

VOCATIONAL TEACHERS' ATTITUDES TOWARD
EXTENDED TEACHER EDUCATION PROGRAMS

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CHAPTER I

INTRODUCTION

A distinct characteristic of this decade has been an increase in calls for educational reform which have focused attention on schooling itself, exhorting changes in graduation requirements and public school curriculum, and the motivation of teachers by merit pay systems. Fundamental reasoning for the recent focus of attention on teacher education reform has been the thought that the better educated a teacher was, the better an education that teacher could provide (Soltis, 1987). Also implicit in this rationale was that the best educators would have to be selected from the brightest of possible teacher education candidates.

Changes have been taking place across the nation regarding the way that America's teachers have been educated as a result of the shift in focus of reform from schooling in general to teacher education. These changes have come from within colleges of education and have been further spurred by national reports which have been critical of teacher education. Both the Carnegie Forum (1986) and the Holmes Group (1986) have recommended: (a) greater emphasis on subject matter training for teachers (e.g., in natural sciences, humanities, etc.), (b) placing professional education courses in a fifth or graduate year, and (c) increasing standards for entry into the teaching profession. Already a number of schools of education across the nation have instituted

required five year teacher education programs, among them are the University of Virginia and the University of Kansas. In California, state law required a fifth year of study for teacher certification, the first four years being in liberal arts. In Texas, the legislature has passed legislation which was believed to in effect abolish undergraduate teacher education degree programs. It limited certification requirements in teacher education courses to 18 hours including student teaching.

Statement of the Problem

As schools of education consider the redesign of teacher education programs the opinions of every group which may be affected by such changes should be carefully examined. The problem for this study was that vocational teachers' opinions were not solicited for inclusion in the major reform reports which would mandate changes in all aspects of education. This information is needed in order to make sound decisions concerning possible teacher education redesign or reform. Specifically, little or no information existed regarding vocational educators' attitudes toward placing professional teacher education courses in a fifth or graduate year.

Purpose and Research Questions

The purpose of this study was to ascertain vocational educators' attitudes regarding extended teacher education programs. Specific research questions for the study were:

1. Do vocational teachers perceive a need for extended teacher education programs?

2. How do vocational teachers perceive the value of general education components of teacher education programs?

3. How do vocational teachers believe that teacher education programs should be organized?

4. Do vocational teachers believe that the present teacher education programs are adequate?

Assumptions

The following assumptions were accepted in order to conduct the study:

1. The collected data were accurate.
2. That the members of A.V.A. Region Four were a true representation of vocational teachers from the region.

Limitations

1. The subjects of this study were A.V.A. members from Region Four: Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma, and Texas.
2. This study was limited to teachers of vocational education programs.

Definition of Terms

The following terms and definitions were used for this study.

Agriculture Education: Vocational education program designed for in-school youth, out-of-school youth, and adults who are gainfully employed or who are preparing for careers in production agriculture and off-farm agriculture occupations. Subjects studied includes animal

science, plant science, soil science, agriculture mechanization, farm business management, leadership, and citizenship (Public Information Office, 1985).

Business and Office Education: A vocational education program designed for initial preparation, refresher training, and/or upgrading of individuals, leading to employment and advancement in business and office careers (Public Information Office, 1985).

Extended Teacher Education Programs: Teacher education programs which require more than four years or a bachelors degree for completion.

Health Occupations Education: Vocational education programs designed to prepare students for employment in health occupations of their choice and to upgrade those already employed in the health field (Public Information Office, 1985).

Home Economics Education: Vocational educational programs which are comprised of two aspects: consumer and homemaking education and occupational home economics education. Consumer and homemaking education is designed to prepare youth and adults for the occupation of homemaking. Occupational home economics is designed to capacitate individuals for employment in selected occupations involving skills and knowledge in home economics subject matter areas (Public Information Office, 1985).

Industrial Arts Education: Educational programs designed to utilize and motivate general education learning and career education by providing activities involving tools, materials, and processes (Public Information Office, 1985).

Marketing Education: Vocational education programs designed to

meet the needs of individuals who have entered or who are preparing to enter the field of marketing and distribution or any field involving skill in the business operations and management areas (Public Information Office, 1985).

Technical Education: Planned instruction that will prepare individuals for a variety of occupations requiring skills of a semi-professional nature. Instruction normally involves subjects of a technical nature such as mathematics, the physical and life sciences, and materials and processes related to the specific requirements of the job (U.S. Department of Health, Education and Welfare, 1967).

Trade and Industrial Education: Vocational education programs designed to prepare high school and adult students for employment in one of the service, manufacturing, or industrial occupations. Preparation for gainful employment occurs through practical instruction on industry quality tools and equipment and actual industry-level projects (Public Information Office, 1985).

Organization of the Study

Chapter I has introduced the study, presented the problem, purposes, research questions, hypotheses, assumptions, limitations, and definitions to clarify terms used in this study. Chapter II includes a discussion of related literature concerning teacher education reform. Chapter III reports the methodology used in this study. The findings are presented in Chapter IV. Chapter V includes a summary of the study, conclusions, and recommendations.

CHAPTER II

REVIEW OF LITERATURE

The review has been divided into three major areas: a discussion of the major reports calling for reform in teacher education, a discussion of existing models of extended teacher education programs, and discussion of various universities and states' plans for reforming teacher education.

Major Reports

Reform of teacher education and the restructuring of the teaching profession have been very basic and yet different kinds of reform. Past cycles of reform have focused on schooling itself, urging such things as changes in the public school curriculum and graduation requirements, raising standards, and motivating teachers by installing merit pay and career ladder pay scales (Soltis, 1987). Recent calls for reform have given particular attention to teacher education; however, Keith (1987) opines that Horace Mann, Secretary of the Massachusetts Board of Education, 1838, really began the call for the reform of teacher education. Keith writes of Mann's position that teachers need special qualifications to elevate the character of common schools and to increase their efficiency. Mann (Keith, 1987) was referring to the need for reform in teacher education. Keith (1987) believed that major themes from Mann's era were prevalent in the recent

reform reports. The overriding theme was (in linear terms) that poor teacher preparation lead to poor teachers which lead to poor schools which lead to poor learning.

Hughes (1986) in a presentation to the American Vocational Association in Dallas stated that the recent proposals for reform in education have been the result of public criticism. Keith (1987) wrote that periodic rounds of calls for reform in teacher education may be seen as a response to public criticism. First, there can be seen a period of public criticisms of schools followed by a series of studies, commission reports, and books that describe how these failures are caused by the lack of adequate qualification in the teaching force. This "lack" is then attributed to the poor quality of teacher education programs (Keith, 1987).

Hughes (1986) and Lewis (1986) have written that recent proposals for reform of teacher education climaxed in 1983 with the publication of A Nation at Risk: Imperatives for Educational Reform. This report authored by the United States Department of Education was accompanied by well-known and well-publicized campaigns to bring the report to the attention of all citizens. President Reagan as a result of the attention was known as an "education president" much to the dismay of those who had to work hard to restore the many cuts he proposed in the national budget for education during his administration (Hughes, 1986; Lewis, 1986). Hughes (1986) further stated that soon after the report, A Nation at Risk, local schools, state departments of education, and those responsible for the formal education of teachers began to think about their own plans for reform. Other reports such as Boyer's High School (1983) and Goodlad's A Place Called School (1983) were not

extensively used by politicians, school boards, or the media as they dealt with their respective responsibilities for education even though they both included extensive and intensive data collections on site. A Nation at Risk was not data-based and not related to research studies in any way (Hughes, 1986).

