LPS	67	13	49	16	3	0	18	100
Mathematical Knowledge	HPS	55	15	46	27	2	0	11	101
	LPS	67	13	45	19	3	0	19	99
Knowledge and Skills Dealing with Safety	HPS	55	6	24	56	2	0	13	101
	LPS	67	13	34	33	0	0	19	99
Personal Relations Skills	HPS	55	15	36	38	2	0	9	100
	LPS	67	5	42	34	2	0	18	101
Communication Skills	HPS	55	16	53	20	2	0	9	100
	LPS	67	6	48	25	0	0	21	100
Work Attitudes	HPS	55	20	42	22	6	0	11	101
	LPS	67	15	39	24	5	0	18	101
Supervisory Skills	HPS	55	16	42	26	2	0	15	101
	LPS	67	13	33	27	5	0	22	100
Psychomotor Skills	HPS	55	7	33	42	2	0	16	100
	LPS	67	8	31	36	2	0	24	101
Occupational Skills	HPS	55	20	46	22	2	0	11	101
	LPS	67	18	46	12	5	0	19	100
Other	HPS	55	4	0	0	2	0	95	101
	LPS	67	2	0	0	0	0	99	101

TABLE 90

(continued)

WORKERS WHO HAVE BEEN VOCATIONAL-TECHNICAL EDUCATION STUDENTS COMPARED WITH WORKERS WHO HAVE NOT BEEN VOCATIONAL-TECHNICAL EDUCATION STUDENTS AS INDICATED BY EMPLOYERS WHO HAVE RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Activity	Type of Site	Number of Respondents	Percent of Responses: Much Better	Better	Same	Worse	Much Worse	No Response	Totals[a]
			State C						
Reading and Interpretive Skills	HPS	21	24	29	29	0	0	19	101
	LPS	35	11	37	29	3	0	20	100
Mathematical Knowledge	HPS	21	24	29	29	0	0	19	101
	LPS	35	6	43	29	3	0	20	101
Knowledge and Skills Dealing with Safety	HPS	21	0	52	24	5	0	19	100
	LPS	35	9	31	37	3	0	20	100
Personal Relations Skills	HPS	21	0	33	43	5	0	19	100
	LPS	35	20	31	29	0	0	20	100
Communication Skills	HPS	21	14	38	24	5	0	19	100
	LPS	35	20	31	26	0	0	23	100
Work Attitudes	HPS	21	10	33	29	5	5	19	101
	LPS	35	14	20	34	11	0	20	99
Supervisory Skills	HPS	21	5	33	29	5	5	24	101
	LPS	35	11	31	34	3	0	20	99
Psychomotor Skills	HPS	21	0	33	38	5	0	24	100
	LPS	35	0	29	49	3	0	20	101
Occupational Skills	HPS	21	19	43	10	10	0	19	101
	LPS	35	9	49	20	3	0	20	101
Other	HPS	21	0	5	0	0	0	95	100
	LPS	35	0	3	0	0	0	97	100

TABLE 90
(continued)

WORKERS WHO HAVE BEEN VOCATIONAL-TECHNICAL EDUCATION STUDENTS COMPARED WITH WORKERS WHO HAVE NOT BEEN VOCATIONAL-TECHNICAL EDUCATION STUDENTS AS INDICATED BY EMPLOYERS WHO HAVE RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Activity	Type of Site	Number of Respondents	Percent of Responses						
			Much Better	Better	Same	Worse	Much Worse	No Response	Totals[a]
State Q									
Reading and Interpretive Skills	HPS	24	4	33	38	8	0	17	100
	LPS	25	16	48	28	0	0	8	100
Mathematical Knowledge	HPS	24	0	42	33	8	0	17	100
	LPS	25	16	52	24	0	0	8	100
Knowledge and Skills Dealing with Safety	HPS	24	8	21	50	0	0	21	100
	LPS	25	8	36	48	0	0	8	100
Personal Relations Skills	HPS	24	0	25	63	0	0	13	101
	LPS	25	16	32	40	4	0	8	100
Communication Skills	HPS	24	0	42	42	4	0	13	101
	LPS	25	20	44	24	4	0	8	100
Work Attitudes	HPS	24	8	33	42	4	0	13	100
	LPS	25	24	32	32	4	0	8	100
Supervisory Skills	HPS	24	8	33	38	4	0	17	100
	LPS	25	16	40	36	0	0	8	100
Psychomotor Skills	HPS	24	0	25	50	0	0	25	100
	LPS	25	8	32	52	0	0	8	100
Occupational Skills	HPS	24	25	42	21	0	0	13	101
	LPS	25	20	56	12	4	0	8	100
Other	HPS	24	8	0	4	0	0	88	100
	LPS	25	4	8	0	0	0	88	100

[a] Totals may not equal 100 percent due to rounding.

TABLE 91

RATING OF THE NUMBER OF STUDENTS TRAINED TO MEET BUSINESS/INDUSTRY'S EMPLOYMENT NEEDS AS INDICATED BY EMPLOYERS WHO RESPONDED TO THE MAIL QUESTIONNAIRE

Type of Site	Number of Respondents	Percent of Responses							
		Excellent	Good	Fair	Poor	Doesn't Meet Need	No Basis for Rating	No Response	Total[a]
State A									
HPS	66	17	33	17	3	2	6	23	101
LPS	45	9	51	11	4	0	2	22	99
State B									
HPS	55	6	26	16	4	0	24	26	102
LPS	67	2	36	15	6	6	15	21	101
State C									
HPS	21	5	14	24	5	5	14	33	100
LPS	35	6	43	14	3	6	9	20	101
State D									
HPS	24	21	29	8	0	0	13	29	100
LPS	25	20	24	16	4	0	8	28	100

[a]Totals may not equal 100 percent due to rounding

TABLE 92

CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

	VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
1.	Ranking of the goal of vocational-technical education: Placement in training related job (5=most important...1=least important) Respondent groups: D,T,C,J,A,E[a]	0.55	.001	3.04	0.31
2.	Ranking of the goal of vocational-technical education: Placement in a job not necessarily related to training (5=most important... 1=least important) Respondent groups: D,T,C,J,A,E[a]	0.53	.001	1.59	0.21
3.	Ranking of the goal of vocational-technical education: Creation of an awareness of the various jobs for which one might prepare (5=most important...1=least important) Respondent groups: D,T,C,J,A,E[a]	-0.58	.000	3.25	0.27
4.	Ranking of the goal of vocational-technical education: To provide exploration of various occupational areas (5=most important... 1=least important) Respondent groups: D,T,C,J,A,E[a]	-0.48	.003	2.64	0.33
5.	Helpfulness ratings of basic skills as a factor in job obtainment (5=very much help...1=very little help) Respondent groups: D,T,C,J,A,E,FS[a]	-0.31	.04	4.30	0.20
6.	Helpfulness ratings of previous work experience as a factor in job obtainment (5=very much help...1=very little help) Respondent groups: D,T,C,J,A,CS,FS[a]	0.41	.01	3.84	0.18
7.	Amount of difficulty that a lack of specific job skills poses in job obtainment (5=very much difficulty... 1=very little difficulty) Respondent groups: D,T,C,J,A,E,CS,FS[a]	-0.40	.01	3.11	0.22

