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AUTHOR Pratzner, Frank C.  
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ABSTRACT

In order to measure the preservice and inservice preparation of vocational education teachers, a mail survey was conducted of beginning vocational teachers' perceptions of their competencies and preparation for teaching--especially their preparation for teaching basic skills and special student populations. The survey population included 740 beginning teachers (a 32 percent response), 69 preservice preparation programs (a 61 percent response), and 530 local school administrators or mentors (a 23 percent response). The study found that vocational teacher preservice preparation gives little or modest attention to preparation for teaching basic skills and special student populations. The majority of beginning vocational teachers received no inservice preparation during their first year of teaching, and the small amount of inservice education that was offered was judged by them as being only somewhat effective. Apparently, such recent developments as "induction year programs" and first-year mentoring and assistance programs for teachers are yet to be implemented in secondary vocational education. Recommendations were made for upgrading teacher education programs by including more liberal arts and more preparation for teaching basic skills and special populations, as well as by having colleges and high schools work together to provide more student experience and inservice programs for beginning teachers. Basic skills competency testing of preservice teachers also seems desirable and inevitable. (KC)

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VOCATIONAL TEACHER EDUCATION:  
A SURVEY OF PRESERVICE  
AND INSERVICE PREPARATION

Frank C. Pratzner

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The Ohio State University  
1960 Kenny Road  
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## FOREWORD

As a result of the school reform and excellence movement in education, vocational education teachers are being called upon to integrate and reinforce basic skills instruction in their teaching. Similarly, the Carl D. Perkins Vocational Education Act of 1984, and other reports, have placed heavy emphasis on the need for vocational teachers to provide improved instruction to students with special needs. However, there is no indication that teachers are being adequately prepared to meet such challenges. In addition, little is known about the nature and extent of innovative policies and initiatives being undertaken by states and local educational agencies to ensure that new and current teachers will be adequately prepared to respond to these new challenges in vocational education.

This publication examines the preparation of beginning vocational teachers focusing on their preparation for teaching basic skills and special student populations. The findings of a survey of beginning teachers' perceptions of their competencies and limitations are identified and provide vocational teacher educators and local inservice providers with implications for improving policy and practice in preservice and inservice teacher education.

We wish to thank the Office of Vocational and Adult Education, U.S. Department of Education, for sponsoring the research project that produced this document. The project was conducted in the Applied Research Division of the National Center under the leadership of Dr. Richard J. Miguel, Associate Director. We wish to thank the project staff--Dr. Frank C. Pratzner, Project Director; Dr. Robert Gordon, Research Specialist, Ms. Elizabeth V. Dubravcic, Program Associate; and Mr. Christian Chinien, Graduate Research Associate--for their work on various aspects of the project. We would also like to thank Dr. James Weber of the National Center staff for his assistance with a portion of the data analysis.

We are especially grateful to our many colleagues in vocational education. Although we do not mention them by name, we thank the many individuals in state departments of education and vocational education, teacher education institutions, and local schools who contributed their time and valuable information to the study. We are particularly grateful to the more than 700 beginning vocational teachers, 500 local administrators, and 69 teacher educators who took valuable time from their busy schedules to complete and return our lengthy questionnaires.

Finally, the study and this document benefitted from the long hours of mailing, filing, coding, and typing provided by Tracy Graham. We are grateful for her help and the help of the National Center's editorial and printing staffs.

Ray D. Ryan  
Executive Director  
The National Center for Research  
in Vocational Education

## EXECUTIVE SUMMARY

Given the calls for teacher reform, our lack of knowledge about the content of vocational teacher preparation programs, and vocational education's mandates for improving students' basic skills development and for better meeting the needs of special needs students, there is a need to examine the preservice and inservice preparation of vocational education teachers. A mail survey was conducted of beginning vocational teachers' perceptions of their competencies and preparation for teaching--especially their preparation for teaching basic skills and special student populations. This survey was supplemented by surveys of vocational teacher preservice programs, inservice preparation, and state certification practices.

Three states from each of eight geographic regions were randomly selected, and from them an unbiased national sample of 740 beginning vocational teachers was surveyed. Preservice vocational teacher education institutions in the 24 selected states were also identified and surveyed (N = 69).

The project worked through the teacher credentialing/certification units in each of the 24 state departments of education to obtain names and addresses of all nondegreed and degreed vocational teachers in each state who began their first year of teaching in any vocational service area in 1985. Additionally, key vocational administrators at each of the teacher education institutions in the 24 states were surveyed regarding programs, courses, and special provisions to prepare vocational graduates to teach basic skills and to work effectively with special needs students. Information was also obtained about actual or anticipated changes in college recruitment, admissions, and graduation requirements in response to the mandates for educational reform. School administrators or mentors of each beginning vocational teacher were surveyed to obtain their assessment of beginning teachers' competencies, limitations, and needs for inservice preparation (N = 530). Finally, all 50 states were surveyed to identify current policies and practices concerning competency testing for state certification.

It is clear that vocational teacher education must mount a major minority recruitment and enrollment effort if the critical lack of minority vocational teachers is to be addressed. Although such a recruitment effort is critical, it will become increasingly more difficult as others within and outside education seek to extend their own minority recruitment and training programs and as minorities continue to broaden their employment opportunities and seek preparation for jobs with higher salaries and more prestige than teaching. However, the longer we delay, the more difficult it will be to achieve this goal.

Preservice and inservice vocational programs need to be expanded and improved relative to teachers' basic skills preparation and the preparation to teach special student populations. At present, vocational teacher preservice preparation gives little or modest attention, at best, to these critical needs. Beginning teachers take very few courses or even parts of courses to prepare them for teaching basic skills and special needs students. Most teachers say they spend from 1 to 3 hours per week improving and reinforcing students' basic skills. The majority of beginning teachers do not rank basic skills among the top four skill areas they emphasize in their teaching. Whereas economically disadvantaged, handicapped, and students in programs nontraditional for their sex seem to be included to a limited extent in beginning vocational teachers' teaching, the large majority of teachers spend little or no time teaching adults in retraining, single parents and displaced homemakers, limited English-proficient students, and incarcerated individuals.

The majority of beginning vocational teachers received no inservice preparation during their first year of teaching. The little amount of inservice preparation that was available to the few, in general, was judged by them as being only somewhat effective.

Apparently, such recent developments as so-called "induction year programs" and first-year mentoring and assistance programs for teachers are still things of the future in secondary-level vocational education. Teacher education institutions need to work more closely with local schools in the provision of inservice training to help meet beginning teacher and local school needs, and especially to help reduce, and ultimately eliminate, the practice of nondegreed vocational teaching.

Clearly, vocational teacher education must improve the academic rigor of its programs and the quality of its students. It must achieve a more appropriate balance between academic and liberal arts preparation, pedagogical and professional skills and knowledge, and occupational skills. At present a rigorous liberal arts component is missing and needed. Moreover, because the concept of integrating and infusing basic skills into vocational teaching is gaining widespread acceptance, vocational teachers with sound basic skills preparation will be needed.

Whereas the changes in teacher education policies and practices growing out of the Holmes Group recommendations should help to improve the rigor of vocational teacher preparation, other equally compelling practices work against this. Such practices as the heavy insistence on increased "FTE production" in many institutions, may dissuade faculty and students from seeking appropriate and rigorous preparation outside their major department and must be discouraged.

Approximately half of the states have implemented mandatory testing in basic skills and/or occupational competency for the certification of vocational teachers. Few are testing the pedagogical or professional teaching skills of prospective vocational teachers. Consequently, basic skills competency testing as well as occupational competency testing designed to ensure that prospective vocational teachers can meet new challenges seems highly desirable, and in any case, inevitable.

However, raising basic skills test requirements for vocational teachers could discourage competent craftspersons and others in business and industry from high school teaching, push them away from the teaching profession altogether, or push them toward teaching in the private sector or at the public postsecondary level where certification and competency testing presently are not major issues or concerns. Probably, this particular testing should occur predominantly prior to admission to the teacher education program and the preservice program should enhance and reinforce teachers' basic skills as well as help them to enhance and reinforce the basic skills of their future students.

**VOCATIONAL TEACHER EDUCATION:  
A SURVEY OF PRESERVICE  
AND INSERVICE PREPARATION**

Problem

This study addressed the question of how well prepared beginning vocational education teachers are to provide basic skills instruction and to teach special student populations. As used in this study, and defined in the Carl D. Perkins Vocational Education Act, basic skills refer to communications, computation, and employability skills. Special student populations include economically disadvantaged, handicapped, individuals entering nontraditional occupations, adults in retraining, single parents or homemakers, limited English-proficient students, and incarcerated individuals.

As a result of the school reform and excellence movement in education, vocational education teachers are being called upon to integrate and reinforce basic skills instruction in their teaching. For example, according to United States Secretary of Education William Bennett (1985),

students taking vocational courses should also be provided an academic education since it is becoming increasingly evident that industry requires a literate workforce trained in problem-solving and higher order thinking. A solid foundation in the basics and liberal arts will better prepare the students both for specific jobs and for a more satisfying life in our society. (p. 2)

Similarly, the Carl D. Perkins Vocational Education Act of 1984 has placed heavy emphasis on the need for vocational teachers to provide instruction to students with special needs. As pointed out by the Holmes Group report (1986),

current literature demonstrates that well-meaning, and well-educated persons will make a number of predictable pedagogical mistakes that will disproportionately harm at-risk pupils who traditionally do not do well in school. (p. 58)

The Holmes Group thus suggests that "competent teachers are important to all students, but they are especially critical for the growing number of educationally at-risk children" (p. 33). They recommend that "all career teachers should be qualified to effectively teach students with special needs in regular classrooms" (p. 95).

However, there is no indication that teachers are being adequately prepared to meet such challenges. In addition, little is known about the nature and



extent of innovative policies and initiatives being undertaken by states and local educational agencies to ensure that current and future teachers will be adequately prepared to respond to these new challenges in vocational education.

The focus of current teacher education reform proposals is on policy and structural change (e.g., extended periods of preparation, strengthened certification and testing standards). Less attention has been given to the quality and rigor of instructional practices and curriculum content in teacher preservice and inservice preparation. The Intergovernmental Advisory Council on Education (1985) points out that

contrary to popular belief, only 20 percent of the typical program of prospective high school teachers is made up of education courses and more than a third of that is student teaching. . . . No data is currently available about the range of content in teacher education programs, nor specific knowledge and skills expected at exit. (p. 7)

Feiman-Nemser, Floden, and Cohen (1986) point out that more than 20 years ago teacher education was called an "unstudied problem" and researchers were urged to examine what actually went on in programs as one basis for understanding their effects. They further note that for the most part "that call went unheeded. As a result, we know little about what teacher education programs are like and what impact they have on teachers" (p. 4).

In the Metropolitan Life Insurance Company (1984) survey of teacher attitudes, "50 percent of teachers polled felt their preparation did not serve them well in teaching." In fact, "only 10 percent believed their training prepared them well for the classroom" (p. 6).

As little as we know about preservice teacher education, we know even less about inservice education. Historically, recognition of the importance and provision of appropriate structures, models, and mechanisms for inservice staff development in schools has been absent. It is only recently, and largely as a result of such reports as the Holmes Group report (1986) and the Carnegie Task Force report on teaching (1986), that we have begun to think of teacher education as a process of career development that continues throughout a teacher's professional life span. The National Commission for Excellence in Teacher Education (1985) puts it this way: "Teacher education is not a single, time-bound activity, but a continuing process of career development. . . . Teachers have a right to expect an . . . integrated program for continued professional development" (p. 2). Instead, very often, inservice training for working teachers is "keyed to taking certain courses, often is fragmented and unfocused, and does not relate to a specific area of knowledge or improved classroom technique" (Committee for Economic Development 1985, p. 78). According to the Committee for Economic Development, staff development in education "is a low-funded, low-priority budget item for most school boards. It has traditionally been viewed as a pay increase for credits earned, with little or no attention paid to the specific needs of the individual or the school" (p. 100).

## Objectives

Given the calls for teacher reform, our lack of knowledge about the content of teacher preparation programs, and vocational education's mandates for improving students' basic skills development and for better meeting the needs of special student populations, there is a need to determine to what extent vocational education teachers are prepared to provide basic skills instruction and how well prepared they are to teach special student populations.

A survey of beginning vocational teachers' perceptions of their competencies and limitations for teaching basic skills and for teaching special populations was conducted. Included as beginning teachers were first-year degreed and nondegreed vocational teachers in all of the vocational service areas.

The overall objectives of the study were as follows:

- o To identify the perceptions of beginning vocational teachers regarding their competencies and limitations for teaching basic skills and special student populations
- o To determine how and where beginning vocational teachers acquired the skills and competencies needed to teach basic skills and special student populations
- o To identify recent improvements and recommend needed changes in preservice and inservice vocational teacher preparation to improve their responsiveness to beginning teachers' needs for preparation to teach basic skills and special student populations

## Background

### Framework

The conceptual framework undergirding the study and described briefly here is depicted in figure 1. Two dimensions make up the framework. One dimension describes the two problem areas that constitute the substantive focus of the work--how well prepared beginning vocational teachers are to teach (1) various basic skills and (2) various special student populations. The second dimension focuses the work on the two primary types of teacher preparation--preservice and inservice education--and the responsiveness of each to beginning teacher needs as well as to legislative and social mandates for improved teaching of basic skills for all vocational students and improved instruction for special student populations.

In the preservice preparation of teachers, both institutional adjustments (e.g., recruitment, admission, and graduation policies and practices) and programmatic responsiveness (courses, programs, special provisions) to the two major areas of teacher need were examined by the study. Thus, colleges and schools of vocational teacher preparation and local school administrators with major responsibility for teacher assessment and inservice preparation are primary

	PROBLEM AREAS										
	Basic Skills				Special Student Populations						
	Reading	Writing	Computation	Employability Skills	Disadvantaged	Handicapped	Entering Nontraditional Occupations	Need for Retraining	Single Parents or Homemakers	Limited English-Proficient	Incarcerated
Service Providers											
Preservice Teacher Prep. Institutional Provisions											
Preservice Teacher Prep. Programmatic Provisions											
Inservice Teacher Preparation											

Figure 1. Conceptual framework for the study

audiences for the study's findings. The study also sheds light on what has come to be known as the "induction period" of teacher training. "Teacher educators distinguish the induction period of teacher training as the first, second, and/or third years a beginning teacher is in the classroom" (Hord, O'Neal, and Smith 1985, p. 159). Hord, O'Neal, and Smith reinforce the importance of the focus of the study by noting that "defining the relationship of institutions of higher education, local districts, and state agencies to induction is critical if teacher educators are to deliver quality teacher induction programs to beginning professionals" (p. 159). Moreover, both preservice and inservice audiences are important to this process. Although Galambos (1985) essentially agrees with the importance of beginning teacher internship programs, she claims that "the real issue is whether the needed extra clinical experience in the classroom should be obtained by a teacher as a paid employee, or by a student-teacher as a college student" (p. 12). She raises a number of questions and issues related to the provision of internship programs, many of which have important potential implications for the develop of the questionnaires for the proposed study.

### Related Work

There is widespread belief that the public schools have not done an adequate job of providing a good basic education to students. This is felt to be occurring at exactly a time when life and work are demanding even higher levels of skills in basic subject areas. This set of problems is reflected in long-term declines in scholastic aptitude test scores and in employer complaints about the lack of basic skills and abilities among new entrants to the labor market. The result has been a strong "back-to-basics" reform movement throughout the nation and the adoption of stricter standards for graduation by many states. This has also put additional pressure on secondary-level vocational education to strengthen longer range educational goals and to emphasize the role of vocational education improving the broad educational preparation and basic skills achievement of students.

Moreover, the American Educational Research Association (Kaplan 1985) notes that teachers and teaching have been "portrayed as constituting a near-disaster area in education" (p. 2). Kaplan observes further that

the recruitment, performance, work habits, incentives, preparation, and quality of teachers have ignited attention and action throughout the nation. Scarcely a week passes without legislative or executive measures aimed at achieving excellence in the teaching professions. . . [There have been] 700 pieces of state legislation in 1983 and 1984. (p. 2)

Barton (1981) feels that the first priority is for vocational education to "be good education--in reading, in writing, in computing, in listening, and in problem solving" (p. 9). Education has a responsibility, he feels, for ensuring that young people are equipped with the basic skills needed for employment, as well as for life. "No one who talks with employers can miss getting the message that they are concerned about basic skills and count them as much a part of employment preparation as specific occupational skills" (p. 68).

Ironically, some of the greatest interest in and concern about educational goals and the effects of vocational education seem to come from the public and, in particular, from employers in business and industry. Consider, for example, that in a survey of 775 manufacturers and members of the National Association of Manufacturers, Nunez and Russell (1981) report that 63 percent of respondents stressed teaching the basics as the most important improvement secondary vocational education should make. As Nunez and Russell point out,

many manufacturers believe that the young population's mastery of reading, writing, and computing skills is unsatisfactory. Basic skills, employability skills, and occupational skills are all seen by manufacturers as important employee attributes . . . are regarded as vital preparation for work . . . and are not perceived as mutually exclusive. (p. xi)

Thus, for example, the Committee for Economic Development (1985) concludes that business, in general, is not interested in narrow vocationalism. "It prefers a curriculum that stresses literacy, mathematical, and problem-solving skills. Such a curriculum should emphasize learning how to learn and adapting to change" (p. 6).

A panel of prominent business people convened by the National Academy of Sciences (1984) echoed many of the same beliefs. The panel concluded that

the education needed for the workplace does not differ in its essentials from that needed for college or advanced technical training. . . . The need for adaptability and lifelong learning dictates a set of core competencies that are critical to successful careers of high school graduates. These competencies include the ability to read, write, reason, and compute; an understanding of American social and economic life; a knowledge of the basic principles of the physical and biological sciences; and possession of attitudes and personal habits that make for a dependable, responsible, adaptable, and informed worker and citizen. (p. 19)

The National Assessment of Educational Progress (1982) reports that skills like problem solving, critical thinking, decision making, now considered high level by educators, are likely to become basics for workers in the future. Their report cautions that "clearly we are not cultivating the raw material--our future workers--who will be vital both for economic progress and ultimately for economic survival" (p. 5).

Nevertheless, educational materials are being developed to answer the need for basic skills instruction in vocational education. For example, Oregon State University has produced the following:

- o *A Methodology for Reading Skill Improvement in Vocational Secondary Programs* (Martin 1981)
- o *Mathematics in Vocational Education* (1982)

- o *Speaking and Listening in Vocational Education* (1983)
- o *Writing in Vocational Education* (1983)

The National Center for Research in Vocational Education has developed a series of competency-based instructional modules to enable vocational teachers to assist students in basic skills development (6 modules) and to work effectively with special student populations (13 modules). Included among these modules are the following examples:

- o Assist Students in Achieving Basic Reading Skills
- o Assist Students in Developing Technical Reading Skills
- o Assist Students in Improving Their Writing Skills
- o Assist Students in Improving Their Oral Communication Skills
- o Assist Student in Improving Their Math Skills
- o Assist Student in Improving Their Survival Skills
- o Prepare Yourself to Serve Exceptional Students
- o Plan Instruction for Exceptional Students
- o Use Instructional Techniques to Meet the Needs of Exceptional Students
- o Modify the Learning Environment for Exceptional Students

More recently, the National Center has prepared an integrated package on basic skills development for use by administrators, teachers, and counselors. The products in the package entitled *BASICS: Bridging Vocational and Academic Skills* (National Center for Research in Vocational Education 1987), are aimed toward strengthening the academic component of vocational programs through a joint effort of vocational and academic teachers and all who support them.

To be successful in strengthening students' basic skills, the joint vocational-academic approach must be infused thoroughly into the student's program. *Developing an Instructional Program* in the *BASICS* package provides teachers with information on the development or selection of appropriate applied basic skills instructional materials. Individual components are as follows:

- o *Instructional Materials Development* discusses the prerequisite of materials development, alternative curriculum types, and guidelines for materials development and review.
- o *Supplemental Instructional Resources* identifies sources of basic skills instructional materials for use with vocational students.

- o *Instructional Assistance in Specific Basic Skills* prepares vocational teachers to help students gain reading, writing, oral communications, and math skills.

The success of an instructional program depends heavily on the techniques that teachers use to help students learn within the program. *Targeted Teaching Techniques* from the *BASICS* package provides vocational and academic teachers with assessment, planning and management tools to improve students' basic skills. Individual components are as follows:

- o *Technique for Management: Time for Learning* lays foundations for more effective basic skills instruction through studying the use of classroom time.
- o *Techniques for Remediation: Peer Tutoring* discusses the planning, implementation and evaluation of peer tutoring programs to strengthen students' basic skills.
- o *Technique for Computer Use: Software Evaluation* describes a procedure for joint evaluation of educational software for basic skills instruction.
- o *Technique for Individualization: The Academic Development Plan* guides school staff through systematic identification of individual student needs and steps to meet those needs.
- o *Techniques for Joint Effort: The Vocational-Academic Approach* describes teaching techniques that vocational and academic teachers can use jointly to improve students' basic skills.

Haney and Woods (1982), Lotto (1983), and Weber et al. (1982) all found that vocational education and general track students were similar in their basic skills attainment. Weber and Silvani-Lacey (1983) also report that the basic skills attainment of secondary vocational students varied by occupational service area and that the basic skills level of dropouts usually increased substantially when they participated in vocational programs with basic skills components.

The study by Weber and Silvani-Lacey (1983) is especially relevant to the current study because it deals not only with basic skills but also with those for special student populations. Their study synthesizes existing data on the characteristics of actual and potential dropouts and identifies methods for helping to remedy basic skills deficiencies in these youths. They further recommend that

teacher education programs, those for vocational education and basic skills specialists, need to incorporate both philosophical and pedagogical information as well as different techniques for dealing with the unique needs and problems of vocational students in the area of basic skills. (p. xii)

Kaplan (1985) points out that "the literature on effective teaching reveals that [good teachers] approach teaching in different ways, with but one

characteristic in common--an emphasis on reading and mathematics" (p. 4). Moreover, according to Kaplan (1985) and Sticht and Mikulecky (1984), the preponderance of research evidence supports "an emphasis on inculcating higher order skills in substantive courses and not in settings devoted solely to techniques" (p. 27). Kaplan concludes:

According to considerable literature, as well as intensive applied research . . . there are right and wrong ways to achieve [basic/higher order skills]. The wrong way is to separate higher order-oriented instruction from the actual context of the [classroom] by offering separate, finite dosages of school system-dictated, teacher-led work in the composite skills. (p. 20)

Lotto's (1983) analysis of current practices used by vocational educators for reinforcing basic skills in vocational education concludes that "vocational teachers need preservice and inservice training in providing reinforcement and practice in basic skills areas" (p. 27). She feels that vocational teachers "will be unable to meet the curricular objective of basic skills emphasis without training" (p. 28). She further recommends that

in both situations [preservice and inservice training] local administrators will want to provide appropriate inservice training to reinforce and improve local teachers' expertise. Specific training, given in support of an explicit curricular emphasis, will have a greater impact than either the objective or the training singly. Vocational teachers need to be able to provide learning and practice opportunities for their students in basic skills. They need to be able to diagnose student problems and provide or obtain appropriate remediation. (p. 28)

Two earlier studies done at the National Center were especially related to the current study. The first was a study by Lowry et al. (1983) of vocational teacher education graduates' self-reported preparation to instruct exceptional students. The second was an exploratory study by Vetter et al. (1983) of vocational teachers' preparation to improve secondary students' basic skills. Both the methods and approaches as well as the findings of these two studies were of special interest to the current study. The Lowry study provided a beginning teachers' questionnaire that was especially helpful in the initial development of the questionnaire needed by the current study. It also identified a verified list of 16 professional tasks associated with teaching special student populations and provided a field-tested rating scale for determining whether beginning teachers could perform each professional task (for each group of exceptional students) and how they learned to perform the task.

Although the Vetter et al. (1983) study of teacher preparation to teach basic skills was a limited, exploratory study conducted through on-site interviews at nine vocational teacher education institutions, it nonetheless provided valuable prototypes of questionnaire items and teaching competencies. These materials were helpful in getting the current project off the a quick start.



## Procedures

### Sample Selection

Three states randomly selected from within each of eight geographic regions of the country were used to select an unbiased national sample of beginning vocational teachers. The sample consisted of 740 beginning teachers. It included both degreed and nondegreed teachers and teachers in all vocational service areas (e.g., home economics, marketing, business and office).

The most accurate and reliable source of information for identifying beginning vocational teachers within the 24 states selected for this study, would have been the individual school district within each of these states. However, this would have been an excessively time consuming and costly process. So it was decided to obtain the information from more centralized sources whenever possible. The study worked through the teacher certification and credentialing units and vocational education units in each of the 24 state departments of education to obtain lists of names and addresses of all beginning vocational education teachers in school year 1985-86. However, this process was not smooth.

The project staff first systematically called all the state directors of vocational education within each of these 24 states requesting the list of names and addresses of beginning vocational teachers. This yielded positive responses from three states. For the rest, the next step was to ask the state department contact to identify another individual (or department) within the state department of education who could potentially assist the project. Frequently, this source was the state certification officer or a management information specialist.

Considerable variations in record keeping procedures were found among states. Approximately half of the states indicated that they had a fully computerized system for teacher records. Other states were in the process of implementing such a system. Even in states where record keeping was computerized, variations were observed regarding accessibility and ease of retrieving information. In some states, even though teacher records were computerized, the exorbitant cost of programming the computer for generating the required information prohibited the use of such services. A few states were able to output the information with ease and at no cost to the project. In some cases, the computerized list provided by the states did not include the addresses of the teachers. Consequently, the project staff had to write to the superintendent of each individual school district requesting the addresses. Up to three mail follow-ups, sometimes augmented by telephone follow-ups were necessary to obtain the required information. In states where computerized records of vocational teachers were not distinct from that of all other teachers, the cooperating states personnel had to pull the required information from these records manually. Similarly, cooperating states with no central computerized system had to devote a considerable amount of time and effort to generating the list of beginning vocational teachers. In one of the smaller states, the supervisor actually called each individual school district to compile the list of beginning vocational teachers.

In at least six states, it was not possible to obtain the list of names and addresses of the beginning teachers from the state department of education. In four states, where the information was either not available from the state department, or required too much commitment from state personnel to generate, the names and addresses of beginning vocational teachers were gathered by the project staff through systematic surveys of individual school districts. Again, this effort required initial mass mailings and follow-ups. In spite of the different sources of information used for subject identification, there is no evidence that the external validity of the study has been weakened in any way. Although the identification of beginning teachers through school districts could have included the names of other more experienced teachers, the survey instrument was specifically designed to screen out those teachers with more than 1 year of teaching experience. Similarly, the information generated by the state departments of education included both certified experienced teachers and certified beginning vocational teachers. The list of certified teachers included more experienced migrating teachers being certified through state reciprocity agreements as well as teachers who obtained additional types of certification in 1984-85 such as supervisory certificates. In addition, all the certified teachers identified through the state departments may not have taught immediately following their initial certification. Again, the survey instrument was designed to ensure that the subjects included in the study were truly beginning vocational teachers who were certified in 1984-85 and had their first teaching assignments in 1985-86. Therefore, the use of multiple sources of information for subject identification did not bias the sample for this study.

Using an existing directory of vocational teacher education institutions (Adams and Diehn 1984), all of the vocational teacher colleges in the random sample of 24 states were identified (N = 114). The chief vocational program administrator at each institutions was mailed a questionnaire and 69 institutions returned useable instruments.

The third sample included in the study was that of local school administrators or mentors. This sample was identified by name by each of the beginning teacher respondents. Each of the beginning teachers was asked to identify the individual within his or her school system who had the major responsibility and best opportunity for observing, evaluating, and/or monitoring his or her performance and helping him or her with inservice education activities during the induction year of teaching. (The size of this sample was 530 administrators/mentors.)

### Survey Methods

Data for the beginning teachers, teacher educators, and school administrators were collected by mail survey during the fall of 1986. Additionally, data regarding state mandated competency testing requirements for the certification of vocational teachers across the 50 states were gathered from the state directors of vocational education. These data were collected by phone survey through the Adult Vocational and Technical Education Electronic Mail Network (ADVOCNET).

## Instrumentation

Three instruments specifically designed to address the research objectives were developed. These instruments were (1) a Beginning Vocational Teacher Questionnaire, (2) a Teacher Educator Questionnaire, and (3) an Administrator/Mentor Questionnaire. Copies of each of the instruments, together with the several cover letters and instructions used for the original mailing and the several follow-up mailings, are included in the appendix.

The teacher questionnaire contained 185 items organized under 6 major sections: general background on first year of teaching, first-year experiences with special needs students, first year experiences enhancing basic skills, preservice preparation for special needs students and basic skills instruction, inservice preparation, and general reactions and other information related to teacher preparation. The teacher educator questionnaire was designed to obtain data about preservice vocational preparation. It contained 161 items organized under 5 major sections: general institutional descriptive information, entrance requirements (general and vocational), preparation to teach special student populations, preparation to teach basic skills, and course offerings and graduation requirements.

The school administrator questionnaire focused on the teacher's first-year performance and on inservice preparation. Part A covered inservice preparation and contained 43 items organized under 2 major sections: inservice program information and general reactions to beginning teacher preparation. Part B covered the assessment of individual teacher performance and contained 65 items focused on the teachers' preparation to enhance basic skills and to teach special student populations.

A variety of previously developed and related teacher questionnaires and interview guides were reviewed to aid staff in developing and refining the three questionnaires used by this study. Appropriate rating scales and coding schemes were developed or adapted from prior instrumentation. Each of the questionnaires was designed for use as a mailed survey instrument to collect data primarily focused on the beginning teachers' preparation for and performance in teaching basic skills and special student populations.

The beginning teacher survey was essentially a self-report that relied on teachers' judgments about their own performance. As noted by Borich (1980), the assumption underlying this approach is that "the performer (teacher) can best judge his or her own performance and, when explicitly asked to do so, can make an objective judgment" (p. 42). Borich points out that this assumption is most tenable when the purpose of data collection--as in the present study--is the evaluation of training, not the evaluation of individual teachers.

The three instruments were pilot tested locally with appropriate types of respondents within the National Center and the surrounding community. Respondents were interviewed and responses were analyzed prior to revisions. The questionnaires were also reviewed by a technical panel of five individuals from outside the National Center who were experts in vocational education, teacher education, special needs students, and basic skills instruction.

Several procedures were followed to check on the validity and reliability of the three questionnaires. For example, many of the items across the questionnaires and their response scales were taken from previously published instruments for which adequate reliability and validity data were reported. Additionally, the content validity of each of the questionnaires was checked through pilot tests over several iterations both by content experts and by representatives of the intended respondent groups. Each of the questionnaires was also completed individually by several respondents who were instructed to "think aloud" in responding to the items. This provided insights into the adequacy of response options/alternatives on the rating scales and the correspondence between the rating scales and questions.

Modifications and revisions in questionnaire content were made after each review to check item sampling and the homogeneity of items and to remove or reformulate irrelevant or inappropriate content. Additionally, the several internal and external reviews that required respondents to complete questionnaires were conducted over the course of several weeks and provided an opportunity to check on the temporal stability of the questionnaires.

### Findings and Conclusions

#### Beginning Vocational Teachers--Who Are They?

The study sample of 740 beginning vocational teachers is an unbiased national sample drawn from 24 states in 8 geographic regions of the country. Table 1 shows that the estimated rate of return for teachers was 32 percent overall. The rate of return for teacher educators and school administrators--two of the other respondent groups surveyed by the study--was 23 percent and 61 percent, respectively. Table 2 provides a detailed summary of the distribution and rate of return for the beginning teacher sample by state and by region.