A Nation Prepared: Teachers For the
21st Century

The Carnegie Forum on Education and the Economy, a program of the Carnegie Corporation, was established in January, 1985, to draw America's attention to the vital relationship between the health of schools, the future well being of the economy, and the democratic political institutions. The task force was comprised of 14 members including two business leaders, two governors (one past and one who was presently serving as governor), one state legislator, one journalist, one official of the American Association for the Advancement of Science, two chief state school officers, the leaders of the two teacher unions, an expert on Hispanic affairs, one dean of a college of education, and Dr. John Gardner (Keppel, 1986). The Forum's continuing task was to examine specific policy issues with the responsibility of reporting periodically to the American people its findings and recommendations about teaching as a profession.

Briefly, the recommendations called for a National Board for Teaching Standards, orchestrated by state and regional subgroups that would define what teachers needed to know and what they needed to be able to do. This board was to be similar in function and composition to other boards that establish the standards for professional knowledge

in medicine, law, architecture, and other professions, and that examine and certify professionals in those fields (Miller, 1986).

The Carnegie Forum published the report, A Nation Prepared: Teachers for the 21st Century (1986). The report recommended that schools be restructured to provide a professional environment for teaching, enabling teachers to determine how best to meet state and local educational goals for students while holding teachers accountable for these goals.

In addition to providing a professional environment, a new category of "lead teachers" was suggested as a means of restructuring the teaching force. Lead teachers were identified as those with strong track records for leadership in redesigning schools and in helping colleagues who uphold high standards of teaching and learning. Lead teachers would function in an executive capacity as well as maintain their roles as superior teachers (Carnegie Task Force, 1986).

For teacher education, the report recommends a new professional curriculum in graduate schools resulting in a Master of Teaching degree. Admission to such schools was to be premised on a bachelor's degree in the arts and sciences.

States should abolish the undergraduate degree in education and make professional teacher education a graduate level enterprise, building on a base of sound undergraduate education in the arts and sciences.

1. Master in Teaching degree programs should be developed. They should emphasize systematic study of teaching and clinical experience, including internships and residencies in the schools.
2. Admission should be contingent on applicant's mastery of the basic skills and knowledge expected of all college graduates.
3. The graduate schools of education should design these new programs to make it possible for students to make up during their graduate education substantive course work missed in college. The time allowed to obtain a graduate degree should take this requirement into account.

4. Special financial initiatives should be offered by the state and others to students of exceptional academic ability and to minority group members who qualify to attend graduate teacher institutions (p. 70).

In its most expensive and far reaching recommendations, the Task Force (1986) called for mobilizing both private and public resources to prepare minority children for full participation in American society and particularly for careers in teaching where demographic trends indicate severe shortages of prospective minority teachers (Miller, 1986). The most controversial provision, disputed by Mary Futrell, the President of the National Education Association, was the recommendation that incentives for teachers be related to school wide student performance. These incentives, it was thought, could take the form of bonuses, conditions of teaching, and leadership responsibilities (Miller, 1986). The report also strongly urged that the state and federal governments make teacher's salaries and career opportunities competitive with other professions.

The report made the fundamental case that America's standard of living and its economy cannot be maintained without these commitments on the part of government and the citizens. The report (Carnegie Task Force, 1986) related that if a permanent underclass was to be avoided, and if the American democracy was to thrive, America's schools must graduate students with achievement levels thought possible only for the privileged few who graduated from the finest private schools. The report also stipulated that unless these steps were taken almost immediately, the nation's mass education system, designed for an earlier time and for a mass-production economy, would fail, the economy would falter, and the democracy would shudder with foreseeable political unrest (Carnegie Task Force, 1986).

Holmes Group Report

The Holmes Group began as a consortium of the deans of education from 17 universities known as research universities. The group was designed to invite other research universities to join. It was estimated that the Holmes Group in 1987 was comprised of the top ten percent of research universities which had teacher education (Sedlak, 1987). The group was named for Henry W. Holmes, dean of the Harvard Graduate School of Education during the 1920's, who sought to raise the quality and professional status of teacher education (Hughes, 1986; Sedlak, 1987; Holmes Group, 1986). The nucleus of the Holmes Group gathered initially in the autumn of 1983 to consider generally the issues confronting teaching and teacher education. The first public report of the group, Tomorrow's Teachers, released in 1986, consisted of three sections: an essay outlining the problems with the status, rewards, and work associated with teaching that jeopardize the recruitment and preparation of qualified teachers, a series of essays introducing and addressing a number of potential obstacles to improving the quality and preparation of the teaching force, and a detailed set of proposals for reform of teaching and teacher education (Holmes Group, 1986).

Five major goals of the Holmes Group (1986) have emerged (Murray, 1986; Hughes, 1986; Miller, 1986; Keppel, 1986; Hawley, 1986; Case, Lanier, Miskel, 1986):

1. "To make the education of teachers intellectually more sound." The competent teacher was to possess subject matter knowledge, systematic knowledge of teaching, and practical experience. To accomplish the task of preparing competent teachers the group has

recommended that the undergraduate education degree to be discontinued and that prospective teachers have a major or a minor in the subject they are to teach. Also, prospective teachers were to learn how to teach their subject and to practice under the supervision of a skilled professional during a fifth and sixth year following the baccalaureate. Further, the group proposed a restructuring of undergraduate education to include more general education course work.

2. "To recognize differences in teacher's knowledge, skill, and commitment, and in their education, certification, work, and career opportunities." This was to be achieved by distinguishing among novices, competent professional teachers, and high level professional leaders. The Holmes Group (1986) labeled these distinctive practitioners as: (a) instructors, who would possess a temporary license and an undergraduate degree but would only be allowed to teach under the supervision of a certified professional, (b) professional teacher, who holds a professional certificate which requires a master's degree in teaching as well as a baccalaureate degree in the subject, and (c) career professional, who holds the highest license which is awarded to those whose achievement is outstanding and whose experience is extensive. The instructor would be studying pedagogy while practicing, the professional teacher would have already studied pedagogy and have had a full year of supervised teaching, and the career professional would be engaged in further study, most probably the doctorate.

3. "To create standard of entry to the profession--examinations and educational requirements--that are professionally relevant and intellectually defensible." The report does not specify what the

standards would be, except for insuring qualified, competent teachers. The report proposes multiple evaluations across multiple domains. Included are mastery of writing and speaking, mastery of the subject to be taught, skill in planning, and skill in instructing. The Holmes Group (1986) acknowledged the problem of minority representation and made proposals to insure that there would be minority students in teacher education.

4. "To connect institutions of higher and professional education with schools." This was proposed in order to make better use of expert teachers in professional education which notes the importance of cooperative efforts between practicing teachers and university faculty. Professional Development Schools are to be developed in order for teachers to contribute to the profession. These professional schools were to provide for mutual exchange, experimentation, systematic inquiry, and a diverse student body.

5. "To make schools better places for teachers to work and for students to learn." The report (Holmes Group, 1986) did not propose specifics to achieve this goal, except that generally schools were to become less bureaucratic with more professional autonomy for teachers.