TABLE 92
(continued)
CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
8. Amount of difficulty that union restrictions on hiring poses in job obtainment (5=very much difficulty... 1=very little difficulty) Respondent groups: D,T,C,J,A,E,CS,FS[a]	-0.38	.02	2.04	0.24
9. Amount of difficulty that the minimum wage poses in job obtainment (5=very much difficulty... 1=very little difficulty) Respondent groups: D,T,C,J,A,E,CS,FS[a]	-0.36	.02	2.83	0.29
10. Amount of difficulty that lack of transportation poses in job obtainment (5=very much difficulty... 1=very little difficulty) Respondent groups: D,T,C,J,A,E,CS,FS[a]	-0.46	.00	2.27	0.25
11. Amount of difficulty that lack of certification or associate degree poses in job obtainment (5=very much difficulty... 1=very little difficulty) Respondent groups: D,T,C,J,A,E,CS,FS[a]	-0.52	.00	2.43	0.30
12. Time spent participating in teaching technical education (4=fulltime...1=less than quartertime Respondent groups: D,T,C,J[a]	0.33	.03	86.35	14.61
13. Rating of school's performance in providing advanced education placement (5=excellent...1=failing) Respondent groups: T,C,J,CS,FS[a]	-.56	.001	3.66	0.28
14. Rating of school's performance in providing counseling about careers (5=excellent...1=failing) Respondent groups: T,C,J,CS,FS[a]	-0.42	.00	3.79	0.28

TABLE 92
(continued)
CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
15. Rating of school's performance in working with advisory committee (5=excellent... 1=failing) Respondent groups: T,C,J,CS,FS[a]	0.43	.00	3.48	0.48
16. Percent of time spent in assisting in educational placement Respondent groups: T,C,J[a]	-0.48	.00	15.12	14.71
17. Helfulness of vocational-technical education teachers as sources of information about job openings (5=very much help...1=very little help) Respondent groups: T,C,J,CS,FS[a]	0.62	.00	3.58	0.34
18. Helpfulness of the public employment service as a source of information regarding job openings (5=very much help...1=very little help) Respondent groups: T,C,J,CS,FS[a]	0.34	.05	2.49	0.47
19. Frequency with which individual letters are sent to employers regarding job placement (12 times/year, 4 times/year, 2 times/year, 1 time/year, 0) Respondent groups: T,J[a]	-0.31	.05	1.97	1.38
20. Frequency with which school places ads in media to identify job openings (12 times/ year, 4 times/year, 2 times/ year, 1 time/ year, 0) Respondent groups: T,J[a]	0.44	.01	0.57	0.71
21. Frequency with which school contacts public employment service to identify job openings (12 times/year, 4 times/ year, 2 times/year, 1 times/year, 0) Respondent groups: T,J[a]	0.33	.04	1.44	1.42

TABLE 92
(continued)
CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
22. Frequency with which school uses complete file of job opportunities to identify job openings (12 times/year, 4 times/year, 2 times/year, 1 time/year, 0) Respondent groups: T,J[a]	0.35	.03	1.32	1.64
23. Number of students taught or counseled Respondent groups: T,C[a]	-0.37	.02	130.25	57.62
24. Highest level of education obtained by respondent (12 = Doctorate, 11 = Course credit beyond master's, 10 = Master's, 9 = Course credit beyond undergraduate, 8 = Four-year degree, 7 = 1-3 years college, 6 = Associate degree, 5 = Course credit in vocational education beyond high school, 4 = high school graduate, 3 = 10-11 years high school, 2 = 7-9 years, 1 = under 7 years) Respondent groups: D,T,C,J,A,E[a]	0.40	.01	24.64	13.75
25. Highest level of education obtained by father of respondent (12 = Doctorate, 11 = Course credit beyond master's, 10 = Master's, 9 = Course credit beyond undergraduate, 8 = Four-year degree, 7 = 1-3 years college, 6 = Associate degree, 5 = Course credit in vocational education beyond high school, 4 = high school graduate, 3 = 10-11 years high school, 2 = 7-9 year's, 1 = under 7 years) Respondent groups: CS,FS[a]	0.41	.01	84.31	10.38
26. Percent receiving information in survey of employer satisfaction Respondent groups: D,T,C,J,A[a]	0.35	.03	45.82	17.34

TABLE 92
(continued)
CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
27. Percent who send employer a written recommendation when referring student for job openings Respondent group = T,J[a]	-0.48	.00	36.20	22.25
28. Percent who receive job placement release time Respondent group = T,J[a]	0.42	.01	25.35	14.15
29. Percent who take course work to upgrade skills Respondent group = T[a]	0.34	.03	82.14	14.87
30. Percent who evaluate student's ability to write resumes Respondent group = T[a]	0.47	.00	38.18	16.35
31. Percent who evaluate student's ability to locate available jobs Respondent group = T[a]	0.51	.00	18.51	8.39
32. Percent who evaluate student's ability to fill out job applications Respondent group = T[a]	0.70	.00	52.93	16.52
33. Percent who evaluate student's ability to set up job interview Respondent group = T[a]	0.53	.00	22.74	9.45
34. Percent who evaluate student's interviewing techniques with prospective employers Respondent group = T[a]	0.48	.00	24.15	10.47
t who evaluate student's ability to job information dent group = T[a]	0.51	.00	27.74	9.04
36. Most important consideration for admission to vocational-technical program (4=minimum grade point average, 3=results of standardized tests, 2=student's career objectives, 1=any student who wishes to enroll) Respondent group = D,T[a]	-0.30	.05	15.47	13.38

TABLE 92
(continued)
CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
37. Number of vocational-technical courses student has completed or will have completed by end of term Respondent groups: CS,FS[a]	-0.46	.00	11.72	6.06
38. Length of time in years on job other than coop work while attending school Respondent groups: CS,FS[a]	-0.45	.00	2.27	0.79
39. Confidence expressed in finding a training-related job after leaving school (3=very confident, 2=somewhat confident, 1=not at all confident) Respondent groups: CS[a]	0.31	.04	1.33	0.30

[a]Abbreviations used in identifying mail questionnaires (see Appendix B for copies of the mail questionnaires):

A - Advisory Committee Member Questionnaire
C - Guidance Counselor Questionnaire
CS - Current Vocational-Technical Education Student Questionnaire
D - Dean/Director Questionnaire
E - Employer Questionnaire
FS - Former Vocational-Technical Education Student Questionnaire
P - School Principal Questionnaire
J - Job Placement Coordinator Questionnaire
T - Vocational-Technical Teacher Questionnaire

TABLE 93

CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY TEACHERS, COUNSELORS, JOB PLACEMENT SPECIALISTS, AND DEANS/DIRECTORS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
1. Ranking of the goal for vocational-technical education: to place students as they leave school in jobs related to their training (5=most important...1=least important)	0.62	0.00	3.08	0.44
2. Ranking of the goal for vocational-technical education: to create an awareness of the various jobs for which students might prepare (5=most important... 1=least important).	0.59	0.00	3.13	0.39
3. Ranking of the goal for vocational-technical education: to place students as they leave in jobs including non-training related jobs (5=most important...1=least important).	0.59	0.00	1.62	0.49
4. Ranking of the goal for vocational-technical education: to provide an opportunity for students to explore various occupational areas (5=most important...1=least important)	-0.46	0.00	2.57	0.44
5. Amount of difficulty lack of certificate or associate degree poses for vocational-technical education graduates in job obtainment (5=very much difficulty... 1=very little difficulty).	-0.44	0.01	2.27	0.47
6. Helpfulness of human relations skills in increasing the chances of employment for former students of vocational-technical education (5=very much help...1=very little help)	-0.43	0.00	4.40	0.16
7. Amount of difficulty lack of transportation to jobs poses for vocational-technical education graduates in job obtainment (5=very much difficulty...1=very little difficulty).	-0.36	0.02	2.25	0.45
8. Amount of difficulty union restrictions poses for vocational-technical education graduates in job obtainment (5=very much difficulty...1=very little difficulty).	-0.35	0.03	1.96	0.45