TABLE 1  
ESTIMATED RATE OF RETURN FOR  
THREE STUDY SAMPLES

	Estimated Sample sizes	Useable Returns	Estimated Rate of Return
Teachers	2335	740	32%
Administrators/ Mentors	2335	530	23%
Teacher Educators	114	69	61%

Approximately half of the teachers were male (362), half were female (354), and 24 did not report their sex. The large majority (86.2 percent) were white, 3.1 percent were Hispanic, and 3.1 percent were black. The remainder were

TABLE 2

NUMBER AND PERCENTAGE OF USEABLE  
BEGINNING TEACHER RETURNS BY STATE AND REGION

Regions/States	Estimated Sample Size	<u>Useable Returns</u>	
		No.	%
New England			
Massachusetts	45	16	36
Vermont	10	4	40
New Hampshire	<u>10</u>	<u>4</u>	<u>40</u>
Subtotal	65	24	37
Mid Atlantic			
Maryland	44	14	32
Pennsylvania	152	48	32
Delaware	<u>9</u>	<u>1</u>	<u>11</u>
Subtotal	205	63	31
Great Lakes			
Indiana	88	25	28
Ohio	186	102	55
Wisconsin	<u>64</u>	<u>32</u>	<u>50</u>
Subtotal	338	159	47
Plains			
Missouri	157	45	29
Kansas	40	16	40
Nebraska	<u>39</u>	<u>13</u>	<u>33</u>
Subtotal	236	74	31
South East			
Mississippi	123	42	34
North Carolina	107	43	40
Tennessee	<u>85</u>	<u>28</u>	<u>33</u>
Subtotal	315	113	36
South West			
Arizona	50	19	38
Texas	308	85	28
New Mexico	<u>27</u>	<u>10</u>	<u>37</u>
Subtotal	385	114	30
Rocky Mountains			
Montana	29	13	45
Colorado	38	17	45
Wyoming	<u>27</u>	<u>8</u>	<u>30</u>
Subtotal	94	38	40
Far West			
California	506	90	18
Washington	127	42	33
Oregon	<u>64</u>	<u>23</u>	<u>36</u>
Subtotal	697	155	22
<hr/>			
Total	2335	740	32%

American Indian (N=11), Asian American (N=4), or did not report their ethnic origin (N=24).

Interestingly, a newly released national survey of college education majors by the American Association of Colleges for Teacher Education--AACTE (1987) confirms that the ethnic mix of the study's sample of beginning vocational teachers is also an accurate reflection of the ethnic mix for all education majors. It found that 5 percent of education students in the 1985-86 academic year were black, whereas only 3 percent were Hispanic.

If these data on ethnic origin are a reasonable reflection of conditions in the field of vocational teaching as a whole, then they point up the fact that the lack of minority vocational teachers is a serious problem. Moreover, unless a major minority recruitment and enrollment effort is made within the field, it is a problem that will grow increasingly more serious as the number of minority students in high school and in vocational programs rapidly increases in the years immediately ahead. Although such a recruitment effort is critical, it will also be increasingly more difficult in the future as others within and outside education seek to extend their own minority recruitment and training programs, and as minorities continue to broaden their employment opportunities and seek preparation for jobs with higher salaries and more prestige than teaching.

The average age of the teachers was 33.2 years old and ranged from 22 to 66 years old. This average age is probably somewhat higher than might be expected for beginning teachers in general and is probably accounted for by the fact that, for certification, most states require from 3 to 6 or more years of full-time work experience in the occupation to be taught. Even in the several teaching areas that typically do not require trade experience (e.g., industrial arts, home economics), it isn't unusual for teachers to come from full-time jobs in business and industry and therefore to be somewhat older than beginning teachers in general.

As shown in table 3, approximately 75 percent of the beginning teachers had completed bachelor's degrees or higher levels of education. Twenty-six percent

TABLE 3

NUMBER AND PERCENTAGE DISTRIBUTION OF VOCATIONAL TEACHERS BY HIGHEST LEVEL OF EDUCATION COMPLETED

	No.	%	
High school diploma only	21	2.9	} 26.5%
Some college--no degree	110	15.1	
Associate degree (2 or more years)	62	8.5	
Bachelor's degree	117	24.4	} 75.2%
Bachelor's degree plus	283	38.8	
Master's degree	32	4.4	
Master's degree plus	40	5.5	
Doctorate	5	.7	
No response	10	1.4	

(N=193) were "nondegreed" vocational teachers having completed some college, or perhaps a 2-year associate degree, but not completing the baccalaureate degree. Moreover, the health, trade and industrial subjects, and technical occupations service areas had significantly more nondegreed teachers than the other service areas. Whereas 73 percent of the T&I teachers did not have degrees (N=108), half of the technical teachers (N=17) and health occupations teachers (N=25) did not have degrees.

Most of the teachers in the study were secondary school teachers (see table 4). Almost 69 percent of those responding taught in comprehensive high schools

TABLE 4  
TYPE OF INSTITUTION IN WHICH  
TEACHERS TAUGHT

Type of Institution	No.	%
Junior high school	65	8.8
Comprehensive high school	340	45.9
Area vocational school-secondary	159	21.5
Vocational school-postsecondary	67	9.1
Specialty vocational school-secondary	15	2.0
Specialty vocational school-postsecondary	12	1.6
Correctional facility	0	0.0
Military	8	1.1
Business/industry	1	0.1
Other	44	5.9
No response	29	3.9

(46.8 percent) and secondary-level area vocational schools (21.9 percent). However, analysis of variance of teachers' age by service area revealed that those who taught health, trade and industrial subjects, and technical occupations were predominantly postsecondary teachers and they were significantly older than the teachers in the other occupational service areas.

Almost all of the teachers (98 percent) taught in public institutions, whereas only 2 percent taught in private institutions. At the beginning of their second year of teaching, the majority (95 percent) were teaching in the same school they started at a year earlier.

At first glance there would appear to be a discrepancy between the number and percentage distribution of the sample by areas of certification and teaching (table 5) and the number and percentage distribution by area of college major (table 6). On the one hand, about half of the beginning teachers said they majored predominantly in four areas: business and office occupations (N=124), industrial arts (N=84), agricultural education (N=67), and occupational home economics (N=62). The remaining half majored in areas outside of vocational education, were distributed among the several other occupational teaching areas, or did not report a college major.

TABLE 5

FREQUENCY AND PERCENTAGE DISTRIBUTION OF  
BEGINNING VOCATIONAL TEACHERS BY SERVICE AREA:  
CERTIFICATION AND SUBJECTS TAUGHT

Service Area	Certification		Subjects Taught		Certified and Taught	
	No.	%	No.	%	No.	%
Agricultural Education	74	10.0	73	9.9	67	9.0
Marketing and Distributive Education	35	4.7	35	4.7	27	3.6
Health Occupations Education	49	6.6	54	7.3	48	6.4
Consumer and Homemaking Education	108	14.6	107	14.5	93	12.5
Occupational Home Economics Education	1	.1	1	.1	1	.1
Business and Office Education (e.g., typing, shorthand, etc.)	103	13.9	100	13.5	91	12.2
Trade and Industrial Occupations Education	160	21.6	166	22.4	136	18.2
Technical Occupations Education	38	5.1	37	5.0	32	4.2
Industrial Arts (General Education)	80	10.8	71	9.6	65	8.7
Special Education	11	1.5	15	2.0	7	.9
Other	80	10.8	94	12.7	61	8.2
No Certification	27	3.6	1	.1	1	.1



TABLE 6  
 NUMBER AND PERCENTAGE DISTRIBUTION OF  
 BEGINNING VOCATIONAL TEACHERS BY COLLEGE MAJOR

Major	No.	%
Agricultural Education (including horticulture, animal husbandry, etc.)	67	9.05
Marketing and Distributive Education	24	3.24
Health Occupations Education	47	6.35
Consumer and Homemaking Education	53	7.16
Occupational Home Economics Education	62	8.38
Business and Office Occupations Education	124	16.76
Trade and Industrial Occupations Education	33	4.46
Technical Occupations Education	23	3.11
Industrial Arts Education	84	11.35
Special Education	4	.54
Vocational Education (general major)	37	5.00
General Education	18	2.43
Other (including Liberal Arts, Fine Arts, Social work, etc.)	78	10.54
No Response	86	11.62
<b>Total</b>	<b>740</b>	<b>100.00</b>

On the other hand, nearly half of the teachers said they were certified and taught in three vocational areas: trade and industrial occupations (N=136), consumer and homemaking education (N=93), and business and office occupations (N=91). There is an apparent disagreement in the order and areas of college majors and the order and areas of certification and teaching.

This apparent discrepancy might be explained by several factors. First, the apparent differences in the trade and industrial area might be due to the fact that traditionally this area has had a large number of nondegree teachers who entered the field directly from jobs in business and industry. If the majority of nonrespondents to the question on college majors was actually nondegree teachers in the trade and industrial area, then this area would more nearly approach the size of the group that reported it was certified and taught in this area. Second, some teachers were certified in more than one area and some taught in more than one area. Twenty-seven were teaching without certification. Each of these factors could help account for the higher numbers certified and teaching in the several areas compared to the number of college majors reported in those areas. Finally, it may be that, because they were teaching at the high school level where consumer and homemaking education is more common than occupational home economics, the large number of occupational home economics college majors may have sought certification and teaching assignments in nonoccupational consumer and homemaking education.

In their first year of teaching (1985-86), the beginning teachers taught an average of 84.3 students and 22.4 special needs students. However, the number of students taught differed significantly by service area (see table 7). Analysis of variance revealed that industrial arts ( $\bar{x} = 163.2$ ), consumer and homemaking ( $\bar{x} = 111.3$ ), and business and office ( $\bar{x} = 103.0$ ) teachers taught significantly more students, on average, than teachers in the other occupational service areas.

After 1 year of teaching, the satisfaction of the study sample of teachers with various aspects of teaching was mixed (see table 8). On average, they were most satisfied with the administrative support they received, class sizes, and school facilities. They were least satisfied with their opportunities for input into school decisions. They were also dissatisfied with the parental support they received, their opportunities for advancement, and the time they had available for preparation. In spite of these dissatisfactions, when asked how long they anticipated remaining in teaching, almost half said they expected to remain from 2 to 10 years and the second half anticipated staying indefinitely (see table 9).

TABLE 9

ANTICIPATED TIME TO REMAIN  
IN THE TEACHING PROFESSION

Length of Time	No.	%
One year	18	2.4
Two to five years	208	28.1
Six to ten years	146	19.7
Indefinitely	46	46.8
No Response	22	2.9

TABLE 7

## SERVICE AREA COMPARISONS ON SELECTED BACKGROUND, PREPARATION, AND EXPERIENCE VARIABLES

Dependent Variables (Potential range of Values)	*Group Means										F-Values	ETA <sup>2</sup> Values
	1	2	3	4	5	6	7	8	9	10		
<b>Background</b>												
o Current teaching status (1=teaching, 2=not teaching)	1.0	1.0	1.1	1.0	1.0	1.3	1.0	1.1	1.0	1.0	1.14	.02
o Type of institution where teaching (1=jr. high school; 2=high school; 3=postsecondary)	2.0	2.2	2.5	2.0	1.9	2.0	2.2	2.4	1.8	2.1	12.75**	.16
											(7 < 9; 8 < 9, 5, 4, 6, 1; 3 < 9, 5, 4, 6, 1)	
o Total number of students taught (number of students)	47.3	78.1	37.0	111.3	106.3	103.0	45.7	97.0	163.2	69.3	16.10**	.20
											(6 < 3, 7, 1; 4 < 3, 7, 1; 9 < 3, 7, 1, 2, 6)	
o Frequency of supervisor observation of teaching (3=three or four times; 4=five or more times)	3.6	3.8	3.3	3.8	4.0	3.6	3.8	3.5	3.8	3.9	1.85**	.05
20 o Number of supervisor conferences (2=twice; 3=three or four times)	3.0	3.3	3.2	2.9	2.8	2.7	3.4	3.2	3.0	3.0	4.21**	.08
o Academic collage courses taken (1=1; 2=2; 3=3; 4=4; 5=5 or more)	4.0	4.2	3.6	3.7	4.1	4.4	2.8	3.9	3.8	4.0	16.94**	.21
											(7 > 3, 4, 9, 8, 1, 5, 2, 6)	
<b>Preparation for Teaching Basic Skills</b>												
o Taught basic skills in first year (1 = 1 hour; 2 = 2-3 hours)	1.1	1.0	1.3	1.1	1.1	1.1	1.2	1.5	1.2	1.0	6.32**	.08
											(8 < 10, 2, 5, 6, 1, 4, 7)	
o Time spent teaching basic skills (1 = 1 hour; 2 = 2-3 hours)	1.4	1.5	1.2	1.4	1.4	1.3	1.3	1.3	1.3	1.6	2.16	.04

\*Specific groups noted are as follows:

- 1 - Agricultural Education
- 2 - Marketing & Distributive Education
- 3 - Health Occupations Education
- 4 - Consumer and Homemaker
- 5 - Occupational Home Economics

- 6 - Business and Office Education
- 7 - Trade and Industrial
- 8 - Technical Occupations
- 9 - Industrial Arts
- 10 - Special Education

36 \*\*Significant  $\alpha = .05$  level.

TABLE 7--Continued

Dependent Variables (Potential range of Values)	*Group Means										F-Values	ETA <sup>2</sup> Values
	1	2	3	4	5	6	7	8	9	10		
o Hours of inservice related to basic skills (1 = 1-3 hours; 2 = 4-6 hours)	1.8	2.2	2.0	1.7	1.7	1.9	2.5	2.0	1.8	2.7	5.30**	.08
o Importance of basic skills as part of preservice (1 = Yes; 2 = No)	1.1	1.2	1.2	1.0	1.1	1.1	1.2	1.3	1.1	1.1	2.67**	.04
o Importance of skills to teach basic skills (1 = yes; 2 = no)	3.5	3.7	3.6	3.6	3.4	3.5	3.4	3.2	3.4	3.7	3.39**	.07
o Skill level developed to teach basic skills (3 = can do fairly well)	3.1	3.2	3.2	3.1	3.1	3.1	3.0	3.0	3.0	3.0	1.57	.02
o Entire preservice courses in basic skills (1 = 1 course; 2 = 2 or more courses)	1.6	1.8	1.3	1.6	1.6	1.6	1.5	1.4	1.6	1.6	1.74	.02
o No. of courses where basic skills was a topic (1 = 1 course; 2 = 2 or more courses)	2.1	2.1	1.6	2.1	2.0	2.1	1.8	1.9	2.0	1.9	3.07**	.04
o Preservice training in general inst. skills for basic skills (2 = Some; 3 = a lot)	2.7	2.7	2.6	2.7	2.5	2.9	2.9	2.7	2.9	3.0	1.36	.02
o Level of skills in general inst. skills for a.s. (2 = cannot do very well; 3 = can do fairly well)	2.8	3.1	3.0	2.8	2.6	3.0	3.1	2.9	2.9	3.0	3.00**	.04

\*Specific groups noted are as follows:

- 1 - Agricultural Education
- 2 - Marketing & Distributive Education
- 3 - Health Occupations Education
- 4 - Consumer and Homemaker
- 5 - Occupational Home Economics

- 6 - Business and Office Education
- 7 - Trade and Industrial
- 8 - Technical Occupations
- 9 - Industrial Arts
- 10 - Special Education

\*\*Significant at  $\alpha = .05$  level.

TABLE 7--Continued

Dependent Variables (Potential range of Values)	1	2	3	*Gr 4	Means 5	6	7	8	9	10	F-Values	ETA <sup>2</sup> Values
<b>Preparation for Teaching Special Needs Students</b>												
o Number of special needs students taught (Number of students)	11.1	15.2	18.0	27.1	18.4	20.4	18.5	35.4	41.4	46.5	3.12**	.06
o Amount of time teaching special needs students (2 = 2-3 hours; 3 = 4-5 hours)	2.4	2.0	2.9	2.4	2.4	2.2	2.5	2.5	2.3	2.6	2.68**	.05
o How special needs students are integrated (1=mainstreamed; 2=mixed; 3=separated)	1.2	1.4	1.1	1.2	1.3	1.3	1.3	1.2	1.2	1.5	2.21**	.03
o Hours of inservice related to special needs students (1 = 1-3 hours; 2 = 4-6 hours)	1.8	2.2	2.0	1.7	1.7	1.9	2.5	2.0	1.8	2.7	5.30**	.08
o Importance of teaching special needs as part of preservice (1 = Yes; 2 = No)	1.1	1.3	1.1	1.0	1.1	1.1	1.2	1.4	1.2	1.0	4.23**	.06
o Importance of skills to teach special needs students (2=Somewhat important; 3=Quite important)	2.9	2.7	3.2	3.1	3.1	3.0	2.9	2.7	3.0	3.3	3.79**	.06
o Skill level developed to teach special needs students (2=Cannot do very well; 3=Can do fairly well,	2.6	2.6	3.0	2.6	2.8	2.8	2.8	2.7	2.8	3.0	3.17**	.05

\*Specific groups noted are as follows:

- 1 - Agricultural Education
- 2 - Marketing & Distributive Education
- 3 - Health Occupations Education
- 4 - Consumer and Homemaker
- 5 - Occupational Home Economics

- 6 - Business and Office Education
- 7 - Trade and Industrial
- 8 - Technical Occupations
- 9 - Industrial Arts
- 10 - Special Education

\*\*Significant at  $\alpha = .05$  level.

TABLE 7--Continued

Dependent Variables (Potential range of Values)	*Group Means										F-Values	ETA <sup>2</sup> Values
	1	2	3	4	5	6	7	8	9	10		
o Entire preservice courses in special needs teaching (1 = 1 course; 2 = 2 or more courses)	1.4	1.5	1.2	1.4	1.4	1.3	1.3	1.3	1.3	1.5	2.16**	.04
o No. of courses where special needs was a topic (1 = 1 course; 2 = 2 or more courses)	1.8	1.8	1.5	1.9	1.9	1.8	1.6	1.6	1.7	1.9	5.16**	.08
o Preservice training in general inst. skills for special needs (2 = Some; 3 = a lot)	2.8	2.7	2.6	2.8	2.8	2.7	2.7	2.5	2.8	3.3	1.72	.02
o Level of skills in general inst. skills for special needs (2=Cannot do very well; 3=Can do fairly well)	2.9	3.0	2.9	2.9	3.0	2.8	2.7	2.6	2.9	3.1	1.69	.02
o Preservice training in specific skills for special needs (2 = Some; 3 = A lot)	3.3	3.2	3.1	3.2	3.0	3.1	3.1	2.9	3.2	3.3	1.18	.01
o Level of skill in specific skills for special needs (3 = Can do fairly well)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.2	3.1	.32	.01

\*Specific groups noted are as follows:

- 1 - Agricultural Education
- 2 - Marketing & Distributive Education
- 3 - Health Occupations Education
- 4 - Consumer and Homemaking
- 5 - Occupational Home Economics

- 6 - Business and Office Education
- 7 - Grade and Industrial
- 8 - Technical Occupations
- 9 - Industrial Arts
- 10 - Special Education

\*\*Significant at  $\alpha = .05$  level.

23

42

43

TABLE 8

TEACHERS' SATISFACTION WITH VARIOUS ASPECTS  
OF TEACHINGSATISFACTION

1 = Not satisfied at all

2 = Somewhat satisfied

3 = Very satisfied

Aspects of Teaching	Degree of Satisfaction (%)					SD	
	1	2	3	$\bar{x}$			
Salary	22.7	51.9	25.3	2.03	.69	(730)	
Prestige	20.4	54.6	25.1	2.06	.67	(722)	
Administrative support	20.5	33.3	46.2	2.26	.78	(730)	
Parental support	33.4	42.5	24.1	1.91	.75	(697)	
Opportunity for input into school decisions	33.3	47.1	19.6	1.86	.72	(726)	
Facilities	19.6	42.2	38.1	2.19	.74	(729)	
Class size	16.7	43.2	40.1	2.23	.72	(731)	
Time for preparation	28.6	42.0	29.4	2.01	.76	(731)	
Discipline	23.4	48.5	28.1	2.05	.72	(726)	
Opportunity for advancement	27.5	51.4	21.1	1.94	.70	(714)	
Other	40.4	19.2	38.5	2.02	.94	( 52)	

Conversely, the aspects of teaching the beginning teachers liked most in their first year were the intrinsic aspects of the job--all clearly related to the interactions and relationships with students. Other aspects of teaching or school facilities and personnel were not rated highly (see table 10). Almost one-third said that seeing students grow and succeed was the thing they liked best about teaching (N=226). Another one-fourth felt that helping, influencing, and working with young people was their favorite thing (N=183). Thirteen percent (N=95) reported that interaction and communication with students on a personal level was the thing they liked most about first-year teaching. These findings are also consistent with those of the American Association of Colleges for Teacher Education (1987) survey which reported that 90 percent of education majors wanted to become teachers in order to help children grow and learn.

These findings on beginning vocational teacher job satisfaction and anticipated time to remain in teaching are consistent with the newly released findings of the Metropolitan Life (1987) annual survey of the American teacher. These data revealed that teacher morale rose significantly in 1987, with the number of teachers saying they were satisfied with their jobs rising from 81 percent to 85 percent. In addition, according to an article in the September 10, 1987, issue of *Teacher Education Reports*, the pollsters found that "the number now saying that they are likely to give up teaching within the next five years declined from 27 percent in 1986 to 22 percent this year [1987]" (p. 2). The article goes on to state that this change in attitude is "most marked among those young and new teachers with less than 5 years experience. In 1986 the surveyors found that 39 percent of these teachers were contemplating a career change, but that number has plummeted by nearly half to 20 percent this year" (p. 2). Additionally, the recent AACTE survey of college education majors found that nearly half plan to teach for at least 10 years, whereas 27 percent said they plan to teach twice that long.

### Preservice Vocational Teacher Preparation

Sixty-nine teacher education institutions in the 24 states surveyed by the study returned useable questionnaires (61 percent rate of return). Table 11 provides a detailed summary of teacher educator returns by state and by region. Appendix A contains a listing of the 69 institutions.

The respondents for the teacher education institutions were primarily administrators (54.5 percent) or faculty members (43.9 percent). Most of them (41.5 percent) were responsible in their jobs for all vocational service areas offered at their institution, or they were college, department, or school administrators (32.3 percent). Twenty percent were responsible for a specific vocational service area.

The average number of full-time education faculty at the institutions (including vocational education) was 63 faculty. The average size of the full-time vocational education faculty was 10 members. On average, education faculties included 17 part-time faculty, of which 5 were faculty in vocational education (see table 12).



TABLE 10  
TEACHERS' FAVORITE THINGS ABOUT TEACHING  
IN THE FIRST YEAR

Favorite Aspects of Teaching	No.	%
Seeing students grow and succeed	226	30.54
Helping, influencing, working with young people	183	24.73
Student/teacher interaction and communication-- personal level	95	12.84
Challenges and personal growth	37	5.00
Positive student feedback and respect from students	32	4.32
Communication with administrators and staff	21	2.84
Seeing students apply what they have learned (theory into practice)	18	2.43
Freedom within curriculum--teaching what and how I want to teach	15	2.03
Hours and/or pay	10	1.35
Variety in tasks and activities--being creative in teaching	10	1.35
Vacation	7	.95
Community and/or parental interaction/support	5	.68
No Response	81	10.95
Total	740	100.00

TABLE 11

NUMBER AND PERCENTAGE OF USEABLE RETURNS FOR  
TEACHER EDUCATION INSTITUTIONS BY STATE AND REGION

Regions/States	Number of Institutions	Useable Returns	
		No.	%
<b>New England</b>			
Massachusetts	3	2	66
Vermont	1	1	100
New Hampshire	2	1	50
Subtotal	6	4	66
<b>Mid Atlantic</b>			
Maryland	2	0	00
Pennsylvania	8	3	38
Delaware	2	1	50
Subtotal	12	4	33
<b>Great Lakes</b>			
Indiana	4	2	50
Ohio	10	8	80
Wisconsin	4	4	100
Subtotal	18	14	78
<b>Plains</b>			
Missouri	7	5	71
Kansas	6	4	66
Nebraska	6	4	66
Subtotal	19	13	68
<b>South East</b>			
Mississippi	5	3	60
North Carolina	6	5	83
Tennessee	7	4	57
Subtotal	18	12	66
<b>South West</b>			
Arizona	2	1	50
Texas	13	5	38
New Mexico	4	3	75
Subtotal	19	9	47
<b>Rocky Mountains</b>			
Montana	2	1	50
Colorado	2	2	100
Wyoming	1	1	100
Subtotal	10	4	80
<b>Far West</b>			
California	10	3	30
Washington	6	5	83
Oregon	1	1	100
Subtotal	17	9	53
<b>Total</b>	<b>114</b>	<b>69</b>	<b>61%</b>

TABLE 12  
FULL-TIME AND PART-TIME FACULTY

Faculty	Full-time ( $\bar{x}$ )	Part-time ( $\bar{x}$ )
Education faculty (including vocational education)	63 (59)	17 (38)
Vocational education faculty	10 (54)	5 (31)

NOTE: The numbers in parentheses are the number of institutions responding to the question.

Nearly one-third of the institutions did not report student enrollment figures. For the two-thirds responding, the average full-time enrollment in teacher education (including vocational teacher education) was 366 students--166 students was the average part-time enrollment. The average full-time enrollment in all service areas of vocational teacher education was 99 students--the average part-time enrollment was 47 students.

Preservice preparation. Table 13 shows that most students entered the vocational teacher education program either in their junior year of college (44.9 percent) or their freshman year (30.4 percent). The average time required to complete the vocational teacher program was 3.6 years (see table 14).

TABLE 13  
POINT OF ENTRY INTO TEACHER EDUCATION PROGRAM

Point of Entry	Teacher Education	Vocational Teacher Education
Beginning of:		
--freshman year	23.9	30.4
--sophomore year	15.9	14.5
--junior year	44.9	44.9
--senior year	1.4	1.4
At post-baccalaureate level	2.9	8.7

TABLE 14  
TIME REQUIRED TO COMPLETE  
VOCATIONAL TEACHER EDUCATION PROGRAM

No. of Years	No.	%
1	1	1.4
2	11	15.9
3	4	5.8
4	45	65.2
5	2	2.9
6	1	1.4
No response	5	7.2
Total	69	100.0%

Almost all of the institutions (95.7 percent) were accredited by their respective states. Sixty-one percent had regional accreditation and 84.1 percent were accredited by the National Council for Accreditation of Teacher Education (NCATE). Six of the institutions were members of the University Council for Vocational Education and 20 were members of the Holmes Group, Inc.

Table 15 shows the types of vocational teacher preparation programs offered by the responding institutions and a rough estimate of the relative size of the programs as indicated by the average number of graduates from each program in the 1984-85 academic year. Over three-fourths of the institutions offered industrial arts programs. Consumer and homemaking, office occupations, and trade and industry programs were each offered by close to two-thirds of the institutions.

By far, the business education program, offered by over 50 percent of the institutions, was the largest program in terms of average number of graduates ( $\bar{x}=20.1$ ). This was followed by agricultural programs ( $\bar{x}=15.5$ ), industrial arts programs ( $\bar{x}=11.0$ ), and office occupations programs ( $\bar{x}=10.7$ ).

However, these estimates are based on relatively small numbers of respondents. For example, although 55 institutions offered programs in health occupations, only 10 institutions supplied data on the number of program graduates in this service area. The large number of institutions that did *not* respond to the questions regarding numbers of graduates suggests that this information may not be widely known or readily available within the institutions. Thus, these data are only rough estimates and should be treated accordingly.

Table 16 reveals some surprising findings regarding the entry requirements used by the responding institutions for admission of students to preservice vocational teacher education programs. First, it appears that entry requirements have not changed much over time. Thus, the current entry requirements used and not used by the institutions are about the same as those used and not used in 1981 and 1983 when most 1985 graduates entered the teacher education programs. For example, most of the institutions do not require prior experiences working with youth or personal letters of recommendation for admission to their programs, and this has not changed since the early 1980s. The large majority of institutions used an average undergraduate cumulative GPA of 2.4 points for program admission currently and in the early 1980s. Almost 48 percent of the

TABLE 15

VOCATIONAL TEACHER PREPARATION PROGRAM BY  
SERVICE AREA AND BY PROPORTION OF GRADUATES

Vocational Service Area	Program Offering No.	%	Proportion of 1984-1985 Graduates
Agricultural Education	26 (59)	44.1	15.5 (22)
Marketing and Distributive Education	27 (60)	45.0	6.3 (19)
Health Occupations Education	16 (55)	29.1	4.4 (10)
Consumer and Homemaking Education	40 (61)	65.6	9.5 (28)
Occupational Home Ec. Education	34 (60)	56.7	6.6 (18)
Office Occupation Education (e.g., typing, shorthand)	38 (61)	62.3	10.7 (29)
Other Business Education	24 (45)	53.3	20.1 (11)
Trade and Industry Education	37 (57)	65.0	9.7 (29)
Technical Occupations Education	19 (54)	35.2	9.4 (14)
Industrial Arts Education	47 (60)	78.3	11.0 (40)

TABLE 16  
ENTRY REQUIREMENTS FOR ADMISSION TO  
PRESERVICE VOCATIONAL TEACHER EDUCATION PROGRAMS

Entry Requirement	Current Requirement		Requirement for '85 Grads	
	No.	%	No.	%
High School Diploma				
Required	55	79.7	46	66.6
Not required	10	14.5	8	11.6
No response	4	5.8	15	21.7
Occupational Certificate or License				
Required	10	14.5	9	13.0
Not required	49	71.0	43	62.3
No response	9	13.0	18	26.1
Related Work Experience <sup>(a)</sup>				
Required	33	47.8	29	42.0
Not required	28	40.6	24	34.8
No response	8	11.6	16	23.2
Prior Experiences Working with Youth <sup>(a)</sup>				
Required	9	13.0	9	13.0
Not required	48	69.6	40	58.0
No response	10	14.5	18	26.1
Personal Letters of Recommendation				
Required	24	34.8	19	27.5
Not required	37	53.6	32	46.4
No response	8	11.6	18	26.1
Interviews				
Required	26	37.7	19	27.5
Not required	36	52.2	34	49.3
No response	9	13.0	16	23.2
High School Grade Point Average (GPA) <sup>(b)</sup>				
Required	17	24.6	15	21.7
Not required	42	60.9	32	46.4
No response	10	14.5	22	31.9
High School Class Rank <sup>(c)</sup>				
Required	26	37.7	23	33.3
Not required	37	53.6	28	40.6
No response	6	8.7	18	26.1
Cumulative Undergraduate GPA <sup>(d)</sup>				
Required	51	73.9	40	58.0
Not required	12	17.4	13	18.8
No response	6	8.7	16	23.2

NOTE: (a) The average number of years of experience, in both cases, was 3 years.  
(b) The average high school GPA required currently and for '85 grads was 2.0.  
(c) The average class rank required currently was 48.7; required for '85 grads was 61.  
(d) The average cumulative undergraduate GPA required currently and for '85 grads was 2.4.

institutions required an average of 3 years of work experience related to the vocational service area students intended to enter.

Other surprising findings included the fact that, although 80 percent of the institutions required a high school diploma for admission, almost 15 percent did *not* require one. Surprisingly, most of the institutions did *not* use high school class rank or high school GPA for their admission decisions. However, for the 25 percent of the institutions that did use high school GPA, the average GPA required was 2.0 points. This was the same GPA required in the early 1980s.

There was no apparent change in the number of institutions requiring courses in communications and mathematics or in the average number of credits required in these courses for admission to teacher education programs (see table 17). In general, about seven to eight credits on average were required in communications courses, and four to five credits on average in mathematics courses were required for program admission.