Criticisms of the Major Reports

Both the Holmes Group (1986) and the Carnegie Task Force (1986) have been under much criticism since the publication of their first reports. The major criticism has been the reports' call for extended schooling (Tom, 1986). Evans (1987) has written that the reports ignore the problems of previously tried extended programs such as the Master of Teaching in Arkansas where the Ford Foundation supported

teacher education institutions over twenty years ago which "collapsed on its own weight". Evans (1987) further speculated "Indeed, the record of trials of similar proposals suggests that the Holmes Group will fail, and soon." However, Imig (1986), Mehlinger (1986), and Nussel (1986) have written that the Holmes Group will succeed in generating change in teacher education because of the enormous and widespread commitment to change and that it is not the newness of the report which made it compelling.

Tom (1986) reports that the Holmes Group provided no specifically compelling rationale for requiring more than four years for teacher preparation. Tom (1986) called the reason for requiring more than four years for teacher preparation the "inadequate time hypothesis". The inadequate time hypothesis had the essential flaw of contending that one must have more quantity of education rather than quality of education. The Southern Regional Education Board [SREB] (1986) agreed with Tom when it released its official position on the matter of extending teacher education programs beyond four years:

The SREB position is that until the undergraduate curriculum is revitalized, and truly represents college level work beginning with the first freshman course for credit, it is premature to give up on the four-year program as the typical route for preparing teachers (p. 1).

The SREB contends that the recent ferment throughout the United States about undergraduate education in general indicated that all was admittedly not right, and that standards have indeed declined. The clamor to lengthen the preparation time for teachers had come at a time when a consensus agreed that undergraduate programs had suffered. SREB (1986) suggests that strengthening undergraduate education through higher standards throughout the curriculum would improve teacher

education. Further, "the higher standards may result in more students needing more than four years to earn a college degree, but that degree would still be the baccalaureate--one with restored prestige" (p. 1). They further believed that states should not spend extra time and money adding on to teacher education until they are convinced that a good four-year program will not work (SREB, 1986).

Evans (1986), Smith (1986), and Hughes (1986) have criticized the Holmes Group and the Carnegie Task Force for not relying on data collection or research of any kind in the preparation of their respective reports. Evans (1986) stated that it was "ironic" that the teacher education plans that the Holmes Group was "selling" to the major research universities lacked "a scrap of research evidence that the proposed program will produce more or better teachers or students" (p. 2). Others (Soder, 1986; Lewis, 1986; Miller, 1986; Hughes, 1986) decry the use of the word or concept of professional or professionalism in ways central to the analysis of the reports without ever defining the terms.

Both the Holmes Group (1986) and The Carnegie Task Force (1986) have been criticized for not having representatives from all facets of education represented in the preparation of the reports. Hughes (1986) stated that in the reports there was no mention that many teachers already have degrees in the specialized subject areas such as agriculture, home economics, and trade and industrial subjects.

Evans (1986) stated that if the recommendations of the Holmes Group were accepted, the effects for vocational education would be disastrous. Two alternatives were related:

- (a) Vocational teacher education could be treated as a special case and exempted from the requirements, or
- (b) Vocational education teachers could take baccalaureates in colleges of agriculture, allied health, business, home economics, nursing and technology" (p. 2).

If alternative (a) were followed, Evans (1986) predicted that it would exacerbate the traditional split between academic and vocational education, which is not desirable. If alternative (b) were followed, it was believed that the principal effect would be a sharper decrease in the number of vocational teachers. However, Robinson (1987) predicted that a substantial decrease in teachers would result in higher salaries for teachers.

Smith (1986) has written that many believe that a chief weakness of the major reports was that they were too simplistic because they mandated a single template for the preparation of both elementary and secondary teachers, and by implication, for other teachers as well. It would have been productive for the authors of the major reports to have considered that the preparation of the various groups of teachers had both commonalities and well as distinct differences. Smith (1986) related:

It may well be that the nature of the skills required for elementary, special education, and vocational teachers are such that a background other than that reflected in a four-year liberal arts degree with a traditional major would be more appropriate (p. 53).

Models of Extended Teacher Education

Programs

Zimpher (1986) has identified six "models" of extended teacher education programs: (1) business as usual, (2) stretch-five, (3) three

plus two, (4) post BA/BS degree, (5) school based certification, and (6) lead teacher model.

Business as Usual Model

The business as usual model was really a non reform model because it required no major changes in teacher education program design. Zimpher (1986) stated that this was the position taken by most teacher education programs throughout the United States. However, Miller (1987), president of the University Council of Vocational Education (UCVE), stated that he takes exception to Zimpher's remarks regarding vocational schools of teacher education as business as usual models because the UCVE member institutions have begun to examine their own programs for possible reorganization. Tom (1986), Evans (1986) and the SREB (1986) concurred that the business as usual model should be followed in vocational teacher education because other models are too expensive and would create shortages of vocational teachers. Zimpher (1986) explained that one of the major reasons for accepting business-as-usual as the vocational teacher education model was that there existed an overall resistance to change in most vocational teacher education programs. Zimpher (1986) also added that this position is not acceptable because change was inevitable and that it would occur with or without input from vocational educators; therefore, she suggested that vocational education take a lead role in the possible redesign of teacher education programs.

Stretch-Five Model

The stretch-five model of teacher education was an extension of

the traditional four-year baccalaureate degree. At the conclusion of the fourth year a baccalaureate degree was awarded, however, certification was not awarded until the successful completion of the fifth year of study. Students enrolled in programs which followed the stretch-five model of teacher education were not automatically accepted into the fifth year of study. Students were required to exemplify attributes of studiousness as evidenced by high grade point averages and/or by high scores on standardized exams. The fifth year of study included experiences in student teaching, teacher internships, or a combination of both student teaching and an internship. Students who participated in the fifth year had the option of seeking graduate credit, undergraduate credit, or a mixture of undergraduate and graduate credit (Zimpher, 1986).

Three Plus Two Model

The three plus two model of teacher education as described by Zimpher (1986) was designed to facilitate a smooth transition for teacher education candidates into the teaching profession. The three plus two teacher education program of study required five years of preparation which lead to the awarding of two degrees, a bachelor of arts degree from the college of arts and sciences and a master's degree from the college of education. Both degrees, as well as certification, were awarded at the successful completion of the fifth year of study. The pedagogy portion of study began at the outset of the fourth year while a majority of the liberal arts was completed at the end of the third year--thus, the name, three plus two. Skilled cooperating teachers, who were hired by the local school district, were also

members of the college of education faculty. These clinical instructors were required to receive special training to develop skills in observing, conferring, and in program development.

Post BA/BS Degree Model

The post BA/BS degree model of extended teacher education (Zimpher, 1986) required that teacher education candidates complete degrees in liberal arts subjects before being accepted into the college of education program. This was the model that the Carnegie Task Force (1986) and the Holmes Group (1986) originally proposed as the desired model of teacher education. Candidates enrolled in programs that followed the post BA/BS degree model were required to have completed bachelors degrees in liberal arts studies and usually required two majors areas of study. Pedagogy was to occur during the fifth year of study and terminate in a masters of teaching degree and certification. The pedagogy portion included internships and residencies in local schools. Admission to the fifth year of study, pedagogy, was contingent upon the candidate's mastery of the basic skills and knowledge required for all college graduates as evidenced by scores on standardized examinations.