TABLE 94

CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY TEACHERS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
1. Percentage of teachers that have course credit beyond Master's Degree	-0.39	0.02	10.51	2.59
2. Number of years that you have been involved in working in occupational area you currently teach	-0.30	0.05	15.06	2.61
3. Ranking of the goal for vocational-technical education: To place students as they leave school in jobs related to their training (5=most important...1=least important)	0.58	0.00	3.08	0.47
4. Ranking of the goal for vocational-technical education: To provide the students with comptencies needed to obtain jobs (5=most important...1=least important)	0.57	0.00	1.63	0.31
5. Ranking of the goal for vocational-technical education: To create an awareness of the various jobs for which students might prepare (5=most important...1=least important)	-0.56	0.00	3.1[illegible]	0.41
6. Amount of difficulty union restrictions poses for vocational-technical education graduates in job obtainment (5=very much difficulty...1=very little difficulty)	-0.32	0.04	1.77	0.40
7. Amount of difficulty lack of transportation poses for vocational-technical education graduates in job obtainment (5=very much difficulty...1=very little difficulty)	-0.31	0.05	2.19	0.45
8. Rating of school's performance in providing counseling about careers (5=excellent...1=failing)	-0.31	0.05	3.78	0.38

TABLE 94
(continued)
CORRELATIONS BETWEEN SELECTED VARIABLES AND
JOB PLACEMENT RATE IN RELATED FIELD BY TEACHERS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
9. Rating of school's performance in working with labor unions regarding job placement of students (5=excellent...1=failing)	0.34	0.03	2.57	0.85
10. Rating of school's performance in working with vocational-technical education advisory committee regarding job placement of students (5=excellent...1=failing)	0.33	0.03	3.57	0.44
11. Percent of time spent on providing assistance in advanced educational placement.	-0.49	0.00	15.82	15.58
12. Percent of time spent providing training in job seeking skills (e.g. seeking sources of job information identifying available jobs.	0.30	0.05	15.51	6.19
13. Helfulness of other sources of information about job openings for your vocational-technical education graduates (5=very much help...1=very little help)	-0.36	0.04	4.38	0.84
14. Average number of students per year that you have taught over the past three academic years.	-0.47	0.00	115.18	52.38
15. Percentage of teachers who send an employer a written recommendation concerning student.	-0.51	0.00	38.14	22.43
16. Percent of teachers who take course work to upgrade their skills in the occupational area in which they teach.	0.34	0.03	82.14	14.87

TABLE 94
(continued)
CORRELATIONS BETWEEN SELECTED VARIABLES AND
JOB PLACEMENT RATE IN RELATED FIELD BY TEACHERS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
17. Percent of teachers who evaluate students on their performance in writing resumes.	0.49	0.00	39.42	20.13
18. Percent of teachers who evaluate students on their performance in locating available jobs.	0.34	0.03	21.33	14.35
19. Percent of teachers who evaluate students on their performance in filling out a job application.	0.65	0.00	33.68	21.68
20. Percent of teachers who evaluate students on their performance in setting up job interviews.	0.42	0.01	23.39	14.42
21. Percent of teachers who evaluate students on their performance in interviewing with prospective employers.	0.44	0.01	24.29	13.98
22. Percent of teachers who evaluate students on their performance in obtaining job information (e.g. salaries, benefits).	0.36	0.02	30.97	16.02

TABLE 95

CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY CURRENT AND FORMER STUDENTS

	VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
1.	Helpfulness rating basic education skills will be in obtaining your first job after leaving school (5=very much help...1=very little help)	-0.47	0.00	4.05	0.35
2.	Helpfulness rating occupational skills and competencies will be in obtaining your first job after leaving school (5=very much help...1=very little help)	-0.32	0.04	4.41	0.26
3.	Helpfulness rating human relations skills will be in obtaining your first job after leaving school (5=very much help...1=very little help)	-0.44	0.01	4.17	0.32
4.	Helpfulness rating previous work experience will be in obtaining your first job after leaving school (5=very much help... 1=very little help)	-0.32	0.04	3.83	0.43
5.	Amount of difficulty lack of job openings poses for vocational-technical education graduates in job obtainment (5=very much difficulty...1=very little difficulty)	0.40	0.01	3.50	0.55
6.	Helpfulness rating vocational-technical education teachers in finding first job after leaving school (5=very much help... 1=very little help)	0.61	0.00	3.20	0.49
7.	Helpfulness rating cooperative education coordinator in finding first job after leaving school (5=very much help...1=very little help)	0.33	0.03	2.48	0.59
8.	Helpfulness rating public employment service in finding first job after leaving school (5=very much help...1=very little help)	0.29	0.05	2.26	0.68

TABLE 95
(continued)
CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY CURRENT AND FORMER STUDENTS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
9. Percent of students evaluated on their performance in writing resumes.	0.38	0.02	36.00	17.53
10. Percent of students evaluated on their performance in locating jobs.	0.31	0.05	15.69	9.39
11. Percent of students evaluated on their performance in filling out job applications.	0.52	0.00	28.65	17.68
12. Percent of students evaluated on their performance in setting up job interviews.	0.44	0.01	20.13	11.96
13. Percent of students evaluated on their performance in interviewing with prospective employers.	0.32	0.04	22.35	12.80
14. Number of courses completed in vocational-technical educa ion program service area.	-0.46	0.00	11.72	6.07

TABLE 96

CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY CURRENT STUDENTS

	VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
1.	Percent of students evaluated on their ability to fill out job applications:	0.54	0.00	32.76	20.95
2.	Amount of difficulty lack of job openings pose for vocational-technical education graduates in job obtainment (5=Very much difficulty...1=Very little difficulty)	0.46	0.00	3.66	0.64
3.	Helfulness rating of vocational-technical teacher in finding your first job after leaving school. (5=Very much difficulty...1=Very little difficulty)	0.42	0.01	3.34	0.74
4.	Percent of students evaluated on ability to set up job interviews.	0.40	0.01	23.03	16.02
5.	Helfulness rating of cooperative education coordinator in finding your first job after leaving school (5=Very much help...1=Very little help)	0.38	0.02	2.79	0.67
6.	Percent of students evaluated on ability to locate available jobs.	0.38	0.02	16.30	12.27
7.	Helpfulness rating human relations skills will be in obtaining your first job after leaving school (5=Very much help...1=Very little help)	-0.35	0.03	4.37	0.37
8.	Helpfulness rating of basic educational skills, such as writing, reading, and mathematics will be in obtaining your first job after leaving school (5=Very much help...1=Very little help)	-0.30	0.05	4.15	0.45

TABLE 97

CORRELATIONS BETWEEN SELECTED VARIABLES AND
JOB PLACEMENT RATE IN RELATED FIELD BY FORMER STUDENTS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
1. Number of courses completed while in program area.	-0.54	0.00	11.50	7.18
2. Percent of students contacted regarding their employment status since you left school.	0.46	.01	49.65	23.94
3. Percent of students evaluated on their ability to complete job applications	0.40	0.02	26.56	17.72
4. Percent of students evaluated on their ability to write a resume	0.33	0.04	31.22	20.08
5. Percent of students evaluated on their ability to set up job interviews	0.31	0.05	18.26	13.34