TABLE 17  
PREREQUISITE COURSES IN COMMUNICATIONS AND MATHEMATICS  
REQUIRED FOR ADMISSION TO PRESERVICE VOCATIONAL TEACHER EDUCATION PROGRAMS

Entry Requirements	Current Entry Requirements				Requirements for 1985 Grads			
	No.	%	Average No. Credits Required		No.	%	Average No. Credits Required	
Communications (including English and language arts)	41 (61)	67.2	7.7	(31)	30 (50)	60.0	7.5	(23)
Mathematics (including algebra, geometry, statistics, etc.)	31 (60)	51.7	4.8	(24)	21 (47)	44.7	3.6	(18)

Interestingly, almost 88 percent of the institutions (N=57) required one or two additional courses in mathematics and 71 percent required three to four additional courses in communications as part of their vocational teacher education program (see table 18). A course was defined as one that met 2-5 classroom hours per week during one semester or quarter. Additionally, 64 percent required two to three courses in the humanities and fine arts, 62.5 percent required two to three courses in science, and 7 percent required two to three courses in the social sciences. Almost 59 percent required one course in computer skills, whereas 32 percent did not require computer skills courses. Comparing the average number of courses actually taken in these academic areas by beginning vocational teachers (table 19) with the institutional course requirements in the areas (table 18) shows that, in general, the beginning teachers met or exceeded the institutional requirements in each of the areas.

If it is assumed that a college course is equivalent to three college credits, then the courses taken and institutional credit requirements in the five major academic areas for the beginning vocational teachers can be compared to three other estimates of academic requirements. These three estimates are all

TABLE 18

## INSTITUTIONAL COURSE REQUIREMENTS IN ACADEMIC AREAS OTHER THAN EDUCATION

Course Requirements	NUMBER OF COURSES												Mean
	None		One		Two		Three		Four		Five or More		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Communications (e.g., English, language arts, speech)	2	3.1	2	3.1	9	13.8	31	47.7	15	23.1	6	9.2	3.0 (85)
Mathematics (e.g., algebra, geometry, statistics)	3	4.8	27	41.5	30	48.2	4	6.2	1	1.5	—	—	1.8 (65)
Humanities and Fine Arts (e.g., languages, philosophy, music)	3	4.7	3	4.7	16	25.0	25	39.1	9	14.1	8	—	3.0 (84)
Science (e.g., biology, geology)	2	3.1	5	7.8	24	37.5	18	25.0	9	14.1	8	12.5	2.8 (84)
Social Science (e.g., psychology, economics)	2	3.1	—	—	18	28.1	27	42.2	10	15.6	7	10.9	3.0 (84)
Computer Skills (e.g., key-boarding, programming)	21	32.3	38	58.5	4	8.2	2	3.1	—	—	—	—	0.8 (85)



TABLE 19  
COURSES TAKEN BY BEGINNING VOCATIONAL TEACHERS  
IN AREAS OTHER THAN EDUCATION

Areas of Study	Percent of Teachers Taking Courses						Mean
	1 crse.	2 crses.	3 crses.	4 crses.	5 or more crses.	None	
Communications (e.g., English, language arts, speech)	5.0	8.2	21.7	22.3	32.4	10.4 (695)	3.38
Mathematics (e.g., algebra, geometry, statistics)	17.9	22.5	20.3	12.6	13.0	13.7 (693)	2.40
Humanities and Fine Arts (e.g., languages, philosophy, music)	8.1	16.0	21.5	15.6	25.6	13.2 (692)	2.97
Science (e.g., biology, geology)	9.0	18.7	16.8	14.3	27.5	13.6 (690)	2.91
Social Science (e.g., psychology, economics)	6.8	13.2	18.3	18.1	32.2	11.4 (690)	3.23
Computer Skills (e.g., key-boarding, programming)	23.4	14.6	8.3	5.1	9.1	39.6 (685)	1.43

based upon a study of college transcripts conducted by Galambos, Cornett, and Spitler (1985) for the Southern Regional Education Board (SREB). Although there was considerable variability among the 17 institutions included in the SREB study and among the 69 institutions in the present study, several trends can be noted (see table 20).

TABLE 20  
COMPARISONS OF BEGINNING TEACHER ACADEMIC  
PREPARATION WITH SREB TRANSCRIPT STUDY DATA

Average Total Hours in:	Present Study		SREB Transcript Study (a)		
	Average Credits Taken by Teachers (b)	Average Institutional Requirements (c)	Average for Academic Teachers	Average for Arts and Science Majors	Average Catalog Requirements
Mathematics	7.2	7.2	6.0	7.2	3.0
English	10.2	9.0	11.3	11.8	6.0
Social Science	9.6	9.0	21.6	20.4	6.0
Science	9.0	8.4	11.6	12.2	3.0
Humanities	9.0	9.0	26.1	34.0	---

NOTE: (a) Source is Galambos, Cornett, and Spitler (1985).  
(b) See table 19.  
(c) See table 18.

First, it can be seen that, in all academic areas, the average institutional requirements reported for the 69 institutions in the present study exceeded the average catalog requirements listed for the 17 SREB institutions. Second, on average, the number of credit hours reportedly taken by beginning vocational teachers in mathematics (7.2 credits) is about the same as the average number of math credits taken by either academic teachers (6.0 credits) or by arts and

science majors (7.2 credits).<sup>1</sup> The average number of English credits taken by the beginning vocational teachers (10.2 credits) was slightly less than the average number of English credits taken by the academic teachers and the arts and science majors (11.3 and 11.8 average credits respectively).

In each of the other three academic areas, the academic teachers and arts and science majors in the SREB study on average greatly exceeded the beginning vocational teachers in average credits taken and in average institutional requirements. Thus, it would seem that preservice vocational teacher programs and teachers were not greatly different from their academic counterparts, or arts and science majors in general, in terms of their basic skills (math and English) requirements. However, it seems clear that, in general, the beginning vocational teachers did not pursue a rigorous liberal arts program. In general, they were considerably below academic teachers and arts and science majors in science, social science, and humanities credits required or earned. Moreover, T&I teachers took significantly fewer courses in these academic areas in their preservice preparation than any of the other beginning vocational teachers (see table 7). Surprisingly, when teacher educators were asked about their plans for implementation of selected strategies for preparing vocational teacher to teach basic skills (see table 21), 51.6 percent said they had no plans to increase the number of credit hours required in the humanities and social sciences either as a prerequisite to the program or for graduation.

Based on their findings, Galambos, Cornett, and Spitzer (1985) concluded that,

when all teachers are considered together, they earned fewer general education credits than the arts and sciences graduates and a smaller proportion of the teachers' credits were upper level courses. . . . Teachers, as compared to arts and sciences graduates, take fewer hours in mathematics, English, physics, chemistry, economics, history, political science, sociology, and other social sciences, foreign languages, philosophy, and other humanities. (p. 29)

Moreover, Galambos et al. go on to point out that "while arts and sciences graduates complete a more rigorous general education component than is true for teachers as a whole, this does not indicate that the core curriculum for the arts and sciences students is in great shape" (p. 78).

The findings regarding test requirements for teacher education program admission parallel those noted earlier for general admission requirements and prerequisite course requirements (see table 22). The American College Test (ACT) was the most popular test for admission currently and in the early 1980s. This was followed by the Scholastic Aptitude Test (SAT) and the Pre-professional Skills Test (PPST). Although the National Teacher Exam-Core Battery (NTE) was

<sup>1</sup>However, it should be noted that Galambos et al. found that lower level mathematics courses, remedial courses, and courses in mathematics explicitly designed for teachers help account for the average number of credits in math for academic teachers. This may well be the case for the beginning vocational teachers as well, but data were not collected regarding the exact nature of the courses or credits taken by the beginning vocational teachers.

TABLE 21

TEACHER EDUCATORS' RESPONSES REGARDING THE IMPLEMENTATION AND DEGREE OF EFFECTIVENESS  
OF SELECTED STRATEGIES FOR PREPARING VOCATIONAL TEACHERS TO TEACH BASIC SKILLS

IMPLEMENTATION					EFFECTIVENESS					
1=Implemented more than 3 yrs. ago					1=Not effective					
2=Implemented within past 3 years					2=Somewhat effective					
3=Plan to implement within next 3 years					3=Effective					
9=No plan to implement					4=Very effective					
					9=I don't know					
Implementation					Effectiveness					
1	2	3	9		1	2	3	4	9	
47.5	14.8	14.8	23.0	(61)	recruiting students who have demonstrated high academic ability into the program	2.2	23.9	34.8	10.9	28.3 (46)
39.1	18.8	12.5	29.7	(64)	improving faculty awareness and development through workshops, seminars, excursions to schools, etc.	4.3	23.9	30.4	21.7	19.6 (46)
23.8	14.3	15.9	46.0	(63)	providing faculty with additional support (grants, resources, etc.) to engage in activities (research, development of teaching materials, extension) that will improve their teaching of basic skills	2.6	25.6	28.2	10.3	33.3 (39)
11.1	7.9	7.9	73.0	(63)	restructuring faculty career incentives (promotion and tenure decisions) to allow them greater flexibility and support for engaging in teaching basic skills	3.0	15.2	12.1	9.1	60.6 (33)
16.1	9.7	9.7	64.5	(62)	hiring new faculty with expertise in enhancing basic skills in vocational education	---	14.7	23.5	8.8	52.9 (34)
29.0	24.2	22.6	24.2	(62)	increasing amount of actual practice in teacher preparation programs	4.4	20.0	28.9	20.0	26.7 (45)
11.3	21.0	16.1	51.6	(62)	increasing the number of credit hours required in humanities, social sciences, etc., either as prerequisite to teacher education or for graduation from the program	10.5	18.4	13.2	5.3	52.6 (38)

56

56

57

TABLE 21--Continued

IMPLEMENTATION					EFFECTIVENESS					
1=Implemented more than 3 yrs. ago					1=Not effective					
2=Implemented within past 3 years					2=Somewhat effective					
3=Plan to implement within next 3 years					3=Effective					
9=No plan to implement					4=Very effective					
					9=I don't know					
Implementation					Effectiveness					
1	2	3	9		1	2	3	4	9	
16.1	12.9	11.3	59.7	(62)	adding one or more new courses to the curriculum (i.e., teaching basic skills in vocational context)	5.4	21.6	16.2	5.4	51.4 (37)
23.4	25.0	21.9	29.7	(64)	redesigning existing methods courses to include/place more emphasis on teaching basic skills	2.3	11.6	37.2	16.3	32.6 (43)
34.9	22.2	9.5	33.8	(63)	providing students with individualized learning approaches to emphasize basic skills	2.3	23.3	34.9	14.0	25.6 (43)
46.0	20.6	12.7	20.6	(63)	providing students with competency-based learning approaches	4.3	19.1	40.4	19.1	17.0 (47)
47.6	17.5	7.9	27.0	(63)	providing students with additional resource materials/library	2.1	25.0	31.3	16.7	25.0 (48)
33.3	28.6	6.3	31.7	(63)	providing students with early field experiences related to reinforcing basic skills in basic skills in their vocational area	2.3	18.2	27.3	29.5	22.7 (44)
53.1	17.2	4.7	25.0	(64)	providing students with teaching practice under simulated conditions	---	14.3	32.7	32.7	20.4 (49)
11.5	14.8	6.6	67.2	(61)	adding a practicum in microteaching on basic skills instruction	2.9	14.3	20	2.9	60.0 (35)
19.7	9.8	3.3	67.2	(61)	grouping vocational teacher education students with teacher education students specializing in English, math, etc., in practicums where they work together	8.3	8.3	16.7	8.3	58.3 (36)

37

TABLE 21--Continued

IMPLEMENTATION					EFFECTIVENESS				
1=Implemented more than 3 yrs. ago					1=Not effective				
2=Implemented within past 3 years					2=Somewhat effective				
3=Plan to implement within next 3 years					3=Effective				
9=No plan to implement					4=Very effective				
					9=I don't know				
Implementation					Effectiveness				
1	2	3	9		1	2	3	4	9
6.6	11.5	3.3	78.7	(61)	5.7	14.3	5.7	11.4	62.9 (35)
4.9	14.8	6.6	73.8	(61)	2.9	14.7	14.7	8.8	58.8 (34)
25.8	21.0	14.5	38.7	(62)	4.9	12.2	41.5	7.3	34.1 (41)
22.0	10.2	20.3	47.5	(59)	2.6	12.8	25.6	17.9	41.0 (39)
4.9	3.3	19.7	72.1	(61)	6.5	3.2	6.5	83.9	---- (31)
6.7	10.0	18.3	65.0	(60)	6.3	15.6	12.5	----	65.6 (32)

NOTE: Numbers in parentheses are the number of responding teacher educators.

TABLE 22

TEST REQUIREMENTS FOR ADMISSION TO PRESERVICE  
VOCATIONAL TEACHER EDUCATION PROGRAMS

Entry Requirement	Current Entry Requirements				Requirement for 1985 Grads			
	Usage		Average Minimum Standards		Usage		Average Minimum Standards	
	No.	%	Percentile	Points	No.	%	Percentile	Points
Scholastic Aptitude Test scores (SAT)	21 (67)	34.4	50.0 (1)	484 (5)	15 (48)	34.4	50 (1)	760 (2)
American College Test scores (ACT)	24 (59)	40.7	31.7 (6)	16 (9)	18 (49)	36.7	29.3 (6)	15.4 (7)
California Achievement Test scores (CAT)	6 (56)	10.7	70.0 (1)	--- (0)	4 (48)	8.3	50 (1)	--- (0)
39 Pre-professional Skills Test scores (PPST)	17 (54)	31.5	23.8 (4)	171.6 (7)	9 (45)	20.0	70 (2)	171.3 (4)
Calif. Basic Skills Test scores (C-BEST)	5 (55)	9.1	(0)	84.3 (3)	2 (47)	4.3	--- (0)	--- (0)
National Teacher Exam Programs--Core Battery scores (NTE)	12 (58)	20.7	55.0 (2)	341.8 (4)	6 (49)	12.2	--- (0)	--- (0)
State Developed Exam	6 (54)	11.1	50.0 (1)	--- (0)	3 (44)	6.8	50 (1)	--- (0)
Standardized Occupational Competency Exam scores (e.g., NOCTI)	6 (57)	10.5	70.0 (1)	--- (0)	4 (50)	8.0	70 (1)	--- (0)

NOTE: Number in parentheses represents the actual number of teacher educators responding to the item.

1.2

used currently by only 20.7 percent of the institutions, its use relative to the early 1980s had almost doubled. The number of institutions that reported average minimum acceptable standards on these tests for admission was inadequate to draw any conclusions.

In general, these findings regarding test requirements for program admission are similar to those reported for the 18 member institutions of the University Council for Vocational Education (Anderson 1985). Seven of the 18 institutions (almost 39 percent) reported that "passing a competency test was required prior to admission to teacher education" (p. 7).

Apparently, most institutions do not require competency examinations for graduation (see table 23). Of those requiring a competency test for graduation, no single test was used predominantly. However, almost half of the institutions (49.2 percent) used some part of the National Teacher Exam (NTE). For example, 18.8 percent used the NTE professional knowledge test for graduation whereas 17.4 percent used the NTE Core Battery.

TABLE 23  
COMPETENCY EXAMINATIONS REQUIRED FOR GRADUATION  
FROM VOCATIONAL TEACHER EDUCATION PROGRAMS

Competency Tests	Usage		Minimum Score Required
	No.	%	Mean
Graduate Record Exam (GRE)	1	1.4	850
College Outcomes Measures Project Test (Comptest)	1	1.4	---
California Basic Skills Test (C-BEST)	3	4.3	61
NTE - Core Battery	12	17.4	534
NTE - Pedagogy	1	1.4	---
NTE - Professional Knowledge	13	18.8	559
NTE - General Knowledge	8	11.6	641.5
Teacher Occupational Competency Test (TOCT)	2	2.9	70
Other*	7	10.1	---

\* PPST, NTE - Area exam, ACT, State Developed Exam, University Exam, Miller Analogies.

These findings of little or no change in the type or nature of program admission and graduation requirements are surprising in light of all the recent attention given to wide-ranging improvements and increased rigor in teacher education by a variety of prestigious state and national groups starting with the National Commission on Excellence in Education (1983), producers of the *Nation at Risk* report, and including, among others, the Carnegie Task Force on Teaching as a Profession, the Holmes Group, the two major teacher unions, and the American Association of Colleges for Teacher Education. Moreover, when asked how receptive they thought their institutions were to the recommendations of the Holmes Group, 47.8 percent of the respondents said they thought their institutions were receptive to them. Almost 22 percent said they were *not* receptive to them and 30.4 percent did not respond to the question. Additionally, 72.1 percent of the teacher education institutions (or 61 of 69

institutions) said they had no plans to restructure preservice programs to include a fifth-year master of arts program (see table 21) to improve preparation for teaching basic skills, and 68.3 percent said they did not plan a fifth-year master of arts program to improve preparation for teaching special needs students (see page 51).

In general, these findings do *not* support those reported by the study of member institutions of the University Council for Vocational Education (Anderson 1985). According to that study, "pre-student teaching competency testing and increased GPA requirements, both at entry into educational studies and at graduation were noted as trends in undergraduate education" (p. 141). A related conclusion of the University Council study *not* supported by the present study was that "the quality of students admitted to undergraduate programs [in vocational education] has increased" (p. 9). Nothing in the present study would lead one to conclude that, in general, the quality of students or the quality or rigor of the undergraduate program has increased since the early 1980s.

Inservice preparation. The sources of data regarding beginning teachers' inservice preparation were the teachers themselves and their administrators/mentors. Administrators/mentors were identified by the beginning teachers as those individuals in their schools who were closest to and most knowledgeable of their teaching performance and experiences during their first year of teaching. Table 24 shows that administrators/mentors may have been formally assigned by the schools to work with and assist the beginning teachers, or they may have worked informally with the teachers. However, most were immediate supervisors of the teachers. The number and percentage of useable administrator/mentor returns by state and by region is shown in table 25.

TABLE 24  
RELATIONSHIP OF ADMINISTRATORS/MENTORS TO  
BEGINNING VOCATIONAL TEACHERS (N = 516)

Relationship	No.	%
Supervisor	427	82.9
Peer	16	3.1
Counselor	7	1.4
Mentor or consulting teacher officially assigned to assist beginning teacher	30	5.8
Other	36	7.0

NOTE: Fourteen (14) administrators did not specify their relationship with teachers they assessed.

The large majority of administrators said they formally observed the teaching performance of beginning teachers between two and four times during their first year of teaching (see table 26) and informally observed their teaching five or more times. They formally and informally conferred with teachers



TABLE 25

NUMBER AND PERCENTAGE OF USEABLE RETURNS  
FOR ADMINISTRATORS/MEMTORS BY STATE AND REGION

Regions/States	Estimated Sample Size	Useable Returns	
		No.	%
<b>New Eng'and</b>			
Massachusetts	45	8	18
Vermont	10	3	30
New Hampshire	<u>10</u>	<u>7</u>	<u>70</u>
Subtotal	65	18	28
<b>Mid Atlantic</b>			
Maryland	44	13	26
Pennsylvania	152	31	20
Delaware	<u>9</u>	<u>3</u>	<u>33</u>
Subtotal	205	47	23
<b>Great Lakes</b>			
Indiana	88	17	19
Ohio	186	90	48
Wisconsin	<u>64</u>	<u>25</u>	<u>39</u>
Subtotal	338	132	39
<b>Plains</b>			
Missouri	157	35	22
Kansas	40	13	33
Nebraska	<u>39</u>	<u>11</u>	<u>28</u>
Subtotal	236	74	25
<b>South East</b>			
Mississippi	123	30	24
North Carolina	107	33	31
Tennessee	<u>85</u>	<u>19</u>	<u>22</u>
Subtotal	315	82	26
<b>South West</b>			
Arizona	50	17	34
Texas	308	51	17
New Mexico	<u>27</u>	<u>5</u>	<u>19</u>
Subtotal	385	73	19
<b>Rocky Mountains</b>			
Montana	29	5	17
Colorado	38	17	45
Wyoming	<u>27</u>	<u>7</u>	<u>26</u>
Subtotal	94	29	31
<b>Far West</b>			
California	506	44	09
Washington	127	28	22
Oregon	<u>64</u>	<u>18</u>	<u>28</u>
Subtotal	697	90	13
<b>Total</b>	<b>2335</b>	<b>530</b>	<b>23%</b>

TABLE 26

FREQUENCY OF ADMINISTRATOR OBSERVATIONS  
OF BEGINNING TEACHERS

Frequency	Formal Observations		Informal Observations	
	No.	%	No.	%
Once	53	19.7	7	1.4
Twice	196	39.6	54	10.9
Three or four times	117	23.6	109	21.9
Five or more times	78	15.8	317	63.8
Never	51	10.3	20	2.0
Total	495	100.0	497	100.0

most often about their teaching performance and work-related problems (see table 27). They conferred less often about the teachers' inservice training needs, and least often regarding the inservice training opportunities available to teachers.

When asked to compare the beginning teachers with their counterparts of 3 years earlier, administrators generally agreed that the beginning teachers in 1985-86 were better or equally well prepared to teach basic skills and special needs students (see table 28) than their earlier counterparts. It should be noted, however, that almost one-fourth of the administrators said they didn't know which group was better prepared.

TABLE 28

ADMINISTRATOR/MENTOR PERCEPTION REGARDING THE DEGREE  
OF BEGINNING VOCATIONAL TEACHER PREPARATION TO  
TEACH BASIC SKILLS AND SPECIAL NEEDS STUDENTS

Degree of Preparation	Basic Skills		Special Needs Students	
	No.	%	No.	%
Better prepared	142	26.8	139	26.2
Equally well prepared	210	39.6	181	34.2
Not as well prepared	40	7.5	34	6.4
I don't know	115	21.7	142	26.7
No response	23	4.3	34	6.4

Tables 29, 30, 31, and 32 each show administrators' ratings of beginning teachers' competencies and performance in teaching basic skills and special needs students. In general, it can be seen that administrators feel that beginning teachers are fairly well to very well prepared in most of the skills and competencies identified in the tables. It was only in the areas of findings and

TABLE 27

## FREQUENCY OF FORMAL AND INFORMAL TEACHER/ADMINISTRATOR CONFERENCES

o How many times did you formally or informally confer with the teacher you are assessing regarding his/her teaching performance, problems or needs he/she may have had, or inservice training needs and opportunities?

CONFERENCE: 1 = Once; 2 = Twice; 3 = Three or four times; 4 = Five or more times; 9 = Never

Purpose for Conference	Formal Conference					Informal Conference						
	1	2	3	4	9	1	2	3	4	9		
Teaching performance	5.3	19.7	26.8	43.1	5.0	(436)	3.0	12.1	28.5	55.3	1.1	(438)
Work-related problems	5.4	12.3	24.7	48.0	9.6	(446)	13.6	38.4	23.5	17.5	7.0	(456)
Inservice training needs	20.6	26.7	19.1	17.7	15.8	(423)	15.0	28.8	19.8	19.3	17.0	(399)
Inservice training opportunities	20.2	25.7	21.5	20.1	12.4	(428)	19.0	26.2	16.6	7.5	30.6	(385)

NOTE: The numbers in brackets represent the number of respondents to each item.

TABLE 29

ADMINISTRATOR RATINGS OF BEGINNING VOCATIONAL TEACHER COMPETENCIES  
FOR TEACHING BASIC SKILLS AND SPECIAL NEEDS STUDENTS

Ability

- 1 = Does not do well  
2 = Does this fairly well  
3 = Does this well  
9 = I don't know

Teacher Competencies	<u>Ability</u>									
	<u>1</u>		<u>2</u>		<u>3</u>		<u>9</u>		<u>x</u>	<u>SO</u>
	No.	%	No.	%	No.	%	No.	%		
<b>Working with and teaching . . .</b>										
Disadvantaged students	8	1.6	151	30.3	300	80.2	39	7.3	2.63	.51 [498]
Handicapped students	6	1.2	137	28.0	200	40.8	147	30.0	2.56	.53 [490]
Limited English proficient (LEP) students	8	1.7	77	16.3	93	19.7	294	62.3	2.47	.58 [472]
Students in programs non-traditional for their sex	5	1.0	76	15.7	282	58.1	122	25.2	2.76	.45 [485]
Adults in retraining	3	.6	21	4.4	118	24.3	331	70.0	2.81	.44 [473]
Single parents and displaced homemakers	4	.8	18	3.8	97	20.5	354	74.8	2.78	.49 [473]
Incarcerated individuals	3	.7	12	2.6	19	4.1	425	92.6	2.47	.86 [459]
Dropout-prone students	15	3.1	141	28.7	208	42.4	127	25.9	2.53	.57 [491]
<b>Improving and reinforcing . . .</b>										
Writing skills	35	7.0	222	44.1	187	37.2	59	11.7	2.34	.61 [503]
Speaking skills	18	3.6	223	44.3	213	42.3	49	9.7	2.42	.57 [503]
Reading skills	19	3.8	227	45.3	204	40.7	51	10.2	2.41	.57 [501]
Listening skills	18	3.8	183	36.3	283	52.2	40	7.9	2.52	.57 [504]
Mathematics skills	18	3.6	186	37.1	225	44.8	73	14.5	2.48	.57 [502]
Employability skills	13	2.6	131	26.0	318	63.2	41	8.2	2.66	.53 [503]

NOTE: The numbers in brackets represent the number of respondents for each item.

TABLE 30

ADMINISTRATOR RATINGS OF BEGINNING VOCATIONAL TEACHERS' PERFORMANCE  
OF SELECTED TASKS CONSIDERED IMPORTANT FOR TEACHING BASIC SKILLS

o Listed below are selected skills identified as important to improve and reinforce basic skills of students in vocational education classes. Please rate the skill level of the teacher you are evaluating for each item listed below.

Tasks	Cannot Do		Cannot Do Very Well		Can Do Fairly Well		Can Do Well		I Don't Know		$\bar{x}$	SD	
	No.	%	No.	%	No.	%	No.	%	No.	%			
Determining the level of basic skills students need to learn in teacher's classes	5	1.0	46	9.2	216	43.3	216	43.3	16	3.2	3.33	.68	(499)
Determining the level of basic skills students need to succeed in an entry-level job in teacher's area	3	.8	25	5.0	181	36.4	263	52.9	25	5.0	3.49	.82	(497)
Finding and using commercial standardized tests of students' basic skills	10	2.0	78	15.5	140	28.8	82	16.8	181	37.0	2.95	.80	(489)
Making and using teacher's own tests of students' basic skills	6	1.2	34	6.9	184	37.1	227	45.8	45	9.1	3.40	.83	(496)
Interpreting the results of commercial standardized tests to assess students' needs in basic skills	9	1.8	63	12.8	146	29.7	78	15.4	198	40.2	2.98	.77	(492)
Finding and using materials and methods to help vocational students improve their basic skills	3	.8	38	7.7	201	40.5	213	42.9	41	8.3	3.37	.68	(498)
Planning prescriptive teaching that will help students learn the basic skills they will need on the job	3	.8	48	9.3	200	40.3	196	39.5	51	10.3	3.32	.68	(498)
Determining how readable the textbook and other class materials are in the program taught	16	3.2	60	12.1	172	34.7	159	32.1	88	17.8	3.18	.81	(495)
Finding out what levels of basic skills are needed for jobs in the area taught	5	1.0	26	5.3	182	36.8	252	50.9	30	6.1	3.46	.85	(495)
Teaching basic skills as an integral part of the vocational education program	3	.6	33	6.7	199	40.3	240	48.6	19	3.8	3.42	.84	(494)
Motivating students' interests to learn basic skills through vocational education	5	1.0	33	6.7	178	35.5	265	53.4	17	3.4	3.48	.76	(496)

NOTE: The numbers in brackets represent the number of respondents to each item.

TABLE 31

ADMINISTRATOR RATINGS OF BEGINNING VOCATIONAL TEACHERS' PERFORMANCE  
OF SPECIFIC INSTRUCTIONAL SKILLS CONSIDERED IMPORTANT TO SERVE SPECIAL NEEDS STUDENTS

o Listed below are selected skills considered important to serve special needs students effectively. Please rate the skills level of the teacher you are evaluating in each category. Please circle.

Specific Instructional Skills	Cannot Do		Cannot Do Very Well		Can Do Fairly Well		Can Do Well		I Don't Know		$\bar{x}$	SD		
	No.	%	No.	%	No.	%	No.	%	No.	%				
<b>Ability to:</b>														
Provide hands-on trial and error experiences	--	---	18	3.6	137	27.4	338	67.6	7	1.4	3.64	.54	(500)	
Use charts, pictures, graphs, and other visual materials	--	---	17	3.4	100	32.0	319	63.8	4	.8	3.60	.55	(500)	
Use spoken and written communications to provide effective instruction	5	1.0	19	3.8	160	32.1	313	62.7	2	.4	3.57	.61	(499)	
Pace instruction to match students' learning ability	3	.6	31	6.2	206	41.2	253	50.6	7	1.4	3.43	.64	(500)	
Match instruction to students' readiness (ability and prior training) to learn	5	1.0	45	9.0	233	46.8	209	42.0	6	1.2	3.31	.67	(498)	
Organize vocational topics into meaningful units or "clusters" to maximize students' opportunity to learn	4	.8	28	5.6	185	37.3	257	51.8	22	4.4	3.46	.64	(495)	
Select appropriate sequences for instructional activities	1	.2	23	4.6	183	36.6	286	57.2	7	1.4	3.52	.59	(500)	
Establish goals and objectives for each student based on a diagnosis of learning strengths and weaknesses	6	1.2	66	13.3	211	42.2	175	35.1	40	8.0	3.21	.73	(498)	
Determine how often students need to practice the new vocational skills they have learned	1	.2	34	6.8	215	43.0	225	45.0	25	5.0	3.39	.62	(500)	
Reinforce or reward students for achieving goals or for desired behavior	2	.4	31	6.2	169	33.8	283	56.6	15	3.0	3.51	.63	(500)	
Inform students of how well they are performing so they know where improvement is needed	1	.2	17	3.4	159	31.7	322	64.3	2	.4	3.60	.56	(501)	
Interact with parents of special needs students during planning/placement meetings	6	1.2	49	10.0	172	35.2	118	24.1	144	29.4	3.16	.72	(489)	
Interact with professionals during planning end/or placement meetings	3	.6	39	7.8	182	36.5	220	44.2	54	10.8	3.39	.67	(498)	

NOTE: The numbers in brackets represent the number of respondents to each item.

TABLE 32

ADMINISTRATOR RATINGS OF BEGINNING VOCATIONAL TEACHERS' PERFORMANCE  
OF GENERAL INSTRUCTIONAL SKILLS CONSIDERED IMPORTANT TO SERVE SPECIAL NEEDS STUDENTS

o Listed below are selected skills considered important to serve special needs students effectively. Please rate the skills level of the teacher you are evaluating in each category. Please circle.

General Instructional Skills	Cannot Do		Cannot Do Very Well		Can Do Fairly Well		Can Do Well		I Don't Know		$\bar{x}$	SD		
	No.	%	No.	%	No.	%	No.	%	No.	%				
<b>Ability to:</b>														
Use methods of instruction which complement students' learning	8	1.2	43	8.5	239	47.4	198	39.3	18	3.6	3.29	.87	(504)	
Help students improve their ability to interact effectively with other people	5	1.0	34	6.7	238	47.1	213	42.2	15	3.0	3.34	.65	(505)	
Establish a classroom climate that stimulates learning	5	1.0	43	8.5	145	28.8	308	60.7	5	1.0	3.50	.69	(504)	
Identify physical changes needs in classroom/ laboratory to accommodate students' unique instructional needs	5	1.0	41	8.2	187	37.3	234	46.6	35	7.0	3.39	.69	(502)	
Adapt instructional methods and materials as required for students with Individualized Education Programs (IEPs)	11	2.2	52	10.4	186	37.3	150	30.1	59	11.9	3.19	.76	(498)	
Use the school's support services (specialists, counselors, interpreters, etc.) to help meet students instructional and emotional needs	8	1.6	40	7.9	216	42.9	188	37.3	52	10.3	3.29	.70	(504)	
Involves students' parents or guardians to supplement instructional effort	15	3.0	61	12.2	210	42.0	122	24.4	92	18.4	3.07	.76	(500)	
Use community resources to supplement instruction	9	1.7	59	11.7	178	35.4	199	39.6	58	11.5	3.27	.76	(503)	
Comply with special needs-related laws and regulations	1	.2	30	6.0	181	36.0	204	40.7	85	17.0	3.41	.83	(501)	
Identify the least restrictive environment for special needs students	4	.8	48	9.7	192	38.6	151	30.4	102	20.5	3.24	.69	(497)	

NOTE: The numbers in brackets represent the number of respondents to each item.

using commercial standardized tests of students' basic skills, and interpreting the results of commercial standardized tests to assess students' needs in basic skills that substantial percentages of administrators said they didn't know and didn't rate teachers as being able to do these tasks well (see table 30).