School Based Certification Model

The school based certification model of teacher education as described by Zimpher (1986) allowed local school districts to teach pedagogy to candidates who were already hired by the district but who had no prior training in pedagogy. These teachers were required to hold baccalaureate degrees, usually in liberal arts studies, prior to

being hired by the school district. The pedagogy training was performed by the most competent teachers in the district who were experienced practitioners. These experienced practitioners were usually products of a university teacher education program (Zimpher, 1986).

Lead Teacher Model

The lead teacher model of teacher education was much like the clinical models of past decades (Zimpher, 1986). This model required that candidates study in a traditional university teacher education program but that the pedagogy portion of study was conducted in a clinical school. Instructors in the clinical schools were faculty members of both the university and were practicing teachers in the school. An underlying assumption of this model was that teacher education candidates were best taught by practicing professionals rather than by professors from "ivory" towers who were often out of touch with the reality of teaching (Zimpher, 1986).

Summary

Zimpher (1986) has classified teacher education programs into six models even though she acknowledged that some were not true models but rather were mere conceptions of teacher education. The literature contained no models of extended teacher education for vocational education except for the business as usual model. Zimpher (1986) and Hughes (1986) have written that vocational teacher education programs should design their own models of teacher education which best serves vocational education before unacceptable models are forced upon them.

University and State Plans For
Extended Programs

Various states and individual universities have begun to restructure and/or review their respective teacher education programs. While most state and university plans were in their infancy, the purpose of this section was to give the reader a sense of the more mature plans and programs which were intact.

University of Virginia

The University of Virginia plan (1986) was a cooperative five year teacher education plan which was described a three plus two model of teacher education. The plan was approved by the faculty of the Curry School of Education on April 16, 1985. The plan, after minor revisions, was approved by the faculty of the College of Arts and Sciences in December, 1985. The new program was put into operation in September, 1986 with first graduation scheduled for May, 1990.

The teacher education program of study required five years of preparation leading to the awarding of two degrees, A Bachelor of Arts degree from the College of Arts and Sciences and a Masters's degree from the Curry School of Education. Both degrees were to be awarded after successful completion of the five year program. Health and physical education students were to be awarded both degrees from the Curry School of Education due to the extensive certification and course requirements (University of Virginia Plan, 1986).

Skilled cooperating teacher who were employed by the local districts served as clinical instructors and as members of the faculty of the Curry School of Education. Selection of these faculty was based

on their ability to serve as instructional models and as supervisors of entry level professionals. The clinical instructors were required to complete training in masters level pedagogy and supervision.

The first year of the program of study consisted solely of liberal arts core education (See Table I). During year two the liberal arts core courses were to be completed, the generic professional studies were to begin as well as some light clinical experiences. The academic major--liberal arts--was to begin at the outset of the third year. Special professional studies, pedagogy, were designed to be taken during the fourth and fifth year (University of Virginia Plan, 1986).

University of Kansas

The University of Kansas teacher education program (1986) was designed by faculty from the School of Education and College of Liberal Arts and Sciences in cooperation with off-campus advisors including teachers, school administrators, and lay citizens. This plan was most like the post BA/BS degree model because students were required to first complete a baccalaureate in liberal arts before being accepted into the program. Students must maintain a grade point average of 3.00 on a 4.00 system to be admitted into the fifth year of study (pedagogy); however, there existed a probationary admission for students who maintained more than a 2.79 and a 2.99 on a 4.00 system.

The fifth year of study included two field experiences, student teaching and internship experiences. Approximately one-half of the fifth year awarded graduate credit or about 15 hours. The other half of the fifth year awarded undergraduate credit. To have completed a Master of Teaching degree, candidates must complete another 20 hours of

TABLE I
UNIVERSITY OF VIRGINIA PLAN

Content Fields	Year I	Year II	Year III	Year IV	Year V
Liberal Arts Core	Begin-----				
Academic Major	Begin-----				
Generic Professional Studies	Begin-----				
Special Professional Studies	Begin-----				
Clinical Experiences	Begin-----				

graduate credit. The student teaching and internships were to be conducted at one of two schools in Kansas with the possibility for exceptionally strong candidates to complete their internships in London, England or Chinle, Arizona.

Alternative degree routes were suggested for students enrolled in physical education, art education, and music education. As with many of the other reports, there was no mention of vocational education program restructure.

Texas

All teacher education programs in Texas Universities have been affected by the passage of Senate Bill 994 (S.B. 994) by the Texas State Legislature in 1987. The bill stipulated that after September 1, 1991, no more than eighteen semester credit hours of education courses at the baccalaureate level may be required for the granting of a teaching certificate by the Texas State Board of Education (Ishler, 1987). Student teaching was to be included within the eighteen semester credit hours.

Ishler (1987), Dean of the College of Education at Texas Tech University, wrote that the standards established in Texas should be considered to be minimum requirements for the preparation of teachers. He further stated that teacher education programs should be permitted, and even encouraged to exceed the minimum standards as determined by each institution's philosophy regarding teacher education and the resources that each is willing to allocate to programs.

Several provisions of S.B. 994 were compatible with the philosophy of the Holmes Group Proposal (1986). Both called for: (1) the

elimination of the baccalaureate in Education degree, (2) teachers to major in the subject they are planning to teach, and (3) an internship/induction year program that is cooperatively supervised by the school district and the university. The major difference in S.B. 994 and the Holmes Group Proposal was that the Holmes Group Proposal recommended at least one full year of graduate professional preparation be required for beginning teachers as well as a one year internship period (Ishler, 1987).

All universities offering teacher education were in the process of restructuring their teacher education. However, Texas Tech University was the first to release its plans.

Texas Tech University

The University of Texas Tech, due to passage of S.B. 994, has proposed a plan for reorganization of teacher education. The program proposed was a post BA/BS degree model. S.B. 994 removed much of the flexibility of choosing models and strategies for teacher education reform (Ishler, 1987). Students were to complete baccalaureate degrees in liberal arts studies except for vocational agriculture and vocational home economics majors who were to complete baccalaureate degrees in their respective colleges. In addition, all education majors were to be required to take nine semester hours of preprofessional undergraduate level education courses. No courses required for certification were to be included. Students preparing to become business education teachers were to complete a baccalaureate in education with a major in secretarial administration.

It was proposed that students who had completed the required

undergraduate degree were required to have maintained a minimum of 3.00 on a 4.00 scale, passed the state teacher competency examinations, met requirements for admission to graduate school, and to meet other admission requirements as soon as they may be established (Ishler, 1987).

University of Austin

Planning for the Austin Teacher Program (ATP) began in 1966 and was implemented in 1968-69 (Graduate School of Education at Rutgers, 1987). The program was a five year integrated or stretch-five program. During the undergraduate years of study students were required to take professional course work which was offered as seminars. The graduate or fifth year of study included the majority of pedagogical study.

Early clinical observation experiences were provided for throughout the course of study. During the fifth year students were required to spend one semester in a public school setting. Education faculty did all of the student teacher supervision which included a weekly seminar. Vocational teacher education was not discussed in the report.

University of New Hampshire

Between 1969 and 1973 a group including students, teachers, school administrators, state department of education representatives, and university educators met to develop a plan for improving teacher preparation (Andrew, 1983). The University of New Hampshire (UNH) program (Andrew, 1981, 1983, 1984, 1986) was a five year integrated course of study which emphasized a strong liberal arts education.