TABLE 98

CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY EMPLOYER AND ADVISORY COMMITTEE MEMBERS

	VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
1.	Amount of difficulty lack of certificate or associate degree poses for vocational-technical education graduates in job obtainment (5=very much difficulty... 1=very little difficulty)	-0.47	0.00	2.25	0.38
2.	Amount of difficulty lack of transportation poses for vocational-technical education graduates in job obtainment (5=very much difficulty...1=very little difficulty)	-0.42	0.01	2.35	0.45
3.	Ranking of the goal: To create awareness of the various jobs for which students might prepare.	-0.39	0.02	3.37	0.29
4.	Ranking of the goal: To place students as they leave school in jobs related to their training.	0.37	0.02	2.99	0.28
5.	Amount of difficulty job discrimination because of age poses for vocational-technical education graduates in job obtainment (5=very much difficulty... 1=very little difficulty)	-0.35	0.03	1.98	0.43
6.	Amount of difficulty union restrictions poses for vocational-technical education graduates in job obtainment (5=very much difficulty... 1=very little difficulty)	-0.34	0.03	2.10	0.43
7.	Amount of difficulty minimum wage poses for vocational-technical education graduates in job obtainment (5=very much difficulty...1=very little difficulty)	-0.30	0.05	2.55	0.38
8.	Amount of difficulty students do not have specific skills poses for vocational-technical education graduates in job obtainment (5=very much difficulty... 1=very little difficulty)	-0.30	0.05	3.37	0.32

TABLE 99

CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY EMPLOYERS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
1. In your personal opinion, how should the following goals of vocational-technical education programs be ranked in importance: To provide an opportunity for students to explore various occupational areas. (5=most important,...1=least important	-0.42	0.01	2.77	0.52
2. In your personal opinion, how much difficulty does lack of job openings pose for vocational-technical education graduates in job obtainment (5=very much difficulty. ...1=very little difficulty).	0.35	0.04	3.53	0.55
3. In your personal opinion, how much difficulty does minimum wage pose for vocational-technical education graduates in job obtainment (5=very much difficulty...1=very little difficulty).	-0.39	0.02	2.41	0.55
4. In your personal opinion, how much difficulty does lack of transportation to jobs pose for vocational-technical education graduates in job obtainment (5=very much difficulty...1=very little difficulty).	-0.34	0.04	2.18	0.55
5. In your personal opinion, how much difficulty does lack of certificate or associate degree pose for vocational-technical education graduates in job obtainment (5=very much difficulty...1=very little difficulty).	-0.34	0.04	2.08	0.44
6. Of what importance is school attendance in your decision to employ a person for entry-level jobs (5=very much importance...1=very little importance)	0.63	0.00	3.51	0.49
7. Of what importance is grade records in your decision to employ a person for entry-level jobs (5=very much importance...1=very little importance)	0.39	0.02	2.88	0.37

TABLE 99
(continued)
CORRELATIONS BETWEEN SELECTED VARIABLES AND
JOB PLACEMENT RATE IN RELATED FIELD BY EMPLOYERS

VARIABLE DESCRIPTION AND RESPONSE CATEGORIES	r	p	$\bar{x}$	sd
8. Of what importance is getting along with others in your decision to employ a person for entry-level jobs (5=very much importance...1=very little importance)	0.33	0.05	4.26	0.34
9. Of what importance is work attitude in your decision to employ a person for entry-level jobs (5=very much importance...1=very little importance)	0.32	0.05	4.63	0.24
10. Of what importance are other reasons in your decision to employ a person for entry-level jobs (5=very much importance...1=very little importance)	-0.52	0.02	4.55	0.69
11. Rating of employees with post-high school vocational-technical training from the school, compared to your employees who have had no post-high school vocational-technical education training? Your employees with post-high school vocational-technical education training are: Occupational skills (5=much better...1=much worse)	0.43	0.01	3.93	0.27
12. Of what importance are other factors in your decision to employ a person at entry-level jobs (5=very much importance...1=very little importance)	-0.53	0.02	3.89	0.90
13. Percentage of business/industry having a formal agreement for cooperation between the union's apprenticeship programs and the school's vocational-technical education program?	-0.38	0.02	2.68	0.26

TABLE 100

REGRESSION ANALYSIS BETWEEN EIGHT INDEPENDENT VARIABLES IN THE FULL MODEL AND JOB PLACEMENT IN RELATED FIELD BY TEACHERS, COUNSELORS, JOB PLACEMENT SPECIALISTS, AND DEANS/DIRECTORS[a]

Variables	r	Beta	Std. Error	F-Ratio	Variable Type[a]	Education Control[b]
Evaluation of students ability to process job applications (employability skills)	.65	.3919	.1861	4.44*	E	Yes
Difficulty union restrictions	.35	.2697	.1415	3.63	E	No
Goal - to place students in any job	.59	.3382	.1740	3.78	E	Yes
Difficulty no specific job skills	-.24	-.2153	.1322	2.65	E	Yes
Help human relations skills	-.43	-.1964	.1374	2.04	E	Yes
Difficulty lack of certification or associate degree	-.44	-.0978	.1644	0.35	E	Yes
Goal - job placement in related field	.62	.0905	.2644	0.12	E	Yes
Goal - to explore occupational areas	-.46	.0365	.2229	.03	E	Yes

Multiple R = 0.87
R Square = 0.68
Adjusted R Square = 0.56
Std. Error = 11.97396

Overall F-Ratio = 5.86**
df = 8, 22
Constant = 160.47

[a] 31 postsecondary institutions, n = 750
[b] E = Education, L = Labor
[c] Opinion on whether educators can control or influence the particular variable.

*significant at .05 **significant at .01

TABLE 101

REGRESSION ANALYSIS BETWEEN EIGHT INDEPENDENT VARIABLES IN THE FULL MODEL AND JOB PLACEMENT IN RELATED FIELD BY EMPLOYERS AND ADVISORY COMMITTEE MEMBERS[a]

Variables	r	Beta	Std. Error	F-Ratio	Variable Type[2]	Education Control[3]
Difficulty...Lack of certificate or associate degree	-.47	-.3002	.1750	2.943	E	Yes
Difficulty...Lack of transportation	-.42	-.1170	.1923	0.37	C	No
Difficulty...Union restrictions	-.34	-.3315	.1651	4.032	L	No
Difficulty...Lack of job openings	.16	.4041	.1873	4.65*	L	No
Difficulty...Minimum wage	-.30	.2248	.1881	1.43	L	No
Difficulty...Specific job skills	-.30	.1441	.1900	0.58	E	Yes
Goal...Placement related field	-.36	.0770	.1736	0.20	E	Yes
Difficulty...Compete with experienced workers	-.21	-.0561	.2194	0.06	L	No

Multiple R = 0.72
R Square = 0.52
Adjusted R Square = 0.35
Std. Error = 14.68

Overall F-Ratio = 2.98*
df = 8, 22
Constant = 113.21

[a] 31 postsecondary institutions, n = 750
[b] E = Education, L = Labor, C = Community
[c] Opinion on whether educators can control or influence the particular variable.