Table 33 shows that about the *only* time beginning teachers consider as desirable for receiving inservice preparation is professional days (i.e., release time or time when teachers would ordinarily be teaching). They overwhelmingly rejected mornings and afternoons outside the normal school day and weekends as possible times for inservice activities.

TABLE 33  
DESIRABILITY OF INSERVICE TRAINING TIMES

Inservice Times	Desirability			$\bar{x}$	SD
	1	2	3		
Professional days	5.6	25.8	68.6	2.63	.59
Before school--mornings	75.4	19.4	5.2	1.38	.56
After school--afternoons	47.0	43.1	9.9	1.63	.66
After school--evenings	66.0	27.1	6.9	1.41	.62
Weekends	78.8	17.4	3.8	1.25	.51
Summer--weekdays	37.3	40.4	22.3	1.85	.76

Table 34 reveals several interesting findings regarding the desirability of different kinds of inservice providers. First, it shows very little disagreement between teachers (shown in parentheses) and administrators (shown without parentheses) about the relative desirability of different providers. Second, it shows teachers and administrators agree that the *most* desirable providers of inservice preparation were teachers who have practical expertise in effective instructional methods (77.8 percent of administrators and 64.9 percent of teachers rated as the most desirable). The next most desirable providers were training experts from business and industry, and finally, university faculty with expertise in both vocational and special education. Conversely, there seems to be general agreement and aversion to district office and state department personnel as desirable providers of inservice preparation.

Table 35 shows comparisons of teacher and administrator estimates of the amount of inservice preparation completed by teachers in their first year of teaching. Several findings are important. First, it can be seen that there was general and high agreement between teachers and administrators that beginning teachers received little or no inservice preparation related to teaching basic skills, or special needs students. Second, in almost all cases, the large majority of teachers said they received no inservice preparation in these areas. The administrators gave consistently higher estimates of the amount of inservice preparation received by teachers than did beginning teachers.



TABLE 34

## DESIRABILITY OF INSERVICE PROVIDERS

The items listed below refer to potential inservice providers. How would you rate each of the following persons or groups who could provide inservice activities in your school?

Inservice Providers	Desirability				
	1	2	3	9	
Teachers who have practical expertise in effective instructional methods	1.2 (1.5)	19.2 (30.2)	77.8 (64.6)	1.8 (3.7)	[505] [725]
District office personnel with expertise in effective instructional methods	9.1 (14.4)	48.7 (48.8)	38.8 (28.0)	5.4 (8.9)	[503] [722]
Staff of professional education organizations	13.3 (12.5)	52.1 (47.8)	23.4 (30.1)	11.3 (9.8)	[505] [720]
University faculty from departments of vocational education	11.5 (8.8)	45.2 (38.1)	33.3 (46.5)	9.9 (6.8)	[504] [722]
University faculty from departments of special education	15.2 (11.0)	43.2 (42.8)	25.1 (37.2)	16.4 (9.1)	[505] [718]
University faculty with expertise in both vocational and special education	8.5 (4.9)	32.5 (28.8)	42.8 (58.1)	16.2 (8.5)	[505] [720]
Personnel from state departments of education	24.2 (21.3)	48.3 (45.9)	20.8 (21.2)	8.7 (11.6)	[505] [717]
Personnel from county departments of education	19.2 (24.4)	39.7 (43.7)	14.4 (17.0)	26.7 (14.9)	[501] [717]
Training experts from business and industry	5.0 (5.0)	31.0 (24.0)	52.8 (63.3)	11.3 (7.7)	[504] [717]
Others	— —	22.2 (7.8)	50.0 (48.9)	27.8 (45.3)	[ 18] [ 64]

NOTE: The numbers in brackets represent the number of respondents to each item.

TABLE 35

TEACHER AND ADMINISTRATOR ESTIMATES OF THE NUMBER OF INSERVICE HOURS  
COMPLETED IN THE TEACHER'S FIRST YEAR OF TEACHING

o The list below concerns inservice activities. Estimate how many total hours of inservice activities (e.g., workshops, field site observations, coursework, and curriculum redesign) the teacher has completed in each of the following general areas during the first year of teaching.

Inservice Activities	Estimated Hours										Number of Respondents
	1-3 Hours		4-6 Hours		7-9 Hours		10 or More		None		
	No.	%	No.	%	No.	%	No.	%	No.	%	
<b>Working with and teaching . . .</b>											
Disadvantaged students	139 (219)	29.4 (30.3)	79 (83)	16.7 (11.5)	32 (28)	6.8 (3.9)	118 (77)	25.0 (10.7)	104 (315)	22.0 (43.6)	[472] [722]
Handicapped students	143 (173)	30.4 (24.0)	71 (63)	15.1 (8.7)	34 (27)	7.2 (3.7)	84 (49)	17.8 (6.8)	139 (408)	29.5 (56.7)	[471] [720]
Limited English proficient (LEP) students	77 (129)	16.4 (17.9)	30 (31)	6.4 (4.3)	17 (20)	3.6 (2.8)	30 (30)	6.4 (4.2)	315 (511)	67.2 (70.9)	[469] [721]
Students in programs nontraditional for their sex	101 (136)	21.6 (18.9)	73 (59)	15.6 (8.2)	30 (24)	6.4 (3.3)	89 (52)	19.0 (7.2)	175 (449)	37.4 (62.4)	[468] [720]
Adults in retraining	34 (76)	7.2 (10.6)	35 (29)	7.4 (4.0)	13 (22)	2.8 (3.1)	82 (51)	13.2 (7.1)	327 (541)	69.4 (75.2)	[471] [714]
Single parents or displaced homemakers	38 (72)	8.1 (10.0)	24 (31)	5.1 (4.3)	22 (22)	4.7 (3.1)	37 (35)	7.9 (4.9)	347 (557)	74.1 (77.7)	[468] [717]
Incarcerated individuals	25 (52)	5.3 (7.3)	5 (9)	0.9 (1.3)	4 (3)	0.8 (0.4)	7 (15)	1.3 (2.1)	428 (636)	80.8 (89.0)	[469] [715]
Dropout-prone students	103 (170)	21.8 (23.6)	68 (69)	12.8 (9.6)	46 (42)	8.7 (5.8)	108 (53)	20.4 (7.8)	147 (383)	27.7 (53.2)	[472] [720]
<b>Improving and reinforcing . . .</b>											
Writing skills	124 (183)	26.1 (25.6)	85 (83)	17.9 (11.6)	87 (38)	14.1 (5.3)	79 (63)	16.6 (8.8)	121 (348)	25.4 (48.7)	[476] [715]
Speaking skills	101 (165)	21.4 (22.4)	79 (92)	16.7 (12.5)	67 (37)	14.2 (4.9)	83 (52)	17.5 (7.2)	143 (375)	30.2 (52.2)	[473] [719]
Reading skills	109 (152)	23.0 (21.1)	89 (91)	18.8 (12.7)	66 (44)	13.9 (6.1)	82 (50)	17.3 (7.0)	128 (382)	27.0 (53.1)	[474] [719]
Listening skills	110 (155)	23.4 (21.6)	77 (88)	16.4 (12.2)	62 (56)	13.2 (7.8)	89 (59)	18.9 (8.2)	132 (361)	28.1 (50.2)	[470] [719]
Mathematics skills	104 (131)	22.1 (18.3)	78 (93)	16.6 (13.0)	64 (38)	13.6 (5.3)	93 (54)	19.7 (7.5)	132 (401)	28.0 (55.4)	[471] [717]
Employability skills	98 (135)	20.8 (18.7)	76 (104)	16.1 (15.1)	63 (67)	13.3 (9.3)	153 (123)	32.4 (17.0)	82 (289)	17.4 (40.0)	[472] [723]

NOTE: The numbers in parentheses represent the teachers' responses. Numbers without parentheses represent administrators' responses.

Most of the teachers and administrators agreed that incarcerated individuals and single parents or displaced homemakers received the least amount of inservice attention or activities. Recalling that the large majority of the sample of beginning teachers taught in public secondary schools, the inattention to incarcerated individuals is understandable. However, the fact that 77.7 percent of teachers and 74.1 percent of administrators said that no inservice activities were devoted to single parents and displaced homemakers is a disappointing surprise given the current severity and increasing proportions of these special student populations at the secondary school level.

In general, inservice preparation for teaching basic skills seems to have received slightly more attention than inservice preparation for working with special needs students. This is also a little surprising since the federal vocational legislation has long emphasized the need for vocational education to improve access and services for special student populations and only more recently has emphasized improved basic skills development of students.

In almost all cases, administrators rated a variety of inservice strategies for strengthening teachers' skills in teaching basic skills and special student populations higher in effectiveness than beginning teachers (see table 36). The inservice strategies rated most highly effective by both teachers and administrators were (1) courses taken at a college or university that related directly to the teacher's needs, (2) first-year teacher support teams (including mentor, administrator, vocational/area specialist), and (3) workshops or seminars for small groups of teachers. Oddly enough, large percentages of both the teachers and administrators indicated they had no experience with such relatively popular and long-standing strategies for inservice preparation as team teaching, the use of experienced teacher aides, and study groups.

### Preparation for Teaching Basic Skills and Special Needs Students

General preparation for teaching. Several findings relate to the beginning teachers' preparation for teaching *both* basic skills and special needs students, as well as to their training and skills levels in several areas of instructional skills. Whereas table 37 shows that both beginning teachers and teacher educators overwhelmingly believe that teacher preparation for teaching

TABLE 37  
IMPORTANCE OF TEACHER PREPARATION  
TO TEACH BASIC SKILLS AND SPECIAL NEEDS STUDENTS

Import- ance	Teachers				Teacher Educators			
	Basic No.	Skills %	Special No.	Needs %	Basic No.	Skills %	Special No.	Needs %
YES	643	88.8	616	85.4	59	85.1	60	90.0
NO	81	11.2	105	14.6	8	11.9	6	9.1
Total	724	100.0	721	100.0	67	100.0	66	100.0

TABLE 36

EFFECTIVENESS OF INSERVICE STRATEGIES TO STRENGTHEN  
BEGINNING TEACHERS' SKILLS TO WORK WITH SPECIAL NEEDS STUDENTS  
AND TO TEACH BASIC SKILLS

o How effective has each of the following inservice strategies been in strengthening teachers' skills to work with special populations and to provide basic skills instruction?

Strategic Approaches	Effectiveness				Number of Respondents
	1	2	3	4	
First-year teacher support team (including mentor, administrator, vocational/area specialist)	1.6 (8.4)	43.4 (34.3)	45.6 (38.4)	9.4 (18.9)	[502] [724]
Advice from instructional consultants or specialists	4.6 (8.3)	48.3 (35.4)	34.8 (27.8)	12.3 (28.5)	[503] [724]
Individualized teacher training materials (films, workbooks, computer-aided learning)	8.2 (7.5)	45.9 (35.8)	25.1 (29.2)	21.7 (27.5)	[502] [720]
Observing programs/teachers who have successfully served special needs students	4.8 (5.8)	37.6 (25.8)	34.0 (31.6)	23.7 (36.8)	[503] [721]
Workshops (seminars) for small groups of teachers	3.0 (7.3)	38.3 (32.4)	46.0 (31.9)	12.7 (28.4)	[504] [725]
Workshops (seminars) for all teachers	6.8 (14.9)	56.2 (42.2)	29.8 (15.9)	7.2 (23.1)	[500] [720]
On-the-job experiences (internships) in programs successfully educating special needs students	4.2 (4.5)	22.7 (18.7)	36.3 (17.7)	42.8 (49.2)	[498] [712]
Team Teaching	8.0 (6.3)	22.9 (14.9)	18.9 (15.7)	50.3 (63.2)	[503] [720]
Working with academic and/or other vocational and/or special needs instructors to better meet students' needs	3.4 (5.3)	39.8 (26.6)	32.8 (27.4)	23.9 (40.7)	[497] [715]
Use of teacher aides who have background in special needs/one or more of the basic skills	5.0 (6.7)	22.7 (16.6)	19.1 (16.1)	53.2 (60.6)	[502] [719]
Study groups	8.2 (7.9)	25.3 (17.5)	5.8 (7.0)	61.6 (67.5)	[498] [718]
Access to resource center that provides literature/materials	6.2 (7.4)	45.4 (37.0)	23.6 (25.0)	19.8 (30.7)	[500] [721]
Providing training and computer facilities to teachers to assist in revising curriculum, assessing student needs, etc.	6.0 (4.5)	35.0 (22.8)	26.4 (21.9)	32.6 (50.8)	[503] [716]
Courses taken at a college or university that relate directly to the teacher's needs	5.2 (3.9)	43.9 (29.6)	40.9 (44.7)	10.0 (21.7)	[499] [722]
Peer coaching or mentoring	2.6 (5.3)	34.2 (28.1)	37.6 (25.6)	25.6 (43.0)	[500] [716]
Other	— (1.9)	5.9 —	61.8 (38.5)	32.4 (59.6)	[ 34] [ 52]

NOTE: The numbers in parentheses represent the teachers' responses. Numbers without parentheses represent administrators' responses.

basic skills and special student populations is important, table 38 shows that when beginning teachers were asked to rank the top four skills areas they

TABLE 38  
SKILLS EMPHASIZED MOST IN TEACHING

Skills	No.	%
Basic skills (e.g., reading, basic math, writing, speaking)	437	59.1
Advanced academic skills (e.g., chemistry, foreign language, advanced math)	37	5.0
Citizenship (e.g., voting rights and privileges, civic responsibilities)	87	11.8
Personal growth and fulfillment (e.g., self-esteem, improved self-concept)	555	75.0
Good work habits and self-discipline (e.g., punctuality)	625	84.5
Human relations skills (e.g., getting along with others, cultural understanding)	535	72.3
Career development skills (e.g., occupational information or how course work relates to future employment)	568	76.8
Other	45	6.1

emphasized most in their teaching, basic skills were *not* included among the top ranked areas. In fact, table 39 points out that in general the majority of beginning teachers spend between 1 and 3 hours per week improving and reinforcing students' basic skills. Listening skills and employability skills would appear to receive somewhat greater attention than other skill areas with 24.8 percent of the teacher saying they spent over 5 hours on listening skills and 34.1 percent spending over 5 hours on employability skills.

Table 40 shows that the single experience rated most useful for teaching basic skills and special student populations by the largest percentage of teachers was student teaching. Formal inservice training was rated second in usefulness for teaching basic skills, and other activities (such as volunteer work and personal contact with special needs individuals) were also rated as highly useful for teaching special needs students by a large percentage of the teachers.

Tables 41 and 42 show beginning teachers' perceptions of the amount of preservice preparation and level of skill they developed in selected instructional areas or tasks. It can be seen that the only areas where as many as one-fourth or more of the teachers said they received little preparation were in (1) using students' parents or guardians to supplement teaching (table 41), (2) using the school's support services to help instruct students (table 41), (3) adapting instructional methods and materials as required for students with Individualized Education Programs (table 41), and (4) interacting with parents of special needs students during planning and/or placement meetings (table 42). However, in all areas, including the four noted above, the large majority of beginning teachers indicated they could perform the instructional tasks fairly well to very well.

TABLE 39  
WEEKLY TIME SPENT IMPROVING AND REINFORCING  
STUDENTS' BASIC SKILLS

Basic Skills	1 hour		2-3 hours		4-5 hours		Over 5 hours		None		Number of Respondents
	No.	%	No.	%	No.	%	No.	%	No.	%	
Reading Skills	177	31.3	185	32.7	60	10.6	60	10.6	83	14.7	565
Speaking Skills	174	31.2	148	26.5	73	13.1	72	12.9	91	16.3	558
Writing Skills	172	30.6	154	27.4	110	19.5	62	11.0	65	11.5	563
Listening Skills	120	21.0	146	25.5	127	22.2	142	24.8	37	6.5	572
Mathematics Skills	181	31.2	165	28.4	100	17.2	86	14.8	48	8.3	580
Employability Skills	123	21.1	114	19.5	109	18.7	199	34.1	39	6.7	584

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85

8.4

TABLE 40

USEFULNESS OF SELECTED EXPERIENCES  
FOR TEACHING SPECIAL NEEDS AND BASIC SKILLS

Selected Experiences	Usefulness				
	1	2	3	9	
<u>Usefulness</u>					
	1 = Not useful				
	2 = Somewhat useful				
	3 = Very useful				
	9 = No experience				
<b>Special Needs</b>					
Preservice courses in education	6.4	45.1	32.4	16.1	(714)
Preservice courses in areas other than education	10.3	37.3	30.2	22.1	(715)
Student teaching	7.0	23.3	46.6	23.1	(711)
Formal inservice training (e.g., workshops, seminars)	6.7	33.8	41.7	17.8	(715)
Informal training (e.g., observation, group discussion)	4.8	39.7	39.6	15.9	(715)
Other (e.g., volunteer work, personal contact with special needs individuals)	5.7	18.6	46.1	29.6	(371)
<b>Basic Skills</b>					
Preservice courses in education	5.7	40.5	40.3	13.5	(704)
Preservice courses in areas other than education	7.4	37.7	38.4	16.5	(703)
Student teaching	6.3	22.6	49.0	22.2	(704)
Formal inservice training (e.g., workshops, seminars)	6.0	35.4	42.0	16.6	(704)
Informal training (e.g., observation, group discussion)	5.0	39.7	38.5	16.8	(703)
Other	5.2	9.1	37.7	48.1	(77)

NOTE: The numbers in parentheses represent the number of respondents to each item.

TABLE 41

TEACHERS' PERCEPTIONS OF TRAINING AND SKILL LEVEL  
AS PERTAINS TO PRESERVICE PREPARATION IN GENERAL INSTRUCTIONAL SKILLS

	<u>Amount of Training</u>					<u>Skill Level</u>				
	1 = Not much	2 = Some	3 = A lot	9 = None		1 = Cannot do	2 = Cannot do very well	3 = Can do fairly well	4 = Can do well	
General Instructional Skills	<u>Amount of Training</u>					<u>Skill Level</u>				
	1	2	3	9		1	2	3	4	
<b>Teacher's ability to . . .</b>										
Use methods of instruction which complement students' learning styles	12.7	43.4	33.6	10.2	(714)	1.6	11.6	65.6	21.3	(709)
Help students improve their ability to interact effectively with other people	17.2	37.3	32.5	13.0	(716)	1.4	12.4	60.6	25.6	(710)
Establish a classroom climate which stimulates learning	8.7	34.9	48.0	8.4	(714)	.6	5.2	55.7	38.5	(711)
Identify physical changes needed in classroom/laboratory to accommodate students' unique instructional needs	18.3	40.9	28.3	12.5	(714)	2.8	15.3	55.4	26.4	(704)
Adapt instructional methods and materials as required for students with Individualized Education Programs (IEPs)	26.3	34.0	19.2	20.5	(712)	10.5	27.5	46.5	15.5	(692)
Use school's support services (reading and math specialists, counselors, interpreters, etc.) to help instruct students	26.9	36.6	21.0	15.5	(710)	4.6	20.5	49.6	25.2	(701)
Use students' parents or guardians to supplement instructional efforts	29.2	34.4	14.0	22.3	(708)	11.2	34.0	41.6	13.1	(694)
Use community resources to supplement instructional efforts	18.7	40.1	26.9	14.3	(713)	5.8	21.6	48.5	24.0	(707)
Comply with special needs-related laws and regulations	21.8	35.3	24.2	18.7	(711)	10.3	24.6	49.4	15.7	(699)
Identify the least restrictive environment for special needs students	23.4	36.0	19.5	21.2	(709)	12.7	27.5	48.1	11.8	(695)

NOTE: The numbers in parentheses represent the number of respondents to each item.

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TABLE 42

TEACHERS' PERCEPTIONS OF TRAINING AND SKILL LEVEL  
AS PERTAINS TO PRESERVICE PREPARATION IN SPECIFIC INSTRUCTIONAL SKILLS

Specific Instructional Skills	<u>Amount of Training</u>				<u>Skill Level</u>					
	1 = Not much 2 = Some 3 = A lot 9 = None				1 = Cannot do 2 = Cannot do very well 3 = Can do fairly well 4 = Can do well					
	Amount of Training				Skill Level					
	1	2	3	9		1	2	3	4	
<b>Teacher's ability to . . .</b>										
Provide hands-on trial and error experiences	7.1	27.4	58.4	7.1	(719)	.6	4.6	40.9	53.9	(711)
Use charts, pictures, graphs, and other visual materials	6.3	28.2	60.3	5.3	(720)	.4	5.9	42.1	51.6	(713)
Use spoken and written communications to provide effective instruction	3.1	25.5	66.3	.1	(719)	.3	3.9	41.9	53.9	(714)
Pace instruction to match students' abilities to learn	8.2	40.3	42.7	.1	(719)	.3	9.4	55.9	34.5	(716)
Match instruction to students' readiness (ability and prior training) to learn	12.1	42.6	35.8	9.5	(718)	1.4	14.0	56.0	28.5	(712)
Organize vocational topics into meaningful units or "clusters" to maximize students' opportunity to learn	12.2	32.5	46.6	.1	(716)	1.4	12.9	49.2	36.5	(713)
Select appropriate sequences for instructional activities	10.2	33.5	47.8	8.5	(716)	1.3	8.6	52.5	37.7	(713)
Establish goals and objectives for each student based on a diagnosis of their learning strengths and weaknesses	15.5	35.1	38.7	10.8	(716)	3.4	22.3	48.7	25.6	(708)
Determine how often students needs to practice the new vocational skills they have learned	16.3	35.8	35.1	12.7	(717)	2.4	17.2	51.3	29.2	(710)

NOTE: The numbers in parentheses represent the number of respondents to each item.

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TABLE 42--Continued

Amount of Training

- 1 = Not much
- 2 = Some
- 3 = A lot
- 9 = None

Skill Level

- 1 = Cannot do
- 2 = Cannot do very well
- 3 = Can do fairly well
- 4 = Can do well

Specific Instructional Skills	Amount of Training					Skill Level				
	1	2	3	9	(n)	1	2	3	4	(n)
<b>Teacher's ability to . . .</b>										
Reinforce or reward students for achieving goals or desired behavior	2.4	17.2	51.3	29.2	(710)	.7	9.7	45.1	44.4	(709)
Inform students of how well they are performing so they know where improvement is needed	7.7	37.5	48.3	6.6	(717)	.7	6.9	46.6	45.9	(713)
Interact with parents of special needs students during planning and/or placement meetings	26.2	34.4	17.3	22.0	(710)	11.0	27.5	43.8	17.7	(691)
Interact with professionals during planning and, placement meetings	19.1	34.2	28.1	15.0	(713)	4.4	14.4	48.9	32.3	(703)

NOTE: The numbers in parentheses represent the number of respondents to each item.

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Table 43 shows, that with only one exception, the large majority of teacher education institutions do *not* provide entire preservice courses in many areas of teaching special student populations and basic skills. The one exception is in the area of working with and teaching all special needs students where the majority said they provided one or two full courses and some treatment of the area was part of other courses. Whereas it would appear that few courses in the areas of teaching basic skills and special student populations are required for graduation from preservice programs, the very small number of teacher education institutions responding to this question makes it impossible to draw any meaningful conclusions.

However, as shown in table 44, the large majority of beginning teachers said they took no full courses in teaching basic skills or special student populations. Additionally, the large majority of teachers did not take courses where these areas were topics in the courses. The teaching of disadvantaged students and employability skills were the only areas where large percentages of beginning teachers said they had completed some course work.

Preparation for teaching basic skills. With regard to preparation for teaching basic skills, beginning teachers said, on average, they had some or a lot of preservice preparation. They also said they had developed the ability to perform a variety of tasks important for teaching basic skills to levels where they could do the tasks fairly well or very well (see table 45).

Consistent with the perceptions and ratings of administrators/mentors reported earlier, substantial percentages of beginning teachers rated as being low both the amount of preparation received and their skill level in two areas. The areas of finding and using commercial standardized tests of students' basic skills and interpreting the results of commercial standardized tests to assess students' needs in basic skills (see table 45) were areas where no preparation was received and where skills to perform the tasks had not been developed. Interestingly, the highest percentages of teacher educators also confirmed these findings (see table 46). Forty-three percent of the teacher educators said they provided no preservice preparation in finding and using commercial standardized tests and 30.8 percent said they provided no preparation in interpreting the results of commercial standardized tests to assess students' needs in basic skills. Nevertheless, the only problems encountered in common by even a small group of beginning teachers appeared to have been problems related to student motivation and attitudes and entry-level basic skills deficiencies (see table 47)--problems not attributable to lack of teacher skills or preparation.

Relative to changes in their preservice teacher preparation programs, there were only two areas in which there was some agreement among the teachers (see table 48). Fourteen percent of the teachers said they would make no change in their programs, whereas 14 percent said they would suggest adding methods courses for teaching basic skills.

Preparation for teaching special needs students. The large majority of beginning vocational teachers spends little or no time teaching special needs students (see table 49). The only exception appears to be for economically disadvantaged students whereas .45 percent of the teachers said they spend 5

TABLE 43

## COURSE OFFERINGS AND GRADUATION REQUIREMENTS

Areas of Preparation	COURSE OFFERINGS											GRADUATION REQUIREMENTS			
	Entire Courses						Parts of Courses								
	1		2 or more		None		Yes		No		Don't know	Number of courses required			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Minimum	Maximum	Mean
Working with and teaching all special needs students	24	49.0	9	18.4	16	32.7 [49]	42	84.0	3	6.0	5	10.0 [50]	1	7	1.8 [34]
Working with and teaching disadvantaged students	10	24.4	5	12.2	26	63.4 [41]	44	88.0	—	—	6	12.0 [50]	1	7	2.3 [20]
Working with and teaching handicapped students	14	31.8	7	15.9	23	52.3 [44]	47	94.0	1	2.0	2	4.0 [50]	1	7	2.0 [24]
Working with and teaching limited English proficient students	4	9.5	2	4.8	36	85.7 [42]	24	48.0	11	22.0	15	30.0 [50]	1	7	2.8 [ 6]
Working with and teaching students in programs nontraditional for their sex	4	9.8	2	4.9	35	85.4 [41]	39	73.6	3	5.7	11	20.8 [53]	1	7	2.7 [10]
Working with and teaching adults in retraining	9	20.5	6	13.6	29	65.9 [44]	28	56.0	11	22.0	11	22.0 [50]	1	7	2.4 [ 9]
Working with and teaching single parents and displaced homemakers	3	7.3	3	7.3	35	85.4 [41]	26	51.0	8	15.7	17	33.3 [51]	1	7	2.9 [ 8]
Working with and teaching incarcerated individuals	—	—	1	2.4	40	97.6 [41]	14	29.2	15	31.3	19	39.6 [48]	1	7	4.0 [ 2]
Working with and teaching dropout-prone students	1	2.8	5	12.8	33	84.6 [39]	34	66.7	7	.7	10	19.6 [51]	1	7	2.5 [11]

TABLE 43--Continued

Areas of Preparation	COURSE OFFERINGS											GRADUATION REQUIREMENTS			
	Entire Courses						Parts of Courses								
	1		2 or more		None		Yes		No		Don't know	Number of courses required			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Minimum	Maximum	Mean
Improving and reinforcing all basic skills in vocational programs	5	12.8	7	17.9	27	69.2 (39)	50	87.7	4	7.0	3	5.3 (57)	1	7	2.6 (12)
Improving and reinforcing writing skills in vocational programs	7	17.1	7	17.1	27	65.9 (41)	44	81.5	4	7.4	6	11.1 (54)	1	6	2.3 (13)
Improving and reinforcing speaking skills in vocational programs	14	35.9	3	7.7	22	56.4 (39)	45	81.8	5	9.1	5	9.1 (55)	1	6	1.9 (14)
Improving and reinforcing reading skills in vocational programs	19	44.2	4	9.3	20	46.5 (43)	44	86.3	2	3.9	5	9.8 (51)	1	6	1.8 (22)
Improving and reinforcing listening skills in vocational programs	7	17.9	2	5.1	30	76.9 (39)	41	74.5	6	10.9	8	14.5 (55)	1	6	2.6 (7)
Improving and reinforcing mathematics skills in vocational programs	9	22.0	4	9.8	28	68.3 (41)	36	66.7	8	14.8	10	18.5 (54)	1	6	2.2 (13)
Improving and reinforcing employability skills in vocational programs	7	17.5	9	22.5	24	60.0 (40)	47	85.5	4	7.3	4	7.3 (55)		6	3 (10)

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TABLE 44

PRESERVICE PREPARATION TO TEACH  
BASIC SKILLS AND SPECIAL NEEDS

Working with and teaching . . .	Entire Course				Topic in Course			
	1	2 or more	None	(n)	1	2 or more	None	(n)
Disadvantaged students	26.5	16.7	56.8	(645)	28.3	42.6	29.1	(618)
Handicapped students	29.8	11.4	58.7	(647)	29.1	37.4	33.5	(615)
Limited English-proficient (LEP) students	11.8	3.6	84.7	(645)	23.8	10.6	65.6	(614)
Students in programs non- traditional for their sex	12.2	11.7	76.1	(631)	25.0	28.5	46.5	(621)
Adults in retraining	13.7	10.8	75.5	(637)	22.6	22.1	55.4	(616)
Single parents and dis- placed homemakers	7.5	5.1	87.5	(630)	18.3	13.8	67.9	(616)
Incarcerated individuals	4.6	2.4	93.1	(634)	9.5	5.4	85.2	(613)
Dropout-prone students	13.7	8.4	77.9	(630)	26.0	24.0	50.0	(628)
Improving and reinforcing . . .								
Writing skills	21.4	15.2	63.4	(632)	28.6	31.4	40.0	(622)
Speaking skills	19.1	16.2	64.7	(629)	28.3	30.1	41.6	(628)
Reading skills	25.9	15.9	58.3	(630)	29.3	29.8	40.9	(621)
Listening skills	19.2	13.9	66.9	(625)	27.1	30.6	42.3	(631)
Mathematics skills	18.3	14.8	66.9	(622)	26.0	30.6	43.4	(631)
Employability skills	19.6	26.0	54.4	(638)	24.9	46.4	28.7	(623)

NOTE: The numbers in parentheses represent the number of respondents to each item.