Students in the five year program were required to complete a baccalaureate in liberal arts education. There were no undergraduate majors in education at UNH. The UNH program was a stretch-five model of extended teacher education which included teaching as a career exploration experience in the sophomore year. The initial phase of exploring teaching provided students with the opportunity to explore various kinds of teaching sites, teaching environments, and a variety of students. Students were given teaching tasks immediately to help them make decisions about teaching as a career.

Phase two normally began in the junior year and included introductory courses in education foundations. These programs were offered in individualized modules. Phase three consisted of a year-long, post baccalaureate internship as well as graduate study related to one's area or level of teaching. Students normally spent one full academic year as well as two summers completing phase three (Andrew, 1981, 1983, 1984, 1986).

Exceptions to the five year program included: communication disorders, home economics education, preschool education, mathematics, music, physical education, and all occupational education. An undergraduate major with clinical experience and certification coming with the normal four year undergraduate course of study was offered in each of the areas.

Massachusetts

A task force on teacher education was created by the Massachusetts Board of Regents of Higher Education and the Massachusetts Board of Education in May, 1987 to study and make recommendations for improving

teacher education in state colleges and universities within the state (Joint Task Force on Teacher Preparation, 1987). The plan called for two distinct stages of teacher preparation, each of which was to be "intellectually" rigorous and demanding. In the first stage, which was proposed to normally be completed at the undergraduate level, prospective teachers were to develop the skills needed to enter the classroom. Teachers entering the classroom were to receive provisional certification and be required to enter the graduate program to learn advanced competencies and to complete certification, which was phase two.

This stretch-five program was proposed to include a minimum of 150 hours of supervised teaching experience during phase one. Phase two required a master's degree in education patterned after a clinical model of teacher preparation (Joint Task Force on Teacher Preparation, 1987). The report (1987) made no references to vocational education.

University of Florida

The University of Florida's five-year teacher preparation program, PROTEACH, was implemented in the fall, 1984. It was reported that the program terminates in a master's degree of teaching (Joint Task Force on Teacher Preparation, 1987).

Students in secondary programs were required to complete an undergraduate degree in an appropriate field with the College of Liberal Arts and Sciences while students in elementary education are required to major in that field, but must complete two 12 semester hour specializations. One must have been taken outside the College of Education in a liberal arts discipline; the other may be taken outside

of the college or in a specialty within the college.

Students in secondary programs were required to complete courses in general methods of teaching, special subject methods, and secondary school curriculum as well as courses in the respective subject area. Also required in the fifth year of study was clinical teaching, which is a supervised field experience and student teaching. To qualify for the fifth year of study, students were required to meet the university requirements for admission to graduate school: minimum scores of 1000 on the Graduate Record Examination and a 3.0 on a scale of 4.0 grade point average for the last 60 hours of undergraduate study (Smith, 1980).

Other States and Universities

Other states which have implemented post BA/BS degree models include the University of California at Berkley, Stanford University, San Diego State University, and the Harvard Graduate School of Education (Joint Task Force on Teaching, 1987). None of the reports mention or acknowledge vocational education. Each require a baccalaureate in liberal studies and have rigid entrance requirements into the fifth year of study. These programs seemed to follow the Holmes Group Proposal (1986) with regard to requiring extensive internships and student teaching experiences.

The University of Tennessee (Teacher Education Reform Recommendations, 1987) has proposed a plan for teacher educational reform to be implemented in 1993. The proposed plan was a modified stretch-five model which was of interest to this study because all vocational teacher preparation programs were exempted from the plan.

Vocational teacher preparation was to continue as a traditional four year baccalaureate plan.

In Oklahoma, deans from the three major colleges of education in the state have collaborated to put forth a position paper which called for extending teacher education programs among other things (Coppedge, Robinson, & Wood, 1987). The Dean from Oklahoma State University, Robinson, presented a paper to the State Regents for Higher Education Task Force in Teacher Education (Robinson, 1987) in 1983 which recommended a version of the post BA/BS degree model which would require six years to complete including a paid entry year experience during the sixth year. The plan has been revised periodically but retains the major tenants of the original plan.

Summary

Those who have advocated extended programs argued that more time is needed in order to increase prospective teachers' liberal arts background, field experiences, and professional education. Examination of the programs has indicated that the institutions have utilized the extra time in this way, although there was considerable variability. Regarding liberal arts preparation, the five year programs either specified a minimum number of general education credits or required that students complete regular general education requirements of the liberal arts college. At some of the institutions, students completed regular liberal arts majors and received a bachelor of arts degree. At others, academic specializations or teaching fields were required and students were to receive a bachelor of arts in education or a bachelor of science in education.

The extended programs typically prepared both secondary and elementary teachers. In some cases, the amount of professional education has been increased while at others, the number of professional courses have remained the same or have declined, with the additional time allocated to field experiences and liberal arts studies.

A majority of the programs either ignored vocational education or did not offer vocational teacher preparation. Some allowed alternative certification for vocational teachers while others exempted vocational teacher preparation from extended schooling altogether.

CHAPTER III

METHODOLOGY

The purpose of this study was to ascertain vocational teachers' attitudes regarding extended teacher education programs. This chapter is devoted to the discussion of methods utilized to accomplish the study's purpose. Specifically the following sections were discussed: (1) type of research, (2) subjects, (3) instrument development, (4) pilot study, (5) data collection, and (6) analysis of data and statistical analysis.

Type of Research

Key (1974) categorized descriptive research by stating:

Descriptive research is used to obtain information concerning the current status of the phenomena. The purpose of these methods are to describe 'what exists' with respect to variables or conditions in a situation (p. 126).

Turney and Robb (1971) add that descriptive research attempts to answer the question:

Does the research deal with what is? If it does then it is descriptive research. Descriptive research is concerned with characterizing the features of situations, objects, or practices. It allows one to find out pertinent information about an existing situation (p. 8).

They concluded, however, that "descriptive research is more than just a collection of data; it is not research unless discussion of the data is extended to the level of adequate interpretation" (p. 62).

Descriptive research is an attempt to describe things instead of discovering a cause-and-effect relationship (Huck, Comier, and Bounds, 1974).

There are two types of descriptive research, the survey and the case study (Turney and Robb, 1971). "The survey is an attempt to analyze, interpret and report the status of an institution, group, or area in order to guide practice in the immediate future" (p. 63). This study utilized survey research to collect the data.

Subjects

The subjects of this study were individuals who were teachers of vocational subjects in American Vocational Association (AVA) Region Four which included Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma, and Texas. The subjects were members of the AVA during the 1987-1988 school year. The vocational subject areas of the subjects were comprised of the following areas: Agriculture Education, Business and Office Education, Health Occupations Education, Home Economics Education, Industrial Arts/Technology Education, Marketing Education, Technical Education, and Trade and Industrial Education. The population for the study was 8,141 vocational teachers.

Instrument Development

The instrument utilized to collect the data was a questionnaire. The questionnaire was based on related studies conducted by researchers from Oklahoma State University, Dr. Kay Bull, Dr. David Yellin, Dr. Mike Warner, and Mr. Ray Sanders. Their instrument was modified for vocational education by this writer. Appendix A contains a copy of

the instrument. The instrument was tested for clarity by a panel of vocational teacher educators at Oklahoma State University. The instrument was then employed in a pilot study which was conducted to further refine the instrument.