*significant at .05

TABLE 102

REGRESSION ANALYSIS BETWEEN ELEVEN INDEPENDENT VARIABLES IN THE FULL MODEL AND JOB PLACEMENT IN RELATED FIELD BY CURRENT AND FORMER STUDENTS[a]

Variables	r	Beta	Std. Error	F-Ratio	Variable Type[b]	Education Control[c]
Help...voed teacher	.61	.7324	.1595	23.95**	E	Yes
Evaluation of students ability to process job applications (employability skills)	.52	1.4635	.3422	11.96**	E	Yes
Help...previous work experience	-.32	.4507	.1578	8.303**	L	No
Help...basic ed. skills	-.47	-.2394	.2158	1.00	E	No
Eval. students on job interviews (employyability skills)	.44	-.3835	.2264	2.42	E	Yes
Help...occupational skills and competencies	-.32	.0366	.2291	0.00	E	Yes
Eval...students on locating jobs (employability skills)	.31	-.2336	.1828	1.41	E	Yes
Evad...students on writing resumes (employability skills)	.38	-.3788	.2634	1.77	E	Yes
Help...public employment service	.29	.2114	.1616	1.84	E	Yes
Help...cooperative education coordinator	.34	-.1968	.1963	1.20	E	Yes
Help...human relations skills (employyability skills)	-.44	-.1961	.2096	0.91	E	Yes

Multiple R = 0.87
R Square = 0.77
Adjusted R Square = 0.63
Std. Error = 10.97

F-Ratio = 5.74**
df = 11, 19
Constant = 44.57

[a] 31 postsecondary institutions, n = 1203
[b] E = Education, L = Labor, C = Community
[c] Opinion on whether educators can control or influence the particular variable.

*significant at .05 **significant at .01

TABLE 103

REGRESSION ANALYSIS BETWEEN TEN INDEPENDENT VARIABLES IN THE REDUCED MODEL AND JOB PLACEMENT IN RELATED FIELD[a]

Variables	r	Beta	Std. Error	F-Ratio	Variable Type[b]	School Control[c]
Evaluating students ability on completing job applications (employability skills)	.70	1.3458	.3510	14.193**	E	Yes
Help vo-ed teacher is in defining job openings	.62	.3590	.1694	4.346*	E	Yes
County population change between 1970-1980	-.17	-.1283	.1237	0.056	C	No
Evaluating students ability in writing resumes (employability skills)	.47	-.6483	.2484	4.658*	E	Yes
Difficulty lack of transportation	-.46	-.1662	.1582	1.664	C	No
Unemployment rate	.03	-.1958	.1210	1.262	L	No
Evaluating students on ability to locate available jobs(employability skills)	.51	-.3142	.2118	2.627	E	Yes
Difficulty lack of certificate or associate degree	-.52	.2090	.1797	2.485	E	Yes
No of small business establishments	-.04	-.1539	.1399	0.017	C	No
Goal: placement related	.55	.15226	.1674	0.794	E	Yes

Multiple R = 0.87
R Square = 0.76
Adjusted R Square = 0.65
Std. Error = 10.78

Overall F-Ratio = 6.90**
df = 10, 20
Constant = -94.19

[a] 31 postsecondary institutions
[b] E = Education, C = Community, L = Labor
[c] Opinion on whether educators can control or influence the particular variable.

*significant at .05 **significant at .01

TABLE 104

DISCRIMINANT ANALYSIS OF
SELECTED VARIABLES IN A REDUCED MODEL

Variables	Standardized Canonical Discriminant Function Coefficients	High Placement Classification Function Weight	Low Placement Classification Function Weight	Entrance Order	Wilkes Lambda	Significance
Evaluating students ability on completing job applications (employability skills)	-1.25	-1.076	-0.929	5	0.60	0.02
Goals of job placement in related field	0.92	74.141	68.251	6	0.49	0.00
Unemployment rate	0.83	6.047	5.123	2	0.74	0.02
Population change 1970-80	1.21	0.831	0.672	1	0.81	0.01
Number of businesses and industrial firms	-8.68	-0.003	-0.002	3	0.72	0.03
Number of large business and large industrial establishments	8.35	0.105	0.832	4	0.67	0.03
Constant		-125.074	-104.696			

Eigenvalue = 1.04
Canonical Correlation = .71
Wilkes Lambda = .49
Chi Square = 18.56 df = 6, significance = 0.00

Percentage of cases correctly classified = 87.10
tau = .77

TABLE 105

SUMMARY OF CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

Variable Question	Employers and Advisors	Employers	Current and Former Students	Current Students	Former Students	School Personnel	Teachers	Aggregate
What are your total years of teaching experience in vocational-technical education?							X	
What are your total years spent working in the occupational area which you currently teach?							X	
Ranking of the goal for vocational-technical education: to place students as they leave school in a job related to their training (response options: 5=most important...1=least important goal).	X					X	X	X
Ranking of the goal for vocational-technical education: to place students as they leave school in a job not necessarily related to their training (response options: 5=most important...1=least important goal).						X	X	X
Ranking of the goal for vocational-technical education: to create awareness of various jobs (response options: 5=most important...1=least important goal).	X					X	X	X
Ranking of the goal for vocational-technical education: to provide opportunity to explore occupational areas (response options: 5=most important...1=least important goal).		X				X		X

TABLE 105

(continued)

SUMMARY OF CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

Variable Question	Employers and Advisors	Employers	Current and Former Students	Current Students	Former Students	School Personnel	Teachers	Aggregate
In your personal opinion, how much help are basic education skills in increasing the chances of employment for former students of vocational-technical education? (response options: 5=most important...1=least important goal).			X	X				X
Of what help are occupational skills and competencies in finding your first job after leaving school? (response options: 5=very much help...1=very little help).			X					
Of what help are human relations skills in finding your first job after leaving school? (response options: 5=very much help...1=very little help).			X	X		X		
Of what help is previous work experience in finding your first job after leaving school? (response options: 5=very much help...1=very little help).			X					X
In general, how much difficulty does lack of specific job skills pose for vocational-technical education graduates when they are attempting to obtain jobs? (response options: 5=very much difficulty...1=very little difficulty).	X							X

TABLE 105
(continued)
SUMMARY OF CORRELATIONS BETWEEN SELECTED VARIABLES AND
JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

Variable Question	Employers and Advisors	Employers	Current and Former Students	Current Students	Former Students	School Personnel	Teachers	Aggregate
In your personal opinion, how much difficulty does a lack of available jobs pose for vocational-technical education graduates when they are attempting to obtain jobs? (response options: 5=very much difficulty... 1=very little difficulty).		X	X	X				
In your personal opinion, how much difficulty does age discrimination pose for vocational-technical education graduates when they are attempting to obtain jobs? (response options: 5=very much difficulty... 1=very little difficulty).	X							
In your personal opinion, how much difficulty do union restrictions pose for vocational-technical education graduates when they are attempting to obtain jobs? (response options: 5=very much difficulty... 1=very little difficulty).	X					X	X	X
In your personal opinion, how much difficulty do entry level jobs paying only minimum wage pose for vocational-technical education graduates when they are attempting to obtain jobs? (response options: 5=very much difficulty... 1=very little difficulty).	X	X						X

TABLE 105

(continued)