TABLE 45

AMOUNT OF TRAINING AND SKILL LEVEL ON SELECTED TASKS  
IMPORTANT FOR TEACHING BASIC SKILLS

Tasks	Amount of Training					Skill Level				
	1	2	3	9	(707)	1	2	3	4	(702)
Determining the level of basic skills students need to learn in class	22.3	41.4	23.2	13.0	(707)	2.7	18.2	57.5	21.5	(702)
Determining the level of basic skills students need to succeed in an entry-level job in this area	17.3	33.4	35.6	13.7	(707)	2.8	14.1	50.0	33.1	(704)
Finding and using commercial standardized tests of students' basic skills	31.4	32.7	14.7	21.1	(706)	17.1	32.4	39.0	11.4	(694)
Making and using teacher's tests of students' basic skills	15.7	34.8	38.7	10.7	(706)	3.6	12.4	45.4	38.7	(701)
Interpreting the results of commercial standardized tests to assess students' needs in basic skills	29.5	36.4	12.6	21.5	(706)	16.8	35.0	37.0	11.3	(692)
Finding and using materials and methods to help vocational students improve their basic skills	17.6	38.0	31.7	12.7	(706)	2.7	17.3	49.9	30.1	(700)
Planning prescriptive teaching that will help students learn the basic skills they will need on-the-job	16.2	38.8	31.0	14.1	(704)	5.0	15.5	52.6	26.9	(698)
Determining how readable the textbook and other class materials are in the program	16.9	40.6	28.8	13.6	(704)	3.3	15.4	54.1	27.1	(700)
Finding out what levels of basic skills are needed for jobs in specific area	17.8	35.3	33.6	13.3	(708)	3.4	11.4	53.4	31.8	(704)

NOTE: The numbers in parentheses represent the number of respondents to each item.

TABLE 45--Continued

Tasks	Amount of Training					Skill Level				
	1	2	3	9		1	2	3	4	
Teaching basic skills as an integral part of specific vocational education program	15.7	39.0	33.5	11.8	(705)	2.3	11.3	53.9	32.6	(700)
Motivating students to learn basic skills through vocational education	15.6	39.3	32.9	12.2	(705)	1.7	14.6	53.4	30.4	(701)

NOTE: The numbers in parentheses represent the number of respondents to each item.



TABLE 46

TEACHER EDUCATORS' RESPONSES REGARDING PREPARATION IN SELECTED SKILLS  
IDENTIFIED AS BEING IMPORTANT FOR IMPROVING AND REINFORCING BASIC SKILLS  
IN VOCATIONAL EDUCATION (N=69)

Skills	Preparation			Mean
	1= None	2= Some	3= A Lot	
Determining the level of basic skills students need in order to succeed in the teachers' classes	20.0	69.2	10.8	2.0 (65)
Determining the level of basic skills students need to succeed in an entry-level job	21.5	52.3	26.2	2.0 (65)
Finding and using commercial standardized tests of students' basic skills	43.1	50.8	6.2	1.6 (65)
Making and using tests of students' basic skills	27.7	66.2	6.2	1.8 (65)
Interpreting the results of commercial standardized tests to assess students' needs in basic skills	30.8	63.1	6.2	1.8 (65)
Finding and using materials and methods to help vocational students improve their basic skills	6.2	72.3	21.5	2.0 (65)
Planning prescriptive teaching that will help students learn the basic skills they will need on the job	20.0	58.5	21.5	2.0 (65)
Determining how readable the textbook and other class materials are	10.8	56.9	32.3	2.2 (65)
Finding out what levels of basic skills are needed for jobs in the teacher's area	18.8	57.8	23.4	2.0 (64)
Teaching basic skills as an integral part of the vocational education program	10.8	60.0	29.2	2.2 (65)
Motivating students to learn basic skills through vocational education	9.2	60.0	30.8	2.2 (65)

TABLE 47

PROBLEMS ENCOUNTERED BY BEGINNING TEACHERS WHEN IMPROVING AND REINFORCING  
STUDENTS' BASIC SKILLS (N=699)

Problems Encountered	No.	%
Student motivation, student attitudes	137	19.6
Lack of initial preservice preparation to teach basic skills	20	2.9
Lack of time to help individual students in need	38	5.4
Classroom management	3	.4
Finding appropriate materials	17	2.3
Reaching all students with different needs and skill levels	61	8.7
Large class size	2	.3
Assessing students' individual basic skills deficiencies	32	4.6
Teaching and communicating with LEPs	8	1.1
Lack of support from administrators and/or parents	8	1.1
Entry-level behavior--basic skills deficiencies upon entry into course work, including listening, speaking, etc., as well as reading, writing, math	154	22.0
Integrating basic skills into coursework	19	2.7
Identifying basic skills in coursework--application of basic skills in the coursework	2	.3
Teaching students of all ages	1	.1
Absenteeism	3	.4
No materials and lack of funding for purchasing the materials needed	16	.9
Students too involved in extracurricular activities	3	.4
Short attention span (student motivation and attitudes)	5	.7
Getting students to admit they need help with their deficiencies	6	.9
Teachers' own deficiencies in basic skills and teaching techniques	14	2.0
Discipline problems/dropouts	13	1.9
No information on students' entry behavior (deficiencies)	1	.1
Teaching effectively--communicating to the students what is expected of them	9	1.3
Improving basic skills deficiencies	5	.7
Low student self-esteem	5	.7
Getting students to develop a sense of responsibility (to become independent)	3	.4
Getting students to realize the importance of basic skills in the classroom and real life	37	5.3
Does not apply or not answered	26	3.7
No problems	61	8.7

TABLE 48

BEGINNING TEACHERS' SUGGESTIONS FOR CHANGE IN PRESERVICE VOCATIONAL TEACHER  
EDUCATION FOR BASIC SKILLS (N=673)

Suggested Changes	No.	%
No change	94	14.0
More preservice training in general	64	9.5
Training for individualizing instructor, developing curriculum, activities, and instructional materials	21	3.1
Methods courses for teaching basic skills	94	14.0
Preparation for assessing basic skills deficiencies for individual students and how to help them with deficiencies	22	3.0
Preparation for helping students with deficiencies in basic skills	8	1.2
Preparation in time management for helping students in need--planning class structure	7	1.0
Preparation in incorporating basic skills in coursework curriculum	40	5.9
Enforcing basic skills requirements for all beginning teachers	8	1.2
Providing real life experience working with special needs students and basic skills deficient students	7	1.0
Emphasizing basic skills in vocational teacher preparation programs	10	1.5
More student teaching, direct involvement in basic skills teaching	44	6.5
Designing and sequencing units for teaching basic skills	1	.1
None--excellent program/preparation	2	.3
Finding resources--how and where	4	.6
Small class size	1	.1
Training to teach LEPs, economically disadvantaged and other special needs students	6	.9
Fewer courses (e.g., educational psychology, educational history) and more hands-on experience	2	.3
More realistic preparation related to needs of today's students and beginning teachers	21	3.1
Preparation in developing lesson plans	3	.4
Developing familiarity with effective instruction (i.e., student teaching in a successful program)	6	.9
Preparation to work with students with basic skills deficiencies	2	.3
Restructuring teacher education--provide training theory and practice together	1	.1
Teach courses in basic skills	1	.1
Provide better informed faculty members, better materials, more modern materials and teaching methods in preservice education	8	1.2
Training in motivation and motivational skills	2	.3
Does not apply	194	28.8

TABLE 49

TIME PER WEEK SPENT TEACHING GROUPS  
WHICH INCLUDED SPECIAL NEEDS STUDENTS

Special Needs Students	1 hour		2-3 hours		4-5 hours		Over 5 hours		None		Number of Respondents
	No.	%	No.	%	No.	%	No.	%	No.	%	
Economically disadvantaged	55	( 8.0)	76	(11.1)	133	(19.4)	308	(45.0)	56	(16.4)	684
Handicapped	83	(12.9)	61	( 9.5)	69	(10.7)	127	(19.8)	302	(47.0)	642
Students in programs nontraditional for their sex	48	( 7.5)	57	( 8.9)	84	(13.2)	156	(24.5)	293	(45.9)	638
Adults in retraining	15	( 2.4)	25	( 4.0)	23	( 3.7)	93	(15.0)	462	(74.8)	618
Single parents and displaced homemaker	27	( 4.4)	31	( 5.0)	32	( 5.2)	99	(16.1)	427	(69.3)	616
Limited English-proficient (LEP) students	51	( 8.0)	57	( 8.9)	64	(10.0)	114	(17.8)	353	(55.2)	639
Incarcerated	13	( 2.2)	7	( 1.2)	3	( 0.5)	13	( 2.2)	554	(93.9)	590

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hours or more per week teaching groups that include the economically disadvantaged. However, reference to table 50 shows that the number of economically disadvantaged students taught is a relatively small percentage of the total number of students taught by the beginning teachers.

Table 51 shows that, on average, the beginning teachers rated the teaching of basic skills higher in importance than the teaching of special needs students. Moreover, on average, they rated their skills in teaching basic skills slightly higher than their skills in teaching special needs students (see also table 7). Nevertheless, relatively few teachers said they had encountered problems in actually teaching special needs students (see table 52).

Table 53 shows that on selected tasks important for serving special needs students, most teacher education institutions said they provided some preservice preparation. However, substantial percentages said they provided no preservice preparation in (1) using students' parents or guardians to supplement instructional efforts (43.1 percent) and in (2) interacting with parents of special needs students during planning and/or placement meetings (30.8 percent). Beginning teachers said they received little preservice preparation in either of these tasks. Additionally, the large majority of teacher educators said they felt the usual types of preservice experiences offered to beginning teachers were either somewhat useful or very useful (see table 54).

Very few beginning teachers agreed or suggested changes in their preparation for teaching special needs students (see table 55). Almost one-fourth suggested no changes and less than one-fourth (20.5 percent) suggested more preservice preparation in teaching special needs students.

As shown in table 56, a large percentage of teacher education institutions have already implemented a number of strategies to improve the preparation of vocational teachers to teach special needs students. For example, over 68 percent of the institutions have improved faculty awareness and development through workshops, seminars, and so forth; over 60 percent have added one or more courses on special education to the curriculum; and over 70 percent have redesigned existing methods courses to include more emphases on teaching special needs students. Still, many institutions seem to have no plans to implement numerous strategies they judge to be effective or somewhat effective in preparing to teach special needs students.

### Competency Testing for State Certification

Disquieting findings of numerous national commissions and task forces regarding a sharp decline in teacher quality have generated a general consensus on the urgent need to improve the way our teachers are recruited, prepared, certified and rewarded. Since teachers are now being regarded as the most important agents in school improvement efforts in the American quest for excellence in education, teacher quality is receiving considerable attention from politicians, policymakers, and the public in general.

TABLE 50

## TYPES OF SPECIAL NEEDS STUDENTS TAUGHT

Special Needs Students	I Don't Know	1% To 20%	21% To 40%	41% To 60%	61% To 80%	81% To 100%	None	No. of Respondents
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	
Economically disadvantaged	85 (12.1)	259 (37.0)	123 (17.6)	76 (10.9)	56 ( 8.0)	52 ( 7.4)	49 ( 7.0)	700
Handicapped	55 ( 8.3)	271 (40.8)	24 ( 3.6)	9 ( 1.4)	5 ( 0.8)	19 ( 2.9)	281 (42.3)	664
Students in programs nontraditional for their sex	33 ( 5.0)	254 (38.5)	48 ( 7.3)	41 ( 6.2)	12 ( 1.8)	2 ( 0.2)	271 (41.0)	661
Adults in retraining	23 ( 3.6)	78 (12.2)	26 ( 4.1)	23 ( 3.6)	16 ( 2.5)	18 ( 2.8)	457 (71.3)	641
Single parents and displaced homemakers	42 ( 6.5)	110 (17.1)	39 ( 6.1)	20 ( 3.1)	13 ( 2.0)	10 ( 1.6)	408 (63.6)	642
Limited English proficient (LEP) students	37 ( 5.6)	194 (29.3)	46 ( 6.9)	14 ( 2.1)	11 ( 1.7)	13 ( 2.0)	347 (52.4)	662
Incarcerated	51 ( 8.1)	19 ( 3.0)				8 ( 1.3)		627

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TABLE 51

BEGINNING VOCATIONAL TEACHERS' PERCEPTIONS REGARDING IMPORTANCE AND SKILL LEVEL  
FOR TEACHING BASIC SKILLS AND SPECIAL NEEDS STUDENTS

	<u>Importance</u>							<u>Skill Level</u>						
	1	2	3	4	$\bar{x}$	SD		1	2	3	4	$\bar{x}$	SD	
Special Needs Students														
Working with and teaching disadvantaged students	2.1	14.3	47.1	36.5	3.18	.75	(712)	2.3	15.5	64.3	17.9	3.00	.85	(703)
Working with and teaching handicapped students	4.6	19.8	43.8	31.8	3.03	.84	(692)	9.0	31.9	49.7	9.4	2.60	.78	(668)
Working with and teaching limited English proficient (LEP) students	8.3	25.7	37.1	28.8	2.88	.93	(684)	21.1	38.8	33.1	9.0	2.30	.90	(653)
Working with and teaching students in programs nontraditional for their sex	6.9	23.3	34.0	35.7	2.99	.93	(691)	4.1	9.3	43.7	42.8	3.25	.79	(677)
Working with and teaching single parents and displaced homemakers	7.5	20.2	38.6	35.7	3.00	.93	(687)	12.4	13.2	40.3	34.0	2.98	.98	(620)
Working with and teaching adults in retraining	8.7	22.8	35.3	32.2	2.93	.95	(663)	12.9	15.0	43.5	28.8	2.88	.97	(619)
Working with and teaching incarcerated individuals	20.1	33.2	28.0	18.7	2.45	1.01	(632)	39.3	27.4	28.2	7.2	2.01	.97	(573)
Working with and teaching dropout-prone students	3.2	12.4	30.7	53.7	3.35	.82	(694)	5.0	24.6	51.5	18.9	2.84	.78	(679)

NOTE: The numbers in brackets represent the number of respondents to each item.

TABLE 51—Continued

Importance  
 1 = Not important  
 2 = Somewhat important  
 3 = Quite important  
 4 = Extremely important

Skill Level  
 1 = Cannot do  
 2 = Cannot do very well  
 3 = Can do fairly well  
 4 = Can do well

Basic Skills	Importance							Skill Level						
	1	2	3	4	$\bar{x}$	SD		1	2	3	4	$\bar{x}$	SD	
Improving and reinforcing writing skills	.8	10.9	41.3	46.8	3.34	.70	(714)	1.8	18.1	63.4	16.6	2.95	.65	(703)
Improving and reinforcing speaking skills	.7	10.4	40.2	48.7	3.37	.69	(712)	1.9	15.2	57.5	25.5	3.07	.69	(699)
Improving and reinforcing reading skills	1.1	8.3	39.4	53.1	3.45	.67	(710)	2.1	18.3	60.3	19.2	2.97	.68	(658)
Improving and reinforcing listening skills	.6	4.5	34.4	60.8	3.55	.61	(715)	1.7	14.3	57.8	26.4	3.08	.68	(705)
Improving and reinforcing mathematics skills	.6	7.0	38.5	53.9	3.46	.65	(712)	2.3	17.2	55.1	25.4	3.04	.72	(704)
Improving and reinforcing employability skills	.3	1.7	20.7	77.3	3.75	.48	(714)	1.3	7.1	46.0	45.7	3.38	.67	(706)

NOTE: The numbers in brackets represent the number of respondents to each item.



TABLE 52

NUMBER AND PERCENTAGE OF PROBLEMS ENCOUNTERED BY BEGINNING  
TEACHERS WORKING WITH AND TEACHING SPECIAL NEEDS STUDENTS (N=622)

Problems Encountered	No.	%
Teaching blind students	2	.3
Lack of time to provide individual assistance to students in need	64	10.3
No initial preparation to teach special needs students	33	5.3
Finding and/or developing appropriate materials, lesson plans, tests, etc.	13	2.1
Large class size	8	1.3
Diagnosing and providing for nees of special needs students	8	1.3
Lack of training and/or experience and/or time to individualize instruction to teach special needs students (reaching students at all levels)	90	14.5
Student motivation, attitude, discipline problems	74	11.9
Keeping students on task	15	2.4
Teaching and communicating with LEPs	22	3.5
Lack of parental and/or administrative support	10	1.6
No materials available	12	1.9
Patience and understanding from teachers and/or other students	17	2.7
Students' basic skills deficiencies including listening, speaking, application of skills, etc.	18	2.9
Special treatment given to students (inappropriate placement of student)	5	.8
Educational psychology courses	5	.8
Low student self-esteem, self-image	5	.8
No problem	2	.3
Lack of specialized help (teacher's aide, equipment, etc.)	44	7.1
Identifying students with special needs and information about their needs and how to teach them	1	.2
Difficulty in teaching	1	.2
No sharing or communication with special needs teachers	4	.6
Not enough proper communication with students--students not asking questions	6	1.0
Absenteeism	1	0.2
Does not apply	41	6.6

TABLE 53

TEACHER EDUCATORS' RESPONSES REGARDING AMOUNT OF PRESERVICE TEACHER PREPARATION ON SELECTED SKILLS IDENTIFIED AS IMPORTANT TO SERVE SPECIAL NEEDS STUDENTS (N=69)

Selected Skills	Preparation		
	1	2	3
Use methods of instruction which complement students' learning styles	1.5	73.8	24.6
Help students improve their ability to interact effectively with other people	1.5	55.4	43.1
Establish a classroom climate that stimulates learning	---	44.6	55.4
Identify physical changes needed in classroom/laboratory to accommodate students' unique instructional needs	9.2	60	30.8
Adapt instructional methods and materials as required for students with IEPs	13.8	58.5	27.7
Use the school's support services (reading and math specialists, counselors, interpreters, etc.) to help instruct students	21.5	50.8	27.7
Use students' parents or guardians to supplement instructional efforts	43.1	50.8	6.2
Use community resources to supplement instructional efforts	10.8	72.3	16.9
Comply with special needs-related laws and regulations	6.3	48.4	45.3
Identify the least restrictive environment for special needs students	13.8	50.8	35.4
Provide hands-on trial and error experiences	20.3	60.9	18.8
Use charts, pictures, graphs, and other visual materials	4.6	56.9	38.5
Use spoken and written communications to provide effective instruction?	1.5	44.6	53.8
Pace instruction to match students' ability to learn	4.6	52.3	43.1

TABLE 53--Continued

Selected Skills	<u>Preparation</u>		
	1	2	3
Match instruction to students' readiness (ability and prior training) to learn	4.6	70.6	24.6
Organize vocational topics into meaningful units or "clusters" to maximize students' opportunity to learn	10.8	50.8	38.5
Select appropriate sequences for instructional activities	1.5	49.2	49.2
Establish goals and objectives for each student based on a diagnosis of their learning strengths and weaknesses	9.2	60	30.8
Determine how often students need to practice the new vocational skills they have learned	17.2	67.2	15.6
Reinforce or reward students for achieving goals or for desired behavior	10.8	60	29.2
Inform students of how well they are performing so they know where improvement is needed	1.5	55.4	43.1
Interact with parents of special needs students during .planning and/or placement meetings	30.8	58.5	10.8
Interact with professionals during planning and/or placement meetings	16.9	69.2	13.8

TABLE 54

USEFULNESS OF TEACHER EDUCATION EXPERIENCES TO TEACH  
SPECIAL NEEDS STUDENTS AND BASIC SKILLS (N=69)

Teacher Education Experience	Usefulness				Mean
	1	2	3	9	
<b>Special Needs</b>					
Preservice courses in education	4.6	38.5	52.3	4.6	2.5 (65)
Preservice courses in areas other than education	10.6	47.0	27.3	15.2	2.2 (66)
Student teaching	4.6	12.1	80.3	3.0	2.8 (66)
Formal inservice training (e.g., workshops, seminars)	3.1	38.5	50.8	7.7	2.5 (65)
Informal training (e.g., observation, group discussion)	7.7	56.9	32.3	3.1	2.3 (65)
Other (e.g., volunteer work, personal contact with special needs individuals)	4.2	37.5	39.6	18.8	2.4 (48)
<b>Basic Skills</b>					
Preservice courses in education	7.6	45.5	39.4	7.6	2.3 (66)
Preservice courses in areas other than education	7.6	43.9	34.8	13.6	2.3 (66)
Student teaching	1.5	22.7	71.2	4.5	2.7 (66)
College, department, or school of education as a whole	4.7	48.4	39.1	7.8	2.4 (64)
Informal training (e.g., observation, group discussions)	10.8	49.2	26.2	13.8	2.2 (65)
Other					

TABLE 55

BEGINNING TEACHERS' SUGGESTIONS FOR CHANGE IN PRESERVICE VOCATIONAL  
TEACHER EDUCATION FOR TEACHING SPECIAL NEEDS STUDENTS

Suggested Changes	No.	%
No change	142	23.7
More preservice preparation in teaching special needs students	123	20.5
Courses in designing appropriate instructional materials for special needs students	13	2.2
Develop student/teacher awareness to special needs	1	.2
More exposure to special needs students--student teaching	11	1.8
More courses for teaching slow learners	1	.2
Preparation in designing lesson plans, materials, and curriculum for special needs students, tutoring/translating plans, individualized plans	20	3.3
Courses on task and skill simplification	5	.8
More practical experience/observation--students teaching	73	12.2
Courses on discipline	1	.2
More inservice training with special needs students	6	1.0
Courses in guidance and counseling, motivation, how to deal with emotions of special needs students (educational psychology)	17	2.8
Preparation in cultural/ethnic traditions	2	.3
Student teaching under tutelage of master teacher	5	.8
Smaller class size	3	.5
Training for teaching LEPs	3	.5
Working with and learning from professors and master teachers	11	1.8
Courses on identification of special needs and how to teach them	16	2.7
Courses on how to evaluate and grade special needs	6	1.0
Courses related to area of specialty	3	.5
Emphasis on course objectives and how to teach objectives	3	.5
Does not apply	135	22.5

TABLE 56

TEACHER EDUCATORS' RESPONSES REGARDING THE IMPLEMENTATION AND DEGREE OF EFFECTIVENESS  
OF SELECTED STRATEGIES FOR PREPARING VOCATIONAL TEACHERS TO TEACH SPECIAL NEEDS STUDENTS

IMPLEMENTATION					EFFECTIVENESS				
1=Implemented more than 3 yrs. ago					1=Not effective				
2=Implemented within past 3 years					2=Somewhat effective				
3=Plan to implement within next 3 years					3=Effective				
9=No plan to implement					4=Very effective				
					9=I don't know				
Implementation					Effectiveness				
1	2	3	9	Strategies	1	2	3	4	9
24.6	9.2	12.3	53.8	(65) recruiting students from special populations into vocational teacher education	11.1	22.2	13.9	5.6	47.2 (36)
14.5	1.6	9.7	74.2	(62) recruiting students with extensive experience working/living with special populations into vocational teacher education	6.9	6.9	17.2	----	69.0 (29)
50.0	18.8	9.4	21.9	(64) improving faculty awareness and development through workshops, seminars, excursions to schools, etc.	2.1	29.8	34.0	14.9	19.1 (47)
34.4	18.8	6.3	40.6	(64) providing faculty with additional support (grants, resources, etc.) to engage in activities (research, development of teaching materials, extension) that will improve their teaching in this area	2.4	31.7	26.8	9.8	29.3 (41)
11.1	6.3	6.3	76.2	(63) restructuring faculty career incentives (in terms of promotion and tenure decisions) to allow them greater flexibility and support for engaging in aforementioned activities	3.1	6.3	21.9	9.4	59.4 (32)
29.7	12.5	12.5	45.3	(64) hiring new faculty with expertise in special needs	8.5	19.1	23.4	23.4	25.5 (47)
31.3	29.7	10.9	28.1	(64) increasing amount of classroom experience in teacher preparation programs	---	---	---	---	---

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TABLE 56--Continued

IMPLEMENTATION					EFFECTIVENESS				
1=Implemented more than 3 yrs. ago					1=Not effective				
2=Implemented within past 3 years					2=Somewhat effective				
3=Plan to implement within next 3 years					3=Effective				
9=No plan to implement					4=Very effective				
					9=I don't know				
Implementation					Effectiveness				
1	2	3	9	Strategies	1	2	3	4	9
10.9	18.8	14.1	56.3	(64) increasing the number of credit hours required in humanities, social sciences, etc., either as prerequisite to teacher education or for graduation from the program	19.4	13.9	11.1	5.6	50.0 (36)
41.3	20.6	12.7	25.4	(63) adding one or more courses on special education to the curriculum	4.2	18.9	29.2	2.5	22.9 (48)
42.9	33.3	11.1	12.7	(63) redesigning existing methods courses to include/plp e more emphases on teaching special needs students	----	22.6	35.8	20.8	20.8 (53)
08 32.3	16.1	9.7	41.9	(62) providing students with individualized competency-based learning approaches	---	17.9	30.8	15.4	35.9 (39)
46.8	21.0	8.1	24.2	(62) providing students with additional resource materials/library	2.0	34.7	28.6	14.3	20.4 (49)
39.0	20.3	13.6	27.1	(59) providing students with early field experiences related to teaching special needs students, i.e., on-site observation of successful teachers and programs	8.3	25.0	16.7	41.7	8.3 (12)
48.4	12.9	8.1	30.6	(62) providing students with teaching practice under simulated conditions	4.5	15.9	27.3	31.8	20.5 (44)
16.4	3.3	8.2	72.1	(61) adding a practicum in microteaching special needs students	----	9.4	12.5	9.4	68.8 (32)
17.3	17.7	4.8	37.1	(62) providing students with special units (i.e., in developing IEP's, etc.)	----	16.3	32.6	20.9	30.2 (43)

TABLE 56--Continued

IMPLEMENTATION					EFFECTIVENESS				
1=Implemented more than 3 yrs. ago					1=Not effective				
2=Implemented within past 3 years					2=Somewhat effective				
3=Plan to implement within next 3 years					3=Effective				
9=No plan to implement					4=Very effective				
					9=I don't know				
Implementation					Effectiveness				
1	2	3	9	Strategies	1	2	3	4	9
16.1	11.3	8.1	64.5	(62) grouping vocational teacher education students with special needs education students in seminars/practicums where they work together	3.1	12.5	18.8	15.6	50.0 (32)
32.3	17.7	8.1	41.9	(62) assuring that internship/student teaching experience provide experience with special needs students	2.4	21.4	19.0	21.4	35.7 (42)
32.3	11.3	8.1	48.4	(62) improving assessment/monitoring of students progress throughout the program through diagnostic testing and periodic evaluations in student teaching	----	10.0	25.0	17.5	47.5 (40)
8.3	----	23.3	68.3	(60) restructuring preservice to include fifth year MA program	3.3	----	3.3	13.3	80.0 (30)
6.8	3.4	15.3	74.6	(59) implementing a comprehensive exam prior to program completion that includes problems related to special needs students	---	3.7	14.8	3.7	77.8 (27)
----	1.4	----	----	( 1) other (please specify: _____)	----	----	1.4	----	---- ( 1)

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Kaplan (1985) observes that

the recruitment, performance, work habits, incentives, preparation, and quality of teachers have ignited attention and action throughout the nation. Scarcely a week passes without legislative or executive measures aimed at achieving excellence in the teaching profession, . . . 700 pieces of state legislation in 1983 and 1984. (p. 2)

The recommendations emerging from the major efforts mandated to investigate various avenues to improve teacher quality, indicate that a general consensus is forming regarding the most appropriate measures to achieve this objective. These include (1) attracting bright, talented individuals into the profession; (2) making admission to teacher education selective; (3) enhancing and making teacher preparation more challenging so as to attract bright students; (4) exercising quality assurance and quality control over graduation; (5) raising exit requirements in teacher education programs; (6) raising certification requirements for beginning teachers; (7) abolishing lifelong teacher certification; (8) implementing mandatory competency testing for certification and recertification; and (9) implementing merit pay, career ladders, and master teacher plans.

Of all the measures targeted to improve teacher quality, the teacher competency testing movement has perhaps been the most debated and most publicized. Despite the controversy surrounding teacher competency testing, it appears that it is not just a fad, but will become a major part of teacher recruitment, selection, certification, promotion and retention. This trend is evidenced by the recent Holmes Group report (1986) and the Carnegie Task Force report on teaching. Both of these reports place heavy emphasis on teacher competency testing, and call for more stringent certification requirements.

National polls have repeatedly shown that the great majority of the American public supports mandatory teacher competency testing for certification. For example, the 1986 Gallup poll of the public's attitude toward the public schools showed that "85 percent of the public favored requiring experienced teachers to pass a statewide test of basic competence in their subject areas. Three previous education polls showed across-the-board support for teacher competency testing" (Gallup and Clark, 1987, p. 27). In commenting on the wave of the teacher competency testing movement, Ishler (1985) observes that

competency testing of prospective teachers seems to be taking this country by storm. It is being viewed both as a quality assurance measure for the general public and as a way of demonstrating that teaching is indeed a profession since other professions already require successful completion of an examination prior to entry. (p. 27)

Teacher testing for certification is not an innovation in itself, since the practice dates back to colonial times when written and oral examinations were administered to prospective teachers. However, it is only recently that it has gained widespread attention and acceptance. Denham (1985) comments on the factors that have generated the need for teacher competency testing noting that

a recent loss of confidence in universities as providers of well-educated graduates, often coupled with suspicion that university teacher training programs are neither rigorous nor effective, has led about all of the fifty states to require competency tests for the credentialing of teachers. (p. 41)

The logic underlying the teacher competency testing movement is based on the assumption that more educated teachers would be better prepared to improve the declining quality of education. In general, teacher competency testing has focused on the following domains: (1) basic skills, (2) professional knowledge, and (3) specific specialty areas.

Recent data on the status of teacher competency testing at the national level indicate that 27 states now require candidates for teacher certification to demonstrate their competency in basic skills (reading, writing, mathematics, speaking, and listening) through test performance. In addition, 19 states have implemented tests in the area of professional knowledge or pedagogy, whereas 18 others have imposed similar requirements in specific specialty areas (Peterson 1986).

Although it has been well evidenced that almost all states have implemented or are in the process of implementing some form of mandatory basic skills competency testing for certification of regular academic teachers, little is known regarding states' initiatives and policies on this issue related to the certification of vocational teachers. Presently, there are no universal standards governing the certification of vocational teachers. There are wide variations in vocational teacher certification requirements not only between states, but also within states and across specific specialty areas. These requirements are also different within states for degreed and nondegreed teachers. In general, states' requirements for the certification of nondegreed vocational teachers have been limited to documented evidence of basic education and a minimum amount of relevant occupational experience. On the other hand, candidates aspiring to teach in such areas as business education, industrial arts, or home economics must, in general, hold college degrees and have some amount of relevant occupational experience (Miller 1982).

A recent survey of state practices related to the certification of prospective vocational teachers (Milanovich 1986) shows a national trend toward competency testing. Results also indicated that the NOCTI competency tests were currently being used in 21 states as part of the requirements for the certification of aspiring vocational teachers.

Methods and procedures. It was the purpose of this survey to shed some light on the patterns and practices adopted by states for the competency testing of vocational teachers for certification purposes.

Data regarding state mandated competency testing requirements for the certification of vocational teachers across the 50 states were gathered from the state directors of vocational education (SDVEs) through the Adult Vocational and Technical Education Electronic Mail Network (ADVOCNET). ADVOCNET is an online communications network of federal, state, and local adult, vocational, and technical education personnel. Linked via an electronic mail system provided by

ITT Dialcom, members can transmit messages, documents, meeting and product announcements, or other information. The development of ADVOCNET was sponsored by the Office of Vocational and Adult Education, U.S. Department of Education. The network is managed by the National Center for Research in Vocational Education, Columbus, Ohio. ADVOCNET can be accessed with most receiving terminals or microcomputers connected to a telephone by a modem. With the exception of Connecticut and New Hampshire, all the SDVEs are linked to the ADVOCNET.

Three specific sets of questions were developed and used to elicit the information sought regarding competency testing of prospective vocational teachers for certification purposes. These questions were as follows:

1. Does your state require vocational teachers to take a BASIC SKILLS test for certification?
  - a. If so, which test?
  - b. What score is required for certification?
  - c. Was it required in school year 1985-1986?
  
2. Does your state require vocational teachers to take a test of SPECIFIC OCCUPATIONAL SKILLS?
  - a. If so, which test?
  - b. What score is required for certification?
  - c. Was it required in school year 1985-1986?
  
3. Does your state require vocational teachers to take any other test for certification? Which test? Score required? Required in 1985-1986?