Pilot Study

A pilot study was conducted during the annual August Conference of Oklahoma vocational educators Stillwater, Oklahoma, August, 1987, in order to refine the survey questionnaire for this study. The subjects for the pilot study were teachers of vocational education in Oklahoma including teachers representing: Agriculture Education, Business and Office Education, Industrial Arts/Technology Education, Health Occupations Education, Home Economics Education Marketing Education, Technical Education, and Trade and Industrial Education. The population of the pilot study consisted of 2,467 teachers.

The pilot study questionnaire was divided into two sections: a personal section used to gather demographic data and other personal data, and a section which asked 47 questions related to the four factors listed in the research questions. The questions in section two utilized a lichert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Six hundred questionnaires were placed in randomly selected vocational teachers' registration packets at the annual August conference. This writer introduced the study, stated the purpose of the study, and answered individual questions at each of the vocational divisional meetings except for the agriculture division. The respondents were asked to return the completed questionnaires to their

respective state supervisor. One hundred thirty-six questionnaires were returned for the pilot study (N = 136).

A confirmatory factor analysis was employed to further develop the instrument. Four factors were determined to be significant for the pilot study: (1) Perceived need for extended teacher education programs, (2) Perceptions of general education components of teacher education programs, (3) Perception of how extended teacher education programs should be organized, and (4) Perceptions of the adequacy of present teacher education programs. Reliability coefficients were determined for the four factors listed in the research questions by use of the factor analysis. Table II shows the results of the factor analysis with regard to a reliability coefficient of $r = .840$, factor two $r = .752$, factor three $r = .729$, and factor four had a coefficient of $r = .628$. Appendix B shows the mean of each of the questions used in the pilot study. The reliability coefficients indicated a high reliability among the four pilot studies conducted by Sanders, Warner, Yellin, and Bull.

The 49 questions utilized in the major study which represented the four factors listed in the research questions were randomly distributed throughout the final questionnaire to avoid question to question disturbance. Table III shows the question number and the factor which it represented. The 19 questionnaire questions related to factor number one were designed to answer research question number one and to test hypothesis number one. The seven questionnaire questions related to factor number two were designed to answer research question number two and to test hypothesis number two. The 16 questionnaire questions related to factor number three were designed to answer

TABLE II
 FACTOR ANALYSIS (PILOT STUDY)

	Item Loading	Item Numbers Per Each Form			
		1	2	3	4
FACTOR 1: <u>Perceived Need for Extended Programs</u>	.829	1	1	1	1
	.796*	13	13	13	9
	.772	24	30	28	13
	.680	29	35	33	17
	.651*	8	8	8	5
	.651*	3	3	3	2
	.634	7	8	7	4
	.528*	15	14	15	11
	.586*	12	11	12	8
	.562	26	31	29	14
	.474	17	16	17	DEL
	.468	4	4	4	3
	.449	30	36	34	19
	.431*	14	13	14	10
	.422*	16	15	15	12
	.398	26	32	30	15
	.353	32	43	36	25
	.315	11	10	11	7
	.310	31a	37	35a	14
var. explained 7.803					
% total var. 10.837					
Reliability <u>.840</u>					
FACTOR 2: <u>Perceived Need for General Education Components</u>	.792*	DEL	18	19	30
	.787	19	19	20	31
	.758	23a	27	27a	37
	.709	31a	37	35a	19
	.496	34	45	38	27
	.379	21	22	11	33
	.332	16	16	16	12
	.306	31d	40	35d	22
var. explained 4.347					
% total variance 6.038					
Reliability <u>.752</u>					

TABLE II (Continued)

	Item Loading	Item Numbers Per Each Form			
		1	2	3	4
FACTOR 3: <u>Beliefs Regarding Extended</u>	.771	31f	42	35f	24
<u>Teacher Education Program</u>	.600	31d	40	35d	22
<u>Organization</u>	.594	31c	39	35c	21
	.574	31e	41	35e	23
	.512	31b	38	35b	10
	.510	33	44	37	26
	.473	23c	29	35c	29
	.471	23b	28	27c	28
	.447	32	43	36	25
	.338*	35	46	39	35
	.321*	3	3	3	2
var. explained 4.400					
% total var. 6.111					
Reliability <u>.729</u>					
FACTOR 4: <u>Perception of the Adequacy</u>	.690	DEL	24	24	34
<u>of Present Teacher Education</u>	.600*	DEL	26	26	36
<u>Programs</u>	.590*	DEL	25	25	35
	.412	20	21	21	32
	.372	28	34	32	16
	.367*	19	20	20	31
	.358*	45	56	49	DEL
	.349*	DEL	52	45	DEL
	.319*	DEL	69	55	DEL
var. explained 3.005					
% total var. 4.174					
Reliability <u>.628</u>					

*Starred items were phrased negatively and had a negative sign. (Form 1 N = 128; Form 2 N = 132; Form 3 N = 136; Form 4 N = 127). DEL = item deleted.

Note: Form 1 was a study of undergraduate teacher education students at OSU; Form 2 was a study of graduate teacher education students at OSU; Form 3 was a study of vocational teachers in Oklahoma; Form 4 was a study of counseling psychology students at OSU.

TABLE III
QUESTION DISTRIBUTION IN QUESTIONNAIRE

Factor 1*	Factor 2*	Factor 3*	Factor 4*
2	1	5	3
11	4	8	7
12	6	9	10
13	16	17	25
14	18	20	28
15	31	22	34
19	32	23	42
21		27	
24		29	
26		30	
33		35	
36		38	
37		39	
40		41	
43		44	
46		45	
47			
48			
49			

*Factor 1 = Perceived Need for Extended Teacher Education Programs

Factor 2 = Perceptions of General Education Components

Factor 3 = Beliefs Regarding Extended Teacher Education Program
Organization

Factor 4 = Perceived Adequacy of Present Teacher Education Programs

research question number three and to test hypothesis number three. The seven questionnaire questions related to factor number four were designed to answer research question number four and to test hypothesis number four.

Data Collection

The questionnaire and accompanying letter (See Appendix C) were sent by mail to the 600 randomly selected subjects (N = 600). The subjects were asked to complete the questionnaire and to return it to the researcher in the enclosed self-addressed, stamped envelope.

Analysis of Data and Statistical Analysis

To develop the instrument a factor analysis was run on the data collected in the pilot study by the use of a personal computer statistical package (SYSTAT, 1985). Isaac and Michael (1981) stated:

Factor analysis is a statistical analysis procedure that affords an explanation of how the variance common to several intercorrelated measures can be accounted for in terms of a small number of dimensions with which the variables are correlated (p. 201).

They further related that the technique may also be used to provide a means of testing hypotheses regarding anticipated structures. Factor analysis is used to describe a parsimonious structure in the convariation present among many variables in terms of a relatively small number of common factors (Isaac and Michael). Kerlinger (1967) related:

Generally speaking, if two tests measure the same thing, the scores obtained from them can be added together. If, on the other hand, the two tests do not measure the same thing, their scores cannot be added together. Factor analysis tells us, in effect, what tests or measures can be added and

studied together rather than separately. It thus limits the variable with which the scientist must cope. It also (hopefully) helps the scientist to locate and identify unities or fundamental properties underlying tests and measures (p. 650).

Kerlinger (1967) identified a factor as a construct, a hypothetical entity that is assumed to underlie tests and test performance.

The principal factors method was utilized because it is mathematically satisfying yielding a mathematically unique solution of an R matrix. A major solution feature was that it extracted a maximum amount of variance as each factor was calculated. The r matrix was expressed in the smallest number of factors with the method (Kerlinger, 1967). Kerlinger (1967, p. 653) stated "It is strongly recommended, therefore, that social scientific and educational researchers use the principal factors method".