SUMMARY OF CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

Variable Question	Employers and Advisors	Employers	Current and Former Students	Current Students	Former Students	School Personnel	Teachers	Aggregate
In your personal opinion, how much difficulty does lack of transportation pose for vocational-technical education graduates when they are attempting to obtain jobs? (response options: 5=very much difficulty... 1=very little difficulty).	X	X				X	X	X
In your personal opinion, how much difficulty does lack of a certificate or degree pose for vocational-technical education graduates when they are attempting to obtain jobs? (response options: 5=very much difficulty... 1=very little difficulty).	X	X				X		X
How would you rate your school's performance in providing assistance in advanced educational placement to vocational-technical students? (5= excellent...1=failing).								X
How would you rate your school's performance in providing counseling about careers to vocational-technical education students? (5=excellent... 1=failing).							X	X
How would you rate your school's performance in working with labor unions regarding job placement of students? (5= excellent...1=failing).							X	

TABLE 105
(continued)
SUMMARY OF CORRELATIONS BETWEEN SELECTED VARIABLES AND
JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

Variable Question	Employers and Advisors	Employers	Current and Former Students	Current Students	Former Students	School Personnel	Teachers	Aggregate
How would you rate your school's performance in working with the vocational technical advisory committee regarding job placement of students? (response options: 5=excellent...1=failing).							X	X
Of the time you spend on job placement activities per week, approximately what percent is spent providing assistance in advanced education placement?							X	X
Of the time you spend on job placement activities per week, approximately what percent is spent providing assistance in providing job skills?							X	
When you refer students to job openings, do you typically send employers a written recommendation concerning the student?							X	
Of what help is (was) the vocational technical education teacher as a source of information about job openings for vocational-technical education graduates? (response options: 5=very much help...1=very little help).			X	X	X			X

TABLE 105
(continued)
SUMMARY OF CORRELATIONS BETWEEN SELECTED VARIABLES AND
JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

Variable Question	Employers and Advisors	Employers	Current and Former Students	Current Students	Former Students	School Personnel	Teachers	Aggregate
Of what help is (was) the cooperative education teacher as a source of information about job openings for vocational-technical education graduates? (response options: 5=very much help...1=very little help).			X	X				
Of what help are (were) the student's parents as a source of information about job openings for vocational-technical education graduates? (response options: 5=very much help...1=very little help).					X			
Of what help is (was) the public employment services as a source of information about job openings for vocational-technical education graduates? (response options: 5=very much help...1=very little help).			X					X
Of what help are (were) other sources of information about job openings for vocational-technical education graduates? (response options: 5=very much help...1=very little help).							X	
Over the past three academic years, what has been the average number of students per year that you have taught?							X	

TABLE 105
(continued)
SUMMARY OF CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE IN RELATED FIELD BY ALL RESPONDENT GROUPS

Variable Question	Employers and Advisors	Employers	Current and Former Students	Current Students	Former Students	School Personnel	Teachers	Aggregate
Do you engage in course work at an accredited institution to upgrade your skills in the occupational area you teach?							X	X
Do you evaluate students, (are you ever tested) on their (your) ability to write resumes?			X		X		X	X
Do you evaluate students, (are you ever tested) on their (your) ability to locate available jobs?			X	X			X	X
Do you evaluate students, (are you ever tested) on their (your) ability to fill out job applications?			X	X	X	X	X	X
Do you evaluate students, (are you ever tested) on their (your) ability to set up job interviews?			X	X	X	X	X	X
Do you evaluate students, (are you ever tested) on their (your) ability to interview with prospective employers?			X			X	X	X
Do you evaluate students, (are you ever tested) on their (your) ability to obtain job information (e.g., salary, benefits)?						X	X	X

TABLE 105

(continued)

SUMMARY OF CORRELATIONS BETWEEN SELECTED VARIABLES AND JOB PLACEMENT RATE RELATED FIELD BY ALL RESPONDENT GROUPS

Variable Question	Employers and Advisors	Employers	Current and Former Students	Current Students	Former Students	School Personnel	Teachers	Aggregate
Of what importance are school grade records in your decision to employ a person for entry-level jobs? (response categories: 5=very much importance... 1=very little importance).		X						
Of what importance is school attendance in your decision to employ a person for entry-level jobs? (response categories: 5=very much importance... 1=very little importance).		X						
Of what importance is ability to get along with people in your decision to employ a person for entry-level jobs? (response categories: 5=very much importance... 1=very little importance).		X						
Of what importance work attitude in your decision to employ a person for entry-level jobs? (response categories: 5=very much importance... 1=very little importance).		X						
Of what importance are other factors in your decision to employ a person for entry-level jobs? (response categories: 5=very much importance... 1=very little importance).		X						

APPENDIX D

REFERENCES AND BIBLIOGRAPHY

APPENDIX D

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APPENDIX E

DEFINITION OF TERMS

DEFINITION OF TERMS*

Civilian Labor Force: All civilians sixteen years of age and over who are classified as either employed or unemployed.

Completer, Program (Vocational Education): A student who finishes a sequence of courses, services, or activities that are designed to meet an occupational objective and that purports to teach entry-level skills.

Cooperative Education: A combination program of vocational study and practice for persons through written cooperative arrangements between school and employer. The program offers instruction, including required academic courses and related vocational preparation, by alternating study in school and supervised on-the-job training.

County: The largest local administrative subdivision of most states

Course: An instructional unit of an area or field, or organized subject matter and related learning experiences usually provided for the instruction of students on a quarter, semester, year, or other prescribed length-of-time basis. It can be offered for credit or non credit.

Demographic Information: Describes the population within a specified geographic area in terms of number, age, ethnic composition, sex, work status, and/or other pertinent information

Employee: A person hired by another or a business, firm, and so forth to work for wages or salary.

Employer Specifications: Required skills, knowledges, aptitudes, attitudes, training, or education, personal appearance, and job prerequisites (such as license, certificate, union membership) demanded or desired of an applicant by employer.

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*Source: National Occupational Information Coordinating Committee. Glossary of Terms and Definitions Used in An Occupational Information Program. Draft Copy. September, 1978.

Selected publications from the U.S. Department of Labor and the U.S. Department of Commerce, Bureau of the Census.

Employment Training: Training designed to enhance the employability of individuals by upgrading basic skills through such course as remedial education, work orientation, English as a Second Language, or training in the primary language of persons of limited-English usage. The courses may be offered as part of institutional training.

Entry Level: The lowest position in any promotional line

Full-time Employed: Person working thirty-five hours or more per week.

Hiring Specifications: Requirements established by the employer which must be possessed by the applicant prior to employment. Examples of these are union membership, license, certification of education, health, attitude, and appearance.

Industry: The production activities of the United States economy. An industry is a private, public, and/or nonprofit productive enterprise engaged in producing goods or servcies. The basic unit of classification in an industry on the basis of its principal activity.

Job: A position or employment situation; work, either paid or unpaid.

Job Development: The process of soliciting a public or private employer's orders for a specific applicant for whom no suitable opening is on file. May also refer to solicitation of jobs for groups of applicants who may be available in large numbers.

Job Opening: A single job vacancy for which the Employment Service office has on file a request from and employer to select and refer an applicant or applicants.

Job Skills: Competencies imparted to or possessed by persons to prepare or make them acceptable for employment (paid or unpaid) in a specific occupation or a cluster of closely related occupations in an occupational field.

Job Vacancies: Actual jobs that are immediately available for filling, and that the employer is actively trying to find or recruit workers from outside the firm.

Labor Demand (Current): Total employment plus the number of job vacancies existing. May be referred to in terms of industry demand or occupational demand.

Labor Demand (Projected): The number of job opportunities or job openings expected to occur over a given period of time because of change in employment levels and the need to replace workers who die.