The survey questions were transmitted to the SDVEs in the fall of 1986 through ADVOCNET. Two weeks following the initial transmission of the research questions, reminders were sent to all nonrespondents. In addition, the SDVEs were also requested to acknowledge receipt of the survey questions. Finally, all nonrespondents to the electronic mail follow-up were surveyed by telephone.

**Results.** Following the initial transmission of the research questions through ADVOCNET, slightly over a third (37.5 percent) of the SDVEs favorably responded to the request within the first week. A follow-up of nonrespondents was conducted and messages acknowledging receipt of the survey questions were obtained from all 30 nonrespondents. This follow-up generated data on vocational teacher competency testing from 14 (29 percent) SDVEs. Data from the remaining 16 states were obtained by telephone surveys. Therefore, data regarding the status of vocational teacher competency testing were available from all 50 of the states.

Of the 50 states surveyed, 23 (45 percent) indicated that basic skills competency testing was part of the state mandated requirements for the certification of vocational teachers. Similarly, in 26 states (52 percent), occupational competency testing was a certification requirement for vocational teachers. In 14 (28 percent) of the states surveyed, testing in both basic skills and occupational competency was required for vocational teacher certification.

Results also indicated that six different tests were used by states for testing the basic skills competencies of prospective vocational teachers (see table 57). The National Teacher Examination (NTE) Core Battery and state developed tests were the most frequently used instruments.

TABLE 57  
TESTS OF BASIC SKILLS USED FOR  
THE CERTIFICATION OF VOCATIONAL TEACHERS

Name of Test	No.	%
NTE Core Battery	8	34.78
State Developed Test	7	30.44
ETS PPST	3	13.04
California Achievement Test	3	13.04
University Developed Test	1	4.35
ACT COMP	1	4.35
Total	23	100.00

Given these findings, and the fact that most of the beginning vocational teachers in the present study were high school teachers, it is odd that so few of the teachers reported having taken competency exams for state certification. Table 58 shows that only 16.4 percent or 121 of the teachers took a basic skills competency exam, and only 6.9 percent or 52 teachers reported taking an occupational skills competency exam for state certification. A chi-square test for differences among service areas revealed no significant differences among service areas in teachers' basic skills or occupational competency test scores.

TABLE 58  
TEACHER COMPETENCY EXAMINATIONS REQUIRED  
FOR CERTIFICATION AND EARNED SCORES

Examinations	No.	%	Scores			
			Low Quar- tile	2nd Quar- tile	3rd Quar- tile	High Quar- tile
Basic Skills Exam						
YES	121	16.4	8 (6.6)	13 (10.7)	45 (37.2)	55 (45.5)
NO	553	74.4				
No Response	66	8.9				
Occupational skills Exam						
YES	52	6.9	4 (7.7)	4 (7.7)	9 (17.3)	35 (67.3)
NO	629	85.0				
No Response	59	8.0				

Of the 26 states having implemented mandatory occupational competency testing requirements for vocational teacher certification, the majority (61.5 percent) were using the Teacher Occupational Competency Tests (TOCT). The TOCT tests are developed by the National Occupational Competency Testing Institute

(NOCTI). Table 59 provides a listing of other types of tests used for the same purpose along with their frequency of use. A detailed breakdown of basic skills and occupational competency tests used for certification of vocational teachers by state is presented in table 60.

TABLE 59  
TESTS OF OCCUPATIONAL SKILLS USED  
FOR VOCATIONAL TEACHER CERTIFICATION

Name of Test	No.	%
NOCTI	16	61.54
NTE Professional Test	6	23.08
State Developed Test	2	7.68
ETS Specialty Area Test	1	3.85
National Evaluation System	1	3.85
Total	26	100.00

Although many states have implemented or are in the process of implementing basic skills competency testing for the certification of vocational teachers, the great majority are exercising some caution in using the test results for decision making purposes. This trend was evidenced from information provided by the SDVEs during one-to-one telephone surveys. Many states are collecting test data over a period of time in order to establish appropriate cut-off scores for aspiring vocational teachers. Only a few states are actually applying the cut-off scores used for certifying regular classroom teachers to the vocational area. An informal telephone follow-up of some states having implemented this measure indicated that failing rates among prospective vocational teachers were not alarmingly or significantly different from those of aspiring academic teachers. A certification officer from one state department of education indicated that although candidates seeking certification to teach in general education tend to score higher on language skills, those in the vocational area score higher on mathematics skills. In all states where the TOCT is used for certification purposes, the national norms established by NOCTI are used as the passing grade.

Results indicated that approximately 50 percent of the states have implemented testing in basic skills and in the occupational area for the certification of vocational teachers. However, hardly any states were testing the pedagogical and professional teaching skills of prospective vocational teachers.

Discussion. The electronic mail (ADVOCNET) was used as the main data collection medium for this study. Initial transmission of the research questions to the SDVEs generated a response rate of 37.5 percent. An optional receiver acknowledgement feature was included in the ADVOCNET message at the follow-up stage. Although all states acknowledged receipt of the message, only 29 percent actually provided the information requested. Results suggested that the electronic mail network is about as effective as any of the other traditional

TABLE 60

COMPARISON OF STATES USING BASIC SKILLS AND OCCUPATIONAL COMPETENCY TESTING FOR THE CERTIFICATION OF VOCATIONAL TEACHERS

STATES	Basic Skills Testing					Occupational Skills Testing					
	NTE Core Battery	State Developed Basic Skills Tests	ETS PPST	Calif. Achievement Test	University Developed Test	ACT Comp.	NOCTI	NTE Professional Test	State Developed Test	ETS Specialty Test	National Evaluation System Test
Alabama		X					X				
Alaska											
Arizona*		X									
Arkansas		X					X				
California*											
Colorado*				X			X				
Connecticut											
Delaware*			X				X				
Florida		X									
Georgia							X				
Hawaii	X							X			
Idaho											
Illinois											
Indiana*	X						X			X	
Iowa							X				
Kansas*							X				
Kentucky		X					X		X		
Louisiana	X							X			
Maine	X										
Maryland*							X				
Massachusetts*									X		
Michigan											
Minnesota											
Mississippi*				X							
Missouri*											
Montana*	X							X			
Nbraska*											
Nevada											
New Hampshire*			X								
New Jersey											
New Mexico*					X			X			
New York	X							X			
North Carolina*	X										
North Dakota											
Ohio*											
Oklahoma							X				
Oregon*				X							
Pennsylvania*		X					X				
Rhode Island							X				
South Carolina								X			
South Dakota	X						X				
Tennessee*											
Texas*		X									
Utah											
Vermont*							X				
Virginia							X				
Washington*											
West Virginia			X			X					X
Wisconsin*											
Wyoming*											
TOTAL	8	7	3	3	1	1	16	6	2	1	1

\*Denotes the 24 states surveyed by the Vocational Teacher Education Study.

data collection techniques used for survey research. This is probably due in part to the fact that, at present, the system calls for special skills in order to input outgoing messages and collect incoming messages. With this limitation, messages can be left unattended until a trained operator is available. In some instances, messages are picked up, but do not command immediate attention. Furthermore, ADVOCNET lacks necessary features for personalizing a survey.

In spite of these difficulties, electronic mail offers promising potential as a medium for future survey research. However, at present, when surveys of senior executives such as the SDVEs are conducted, the telephone survey probably remains one of the most effective approaches. In this study, an average of two calls was necessary to obtain the information sought from the SDVEs. All state directors who were not available to respond initially, returned the calls within a day or two. In addition, the telephone survey s generated more in-depth and rich data than the electronic mail.

Results indicate that the wave of teacher competency testing is also gaining support for vocational teacher certification. Approximately half of the states had already implemented mandatory testing in basic skills and/or occupational competency for the certification of vocational teachers. Some states are moving with caution in the implementation of basic skills tests by first adopting a no-fault testing policy to gather a database for establishing appropriate cut-off scores in the vocational area. Establishing differential cut-off scores is perhaps justified in light of the specific needs of vocational education. However, such measures are not likely to improve the image of vocational education. Other states are requiring their prospective vocational teachers to meet the same basic skills competency testing requirements as regular academic teachers.

Considering that 16 states are currently using the NOCTI tests for certification purposes, granting advanced standing credits or granting recognition for years of industrial experience, it appears that NOCTI could become a major national influence on or agency for the certification of vocational teachers. Such a development could, of course, generate many benefits: (1) vocational competency testing research, test development, test administration and scoring activities could become more cost effective; (2) national norms and standards for various occupations could be developed and maintained; and (3) teacher mobility across states could be facilitated.

Another issue that deserves consideration when implementing competency testing for vocational teachers is that of achieving an appropriate balance between academic skills, pedagogical skills and professional knowledge, and occupational skills. Raising basic skills test requirements for vocational teachers could discourage competent craftsmen and technicians from high school teaching, push them out of the teacher profession altogether, or push them toward teaching in the private sector or at the public postsecondary level where certification and competency testing are presently not major issues or concerns. Moreover, it has been well evidenced by this study and others that minority teachers are underrepresented in the teaching profession and that a disproportionate number of minority candidates are failing tests of certification. The full impact of this state of affairs is still unknown. However, a newly released report by the U.S. Department of Education's Office of

Educational Research and Improvement--OERI (1987), looking at the impact of the teacher testing phenomenon upon minority group members, finds that "there has been a drop in the supply of talented, well-educated minority teachers and this is occurring at a time when there is an increasing need for black, Hispanic and Asian-American classroom instructors" (*Teacher Education Reports* 10 September 1987, p. 5). Consequently, policymakers need to assess the full societal, cultural, and political impact of teacher competency testing before its full-blown implementation.

On the other hand, of course, one cannot lose sight of the fact that in today's workplace, where technology is expanding at an exponential rate, developing vocational education students' basic skills has become as important as developing their occupational skills. Therefore, the concept of integrating or infusing basic skills preparation into vocational education is gaining more acceptance. In order to achieve this objective, vocational teachers with sound basic skills preparation will be needed. Consequently, basic skills as well as occupational competency testing designed to ensure that prospective vocational teachers can meet these challenges is highly desirable.

A critical concern closely related to the competency testing issue is the growing support for the requirement that all public school teachers have a 4-year liberal arts degree with a subject-matter major before entering a teacher preparation program. "This requirement, which has been advocated strongly by two major reform groups in teacher education (the Carnegie Forum on Teaching and the Holmes Group) is favored by 72 percent of the public. Only 17 percent oppose it" (Gallup and Clark 1987, p. 27). Moreover, a recent poll of 1,513 adults and 202 top executives from 1,000 of the country's leading corporations conducted for the Carnegie Forum on Education and the Economy by Louis Harris and Associates, revealed that "nearly 80 percent of the public and 68 percent of the business executives favored the forum's recommendation that teachers obtain a 4-year college degree in the subject they plan to teach" (*Education Daily* 27 August 1986, p. 2). Also, according to the survey, most of the adults and top executives "believe teachers should be required to demonstrate full command of the subject they teach and the ability to communicate that knowledge to students (*ibid.*).

Two conclusions seem to be important. First, although it would seem to be highly desirable for all teachers, including public school vocational teachers, to have a 4-year liberal arts degree, this would not appear to be sufficient for vocational teachers to acquire "full command of the subject they will teach." High levels of occupational competence probably are best acquired through years of direct, on-the-job work experience, which is a traditional and continuing requirement for vocational teacher certification. Thus, whether or not they teach occupations that require less than a baccalaureate degree, in order to relate effectively with their academic colleagues and to meet increased public expectations and standards, all vocational teachers, especially at the secondary-school level, will increasingly need to acquire 4-year baccalaureate degrees. It would seem that the traditional expectation and route into vocational teaching, including the combination of a 4-year baccalaureate degree *with a balanced emphasis on teaching and a liberal education* and 3-6 years of related trade experience, should enable vocational teachers to develop the skills and knowledge in the three major areas necessary for teaching--the basic skills, professional



knowledge and pedagogical skills, and subject-matter specialty skills and knowledge.

Second, acquiring a liberal arts degree with a major in the subject they plan to teach is not likely to be sufficient preparation for academic teachers to "demonstrate full command of the subject they teach and the ability to communicate that knowledge to students." Beyond the requirement for a liberal arts degree and pedagogical expertise, it seems essential that state certification requirements, as well as the major teacher reform groups, recognize the need for all teachers, especially academic teachers, to acquire significant amounts of practical, on-the-job work experience in or related to their academic discipline. It seems that almost 70 years of experience in public vocational education and recent experiments, primarily in New Jersey, with alternative routes into teaching have shown that this is a promising way to eventually reduce some of the abstractness and lack of relevance of much of current academic teaching and its detrimental effects on students.

APPENDIX A

LIST OF TEACHER EDUCATION INSTITUTIONS

New England

University of Massachusetts<sup>#</sup>  
Westfield State College  
University of Vermont<sup>#</sup>  
Keene State College

Mid Atlantic

Penn State University  
California University of  
Pennsylvania  
Temple University<sup>#</sup>  
University of Delaware<sup>#</sup>

Great Lakes

Indiana University-Bloomington  
Indiana University-Indianapolis  
Ohio State University<sup>\*#</sup>  
Central State University  
Ohio Northern University  
University of Akron  
University of Toledo  
Kent State University<sup>#</sup>  
Wilmington College  
Bowling Green State University  
University of Wisconsin<sup>#</sup>  
University of Wisconsin-River Falls  
University of Wisconsin-Platteville  
University of Wisconsin-Stout

Plains

Southwest Missouri State University  
Missouri Southern State College  
Northwest Missouri State University  
Central Missouri State University  
The School of the Ozarks  
Emporia State University  
Kansas State University<sup>#</sup>  
Pittsburg State University  
McPherson College  
Concordia Teachers College  
Chadron State College  
Kearney State College  
Peru State College

Southeast

Mississippi State University<sup>#</sup>  
University of Southern Mississippi  
University of Mississippi<sup>#</sup>  
North Carolina State University  
North Carolina A&T State University  
Western Carolina University  
North Carolina Central University<sup>\*</sup>  
Appalachian State University  
University of Tennessee<sup>\*#</sup>  
Tennessee Technological University  
Memphis State University  
East Tennessee State University

Southwest

Arizona State University<sup>#</sup>  
University of Houston<sup>#</sup>  
Sam Houston State University  
Corpus Christi State University  
Southwest Texas State University  
Texas A&M University<sup>#</sup>  
New Mexico State University<sup>#</sup>  
New Mexico Highlands University  
University of New Mexico<sup>#</sup>

Rocky Mountains

Northern Montana College  
Colorado State University<sup>\*#</sup>  
University of Northern Colorado  
University of Wyoming<sup>\*#</sup>

Far West

UCLA - Education Extension  
San Jose State University  
California Polytechnic State  
University  
Eastern Washington University  
University of Washington<sup>#</sup>  
Central Washington University  
Washington State University<sup>#</sup>  
Walla Walla College  
Oregon State University<sup>\*</sup>

<sup>#</sup>Denotes members of the Holmes Group, Inc. (N=20)

<sup>\*</sup>Denotes members of the University Council for Vocational Education (N=6)

APPENDIX B

LETTER ACCOMPANYING ORIGINAL MAILING OF BEGINNING TEACHER QUESTIONNAIRE



The Ohio State University



THE NATIONAL CENTER  
FOR RESEARCH IN VOCATIONAL EDUCATION

October, 1986

1960 Kenny Road  
Columbus, Ohio 43210-1090

Phone: 614-486-3655  
Cable: CTVOCEDOSU/Columbus, Ohio

Dear Colleague:

As someone who has recently entered the teaching profession, you know how exciting and rewarding and yet how difficult and demanding the first year of teaching can be. While it is one of the most critical periods in the life of a teacher, for the most part, little is known about the problems and needs of teachers during this induction year. As a part of a grant from the U.S. Department of Education, the National Center for Research in Vocational Education is conducting a nationwide study to determine the preservice and inservice needs of beginning vocational teachers in two general areas, building students' basic skills and teaching students with special needs. Information from beginning vocational teachers, teacher educators, and administrators/mentors in the schools where the beginning teachers are employed is being sought through a mail survey.

Twenty-four states have been randomly selected for the study, and your state is a part of that sample. We are sending a questionnaire to each vocational teacher in your state who began teaching during the 1985-86 school year. Please complete yours as soon as possible and return it in the envelope provided.

In addition, you will find a packet of materials for administrators. Please write your name on the Administrator Survey, and give the entire packet to the person you think had the greatest opportunity to work with you, listen to you, and/or observe you during your first year of teaching. This could be a principal, department head, assigned mentor, or district supervisor. If you have any questions about this questionnaire or our study, please contact me or Robert Cordon at 800-848-4815 (toll free) or 614-486-3655 in Ohio.

All the information that we receive from this study will remain confidential. It will not be used to evaluate you or your school, and will not affect your professional future in any way. The results will provide essential information for planning, designing, developing, and implementing preservice and inservice training programs for vocational teachers. We greatly appreciate your support in this endeavor.

Sincerely,

A handwritten signature in cursive script that reads "Frank C. Pratzner".

Frank C. Pratzner  
Senior Research Specialist

tlg

Enclosures (3)

APPENDIX C

AACTE LETTER OF ENDORSEMENT ACCOMPANYING ORIGINAL MAILING



**AMERICAN ASSOCIATION OF COLLEGES FOR TEACHER EDUCATION**  
*One Dupont Circle, Washington, D.C. 20036 (202) 293-2450*

*Office of the Executive Director*

April, 1986

Dear Colleague:

The American Association of Colleges for Teacher Education (AACTE) supports the efforts of the National Center for Research in Vocational Education in examining the extent to which vocational teachers have been, need to be, and can be prepared to enhance and reinforce basic skills in the vocational curriculum, and their preparation to teach special needs students. The findings of this study should provide much needed information for vocational teacher educators as well as for teacher education policymakers at state and local levels.

The AACTE recognizes the need to continually monitor the effectiveness and relevance of our teacher preparation programs. In addition to the individual efforts made by many of our member institutions on an ongoing basis, periodic assessment of groups of teacher preparation programs is relevant for assessing the impact of various national reform movements.

I encourage you to support this work through your active participation in the data collection effort.

Sincerely,

A handwritten signature in cursive script that reads "David Imig".

David Imig  
Executive Director  
The American Association of Colleges  
for Teacher Education

/lmc

APPENDIX D

BEGINNING VOCATIONAL TEACHER QUESTIONNAIRE



The Ohio State University



THE NATIONAL CENTER  
FOR RESEARCH IN VOCATIONAL EDUCATION

1960 Kenny Road  
Columbus, Ohio 43210-1090

BEGINNING VOCATIONAL  
TEACHER EDUCATION STUDY

Vocational Teacher Survey

Name \_\_\_\_\_ (Please Print)

State \_\_\_\_\_

This survey seeks information from you as a beginning vocational teacher. If your first year of teaching experience was prior to 1985-86—either in public schools or in other institutions—YOU NEED NOT COMPLETE THE QUESTIONNAIRE. Please fill in your name above and return the blank questionnaire in the envelope provided. (This will prevent us from badgering you with followup letters!) THANK YOU FOR YOUR HELP.

If you began your first year of full-time vocational teaching in school year 1985-86, please fill in your name above, complete the remainder of the questionnaire, and return it as soon as possible in the post-paid envelope provided.

**Definitions:** Please refer to the following definitions as they are used in this questionnaire.

**Preservice:** Any coursework or educational experiences/activities that you engaged in prior to your first year of teaching. This might include student teaching experiences, coursework, etc.

**Inservice:** All educational experiences/activities (including college coursework) that you engaged in after beginning to teach, even though you may not have had a degree or previous preparation for teaching.

**Basic Skills:** Reading, listening, writing, speaking, math, employability.

**Special Needs Students:** Economically disadvantaged, handicapped, students in programs nontraditional for their sex, adults in retraining, single parents and displaced homemakers, Limited English Proficient (LEP) students, incarcerated individuals.

**I. GENERAL INFORMATION: 1ST YEAR TEACHING**

1. Do you think that the preparation of vocational teachers for teaching basic skills should be an integral part of their initial preparation? Please circle.

- 1 YES
- 2 NO

2. Do you think that the preparation of vocational teachers for teaching special needs students should be an integral part of their initial preparation? Please circle.

- 1 YES
- 2 NO

3. What is the name and address of the institution where you taught in 1985-86?

Name of School \_\_\_\_\_ Street or PO Box \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

4. Are you still teaching?

- 1 YES (Go to Question No. 5.)
- 2 NO (Go to Question No. 6.)

5. Are you teaching at the same institution as last year? Please circle.

- 1 YES
- 2 NO

6. In what institution did you teach in school year 1985-86?

- |   |  |
|---|--|
| 1 Jun. School                                   | 7 Correctional Facility                    |
| 2 Comprehensive High School                     | 8 Military                                 |
| 3 Area Vocational School-Secondary              | 9 Business/Industry:<br>Specify area _____ |
| 4 Vocational School-Postsecondary               |  |
| 5 Specialty Vocational School-Secondary         |  |
| 6 Specialty Vocational School-<br>Postsecondary | 10 Other (Specify) _____                   |

7. Is this a public or private institution? Please circle.

- 1 PUBLIC
- 2 PRIVATE

8. During your first year of teaching, how many times did a supervisor observe your teaching? Please circle.

- |         |                       |
|---------|-----------------------|
| 1 ONCE  | 3 THREE OF FOUR TIMES |
| 2 TWICE | 4 FIVE OR MORE TIMES  |
|         | 9 NEVER               |

9. How many times did that person confer with you regarding your teaching performance, problems or needs you may have had, or inservice training needs and opportunities? Please circle for each.

	Once	Twice	Three or Four Times	Five or More Times	Never
Teaching performance?	1	2	3	4	9
Work-related problems?	1	2	3	4	9
Inservice training needs?	1	2	3	4	9
Inservice training opportunities?	1	2	3	4	9

10. In which of the following vocational service areas are you certified to teach, and in which did you actually teach in 1985-86? Please circle in both columns.

**CERTIFIED**

**TAUGHT, 1985-86**

1	Agricultural Education	1
2	Marketing & Distributive Education	2
3	Health Occupations Education	3
4	Consumer and Homemaking Education	4
5	Occupational Home Economics Education	5
6	Business & Office Occupations Education (e.g., typing, shorthand, etc.)	6
7	Trade and Industrial Occupations Education	7
8	Technical Occupations Education	8
9	Industrial Arts (Purpose: General Education)	9
10	Special Education	10
11	Other (Specify) _____	11
12	No Certification	12

11. In addition to specific occupational skills, which four of the following do you emphasize most in your teaching? Circle the four that you emphasize most.

- 1 Basic Skills (e.g., reading, basic math, writing, speaking)
- 2 Advanced Academic Skills (e.g., chemistry, foreign language, advanced math)
- 3 Citizenship (e.g., voting rights and privileges, civic responsibilities)
- 4 Personal Growth and Fulfillment (e.g., self-esteem, improved self-concept)
- 5 Good Work Habits and Self-discipline (e.g., punctuality)
- 6 Human Relations Skills (e.g., getting along with others, cultural understanding)
- 7 Career Development Skills (e.g., occupational information or how coursework relates to future employment)
- 8 Other (please specify) \_\_\_\_\_

## II. FIRST YEAR EXPERIENCES: SPECIAL NEEDS STUDENTS

Questions 12-27 refer to your experience with special needs students during your first year of teaching.

During a typical week, how much of your instructional time in vocational courses was spent with groups that included special needs students? Since individuals often belong to more than one of these categories, you may count students more than once.

### TEACHING TIME

- 1 = One hour
- 2 = 2-3 hours
- 3 = 4-5 hours
- 4 = Over 5 hours
- 9 = None

	Teaching Time				
	1	2	3	4	9
12. Economically disadvantaged?	1	2	3	4	9
13. Handicapped?	1	2	3	4	9
14. Students in programs nontraditional for their sex?	1	2	3	4	9
15. Adults in retraining?	1	2	3	4	9
16. Single parents and displaced homemakers?	1	2	3	4	9
17. Limited English Proficient (LEP) students?	1	2	3	4	9
18. Incarcerated?	1	2	3	4	9

During the past year, approximately what percentage of your students belonged to each of the following special needs groups? Please circle for each group.

	1 Don't Know	1% To 20%	21% To 40%	41% To 60%	61% To 80%	81% To 100%	None
19. Economically disadvantaged?	1	2	3	4	5	6	9
20. Handicapped?	1	2	3	4	5	6	9
21. Students in programs nontraditional for their sex?	1	2	3	4	5	6	9
22. Adult in retraining ?	1	2	3	4	5	6	9
23. Single parents & displaced homemakers?	1	2	3	4	5	6	9
24. Limited English Proficient (LEP) students?	1	2	3	4	5	6	9
25. Incarcerated?	1	2	3	4	5	6	9



26. How many students did you teach last year?

\_\_\_\_\_ TOTAL STUDENTS, 1985-86  
\_\_\_\_\_ SPECIAL NEEDS STUDENTS, 1985-86

27. In your vocational classes, are special needs students mainstreamed or grouped separately? Please circle.

- 1 MAINSTREAMED
- 2 SOME MAINSTREAMED, SOME SEPARATE
- 3 SEPARATED

### III. FIRST YEAR EXPERIENCES: BASIC SKILLS

28. During your first year of teaching, did you teach basic skills in your vocational classes? Please circle.

- 1 YES
- 2 NO

If you answered NO to question 28, go directly to Question 35.

Questions 29-34 refer to your experience teaching basic skills during your first year of teaching. During a typical week, how much of your teaching time in vocational courses was spent improving and reinforcing students' basic skills? Please circle.

#### TEACHING TIME

- 1 = 1 hour
- 2 = 2-3 hours
- 3 = 4-5 hours
- 4 = Over 5 hours
- 9 = None

	Teaching Time				
29. Reading skills?	1	2	3	4	9
30. Speaking skills?	1	2	3	4	9
31. Writing skills?	1	2	3	4	9
32. Listening skills?	1	2	3	4	9
33. Mathematics skills?	1	2	3	4	9
34. Employability skills?	1	2	3	4	9

#### IV. PREPARATION FOR SPECIAL NEEDS STUDENTS AND BASIC SKILLS INSTRUCTION

Questions 35-42 ask you to consider working with special needs students. Questions 43-48 refer to teaching basic skills. For each of the following, indicate how important you think it is to develop these skills, and the level of skill you have achieved.

##### IMPORTANCE

- 1 = Not important
- 2 = Somewhat important
- 3 = Quite important
- 4 = Extremely important

##### SKILL LEVEL

- 1 = Cannot do
- 2 = Cannot do very well
- 3 = Can do fairly well
- 4 = Can do well

<u>Importance</u>						<u>Skill Level</u>			
35.	1	2	3	4	Working with and teaching disadvantaged students?	1	2	3	4
36.	1	2	3	4	Working with and teaching handicapped students?	1	2	3	4
37.	1	2	3	4	Working with and teaching Limited English Proficient (LEP) students?	1	2	3	4
38.	1	2	3	4	Working with and teaching students in programs nontraditional for their sex?	1	2	3	4
39.	1	2	3	4	Working with and teaching adults in retraining?	1	2	3	4
40.	1	2	3	4	Working with and teaching single parents and displaced homemakers?	1	2	3	4
41.	1	2	3	4	Working with and teaching incarcerated individuals?	1	2	3	4
42.	1	2	3	4	Working with and teaching dropout-prone students?	1	2	3	4
43.	1	2	3	4	Improving and reinforcing writing skills in vocational programs/contexts?	1	2	3	4
44.	1	2	3	4	Improving and reinforcing speaking skills in vocational programs/contexts?	1	2	3	4
45.	1	2	3	4	Improving and reinforcing reading skills in vocational programs/contexts?	1	2	3	4
46.	1	2	3	4	Improving and reinforcing listening skills in vocational programs/contexts?	1	2	3	4
47.	1	2	3	4	Improving reinforcing mathematics skills in vocational programs/contexts?	1	2	3	4
48.	1	2	3	4	Improving and reinforcing employability skills in vocational programs/contexts?	1	2	3	4

Questions 49-63 concern your teacher education program. In your preservice program, approximately how many courses did you take that dealt entirely or in part with preparing you to teach each of the following?

	COURSES TAKEN					
	Entire Courses			Topic in Course		
	1	2 or More	0	1	2 or More	0
49. Working with and teaching disadvantaged students?	1	2	9	1	2	9
50. Working with and teaching handicapped students?	1	2	9	1	2	9
51. Working with and teaching Limited English Proficient students (LEP)?	1	2	9	1	2	9
52. Working with and teaching students in programs nontraditional for their sex?	1	2	9	1	2	9
53. Working with and teaching adults in retraining?	1	2	9	1	2	9
54. Working with and teaching single parents or displaced homemakers?	1	2	9	1	2	9
55. Working with and teaching incarcerated individuals?	1	2	9	1	2	9
56. Working with and teaching dropout-prone students?	1	2	9	1	2	9
57. Improving and reinforcing writing skills in vocational programs/context?	1	2	9	1	2	9
58. Improving and reinforcing speaking skills in vocational programs/context?	1	2	9	1	2	9
59. Improving and reinforcing reading skills in vocational programs/context?	1	2	9	1	2	9
60. Improving and reinforcing listening skills in vocational programs/context?	1	2	9	1	2	9
61. Improving and reinforcing mathematics skills in vocational programs/context?	1	2	9	1	2	9
62. Improving and reinforcing employability skills in vocational programs/context?	1	2	9	1	2	9

63. How many of the courses referred to in questions 49-62 were required or elective?

\_\_\_\_\_ NUMBER OF REQUIRED COURSES  
 \_\_\_\_\_ NUMBER OF ELECTIVE COURSES

Questions 64-86 list selected skills identified as important to serve special needs students effectively. Please rate the training you have had in your preservice preparation for each item listed. Also, please rate your skill level for each item listed.

YOUR TRAINING

- 1 = Not much
- 2 = Some
- 3 = A lot
- 9 = None

YOUR SKILL LEVEL

- 1 = Cannot do
- 2 = Cannot do very well
- 3 = Can do fairly well
- 4 = Can do well

					GENERAL INSTRUCTIONAL SKILLS									
					Your ability to:									
					Training					Skill Level				
						1	2	3	9		1	2	3	4
64.	1	2	3	9	Use methods of instruction which complement your students' learning styles?	1	2	3	4		1	2	3	4
65.	1	2	3	9	Help your students improve their ability to interact effectively with other people?	1	2	3	9		1	2	3	4
66.	1	2	3	9	Establish a classroom climate which stimulates learning?	1	2	3	9		1	2	3	4
67.	1	2	3	9	Identify physical changes needed in your classroom/laboratory to accommodate students' unique instructional needs?	1	2	3	9		1	2	3	4
68.	1	2	3	9	Adapt your instructional methods and materials as required for students with Individualized Education Programs (IEPs)?	1	2	3	9		1	2	3	4
69.	1	2	3	9	Use your school's support services (reading and math specialists, counselors, interpreters, etc.) to help you instruct your students?	1	2	3	9		1	2	3	4
70.	1	2	3	9	Use your students' parents or guardians to supplement your instructional efforts?	1	2	3	9		1	2	3	4
71.	1	2	3	9	Use community resources to supplement your instructional efforts?	1	2	3	9		1	2	3	4
72.	1	2	3	9	Comply with special needs-related laws and regulations?	1	2	3	9		1	2	3	4
73.	1	2	3	9	Identify the least restrictive environment for special needs students?	1	2	3	9		1	2	3	4

YOUR TRAINING

- 1 = Not much
- 2 = Some
- 3 = A lot
- 9 = None

YOUR SKILL LEVEL

- 1 = Cannot do
- 2 = Cannot do very well
- 3 = Can do fairly well
- 4 = Can do well

					SPECIFIC INSTRUCTIONAL SKILLS				
Training						Skill Level			
74.	1	2	3	9	Provide hands-on trial and error experiences?	1	2	3	4
75.	1	2	3	9	Use charts, pictures, graphs, and other visual materials?	1	2	3	4
76.	1	2	3	9	Use spoken and written communications to provide effective instruction?	1	2	3	4
77.	1	2	3	9	Pace instruction to match students' ability to learn?	1	2	3	4
78.	1	2	3	9	Match instruction to students' readiness (ability and prior training) to learn?	1	2	3	4
79.	1	2	3	9	Organize vocational topics into meaningful units or "clusters" to maximize students' opportunity to learn?	1	2	3	4
80.	1	2	3	9	Select appropriate sequences for instructional activities?	1	2	3	4
81.	1	2	3	9	Establish goals and objectives for each of your students based on a diagnosis of their learning strengths and weaknesses?	1	2	3	4
82.	1	2	3	9	Determine how often students need to practice the new vocational skills they have learned?	1	2	3	4
83.	1	2	3	9	Reinforce or reward students for achieving goals or desired behavior?	1	2	3	4
84.	1	2	3	9	Inform students of how well they are performing so they know where improvement is needed?	1	2	3	4
85.	1	2	3	9	Interact with parents of special needs students during planning and/or placement meetings?	1	2	3	4
86.	1	2	3	9	Interact with professionals during planning and/or placement meetings?	1	2	3	4



## V. INSERVICE EDUCATION

Questions 98-111 concern your inservice activities during your first year of teaching. How many total hours of inservice activities (e.g., workshops, field site observations, coursework, curriculum redesign) did you complete in each of the following general areas during your first year of teaching? Please circle for each.