A principal factors matrix and its loadings accounted for the common factor variances of the test scores, but they did not provide scientifically meaningful structures in their initial form. Kerlinger noted that the configurations of tests or variables in factor space are of fundamental concern. In order to discover these configurations adequately "the arbitrary reference axes must be rotated" (Kerlinger, 1967).

There were several rotational methods which could be utilized to help assume psychological reality of the test, however, two main types of rotation according to Kerlinger (1967) are used: orthogonal and oblique. This pilot study utilized the orthogonal method in order to maintain the right angle between the axes so that four research studies conducted at OSU could be compared. Many researchers preferred to use the orthogonal method in educational research because the oblique method makes it difficult to compare factor structure from one study to

another; however, Kerlinger (1967) wrote that the type of rotation seemed to be a matter of taste.

To answer the research questions the means, a measure of central tendency, were calculated for each of the questions which represented each of the four factors listed in the research questions. Gay (1981, p. 284) stated:

The mean is the arithmetic average of the scores and is the most frequently used measure of central tendency. It is calculated by adding up all of the scores and by dividing that total by the number of scores.

This was accomplished by utilizing a statistical package designed for personal computers (Bolding, 1984).

The following specific hypotheses were formulated for the study:

1. There are no significant differences in vocational teachers' perceived need for extended teacher education programs and age, sex, employment status, program area, college classification, community size, preferred size of community in which to work, and ethnic classification.
2. There are no significant differences in vocational teachers' perceptions of teacher education general education components and age, sex, employment status, program area, college classification, community size, preferred size of community in which to work, and ethnic classification.
3. There are no significant differences in vocational teachers' beliefs regarding the organization of extended teacher education programs and age, sex, employment status, program area, college classification, community size, preferred size of community in which to work, and ethnic classification.
4. There are no significant differences in vocational teachers'

beliefs regarding the adequacy of teacher education programs and age, sex, employment status, program area, college classification, community size, preferred size of community in which to work, and ethnic classification.

To test the research hypotheses a between-subjects one-way analysis of variance was computed by using a statistical program (Bolding, 1984) with a personal computer. An alpha of .05 was selected by the researcher. After the means were calculated for each of the questionnaire questions, they were then sorted into the four groups representing the four hypotheses. To test the various portions of the hypotheses, the means for the respective questions which represented each hypothesis was sorted into each of the variables to be tested for significance. The variables were: age, employment status, certification level, program area, college classification, size of residence community, preferred size of community in which to work, and ethnic classification. According to Jaccard (1983) the between-subjects one-way analysis of variance may typically be used to analyze the relationship between two variables when:

1. the dependent variable is quantitative in nature and is measured on approximately an interval level;
2. the independent variable is between-subjects and in nature (it can be either qualitative or quantitative); and
3. the independent variable has three or more groups or value (p. 207).

All three of the conditions were met for the study except for one of the independent variables, sex, listed in the hypotheses, which had only two groups or values. To test the portion of the hypotheses regarding sex, an independent groups t test was calculated by using a statistical program (Bolding, 1984) with a personal computer. An alpha of .05 was selected by the researcher. After the means were calculated

for each of the questionnaire questions, they were then sorted into the four groups representing the four hypotheses. To test the age variable of the hypotheses, the means for the respective questions which represented each hypothesis was sorted into the age variable to be tested for significance. Jaccard (1983) reports that the independent groups t test is typically used to analyze the relationship between two variables when:

1. the dependent variable is quantitative in nature and is measured on a scale that approximates interval characteristics;
2. the independent variable is between-subjects in nature (note: it can be either qualitative or quantitative); and
3. the independent variable has two and only two values (p. 161).

When the analysis of variance test revealed significance, an eta squared appropriate for the test was utilized to measure the strength of association between the independent and dependent variable (Linton and Gallo, 1975). Likewise, when the t test revealed significance, an eta squared appropriate for the t test was utilized to measure the strength of association between the independent and dependent variable (Linton and Gallo, 1975).

Because the test of significance, ANOVA, could only determine whether an overall difference existed, it was imperative that a specific comparison test be used. A Tukey's Test of Unconfounded Means was employed, whenever an analysis of variance was significant at the predetermined .05 level, for specific comparisons of the means. The Tukey's test was the most conservative and easiest to compute since the values already obtained in the ANOVA were utilized in the formula (Linton and Gallo, 1975).

CHAPTER IV

PRESENTATION OF FINDINGS

This chapter presents the findings of the research. There are six sections in this chapter. The first section presents demographic information regarding the respondents. The second section presents data relevant to the four research questions. Data pertinent to the four hypotheses are presented in the four successive sections. Chapter V is devoted to the summary, conclusions, and recommendations for the study. The purpose of this study was to ascertain vocational teachers' attitudes regarding extended teacher education programs.

To answer the research hypotheses one way analyses of variances were employed for all variables except for the variable of sex which utilized independent t tests. In all cases an alpha of .05 was selected to test the hypotheses. After the means were calculated for each of the questionnaire questions, they were then sorted into the four groups representing the four hypotheses. Three hundred eighty questionnaire questions were used for each of the four factors.

Responses

Six hundred questionnaires were mailed to randomly selected subjects who were members of the American Vocational Association, Region Four. The total population was 8,191. Three hundred eighty-four questionnaires were completed and returned for a return rate of 64

percent. Four of the returned questionnaires were improperly completed leaving 380 useable questionnaires for the study.

Table IV shows the demographic characteristics of the respondents. The respondents were comprised of 38 persons (10.00%) who were between the ages of 20-29 years old, 102 (26.84%) in the age category of 30-39, 144 (37.89%) in the age category of 40-49, 72 (18.95%) in the age category 50-59, and 24 (6.32%) in the age category 60 years or older. Regarding gender of the respondents, 172 (45.26%) were males and 208 (54.74%) were females.

Three hundred (78.95%) of the respondents indicated that they were not employed as something other than as a teacher. Forty-four (11.58%) were employed as something other than as a teacher for less than 20 hours per week, while 14 (5.79%) indicated that they were employed as something other than as a teacher for 20 to 40 hours per week, and only 14 (3.68%) reported that they were employed for more than 40 hours per week as something other than as a teacher.

The certification types which the respondents held were reported as follows: no certification, 16 (4.21%); provisional level one (one year or less), 20 (5.26%); provisional level two or second level temporary (more than one year), 36 (9.47%); standard, 286 (75.26%); adult, 23 (3.16%); and other, 10 (2.63%). The programs in which the respondents taught were: agriculture, 54 (14.21%); business and office, 58 (15.26%); health occupations, 16 (4.21%); home economics, 96 (25.26%); industrial arts/technology, 12 (3.16%); marketing, 32 (8.24%); other, 20 (5.26%); technical, 16 (4.21%); and trade and industrial, 76 (20%).