Labor Market: The entire set of interlinked institutions and processes that determine the flows of job opportunities and labor supply in both the short and long run.

Labor Market Area (see Standard Metropolitan Statistical Area): An economically integrated unit in which workers may readily change jobs without changing their place of residence. The boundaries depend primarily on economic and geographic factors, and not or political jurisdictioins. Many labor market areas ar also SMSAs.

Labor Supply: The number of persons working or available for work, i.e., the employed plus the unemployed. May refer to the current situation or to expectations for the future.

Leaver, Program: A student who has been enrolled in and has attended a vocational education program and has left the program without completing it. Also includes those who leave the program voluntarily before completion, but leave with marketable skills, i.e., will be capable of obtaining and performing the job for which preparation was directed.

Management Information System: An organized method of providing past, present, and projected information relating to internal operations and external intelligence that supports the planning, control, and operational function of an organization by providing decision makers with uniform information in the proper time frame.

Marketable Skills: Competencies in a specific occupation or cluster of related occupations obtained by persons through training or other job preparation that meet the hiring specifications of local employers.

Metro: Means that a county is located within a SMSA.

Nonmetro: Means that a county is located outside the boundaries of an SMSA.

Occupation: The name or title of a job that identifies and specifies the various activities and functions to be performed.

Occupational Objective (Education): The expected outcome of training and other preparation as started by an individual student. The objective usually is stated in terms of a specific occupational title.

Placement: The obtaining by individuals of unsubsidized employment either as a result of his own efforts after intake services or by referral to a job by the school or public employment services.

Placement Services (Education): Activities organized to help students in appropriate educational situations while they are in school, in appropriate part-time employment while they are in school, and in appropriate educational and occupational situations after they leave school, and to facilitate students; transition from one educational experience to another. This may include, for example, admissions counseling, referral services, assistance with records, and follow-up communications with employers concerning the performance of former students.

Per Capita Income: A measure of income by unit of population (per person).

Program (Education): Planned sequence of course, services, or activities designed to meet an occupational objective.

Related Occupations: Occupations that are determined to be related on the basis of similar job or worker's characteristics required for successful worker performances. Examples of such characteristics are experience, training and education, duties performed, tools, machines, and other aids, and materials used on the job.

Specific Vocational Preparation (SVP): The amount of time required to learn the techniques, acquire information, and develop the facility needed for average performance in a specific job-related situation. This training may be acquired in a school, work, military, institution, or a vocational environment. It does not include the orientation training required by a fully qualified worker to beome accustomed to the special conditions of any new job. Specific vocational training includes training given in any of the following circumstances:

1. Vocational education
2. Apprentice training
3. In-plant training
4. On-the-job training
5. Essential experience in other jobs

Standard Metropolitan Statistical Area: A county or group of contiguous counties containing at least one city with a population of 50,000 or more and that are economically and socially integrated with central city. The boundaries may cross state lines. All SMSAs are coterminous with labor market areas.

State Board: A state branch designated or created by state law as the sole state agency responsible for the administration of vocational education, or for the supervision of the administration of vocational education in the state.

State Education Agency: State board of education or other agency or officer primarily responsible for the state supervision of public elementary and secondary schools, or, if there is not such officer or agency, an officer or agency designated by the governor or by state law.

Student (Vocational Education): An individual with a vocational objective who is enrolled in a vocational education program leading to entry or progress in a chosen occupational field.

Technical Education: A program of studies designed primarily to prepare persons for work in the occupational area between that of the skilled and the professional employee. This includes programs for training and retraining and leads to qualification for work as a technician.

APPENDIX F

NQNRESPONDENT ANALYSIS

NONRESPONDENT ANALYSIS

A mail questionnaire return rate of 24 percent provides a base for questioning the representativeness of the respondents with respect to the population being surveyed. Moreover, one must examine the findings and the interpretation of the results based on differences between nonrespondents and those persons or respondent groups who did respond to the initial survey. Kerlinger (1973) stated,

> Every effort should be made to obtain returns of at least 80 to 90 percent or more, and lacking such returns, to learn something of the characteristics of the nonrespondents (p. 144).

However, others take a more moderate position with respect to response rates. Leslie (1972) offers the following position to respond to the prevalent belief that response bias severely limits the usefulness of surveys and questionnaires which did not have 100 percent response rate:

- There is ample evidence that response rate bias may occur in mail surveys. However, much of the available evidence reveals only differences between respondents and nonrespondents or late respondents in terms of such independent variables as sex, geography, age, etc. It is often assumed that these differences lead to differences between respondents and nonrespondents on the dependent variables, i.e. the questions under study.

- When populations surveyed are homogeneous (having a common group identity), minor differences on independent variables between respondents and nonrespondents or late respondents may occur, but differences as to dependent variables are unlikely (p. 328).

Further Leslie (1972) concludes that when surveying homogeneous groups one need not be overly concerned about the response rate, just that enough responses are achieved to meet statistical assumptions.

A nonrespondent survey was conducted to determine if non-respondents as a group differed systematically from those members of the population who did respond. A few "check" questions were used to compare nonrespondent percentages with percentages of those who did respond to the initial mailing of the questionnaire.

Tables 106 and 107 present data comparing group (i.e., teachers, employers, etc.) representation of respondents from the initial survey and the nonrespondents. Tables 108-111 present frequencies on variables such as race/ethnic orign, sex, age, level of education. Table 112 shows the results of a test significance of difference between the means of the nonrespondent sample and the respondent sample on twenty-five selected variables from the questionnaire. A significant difference between the means of respondent and nonrespondent were found in three of the twenty-five variables examined.

TABLE 106

PERCENTAGE COMPARISON OF RESPONDENT AND NONRESPONDENT SAMPLE SURVEY

		Dean/ Director		Teachers		Counselors		Job Placement Specialists		Advisory Committee Members		Employers		Current Students		Former Students		Total	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
STATE A	Respondent	4	.4	270	28.7	16	1.7	5	.5	104	11.06	111	11.8	202	21.5	228	24.3	940	36.7
	Nonrespondent	2	4.7	7	16.3	1	4.4	1	4.4	2	4.7	1	4.4	6	14.0	23	53.5	43	26.6
STATE B	Respondent	7	1.0	184	26.5	11	1.6	6	.9	67	9.6	122	17.6	209	30.1	89	12.8	695	26.7
	Nonrespondent	2	5.4	3	8.1	0	0.0	2	10.0	2	10.0	6	16.2	11	29.7	11	29.7	37	22.8
STATE C	Respondent	7	1.6	111	24.7	23	5.1	3	.7	61	13.6	56	12.4	53	11.8	136	30.2	450	17.3
	Nonrespondent	0	0.0	9	17.0	0	0.0	4	7.6	3	5.7	4	7.6	17	32.1	16	30.2	53	33.0
STATE D	Respondent	4	.9	81	17.8	14	3.1	4	.9	76	16.7	49	10.8	104	22.9	122	26.9	454	17.5
	Nonrespondent	1	3.6	4	14.3	0	0.0	1	3.6	2	7.1	3	10.7	4	14.3	13	46.4	28	17.4
TOTAL ALL STATES	Respondent	22	.8	646	24.9	64	2.5	18	.7	308	11.9	338	13.0	568	21.9	635	24.4	1599	100.0
	Nonrespondent	5	3.1	23	14.3	1	0.6	8	5.0	9	5.6	14	8.7	38	23.6	63	39.1	161	100.0