HOURS OF INSERVICE

1 = 1-3 hours	4 = More than 10 hours
2 = 4-6 hours	9 = None
3 = 7-9 hours	

Hours of Inservice
--------------------

- | 98. Working with and teaching disadvantaged students?                                | 1 | 2 | 3 | 4 | 9 |
|--|---|---|---|---|---|
| 99. Working with and teaching handicapped students?                                  | 1 | 2 | 3 | 4 | 9 |
| 100. Working with and teaching Limited English Proficient (LEP) students?            | 1 | 2 | 3 | 4 | 9 |
| 101. Working with and teaching students in programs non-traditional for their sex?   | 1 | 2 | 3 | 4 | 9 |
| 102. Working with and teaching adults in retraining?                                 | 1 | 2 | 3 | 4 | 9 |
| 103. Working with and teaching single parents and displaced homemakers?              | 1 | 2 | 3 | 4 | 9 |
| 104. Working with and teaching incarcerated individuals?                             | 1 | 2 | 3 | 4 | 9 |
| 105. Working with and teaching dropout-prone individuals?                            | 1 | 2 | 3 | 4 | 9 |
| 106. Improving and reinforcing writing skills in vocational programs/contexts?       | 1 | 2 | 3 | 4 | 9 |
| 107. Improving and reinforcing speaking skills in vocational programs/contexts?      | 1 | 2 | 3 | 4 | 9 |
| 108. Improving and reinforcing reading skills in vocational programs/contexts?       | 1 | 2 | 3 | 4 | 9 |
| 109. Improving and reinforcing listening skills in vocational programs/contexts?     | 1 | 2 | 3 | 4 | 9 |
| 110. Improving and reinforcing mathematics skills in vocational programs/contexts?   | 1 | 2 | 3 | 4 | 9 |
| 111. Improving and reinforcing employability skills in vocational programs/contexts? | 1 | 2 | 3 | 4 | 9 |

Questions 112-121 refer to potential inservice providers. How would you rate each of the following persons or groups who could provide inservice activities in your school related to basic skills and special needs students? Please circle for each.

**DESIRABILITY**

- 1 = Not desirable
- 2 = Desirable
- 3 = Highly desirable
- 9 = No experience

INSERVICE PROVIDER	Desirability			
	1	2	3	9
112. Teachers who have practical expertise in effective instructional methods?	1	2	3	9
113. District office personnel with expertise in effective instructional methods?	1	2	3	9
114. Staff of professional education organizations?	1	2	3	9
115. University faculty from departments of vocational education?	1	2	3	9
116. University faculty from departments of special education?	1	2	3	9
117. University faculty with experience in BOTH vocational and special education?	1	2	3	9
118. Personnel from state departments of education?	1	2	3	9
119. Personnel from county departments of education?	1	2	3	9
120. Training experts from business or industry?	1	2	3	9
121. Others (please specify) _____	1	2	3	9



Questions 122-137 concern inservice strategies and approaches. How effective has each of the following been in strengthening your skills to work with special populations and to provide basic skills instructions. Please circle one for each.

EFFECTIVENESS

- 1 = Not effective
- 2 = Somewhat effective
- 3 = Very effective
- 9 = No experience

	Effectiveness			
	1	2	3	9
122. First-year teacher support team—including mentor, administrator, vocational and/or area specialist?	1	2	3	9
123. Advice from instructional consultants or specialists?	1	2	3	9
124. Individualized teacher training materials (i.e., films, workbooks, computer-assisted learning)?	1	2	3	9
125. Observing programs and/or teachers who have successfully served special needs students?	1	2	3	9
126. Workshops (or seminars) for small groups of teachers?	1	2	3	9
127. Workshops (or seminars) for all teachers?	1	2	3	9
128. On-the-job experiences (internships) in programs successfully educating special needs students?	1	2	3	9
129. Team teaching?	1	2	3	9
130. Working with academic and/or other vocational and/or special needs instructors to redesign curriculum to better meet the students' needs and educational objectives?	1	2	3	9
131. Use of teacher aides who have background training in special needs or in one or more of the basic skills?	1	2	3	9
132. Study groups?	1	2	3	9
133. Access to resource center that provides literature/materials?	1	2	3	9
134. Providing training and computer facilities to teachers to assist them in revising curriculum, assessing students' needs, etc.?	1	2	3	9
135. Courses taken at a college or university that relate directly to my identified teaching needs?	1	2	3	9
136. Peer coaching or tutoring?	1	2	3	9
137. Other? (specify) _____	1	2	3	9

Questions 138-143 concern the best time for inservice training. How do you rate the desirability of the following times? Circle for each.

	Not Desirable	Desirable	Highly Desirable
138. "Professional" days (days when teachers are released from teaching duties to participate in professional development activities)?	1	2	3
139. Before school—mornings?	1	2	3
140. After school—afternoons?	1	2	3
141. After school—evenings?	1	2	3
142. Weekends?	1	2	3
143. Summer—weekdays?	1	2	3

#### VI. GENERAL REACTIONS AND OTHER INFORMATION

Questions 144-155 concern various experiences in preparing you to teach special needs students and basic skills. Rate each one in terms of usefulness.

#### USEFULNESS

- 1 = Not useful.
- 2 = Somewhat useful
- 3 = Very useful.
- 9 = No experience

#### SPECIAL NEEDS

	Usefulness			
	1	2	3	9
144. Preservice courses in education?				
145. Preservice courses in areas other than education?				
146. Student teaching?				
147. Formal inservice training (e.g., workshops, seminars)?				
148. Informal training (e.g., observation, group discussion)?				
149. Other (e.g., volunteer work, personal contact with special needs individuals)? Please specify: _____				

USEFULNESS

- 1 = Not useful
- 2 = Somewhat useful
- 3 = Very useful
- 9 = No experience

**BASIC SKILLS**

Usefulness			
------------	--	--	--

- |   |   |   |   |   |
|---|---|---|---|---|
| 150. Preservice courses in education?                         | 1 | 2 | 3 | 9 |
| 151. Preservice courses in areas other than education?        | 1 | 2 | 3 | 9 |
| 152. Student teaching?  | 1 | 2 | 3 | 9 |
| 153. Formal inservice training (e.g., workshops, seminars)?   | 1 | 2 | 3 | 9 |
| 154. Informal training (e.g., observation, group discussion)? | 1 | 2 | 3 | 9 |
| 155. Other? (specify) _____                                   | 1 | 2 | 3 | 9 |

156. What was the ONE greatest problem or difficulty you had improving and reinforcing students' basic skills during your first year of teaching? Please describe briefly.

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157. What ONE change could have most improved your vocational teacher education program to prepare you better to improve and reinforce students' basic skills?

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158. What was the ONE greatest problem or difficulty you had working with and teaching special needs students during your first year of teaching? Please describe briefly. If you had no experience with special needs students last year, go to Question 160.

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159. What ONE change could have most improved your vocational teacher education program to prepare you better to work with and teach special needs students?

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160. During your first year as a teacher, what ONE thing did you like most about teaching?

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During your first year as a teacher, how satisfied were you with the following aspects of teaching? Rate each one.

SATISFACTION

- 1 = Not satisfied at all
- 2 = Somewhat satisfied
- 3 = Very satisfied

	Satisfaction		
161. Salary?	1	2	3
162. Prestige?	1	2	3
163. Administrative support?	1	2	3
164. Parental support?	1	2	3
165. Opportunity for input into school decisions?	1	2	3
166. Facilities?	1	2	3
167. Class size?	1	2	3
168. Time for preparation?	1	2	3
169. Discipline?	1	2	3
170. Opportunity for advancement?	1	2	3
171. Other? (please specify)	1	2	3

172. At this stage, how long do you anticipate remaining in teaching? Circle one.

- 1 ONE YEAR
- 2 TWO TO FIVE YEARS
- 3 SIX TO TEN YEARS
- 4 INDEFINITELY

Questions 173-178 refer to academic preparation in areas other than education. How many college courses have you taken and received credit for in each of the following areas? (A course is one that meets 2-5 classroom hours per week during one semester or quarter.) Please circle for each.

	One	Two	Three	Four	Five or more	None
173. Communications, e.g., English, language arts, speech?	1	2	3	4	5	9
174. Mathematics, e.g., algebra, geometry, statistics?	1	2	3	4	5	9
175. Humanities and Fine Arts, e.g., literature, philosophy, music?	1	2	3	4	5	6
176. Science, e.g., biology, geology?	1	2	3	4	5	9
177. Social Science, e.g., psychology, economics?	1	2	3	4	5	9
179. Computer skills, e.g., keyboarding, programming?	1	2	3	4	5	9

179. Were you required to take any of the following tests for entrance or completion of your preservice teacher education program? In each case mark yes or no, and if yes, please indicate your score.

	Entrance to . . .		Completion of . . .		SCORE			
	Teacher Education		Education		1st (low) Quar-	2nd Quar-	3rd Quar-	4th (high) Quar-
	Yes	No	Yes	No	tile	tile	tile	tile
American College Test (ACT)	1	2	1	2	1	2	3	4
Scholastic Aptitude Test (SAT)	1	2	1	2	1	2	3	4
Graduate Record Exam (GRE)	1	2	1	2	1	2	3	4
Pre-Professional Skills Test (P-PST)	1	2	1	2	1	2	3	4
College Outcome Measures Project Test (Comp-Test)	1	2	1	2	1	2	3	4
California Achievement Test (CAT)	1	2	1	2	1	2	3	4
California Basic Skills Test (C-Best)	1	2	1	2	1	2	3	4
NTE-Core Battery	1	2	1	2	1	2	3	4
NTE-Pedagogy	1	2	1	2	1	2	3	4
NTE-Professional Knowledge	1	2	1	2	1	2	3	4
NTE-General Knowledge	1	2	1	2	1	2	3	4
Teacher Occupational Competency Tests (TOCT)	1	2	1	2	1	2	3	4
Other (Specify) _____	1	2	1	2	1	2	3	4

180. For certification, were you required to take a state-mandated teacher competency examination in basic skills? Please circle and, if yes, provide the name of the test.

- |   |   | NAME OF TEST |
|---|---|--------------|
| 1 | NO.   |              |
| 2 | YES. I scored in the first (lowest) quartile.   | _____        |
| 3 | YES. I scored in the second quartile.           | _____        |
| 4 | YES. I scored in the third quartile.            | _____        |
| 5 | YES. I scored in the fourth (highest) quartile. | _____        |

181. For certification, were you required to take a state-mandated teacher examination in specific occupational skills? Please circle and, if yes, provide the name of the test.

- |   |   | NAME OF TEST |
|---|---|--------------|
| 1 | NO.   |              |
| 2 | YES. I scored in the first (lowest) quartile.   | _____        |
| 3 | YES. I scored in the second quartile.           | _____        |
| 4 | YES. I scored in the third quartile.            | _____        |
| 5 | YES. I scored in the fourth (highest) quartile. | _____        |

182. What is your age?

\_\_\_\_\_ YEARS

What is your sex?

1 FEMALE      2 MALE

183. What is your ethnic group? Circle one. (Optional)

- 1 AMERICAN INDIAN OR ALASKAN NATIVE
- 2 ASIAN AMERICAN OR PACIFIC ISLANDER
- 3 BLACK, NOT OF HISPANIC ORIGIN
- 4 HISPANIC
- 5 WHITE, NOT OF HISPANIC ORIGIN
- 6 OTHER (specify) \_\_\_\_\_

184. What is the highest level of education you have completed? Circle one and specify major and institution.

	MAJOR	INSTITUTION & STATE
1 High school diploma only	_____	_____
2 Some college—no degree	_____	_____
3 Associate degree (2 or more years)	_____	_____
4 Bachelor's degree	_____	_____
5 Bachelor's degree plus	_____	_____
6 Master's degree	_____	_____
7 Master's degree plus	_____	_____
8 Doctorate	_____	_____



APPENDIX E

LETTER ACCOMPANYING ORIGINAL MAILING OF ADMINISTRATOR/MENTOR QUESTIONNAIRE



The Ohio State University



October, 1986

1960 Kenny Road  
Columbus, Ohio 43210-1090

Phone: 614-486-3655  
Cable: CTVOCEDOSU/Columbus, Ohio

Dear Colleague:

Recent education reform proposals and legislative mandates have called for increasing the role that vocational education plays in building students' basic skills and providing education to students with special needs. As a part of a grant from the U.S. Department of Education, the National Center for Research in Vocational Education is conducting a nationwide study to determine the preservice and inservice needs of beginning vocational teachers in these two general areas. Information from beginning vocational teachers, teacher educators, and administrators/mentors in the schools where the beginning teachers are employed is being sought through a mail survey. The American Association of Colleges for Teacher Education (AACTE) has endorsed our study, and a letter to that effect from David Imig, Executive Director, is enclosed.

Twenty-four states have been randomly selected for the study, and your state is a part of that sample. We are sending a questionnaire to each vocational teacher in your state who began teaching during the 1985-86 school year. Each beginning teacher is being asked to give an Administrator survey packet to the one professional person who is most familiar with his/her teaching performance during the first year of teaching. You may receive a questionnaire from more than one teacher. Feel free to pass any of these surveys on to others who are also familiar with the beginning teacher's performance. This might be an assistant principal, department head, assigned mentor, or district supervisor. If you have any questions about this questionnaire or our study, please contact me or Robert Gordon at 800-848-4815 (toll free) or 614-486-3655 in Ohio.

All the information that you provide in this study will remain confidential. In order to assure the anonymity of individual respondents, institutions, and school districts, no data will be summarized below the state level. The results of this study will provide essential information for planning, designing, developing, and implementing preservice and inservice training programs for vocational teachers. We greatly appreciate your support in this endeavor.

Sincerely,

A handwritten signature in cursive script that reads 'Frank C. Pratzner'.

Frank C. Pratzner  
Senior Research Specialist

APPENDIX F

ADMINISTRATOR/MENTOR QUESTIONNAIRE



The Ohio State University



1960 Kenny Road  
Columbus, Ohio 43210-1090

**BEGINNING VOCATIONAL  
TEACHER EDUCATION STUDY**

**Administrator/Mentor Survey**

This survey seeks information from school administrators. Part A concerns your evaluation of inservice programs and your general reactions to the preparation of beginning vocational teachers. Part B seeks an assessment of the teaching performance of vocational teachers in your school/district who began teaching during the 1985-86 school year.

You should complete Part A only once, but we hope to have an individual assessment, Part B, for all teachers in our survey. We realize that you may receive this questionnaire from more than one teacher. Feel free to pass it along to the person most familiar with the beginning teacher's performance—an assistant principal, department head, assigned mentor, or district supervisor.

**Definitions:** Please refer to the following definitions as they are used in this questionnaire.

**Basic Skills:** Reading, listening, writing, speaking, math, employability.

**Special Needs Students:** Economically disadvantaged, handicapped, students in programs nontraditional for their sex, adults in retraining, single parents and displaced homemakers, Limited English Proficient (LEP) students, incarcerated individuals.

Name: (Please print) \_\_\_\_\_ Job Title \_\_\_\_\_ Sex  M  F

School Name \_\_\_\_\_

School Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Teacher's Name \_\_\_\_\_

## PART A

### I. INSERVICE PROGRAMS

Questions 1-16 concern inservice strategies and approaches. How effective has each of the following inservice strategies been in strengthening teachers' skills to work with special populations and to provide basic skills instructions? Please circle for each.

#### EFFECTIVENESS

- 1 = Not Effective
- 2 = Somewhat Effective
- 3 = Very Effective
- 9 = No Experience

	Effectiveness			
	1	2	3	9
1. First-year teacher support team—including mentor, administrator, vocational and/or area specialist?	1	2	3	9
2. Advice from instructional consultants or specialists?	1	2	3	9
3. Individualized teacher training materials (i.e., films, workbooks computer assisted learning)?	1	2	3	9
4. Observing programs and/or teachers who have successfully served special needs students?	1	2	3	9
5. Workshops (or seminars) for small groups of teachers?	1	2	3	9
6. Workshops (or seminars) for all teachers?	1	2	3	9
7. On-the-job experiences (internships) in programs successfully educating special needs students?	1	2	3	9
8. Team teaching?	1	2	3	9
9. Working with academic and/or other vocational and/or special needs instructors to redesign curriculum to better meet the students' needs and educational objectives?	1	2	3	9
10. Use of teacher aides who have background training in special needs/ one or more of the basic skills?	1	2	3	9
11. Study groups?	1	2	3	9
12. Access to resource center that provides literature/materials?	1	2	3	9
13. Providing training and computer facilities to teachers to assist them in revising curriculum, assessing students' needs, etc.?	1	2	3	9

**EFFECTIVENESS**

- 1 = Not Effective
- 2 = Somewhat Effective
- 3 = Very Effective
- 9 = No Experience

	Effectiveness			
14. Courses taken at a college or university that relate directly to the teacher's needs?	1	2	3	9
15. Peer coaching or tutoring?	1	2	3	9
16. Other? (specify) _____	1	2	3	9

Questions 17-26 refer to potential inservice providers. How would you rate each of the following persons or groups who could provide inservice activities in your school? Please circle for each.

**DESIRABILITY**

- 1 = Not desirable
- 2 = Desirable
- 3 = Highly Desirable
- 9 = No Experience

	Desirability			
17. Teachers who have practical expertise in effective instructional methods?	1	2	3	9
18. District office personnel with expertise in effective instructional methods?	1	2	3	9
19. Staff of professional education organizations?	1	2	3	9
20. University faculty from departments of vocational education?	1	2	3	9
21. University faculty from departments of special education?	1	2	3	9
22. University faculty with expertise in BOTH vocational and special education?	1	2	3	9
23. Personnel from state departments of education?	1	2	3	9
24. Personnel from county departments of education?	1	2	3	9
25. Training experts from business or industry?	1	2	3	9
26. Others? (Please specify) _____	1	2	3	9

**II. GENERAL REACTIONS**

27. Are beginning vocational teachers better, equally, or not as well prepared to teach basic skills as their counterparts 3 years ago? Please circle.

- 1 BETTER PREPARED
- 2 EQUALLY WELL PREPARED
- 3 NOT AS WELL PREPARED
- 9 I DON'T KNOW

28. What accounts for your answer to question 27?

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29. Are beginning vocational teachers better, equally, or not as well prepared to teach special needs students as their counterparts 3 years ago? Please circle.

- 1 BETTER PREPARED
- 2 EQUALLY WELL PREPARED
- 3 NOT AS WELL PREPARED
- 9 I DON'T KNOW

30. What accounts for your answer to question 29?

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Questions 31-42 concern various experiences in preparing teachers to teach special needs students and basic skills. Rate each one in terms of usefulness.

**USEFULNESS**

- 1 = Not Useful
- 2 = Somewhat Useful
- 3 = Very Useful
- 9 = No Experience

**SPECIAL NEEDS**

	Usefulness			
31. Preservice courses in education?	1	2	3	9
32. Preservice courses in areas other than education?	1	2	3	9
33. Student teaching?	1	2	3	9
34. Formal inservice training (e.g., workshops, seminars)?	1	2	3	9
35. Informal training (e.g., observation, group discussion)?	1	2	3	9
36. Other (e.g., volunteer work, personal contact with special needs individuals)? Please specify: _____	1	2	3	9

**BASIC SKILLS**

	Usefulness			
37. Preservice courses in education?	1	2	3	9
38. Preservice courses in areas other than education?	1	2	3	9
39. Student teaching?	1	2	3	9
40. Formal inservice training (e.g., workshops, seminars)?	1	2	3	9
41. Informal training (e.g., observation, group discussion)?	1	2	3	9
42. Other? (specify) _____	1	2	3	9

43. During the 1985-86 school year, how many of each of the following types of special needs students were enrolled in your school? How many of these students were enrolled in vocational education courses?

Types of Special Needs	Number in School	Number in Voc. Ed.
Economically disadvantaged	_____	_____
Handicapped	_____	_____
Students in programs nontraditional for their sex	_____	_____
Adults in retraining	_____	_____
Single parents and displaced homemakers	_____	_____
Limited English Proficient (LEP)	_____	_____
Incarcerated	_____	_____

THANK YOU FOR YOUR INPUT TO PART A OF THIS SURVEY. NOW PLEASE COMPLETE PART B WHICH FOCUSES ON TEACHER PERFORMANCE ASSESSMENT. AS POINTED OUT EARLIER, YOU MAY COMPLETE PART B YOURSELF OR HAVE IT COMPLETED BY OTHER INDIVIDUALS MOST FAMILIAR WITH THE PERFORMANCE OF YOUR TEACHER(S) INCLUDED IN OUR SURVEY.

**PART B**

**ASSESSMENT OF TEACHER PERFORMANCE**

1. What is your official working relationship with the teacher you are rating?

- 1 SUPERVISOR
- 2 PEER
- 3 COUNSELOR
- 4 MENTOR OR CONSULTING TEACHER OFFICIALLY ASSIGNED TO ASSIST THIS TEACHER WITH HIS/HER INDUCTION INTO TEACHING
- 5 OTHER (SPECIFY) \_\_\_\_\_

2. How many times last year did you formally or informally observe the teaching performance of the teacher you are assessing? Please circle in each case.

FORMAL ASSESSMENT

- 1 ONCE
- 2 TWICE
- 3 THREE OR FOUR TIMES
- 4 FIVE OR MORE TIMES
- 9 NEVER

INFORMAL ASSESSMENT

- 1 ONCE
- 2 TWICE
- 3 THREE OR FOUR TIMES
- 4 FIVE OR MORE TIMES
- 9 NEVER

3. How many times did you formally or informally confer with the teacher you are assessing regarding his/her teaching performance, problems or needs he/she may have had, or inservice training needs and opportunities? Please circle in each case.

CONFERENCE

- 1 = ONCE
- 2 = TWICE
- 3 = THREE TO FOUR TIMES
- 4 = FIVE OR MORE TIMES
- 9 = NEVER

Informal Conference				
---------------------	--	--	--	--

- |   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 9 |
| 1 | 2 | 3 | 4 | 9 |
| 1 | 2 | 3 | 4 | 9 |
| 1 | 2 | 3 | 4 | 9 |

- Teaching performance?
- Work-related problems?
- Inservice training needs?
- Inservice training opportunities?

Formal Conference				
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- |   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 9 |
| 1 | 2 | 3 | 4 | 9 |
| 1 | 2 | 3 | 4 | 9 |
| 1 | 2 | 3 | 4 | 9 |



Questions 4-11 concern teaching and working with various special needs students. Questions 12-17 consider teaching basic skills. Please rate the performance of the teacher you are evaluating in each case. Please circle.

	Does Not Do Well	Does This Fairly Well	Does This Well	I Don't Know
4. Working with and teaching disadvantaged students?	1	2	3	9
5. Working with and teaching handicapped students?	1	2	3	9
6. Working with and teaching Limited English Proficient (LEP) students?	1	2	3	9
7. Working with and teaching students in programs nontraditional for their sex?	1	2	3	9
8. Working with and teaching adults in retraining?	1	2	3	9
9. Working with and teaching single parents or displaced homemakers?	1	2	3	9
10. Working with and teaching incarcerated individuals?	1	2	3	9
11. Working with and teaching dropout-prone students?	1	2	3	9
<hr/>				
12. Improving and reinforcing writing skills in vocational programs/contexts?	1	2	3	9
13. Improving and reinforcing speaking skills in vocational programs/contexts?	1	2	3	9
14. Improving and reinforcing reading skills in vocational programs/contexts?	1	2	3	9
15. Improving and reinforcing listening skills in vocational programs/contexts?	1	2	3	9
16. Improving and reinforcing mathematics skills in vocational programs/contexts?	1	2	3	9
17. Improving and reinforcing employability skills in vocational programs/contexts?	1	2	3	9

Questions 18-40 list selected skills considered important to serve special needs students effectively. Please rate the skill level of the teacher you are evaluating in each category. Please circle.

**TEACHER'S SKILL LEVEL**

- 1 = Cannot Do
- 2 = Cannot Do Very Well
- 3 = Can Do Fairly Well
- 4 = Can Do Well
- 9 = I Don't Know

**GENERAL INSTRUCTIONAL SKILLS**

Ability to:	Skill Level				
18. Use methods of instruction which complement students' learning styles?	1	2	3	4	9
19. Help students improve their ability to interact effectively with other people?	1	2	3	4	9
20. Establish a classroom climate that stimulates learning?	1	2	3	4	9
21. Identify physical changes needed in classroom/ laboratory to accommodate students' unique instructional needs?	1	2	3	4	9
22. Adapt instructional methods and materials as required for students with Individualized Education Programs (IEPs)?	1	2	3	4	9
23. Use the school's support services (reading and math specialists, counselors, interpreters, etc.) to help meet students' instructional and emotional needs?	1	2	3	4	9
24. Involve students' parents or guardians to supplement instructional efforts?	1	2	3	4	9
25. Use community resources to supplement instruction?	1	2	3	4	9
26. Comply with special needs-related laws and regulations?	1	2	3	4	9
27. Identify the least restrictive environment for special needs students?	1	2	3	4	9

**TEACHER'S SKILL LEVEL**

- 1 = Cannot Do
- 2 = Cannot Do Very Well
- 3 = Can Do Fairly Well
- 4 = Can Do Well
- 9 = I Don't Know

**SPECIFIC INSTRUCTIONAL SKILLS**

Ability to:	Skill Level				
28. Provide hands-on trial and error experiences?	1	2	3	4	9
29. Use charts, pictures, graphs, and other visual materials?	1	2	3	4	9
30. Use spoken and written communications to provide effective instruction?	1	2	3	4	9
31. Pace instruction to match students' ability to learn?	1	2	3	4	9
32. Match instruction to students' readiness (ability and prior training) to learn?	1	2	3	4	9
33. Organize vocational topics into meaningful units or "clusters" to maximize students' opportunity to learn?	1	2	3	4	9
34. Select appropriate sequences for instructional activities?	1	2	3	4	9
35. Establish goals and objectives for each student based on a diagnosis of learning strengths and weaknesses?	1	2	3	4	9
36. Determine how often students need to practice the new vocational skills they have learned?	1	2	3	4	9
37. Reinforce or reward students for achieving goals or for desired behavior?	1	2	3	4	9
38. Inform students of how well they are performing so they know where improvement is needed?	1	2	3	4	9
39. Interact with parents of special needs students during planning and/or placement meetings?	1	2	3	4	9
40. Interact with professionals during planning and/or placement meetings?	1	2	3	4	9

Questions 41-51 list selected skills identified as important to improve and reinforce basic skills of students in vocational education classes. Please rate the skill level of the teacher you are evaluating for each item listed below. Please circle.

TEACHER'S SKILL LEVEL

- 1 = Cannot Do
- 2 = Cannot Do Very Well
- 3 = Can Do Fairly Well
- 4 = Can Do Well
- 9 = I Don't Know

TASKS	Skill Level				
	1	2	3	4	9
41. Determining the level of basic skills students need to learn in his/her classes?	1	2	3	4	9
42. Determining the level of basic skills students need to succeed in an entry-level job in his/her area?	1	2	3	4	9
43. Finding and using commercial standardized tests of students' basic skills?	1	2	3	4	9
44. Making and using his/her own tests of students' basic skills?	1	2	3	4	9
45. Interpreting the results of commercial standardized tests to assess students' needs in basic skills?	1	2	3	4	9
46. Finding and using materials and methods to help vocational students improve their basic skills?	1	2	3	4	9
47. Planning prescriptive teaching that will help students learn the basic skills they will need on the job?	1	2	3	4	9
48. Determining how readable the textbook and other class materials are in the program he/she teaches?	1	2	3	4	9
49. Finding out what levels of basic skills are needed for jobs in the area he/she teaches?	1	2	3	4	9
50. Teaching basic skills as an integral part of the vocational education program he/she teaches?	1	2	3	4	9
51. Motivating students' interest to learn basic skills through vocational education?	1	2	3	4	9

Questions 52-65 concern inservice activities. Estimate how many total hours of inservice activities (e.g., workshops, field site observations, coursework, and curriculum redesign) the teacher has completed in each of the following general areas during the first year of teaching.

	Estimated Hours				
	1-3	4-6	7-9	10 or More	None
52. Working with and teaching disadvantaged students?	1	2	3	4	9
53. Working with and teaching handicapped students?	1	2	3	4	9
54. Working with and teaching Limited English Proficient (LEP) students?	1	2	3	4	9
55. Working with and teaching students in programs nontraditional for their sex?	1	2	3	4	9
56. Working with and teaching adults in retraining?	1	2	3	4	9
57. Working with and teaching single parents and displaced homemakers?	1	2	3	4	9
58. Working with and teaching incarcerated individuals?	1	2	3	4	9
59. Working with and teaching dropout-prone students?	1	2	3	4	9
60. Improving and reinforcing writing skills in vocational programs/context?	1	2	3	4	9
61. Improving and reinforcing speaking skills in vocational programs/context?	1	2	3	4	9
62. Improving and reinforcing reading skills in vocational programs/context?	1	2	3	4	9
63. Improving and reinforcing listening skills in vocational programs/context?	1	2	3	4	9
64. Improving and reinforcing mathematics skills in vocational programs/context?	1	2	3	4	9
65. Improving and reinforcing employability skills in vocational programs/context?	1	2	3	4	9

THANK YOU VERY MUCH!

APPENDIX G

LETTER ACCOMPANYING ORIGINAL MAILING OF TEACHER EDUCATOR QUESTIONNAIRE



The Ohio State University



THE NATIONAL CENTER  
FOR RESEARCH IN VOCATIONAL EDUCATION

October, 1986

1960 Kenny Road  
Columbus, Ohio 43210-1090

Phone: 614-486-3655  
Cable: CTVOCEDOSU/Columbus, Ohio

Dear Colleague:

As you know, many groups, such as the Holmes Group, the Carnegie Foundation, the National Education Association (NEA) and others, are calling for vast reforms in teacher education. Vocational teacher education programs will be significantly affected by these sweeping changes, yet there is no comprehensive database to provide the vital information needed by decision makers. In an attempt to fill this gap, the National Center for Research in Vocational Education is conducting a nationwide study to determine the preservice and inservice needs of beginning vocational teachers. Information from beginning vocational teachers, teacher educators, and administrators/mentors in the schools where the beginning teachers are employed is being sought through a mail survey. The American Association of Colleges for Teacher Education (AACTE) has endorsed our study, and a letter to that effect from David Imig, AACTE Executive Director, is enclosed.

Twenty-four states have been randomly selected for the study, and Washington is a part of that sample. We are sending a questionnaire to each institution that prepares vocational teachers in your state. The questionnaire can be completed in a variety of ways. You may fill it out yourself, designate another individual to do so, or make it the responsibility of an appropriate group. Please complete it as soon as possible and return it in the pre-paid envelope. If you or your colleagues have any questions about this questionnaire or our study, please contact me or Robert Gordon at 800-848-4815 (toll free) or 614-486-3655 in Ohio.

All the information that you provide in this study will remain confidential. In order to assure the anonymity of individual respondents, institutions, and school districts, no data will be summarized below the state level. The results of this study will provide essential information for planning, designing, developing, and implementing preservice and inservice education programs for vocational teachers. We greatly appreciate your support in this endeavor.

Sincerely,

A handwritten signature in cursive script that reads 'Frank C. Pratzner'.

Frank C. Pratzner  
Senior Research Specialist

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tlg

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Enclosures (2)

APPENDIX H

TEACHER EDUCATOR QUESTIONNAIRE



The Ohio State University



THE NATIONAL CENTER  
FOR RESEARCH IN VOCATIONAL EDUCATION

1960 Kenny Road  
Columbus, Ohio 43210

BEGINNING VOCATIONAL TEACHER  
EDUCATION STUDY

Teacher Educator Survey

This survey seeks information from teacher educators. Information is being collected from all institutions that prepare vocational teachers in 24 randomly selected states. The questions deal with the teacher education program in general and with vocational teacher education specifically. Additionally, they focus on preparation to teach basic skills in vocational classes and to work with special needs students. Please complete as soon as possible and return in the pre-paid envelope.

Name of Institution (Please print) \_\_\_\_\_

Your name \_\_\_\_\_ Title \_\_\_\_\_

State \_\_\_\_\_

Definitions

**Basic Skills:** Reading, listening, writing, speaking, math, employability.

**Special Needs Students:** Economically disadvantaged, handicapped, students in programs non-traditional for their sex, adults in retraining, single parents and displaced homemakers, limited English proficient (LEP) students, incarcerated individuals.

**YOUR ASSISTANCE IN COMPLETING AND RETURNING THIS SURVEY AS SOON AS POSSIBLE IS CRITICAL. WE GREATLY APPRECIATE YOUR HELP. THANK YOU.**

**I. VOCATIONAL TEACHER EDUCATION GENERAL INFORMATION**

**INTRODUCTORY QUESTIONS**

1. Do you think that the preparation of vocational teachers for teaching basic skills should be an integral part of their preparation? Please circle.

- 1 YES
- 2 NO

2. Do you think that the preparation of vocational teachers for teaching special needs students should be an integral part of their preparation? Please circle.

- 1 YES
- 2 NO

Questions 3-6 refer to numbers of students and faculty involved in teacher education at your institution during the 1985-1986 school year. Please indicate numbers of full-time and part-time persons in each category.

- |   | FULL-TIME | PART-TIME |
|---|-----------|-----------|
| 3. What is the current total enrollment in teacher education? (Total including vocational education)  | _____     | _____     |
| 4. What is the current enrollment in preservice vocational teacher education? (All service areas)   | _____     | _____     |
| 5. How many education faculty members does your college or university have? (Total including vocational education)  | _____     | _____     |
| 6. How many vocational education faculty members are there campus-wide?   | _____     | _____     |
| 7. What are the current sources of funding to support preparing teachers to work with special needs groups? Please circle all that apply, and if possible, indicate level of support. |           |           |

- 1 FEDERAL
- 2 STATE
- 3 OTHER (SPECIFY) \_\_\_\_\_
- 4 NO SPECIAL FUNDING

**LEVEL OF SUPPORT**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

8. What are the sources of funding for preparing teachers to teach basic skills?

- 1 FEDERAL
- 2 STATE
- 3 OTHER (SPECIFY) \_\_\_\_\_
- 4 NO SPECIAL FUNDING

**LEVEL OF SUPPORT**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



9. What accreditation does your teacher education program have? Please circle for each.

	YES	NO
STATE	1	2
REGIONAL (PLEASE SPECIFY) _____	1	2
NATIONAL COUNCIL FOR ACCREDITATION OF TEACHER EDUCATION (NCATE)	1	2

10. When do students normally enter your teacher education program? Your vocational teacher education program? Please circle a number in both columns.

TEACHER EDUCATION		VOCATIONAL TEACHER EDUCATION
1	AT BEGINNING OF THE FRESHMAN YEAR	1
2	AT BEGINNING OF THE SOPHOMORE YEAR	2
3	AT BEGINNING OF THE JUNIOR YEAR	3
4	AT BEGINNING OF THE SENIOR YEAR	4
5	AT POST-BACCALAUREATE LEVEL	5

11. How many years does the average student take to complete the course requirements for your vocational teacher education program?

- 1 ONE YEAR
- 2 TWO YEARS
- 3 THREE YEARS
- 4 FOUR YEARS

Questions 12-22 concern specific program areas. For each of the following areas listed below, indicate whether your institution offers preservice teacher education. If yes, please indicate the number of individuals who graduated from this (preservice) program in the 1984-85 academic year. Please circle.

	YES	NO	NUMBER OF 1984-85 GRADUATES
12. Agricultural Education?	1	2	_____
13. Marketing and Distributive Education?	1	2	_____
14. Health Occupations Education?	1	2	_____
15. Consumer and Homemaking Education?	1	2	_____
16. Occupational Home Ec. Education?	1	2	_____
17. Office Occupation Education (e.g., typing, shorthand)?	1	2	_____
18. Other Business Education? Specify: _____	1	2	_____
19. Trade and Industry Education?	1	2	_____
20. Technical Occupations Education?	1	2	_____
21. Industrial Arts Education?	1	2	_____
22. Other Business Education?	1	2	_____
23. Does your institution offer courses in special needs education?			

- 1 YES
- 2 NO

24. Does your institution offer courses in teaching basic skills?

- 1 YES
- 2 NO

25. In 1985-86, how many of your vocational education faculty provided inservice education (not a regular course) on teaching basic skills or special needs students?

BASIC SKILLS: \_\_\_\_\_ FACULTY MEMBERS  
 SPECIAL NEEDS: \_\_\_\_\_ FACULTY MEMBERS

26. How many inservice activities or programs (courses, workshops, newsletters) does your institution offer each year to groups or individuals that are not a part of a regular degree program?

\_\_\_\_\_ ACTIVITIES AND PROGRAMS

## II. ENTRANCE REQUIREMENTS

Questions 27-46 relate to the entry requirements for preservice vocational teacher education at your institution. For each of the items, please respond as completely as possible.

Entry Requirement Measure	(a)		(b)	(c)		(d)
	Does your institution use this measure for selective admission to its vocational teacher education program? Please circle YES NO		What is the minimum acceptable standard?	Did your institution use this measure for selective admission when 1985 graduates entered? Please circle YES NO		If you answered YES in column (c), what was the minimum acceptable standard then?
27. High school diploma or its equivalent	1	2		1	2	
28. High school class rank	1	2	_____ rank	1	2	_____ rank
29. High school grade point average (gpa)	1	2	_____ gpa	1	2	_____ gpa
30. Cumulative undergraduate grade point average	1	2	_____ gpa	1	2	_____ gpa
31. Scholastic Aptitude Test scores (SAT)	1	2	_____ / _____ %ile / pts.	1	2	_____ / _____ %ile / pts.
32. American College Test scores (ACT)	1	2	_____ / _____ %ile / pts.	1	2	_____ / _____ %ile / pts.
33. California Achievement Test (CAT)	1	2	_____ / _____ %ile / pts.	1	2	_____ / _____ %ile / pts.
34. Pre-professional Skills Test scores (PPST)	1	2	_____ / _____ %ile / pts.	1	2	_____ / _____ %ile / pts.
35. California Basic Skills Test (C-BEST)	1	2	_____ / _____ %ile / pts.	1	2	_____ / _____ %ile / pts.
36. National Teacher Exam Programs Core Battery (NTE)	1	2	_____ / _____ %ile / pts.	1	2	_____ / _____ %ile / pts.
37. State developed exam (please specify)	1	2	_____ / _____ %ile / pts.	1	2	_____ / _____ %ile / pts.

	(a)		(b)	(c)		(d)
	Does your institution use this measure for selective admission to its vocational teacher education program? Please circle YES NO		What is the minimum acceptable standard?	Did your institution use this measure for selective admission when 1985 graduates entered? Please circle YES NO		If you answered YES in column (c), what was the minimum acceptable standard then?
38. Personal letters of recommendation	1	2	N/A	1	2	N/A
39. Interviews	1	2	N/A	1	2	N/A
40. Hold a current certificate or license to practice in occupational area	1	2	_____	1	2	_____
41. Related work experience	1	2	_____ years	1	2	_____ years
42. Standardized occupational competency exam scores (e.g., NOCTI)	1	2	_____ %ile / pts.	1	2	_____ %ile / pts.
43. Prior experiences working with youth	1	2	_____ years	1	2	_____ years
Completion of prerequisite credit hours in:			.			
44. Communications (including English and language arts)	1	2	_____ No. of credits	1	2	_____ No. of credits
45. Mathematics including algebra, geometry, statistics, etc.)	1	2	_____ No. of credits	1	2	_____ No. of credits
46. Other (please specify: _____)	1	2	_____ No. of credits	1	2	_____ No. of credits

### III. SPECIAL NEEDS STUDENTS

Questions 47-68 consider preparing vocational teachers to teach special needs students. Which of the following strategies have been tried at your institution in preparing vocational teacher education students to provide instruction to students with special needs? Rate the degree of effectiveness in each case where you have implemented the strategy. Please circle in each area.

#### IMPLEMENTATION

- 1 = Implemented more than 3 years ago
- 2 = Implemented within past 3 years
- 3 = Plan to implement within next 3 years
- 9 = No plan to implement

#### EFFECTIVENESS

- 1 = Not effective
- 2 = Somewhat effective
- 3 = Effective
- 4 = Very effective
- 9 = I don't know

Implementation						Effectiveness				
47.	1	2	3	9	recruiting students from special populations into vocational teacher education?	1	2	3	4	9
48.	1	2	3	9	recruiting students with extensive experience working/living with special populations into vocational teacher education?	1	2	3	4	9
49.	1	2	3	9	improving faculty awareness and development through workshops, seminars, excursions to schools, etc.?	1	2	3	4	9
50.	1	2	3	9	providing faculty with additional support (grants, resources, etc.) to engage in activities (research, development of teaching materials, extension) that will improve their teaching in this area?	1	2	3	4	9
51.	1	2	3	9	restructuring faculty career incentives (in terms of promotion and tenure decisions) to allow them greater flexibility and support for engaging in aforementioned activities?	1	2	3	4	9
52.	1	2	3	9	hiring new faculty with expertise in special needs?	1	2	3	4	9
53.	1	2	3	9	increasing amount of classroom experience in teacher preparation programs?	1	2	3	4	9
54.	1	2	3	9	increasing the number of credit hours required in humanities, social sciences, etc., either as prerequisite to teacher education or for graduation from the program?	1	2	3	4	9

## IMPLEMENTATION

- 1 = Implemented more than 3 years ago  
 2 = Implemented within past 3 years  
 3 = Plan to implement within next 3 years  
 9 = No plan to implement

## EFFECTIVENESS

- 1 = Not effective  
 2 = Somewhat effective  
 3 = Effective  
 4 = Very effective  
 9 = I don't know

Implementation						Effectiveness				
	1	2	3	9		1	2	3	4	9
55.					adding one or more courses on special education to the curriculum?					
56.					redesigning existing methods courses to include/plan more emphasis in teaching special needs students?					
57.					providing students with individualized competency-based learning approaches?					
58.					providing students with additional resource materials/library?					
59.					providing students with early field experiences related to teaching special needs students, i.e., on-site observation of successful teachers and programs?					
60.					providing students with teaching practice under simulated conditions?					
61.					adding a practicum in microteaching special needs students?					
62.					providing students with special units (i.e., in developing IEPs, etc.)?					
63.					grouping vocational teacher education students with special needs education students in seminars/practicums where they work together?					
64.					assuring that internships/students teaching experience provide experience with special needs students?					
65.					improving assessment/monitoring of students progress throughout the program through diagnostic testing and periodic evaluations in student teaching?					

**IMPLEMENTATION**

- 1 = Implemented more than 3 years ago
- 2 = Implemented within past 3 years
- 3 = Plan to implement within next 3 years
- 9 = No plan to implement

**EFFECTIVENESS**

- 1 = Not effective
- 2 = Somewhat effective
- 3 = Effective
- 4 = Very effective
- 9 = I don't know

Implementation						Effectiveness				
	1	2	3	9		1	2	3	4	9
66.					restructuring preservice to include fifth year MA program?					
67.					implementing a comprehensive exam prior to program completion that includes problems related to special needs students?					
68.					other? (please specify): _____					
					_____					
					_____					
					_____					

Questions 69-91 list selected skills identified as important to serve special needs students effectively. Please indicate the amount of preparation your teacher education program includes for each skill.

**PREPARATION**

- 1 = None
- 2 = Some
- 3 = A Lot

**GENERAL INSTRUCTIONAL SKILLS**

Ability to:	Preparation		
	1	2	3
69. Use methods of instruction which complement students' learning styles?	1	2	3
70. Help students improve their ability to interact effectively with other people?	1	2	3
71. Establish a classroom climate which stimulates learning?	1	2	3
72. Identify physical changes needed in classroom/laboratory to accommodate students' unique instructional needs?	1	2	3
73. Adapt instructional methods and materials as required for students with Individualized Education Programs (IEPs)?	1	2	3
74. Use the school's support services (reading and math specialists, counselors, interpreters, etc.) to help instruct students?	1	2	3
75. Use students' parents or guardians to supplement instructional efforts?	1	2	3
76. Use community resources to supplement instructional efforts?	1	2	3
77. Comply with special needs-related laws and regulations?	1	2	3
78. Identify the least restrictive environment for special needs students?	1	2	3
79. Provide hands-on trial and error experiences?	1	2	3
80. Use charts, pictures, graphs, and other visual materials?	1	2	3
81. Use spoken and written communications to provide effective instruction?	1	2	3
82. Pace instruction to match students' ability to learn?	1	2	3



## PREPARATION

- 1 = None
- 2 = Some
- 3 = A Lot

	Preparation		
	1	2	3
83. Match instruction to students' readiness (ability and prior training) to learn?	1	2	3
84. Organize vocational topics into meaningful units or "clusters" to maximize students' opportunity to learn?	1	2	3
85. Select appropriate sequences for instructional activities?	1	2	3
86. Establish goals and objectives for each student based on a diagnosis of their learning strengths and weaknesses?	1	2	3
87. Determine how often students need to practice the new vocational skills they have learned?	1	2	3
88. Reinforce or reward students for achieving goals or for desired behavior?	1	2	3
89. Inform students of how well they are performing so they know where improvement is needed?	1	2	3
90. Interact with parents of special needs students during planning and/or placement meetings?	1	2	3
91. Interact with professionals during planning and/or placement meetings?	1	2	3

#### IV. BASIC SKILLS

Questions 92-114 concern preparing vocational teachers to reinforce basic skills. Which of the following strategies have been used at your institution to prepare vocational teachers to improve and reinforce vocational students' basic skills? Rate the degree of effectiveness in each case where you have implemented the strategy. Please circle in each case.

##### IMPLEMENTATION

- 1 = Implemented more than 3 years ago
- 2 = Implemented within past 3 years
- 3 = Plan to implement within next 3 years
- 9 = No plan to implement

##### EFFECTIVENESS

- 1 = Not effective
- 2 = Somewhat effective
- 3 = Effective
- 4 = Very effective
- 9 = I don't know

Implementation						Effectiveness				
92.	1	2	3	9	recruiting students who have demonstrated high academic ability into the program?	1	2	3	4	9
93.	1	2	3	9	improving faculty awareness and development through workshops, seminars, excursions to schools, etc.?	1	2	3	4	9
94.	1	2	3	9	providing faculty with additional support (grants, resources, etc.) to engage in activities (research, development of teaching materials, extension) that will improve their teaching of basic skills?	1	2	3	4	9
95.	1	2	3	9	restructuring faculty career incentives (promotion and tenure decisions) to allow them greater flexibility and support for engaging in teaching basic skills?	1	2	3	4	9
96.	1	2	3	9	hiring new faculty with expertise in enhancing basic skills in vocational education?	1	2	3	4	9
97.	1	2	3	9	increasing amount of actual practice in teacher preparation programs?	1	2	3	4	9
98.	1	2	3	9	increasing the number of credit hours required in humanities, social sciences, etc. either as prerequisite to teacher education or for graduation from the program	1	2	3	4	9
99.	1	2	3	9	adding one or more new courses to the curriculum (i.e., teaching basic skills in vocational context)?	1	2	3	4	9

## IMPLEMENTATION

## EFFECTIVENESS

- 1 = Implemented more than 3 years ago  
 2 = Implemented within past 3 years  
 3 = Plan to implement within next 3 years  
 9 = No plan to implement

- 1 = Not effective  
 2 = Somewhat effective  
 3 = Effective  
 4 = Very effective  
 9 = I don't know

Implementation						Effectiveness				
	1	2	3	9		1	2	3	4	9
100.					reuesign existing methods courses to include/place more emphasis on teaching basic skills?					
101.					providing students with individualized learning approaches to emphasize basic skills?					
102.					providing students with competency-based learning approaches?					
103.					providing students with additional resource materials/library?					
104.					providing students with early field experiences related to reinforcing basic skills in their vocational area?					
105.					providing students with teaching practice under simulated conditions?					
106.					adding a practicum in microteaching on basic skills instruction?					
107.					grouping vocational teacher education students with teacher education students specializing in English, math, etc., in practicums where they work together?					
108.					providing students with workshops in peer-tutoring techniques?					
109.					providing students with workshops in team teaching techniques?					
110.					assuring that internships/students teach-experience provide experience in teaching basic skills?					

**IMPLEMENTATION**

**EFFECTIVENESS**

- 1 = Implemented more than 3 years ago
- 2 = Implemented within past 3 years
- 3 = Plan to implement within next 3 years
- 9 = No plan to implement

- 1 = Not effective
- 2 = Somewhat effective
- 3 = Effective
- 4 = Very effective
- 9 = I don't know

Implementation						Effectiveness				
111.	1	2	3	4	improving assessment/monitoring of students' progress throughout the program through diagnostic testing and periodic evaluations in student teaching?	1	2	3	4	9
112.	1	2	3	9	restructuring preservice to include fifth year MA programs?	1	2	3	4	9
113.	1	2	3	9	implementing a comprehensive exam prior to program completion that includes problems related to teaching basic skills?	1	2	3	4	9
114.	1	2	3	9	other? (please specify) _____	1	2	3	4	9
	1	2	3	9	_____	1	2	3	4	9
	1	2	3	9	_____	1	2	3	4	9

Questions 115-125 list selected skills important in improving and reinforcing basic skills in a vocational education program. Please indicate the amount of preparation your vocational teacher education program includes for each skill.

PREPARATION

- 1 = None
- 2 = Some
- 3 = A Lot

TASKS	Preparation		
	1	2	3
115. Determining the level of basic skills students need in order to succeed in the teacher's classes?	1	2	3
116. Determining the level of basic skills students need to succeed in an entry-level job?	1	2	3
117. Finding and using commercial standardized tests of students' basic skills?	1	2	3
118. Making and using tests of students' basic skills?	1	2	3
119. Interpreting the results of commercial standardized tests to assess students' needs in basic skills?	1	2	3
120. Finding and using materials and methods to help vocational students improve their basic skills?	1	2	3
121. Planning prescriptive teaching that will help students learn the basic skills they will need on-the-job?	1	2	3
122. Determining how readable the textbook and other class materials are?	1	2	3
123. Finding out what levels of basic skills are needed for jobs in the teacher's area?	1	2	3
124. Teaching basic skills as an integral part of the vocational education program?	1	2	3
125. Motivating students to learn basic skills through vocational education?	1	2	3

## V. COURSE OFFERINGS AND GRADUATION REQUIREMENTS

Questions 126-141 concern teacher education course offerings and graduation requirements. For the class graduating in 1984-85, could you please circle the total number of courses that were offered that deal entirely with each of the following general areas. If no courses were offered on the specific topic, was it included in other courses? Please indicate also the number of courses required in each area. A course is one that meets 2-5 classroom hours per week during one semester or quarter.

	COURSE OFFERINGS						GRADUATION REQUIRE- MENTS Number of courses required
	Entire courses			Parts of courses			
	1	2	9	Yes	No	Don't Know	
126. Working with and teaching all special needs students?	1	2	9	1	2	9	_____
127. Working with and teaching disadvantaged students?	1	2	9	1	2	9	_____
128. Working with and teaching handicapped students?	1	2	9	1	2	9	_____
129. Working with and teaching limited English proficient students?	1	2	9	1	2	9	_____
130. Working with and teaching students in programs nontraditional for their sex?	1	2	9	1	2	9	_____
131. Working with and teaching adults in retraining?	1	2	9	1	2	9	_____
132. Working with and teaching single parents or displaced homemakers?	1	2	9	1	2	9	_____
133. Working with and teaching incarcerated individuals?	1	2	9	1	2	9	_____
134. Working with and teaching dropout-prone students?	1	2	9	1	2	9	_____

	COURSE OFFERINGS						GRADUATION REQUIRE- MENTS Number of courses required
	Entire courses			Parts of courses			
	1	2 or More	None	Yes	No	Don't Know	
135. Improving and reinforcing all basic skills in vocational programs?	1	2	9	1	2	9	_____
136. Improving and reinforcing writing skills in vocational programs?	1	2	9	1	2	9	_____
137. Improving and reinforcing speaking skills in vocational programs?	1	2	9	1	2	9	_____
138. Improving and reinforcing reading skills in vocational programs?	1	2	9	1	2	9	_____
139. Improving and reinforcing listening skills in vocational programs?	1	2	9	1	2	9	_____
140. Improving and reinforcing mathematics skills in vocational programs?	1	2	9	1	2	9	_____
141. Improving and reinforcing employability skills in vocational programs?	1	2	9	1	2	9	_____

Questions 142-147 refer to requirements in academic areas other than education. How many courses were students required to take prior to the completion of their teacher education program in each of the following areas? Please circle.

	<u>None</u>	<u>One</u>	<u>Two</u>	<u>Three</u>	<u>Four</u>	<u>Five or More</u>
142. Communications, e.g., English, language arts, speech	0	1	2	3	4	5
143. Mathematics, e.g., algebra, geometry, statistics	0	1	2	3	4	5
144. Humanities and Fine Arts, e.g., literature, philosophy, music	0	1	2	3	4	5
145. Science, e.g., biology, geology	0	1	2	3	4	5
146. Social Science, e.g., psychology, economics	0	1	2	3	4	5
147. Computer skills, e.g., keyboarding, programming	0	1	2	3	4	5

148. Do you require any of the tests listed below for graduation from the vocational teacher education program? Please circle all that apply and show minimum score required?

Tests Required	Minimum Score Required
1 Graduate Record Exam (GRE)	_____
2 College Outcomes Measures Project Test (Comptest)	_____
3 California Basic Skills Test (C-BEST)	_____
4 NTE – Core Battery	_____
5 NTD – Pedagogy	_____
6 NTE - Professional Knowledge	_____
7 NTE – General Knowledge	_____
8 Teacher Occupational Competency Test (TOCT)	_____
9 Other (Specify) _____	
(Specify) _____	

Questions 149-160 concern which teacher education experience you feel is the most useful in preparing vocational teachers to teach special needs students and basic skills. Please rate each in terms of usefulness.

**USEFULNESS**

- 1 = Not useful
- 2 = Somewhat Useful
- 3 = Very Useful
- 9 = No Experience

Special Needs	Usefulness			
	1	2	3	9
149. Preservice courses in education?	1	2	3	9
150. Preservice courses in areas other than education?	1	2	3	9
151. Student teaching?	1	2	3	9
152. Formal inservice training (e.g., workshops, seminars)?	1	2	3	9
153. Informal training (e.g., observation, group discussion)?	1	2	3	9
154. Other (e.g., volunteer work, personal contact with special needs individuals)? Please specify: _____	1	2	3	9
_____				



**USEFULNESS**

- 1 = Not useful
- 2 = Somewhat Useful
- 3 = Very Useful
- 9 = No Experience

Basic Skills	Usefulness			
155. Preservice courses in education?	1	2	3	9
156. Preservice courses in areas other than education?	1	2	3	9
157. Student teaching?	1	2	3	9
158. College, department, or school of education as a whole	1	2	3	9
159. Informal training (e.g., observation, group discussions)?	1	2	3	9
160. Other (specify) _____	1	2	3	9

161. How receptive do you think your institution is to the recommendations of the Holmes group?

\_\_\_\_\_

162. What is your job title? Please provide your title, and also circle the number that best describes your function.

\_\_\_\_\_

- |                  |                         |
|------------------|-------------------------|
| 1 Faculty Member | 3 Counselor             |
| 2 Administrator  | 4 Other (specify) _____ |

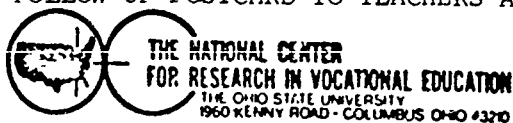
163. Which of the following most accurately reflects your realm of responsibilities in this position? Please circle.

- 1 A specific vocational service area (please specify) \_\_\_\_\_
- 2 All vocational service areas offered at this institution \_\_\_\_\_
- 3 Other education speciality (please specify) \_\_\_\_\_
- 4 College, department, or school of education as a whole \_\_\_\_\_
- 5 University as a whole \_\_\_\_\_

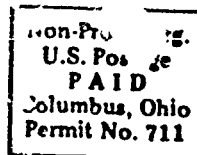
**THANK YOU VERY MUCH!**

APPENDIX I

FIRST FOLLOW-UP POSTCARD TO TEACHERS AND TEACHER EDUCATORS



4030-717994-332-891N



SEASON'S GREETINGS!

Dear Colleague:

Before your holiday break, would you please fill out and return your copy of the Vocational Teacher Education survey questionnaire sent to you in November? Your personal reply is critical to the success of the study and the improvement of the vocational teaching profession. We would certainly appreciate your taking a few minutes now to complete and return the questionnaire. If you have recently completed the form, please disregard this notice.

Best wishes for the holidays, and THANKS FOR YOUR HELP!

Sincerely,  
  
Frank C. Pratzner  
Senior Research Specialist

APPENDIX J

LETTER AND INSTRUCTIONS ACCOMPANYING SECOND FOLLOW-UP  
OF TEACHERS AND TEACHER EDUCATORS



The Ohio State University



THE NATIONAL CENTER  
FOR RESEARCH IN VOCATIONAL EDUCATION

1960 Kenny Road  
Columbus, Ohio 43210-1090

Phone: 614-486-3655  
Cable: CTVOCEDOSU/Columbus, Ohio

December, 1986

Dear Colleague:

Recently you should have received a survey questionnaire from us requesting your participation in our Vocational Teacher Education Study. We believe that this study has the potential to contribute significantly to the improvement of both preservice and inservice vocational teacher preparation. Whether that potential is realized or not is, to a very significant extent, dependent upon your personal commitment and willingness to contribute your professional time and effort to completing the questionnaire and giving us the benefit of your knowledge and experience.

Enclosed you will find a duplicate of the original survey questionnaire. If you haven't already done so, please take a little of your valuable time now to complete and return it as soon as possible. Your personal response is critical. I urge you to reply today.

Thanks very much for your support in this important endeavor and for sharing your experience for the benefit of the profession.

Sincerely,

A handwritten signature in cursive script that reads 'Frank C. Pratzner'.

Frank C. Pratzner  
Senior Research Specialist

tlg

Enclosures

### Vocational Teacher

#### Directions:

We are sending a questionnaire to each vocational teacher in your state who began teaching during the 1985-86 school year. Please complete yours as soon as possible and return it in the envelope provided. Please write your name on the green Administrator Survey instrument, and give the entire packet to the person you think had the greatest opportunity to work with you, listen to you, and/or observe you during your first year of teaching. This could be a principal, department head, assigned mentor, or district supervisor. Also, please include this instruction sheet. If you have any questions about this questionnaire or our study, please contact me or Robert Gordon at 800-848-4815 (toll free) or 614-486-3655 in Ohio.

### Administrator/Mentor

#### Directions:

We are sending a questionnaire to each vocational teacher in your state who began teaching during the 1985-86 school year. Each beginning teacher is being asked to give an Administrator Survey packet to the one professional person who is most familiar with his/her teaching performance during the first year of teaching. You may receive a questionnaire from more than one teacher. Feel free to pass any of these surveys on to others who are also familiar with the beginning teacher's performance. This might be an assistant principal, department head, assigned mentor, or district supervisor. If you have any questions about this questionnaire or our study, please contact me or Robert Gordon at 800-848-4815 (toll free) or 614-486-3655 in Ohio.

THANK YOU VERY MUCH

APPENDIX K

THIRD FOLLOW-UP POSTCARD TO TEACHERS AND TEACHER EDUCATORS



4030-717994-332-891N

Non-Profit Org.  
U.S. Postage  
PAID  
Columbus, Ohio  
Permit No. 711

**URGENT REMINDER !**

Dear Colleague:

This is the final request urging you to please fill out and return your copy of the Vocational Teacher Education survey questionnaire sent to you in November. We are sorry we cannot wait any longer for replies and we urge you to please respond today!

Don't put it off any longer. Please take a few minutes now to complete and return the questionnaire. Your personal reply is critical to the success of the study and the improvement of the vocational teaching profession.

THANKS FOR YOUR HELP.

Sincerely,  
  
Frank C. Pratzner  
Senior Research Specialist

APPENDIX L

LETTER AND INSTRUCTIONS ACCOMPANYING FOLLOW-UP OF ADMINISTRATORS/MENTORS



The Ohio State University



THE NATIONAL CENTER  
FOR RESEARCH IN VOCATIONAL EDUCATION

1960 Kenny Road  
Columbus, Ohio 43210-1090

Phone: 614-486-3655  
Cable: CTVOCEDGSU/Columbus, Ohio

March, 1987

Dear Colleague:

Your participation in the Beginning Vocational Teacher Education Study has been greatly appreciated. Your important contribution to this study will have a significant impact on both preservice and inservice vocational teacher preparation.

We must, however, inform you that, as of this date, we are still anticipating your administrator/mentor reply. The significance of our study findings depends to a large extent on the participation of both teachers and administrators/mentors. We must therefore seek your assistance once more to elicit a reply from your administrator or mentor.

Since you have already devoted your professional time and effort to this study, we believe that you now have an important stake to ensure the success of this study. Please take the enclosed survey questionnaire to your administrator/mentor immediately, and urge him/her to complete and return it today.

Thank you very much for your support in this important endeavor and for sharing your experience for the benefit of the profession.

Sincerely,

A handwritten signature in cursive script that reads "Frank C. Pratzner".

Frank C. Pratzner  
Senior Research Specialist

tlg

Enclosures (2)

#### ADMINISTRATOR/MENTOR DIRECTIONS

We have sent a questionnaire to each vocational teacher in your state who began teaching during the 1985-1986 school year. Each beginning teacher was asked to give an Administrator/Mentor Survey to the one professional person who is most familiar with his/her teaching performance during the first year of teaching. You may have received a questionnaire from more than one teacher. Feel free to pass any of these surveys on to others who are also familiar with the beginning teacher's performance. This might be an assistant principal, department head, assigned mentor, or district supervisor. If you have any questions about this questionnaire or our study, please contact Dr. Frank C. Pratzner, project director, or Tracy Graham, project secretary at 800-848-4815 (toll free) or 614-486-3655 in Ohio.

THANK YOU VERY MUCH!

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