TABLE 107

POSTSECONDARY NONRESPONDENT SAMPLE SURVEY RESULTS

Respondent Type	Nonrespondents Population	Nonrespondent Sample	Percent of Total Population
Director	9	9	100
Teacher	1253	40	3
Counselor	67	2	3
Job Placement Specialist	14	14	100
Advisor	451	14	3
Employer	548	17	3
Current Student	2178	67	3
Former Student	3774	116	3
Total	8294	279	3

Respondent Type	Nonrespondent Sample	Undeliverable Questionnaires	Deliverable Questionnaires	Usable Returns	Percent of Returns
Director	9	0	9	5	56
Teacher	40	5	35	23	68
Counselor	2	1	1	1	100
Job Placement Specialist	14	4	10	8	80
Advisor	14	2	12	9	64
Employer	17	1	16	14	82
Current Student	67	13	54	38	57
Former Student	116	48	68	63	54
Total	279	74	205	161	58

TABLE 108

SELECTED MAIL SURVEY RESPONDENTS AND
NONRESPONDENTS PERCENTAGE COMPARISONS BETWEEN MALE AND FEMALE

Characteristics	Female	Percent	Male	Percent	Totals	Percent
Respondents	1090	43	1422	57	2512	100
Nonrespondents	78	49	81	51	159	100

TABLE 109

RACE/ETHNIC ORIGIN PERCENTAGE COMPARISONS

	American Indian or Alaskan Native		Asian American or Pacific Islander		Black not of Hispanic Origin		Hispanic		White not of Hispanic Origin		Other	
	N	%	N	%	N	%	N	%	N	%	N	%
Respondents	32	1	23	1	68	3	111	4	2217	88	58	2
Nonrespondents	1	1	4	3	15	9	10	6	125	79	3	2

TABLE 110

AGE OF RESPONDENT

	Number of Respondents	20 years		21-30 years		31-40 years		41-50 years		51-60 years		61+	
		N	%	N	%	N	%	N	%	N	%	N	%
Nonrespondents	157	2	1	73	47	41	26	19	12	18	11	4	3
Respondents	2500	52	2	844	34	625	25	475	19	389	16	115	5

TABLE 111

HIGHEST LEVEL OF EDUCATION

	Number of Respondents	0-9 Years		10-12 Years		Voc-Ed Credit Beyond H.S.		1-3 Years		4-year Degree		4 Years		Masters		Masters +		Ph.D.		Other	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Nonrespondents	60	0	0	5	8	5	8	9	15	10	17	5	8	13	22	9	15	3	5	1	2
Respondents	1355	2	.15	55	4	86	6	125	9	195	14	171	13	238	18	295	22	76	6	22	2

TABLE 112

DIFFERENCES BETWEEN RESPONDENTS AND
NONRESPONDENTS ON SELECTED MAIL QUESTIONNAIRE VARIABLES

Variable	Group	Number Of Cases	Mean	Standard Deviation	Standard Error	T Value
Highest level of education-- Respondent	Respondent	1355	0.2642	0.441	0.012	-0.90
	Non-Respondent	60	0.3167	0.469	0.061	
Highest level of education-- Father	Respondent	1098	0.8342	0.372	0.011	0.33
	Non-Respondent	95	0.8211	0.385	0.040	
Goal to place students in related job	Respondent	1276	3.1082	1.109	0.031	-0.96
	Non-Respondent	55	3.2545	1.092	0.147	
Goal to place students in any job	Respondent	1297	1.6299	0.909	0.025	0.38
	Non-Respondent	55	1.5818	0.917	0.124	
Goal to create awareness of jobs	Respondent	1285	3.1813	1.081	0.030	1.08
	Non-Respondent	54	3.0185	1.107	0.151	
Goal to provide oppt. to explore occ. area	Respondent	1281	2.5800	1.221	0.034	-0.51
	Non-Respondent	54	2.6667	1.149	0.156	
Placement-basic education skills	Respondent	1975	4.2319	0.972	0.022	1.49
	Non-Respondent	122	4.0738	1.144	0.104	
Placement- previous work experience	Respondent	1959	3.7902	1.127	0.025	-0.81
	Non-Respondent	121	3.8760	1.152	0.105	
Difficulty placement- don't have specific job skill	Respondent	2237	3.0726	1.284	0.027	-0.32
	Non-Respondent	149	3.1074	1.269	0.104	
Diff-placement- union restrictions	Respondent	1780	2.0320	1.188	0.028	-1.33
	Non-Respondent	112	2.1875	1.339	0.127	

*significant at .05
**significant at .01

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TABLE 112
(continued)
DIFFERENCES BETWEEN RESPONDENTS AND
NONRESPONDENTS ON SELECTED MAIL QUESTIONNAIRE VARIABLES

Variable	Group	Number Of Cases	Mean	Standard Deviation	Standard Error	T Value
Difficulty - placement - entry level jobs offer minimum wage	Respondent Non-Respondent	2242 147	2.8376 2.9252	1.324 1.319	0.028 0.109	-0.78
Difficulty - placement-lack of transportation	Respondent Non-Respondent	2234 143	2.2050 2.4056	1.212 1.301	0.026 0.109	-1.91
Difficulty - placement-lack of certificate or degree	Respondent Non-Respondent	2155 139	2.3865 2.3957	1.320 1.283	0.028 0.109	-0.08
Receive information survey of employer satisfaction	Respondent Non-Respondent	1018 44	1.5177 1.5682	0.552 0.501	0.017 0.076	-0.60
Performance in advanced education placement	Respondent Non-Respondent	1317 90	3.6553 3.3778	0.975 1.066	0.027 0.112	2.60**
Performance in work with adv. committee	Respondent Non-Respondent	525 25	3.7048 3.2000	1.108 1.291	0.048 0.258	2.21*
Sources of information voc ed teacher	Respondent Non-Respondent	1403 95	3.6386 3.3579	1.344 1.529	0.036 0.157	1.95**
Sources of information public employment service	Respondent Non-Respondent	1124 78	2.5089 2.2692	1.344 1.411	0.040 0.160	1.52
Evaluated in writing resumes	Respondent Non-Respondent	1774 122	1.5885 1.6721	0.556 0.471	0.013 0.043	-1.87

*significant at .05
**significant at .01

TABLE 112
(continued)
DIFFERENCES BETWEEN RESPONDENTS AND
NONRESPONDENTS ON SELECTED MAIL QUESTIONNAIRE VARIABLES

Variable	Group	Number Of Cases	Mean	Standard Deviation	Standard Error	T Value
Evaluated in locating available jobs	Respondent	1759	1.8266	0.489	0.012	-1.79
	Non-Respondent	120	1.8833	0.322	0.029	
Evaluated in setting up job interviews	Respondent	1756	1.7808	0.547	0.013	-1.49
	Non-Respondent	121	1.8347	0.373	0.034	
Evaluated in interviewing with employer	Respondent	1759	1.7447	0.471	0.011	-1.26
	Non-Respondent	121	1.7934	0.407	0.037	
Number of courses completed in area	Respondent	897	9.9253	11.198	0.374	0.75
	Non-Respondent	84	8.9762	9.539	1.041	
Other job number of years	Respondent	661	2.3026	2.469	0.096	-0.72
	Non-Respondent	61	2.5410	2.705	0.346	
How confident that will find a job	Respondent	500	1.3740	0.748	0.033	0.14
	Non-Respondent	31	1.3548	0.608	0.109	

*significant at .05
**significant at .01