The respondents were asked to indicate their college

TABLE IV
DEMOGRAPHIC DATA OF THE RESPONDENTS

Code	Frequency	Percent
<u>Age</u>		
20-29 years	38	10.00
30-39 years	102	26.48
40-49 years	144	37.89
50-59 years	72	18.95
60 or over	24	6.32
<u>Sex</u>		
Male	172	45.26
Female	208	54.74
<u>Employed as Something Other Than as Teacher</u>		
Not employed as something other	300	78.95
Less than 20 hours per week	44	11.58
20 to 40 hours per week	22	5.79
More than 40 hours per week	14	3.68
<u>Certification Held</u>		
No certification	16	4.21
Provisional 1 or temporary	20	5.26
Provisional 2 or 2nd level	36	9.47
Standard	286	75.26
Adult	12	3.16
Other	10	2.63
<u>Program Area Taught</u>		
Agriculture Ed	54	14.21
Business and Office Ed	58	15.26
Health Occupations Ed	16	4.21
Home Economics Ed	96	25.26
Industrial Arts/Technology Ed	12	3.16
Marketing Ed	32	8.42
Other	20	5.26
Technical Ed	16	4.21
Trade and Industrial Ed	76	20.00

TABLE IV (Continued)

Code	Frequency	Percent
<u>College Classification</u>		
0-30 hours	6	1.58
31-60 hours	2	0.53
61-90 hours	8	2.11
91-120 hours	12	3.16
BA/BS Degree	96	25.26
BA/BS plus 30 hours	52	13.68
MA/MS Degree	142	37.37
MA/MS plus 30 hours	60	15.79
Doctorate Degree	2	0.53
<u>Size of Residence Community</u>		
Rural area, less than 20,000	136	31.05
Small town, 20,000 to 50,000	104	27.37
Suburb of a city over 50,000	70	18.42
Urban area, over 50,000	70	18.52
<u>Preferred Size of Community in Which to Work</u>		
Rural area, less than 20,000	118	31.05
Small town, 20,000 to 50,000	132	34.74
Suburb of a city over 50,000	74	19.47
Urban area, over 50,000	56	14.74
<u>Ethnic Classification</u>		
Caucasian	344	90.53
Black	12	3.16
Hispanic	8	2.11
Oriental	0	0.00
Native American	14	3.68
Other	2	0.53

N = 380

classification. Six (1.58%) respondents checked the 0 to 30 college hours category; 31 to 60 hours, 2 (0.53%); 61 to 90 hours, 8 (2.11%); 91 to 120 hours, 12 (3.16%); BA/BS degree, 96 (25.26%); BA/BS degree plus 30 semester hours, 51 (13.68%); MA/MS degree, 142 (37.37%); MA/MS plus 30 semester hours, 60 (15.79%); and only 2 (0.53%) reported that they held a doctorate degree.

The respondents reported the size of the communities in which they lived as follows: 136 (35.79%) resided in a rural area in the country or in a town of less than 2,000 population, 104 (27.37%) checked that they resided in a small town not near a larger city (20,000 to 50,000 population), 70 (18.42%) indicated that they resided in a suburban area (suburb of a city over 50,000 population), and 70 (18.42) indicated that they resided in an urban area (city of over 50,000). When asked to indicate the size of the communities in which they would prefer to work, the following responses were obtained: a rural area in the country or a small town of less than 2,000, 118 (31.05%); a small town not near a larger city (2,000 to 50,000), 132 (34.74%); a suburban area (suburb of a city over 50,000 population), 74 (19.47%); and an urban area (city over 50,000), 56 (14.74%).

The ethnic classification represented in the study were: Caucasian, 344 (90.53%); Black, 12 (3.16%); Hispanic, 8 (2.11%); Native American, 14 (3.68%); other, 2 (0.53%); and there were no respondents who indicated that their ethnic classification was Oriental.

Research Question Findings

To answer the research questions the means, a measure of central tendency (Gay, 1981) were calculated for each of the questions which

represented each of the four factors listed in the research questions. The range for each of the questions was: one (strongly disagree), two (disagree), three (undecided), four (agree), and five (strongly agree). To give the reader a more accurate description of the data, the standard deviation, the amount of average deviation from the mean (Jaccard, 1981), for each question was included. A mean of 0 to 1.5 was considered strongly disagree, 1.51 to 2.5 disagree, 2.56 to 3.50 undecided, 3.51 to 4.5 agree, and 4.56 to 5.00 strongly agree. Nineteen unsolicited comments were obtained from the questionnaires. Appendix D contains the unsolicited comments.

Research Question Number One

Nineteen questions in the questionnaire were designed to answer the first research question, "Do vocational teachers perceive a need for extended teacher education programs?" Table V shows the mean and standard deviation for each of the questions related to factor number one--research question number one. The means for all of the questions except for numbers 15 and 26 were around 3.00 (n = 380) which categorized them as "undecided". Question number 19 (mean = 2.92; sd = 1.12) contained 40 strongly disagree, 112 disagree, 88 undecided, 118 agree, and 22 strongly agree. Question number 47 (mean = 2.66; sd = 1.04) contained 42 strongly disagree, 158 disagree, 74 undecided, 84 agree, and 12 strongly agree. Question number 15 had a mean of 2.26 and question number 26 had a mean of 1.95 which placed them in the "disagree" category. The standard deviation for each of the questions was around 1.00 and ranged from 0.96 to 1.19. The subjects disagreed with the statement that extended teacher education programs should

TABLE V
 VOCATIONAL TEACHERS' PERCEIVED NEED FOR EXTENDED
 TEACHER EDUCATION PROGRAMS
 FACTOR ONE

Question Number	Question	Mean	Standard Deviation
2	Extended programs should discourage the marginal students from becoming teachers.	3.16	1.19
11	Participation in an extended program is likely to make teachers knowledgeable in a number of broad discipline areas.	3.29	0.96
12	If extended teacher education programs were mandated, they should require at least 5 years to complete.	3.05	1.07
13	Participation in an extended program is likely to make teachers subject matter experts in a single academic discipline.	2.74	1.00
14	Extended programs which expand the general education component will leave insufficient time for needed specialization courses (e.g., construction, engineering, nursing, etc.).	3.45	1.05
15	Extended programs should encourage students who are marginally motivated to become teachers.	2.26	0.98
19	Extended teacher education programs (5 years or more for a first teaching degree) are desirable.	2.92	1.12
21	Extended programs will increase shortages of teachers where shortages already exist.	3.36	1.08
24	A master's degree should be the minimum educational level for a beginning teacher.	2.18	0.99
26	If extended teacher education programs were mandated, they should require at least 6 years to complete.	1.95	0.96
33	Extended programs will be too expensive for the average teacher education candidate.	3.47	1.00

TABLE V (Continued)

Question Number	Question	Mean	Standard Deviation
36	Extended programs will require too much time for the average person.	3.31	1.04
37	Participation in extended programs is unlikely to make teachers more capable of conveying knowledge to students.	3.17	1.19
40	Early field experiences are less likely in an extended program.	3.00	1.00
43	Four years is <u>not</u> enough time to adequately prepare in both subject matter and teaching pedagogy.	2.70	1.11
46	Teachers who complete extended programs will not be more mature than graduates of 4 years.	2.79	1.04
47	Extended programs are necessary because there is too much content to be taught in a 4-year program.	2.66	1.04
48	Participation in extended programs is unlikely to make teachers more knowledgeable about their jobs.	2.85	1.09
49	Extended programs which greatly expand the general education component will leave insufficient time for needed professional courses (e.g., educational psychology courses, methods of teaching, etc.).	3.30	1.00

N = 380

encourage students who are marginally motivated to become teachers. They also disagreed with the statement that extended teacher education programs should require at least six years to complete.

Research Question Number Two

Seven questions in the questionnaire were designed to answer the second research question, "How do vocational educators perceive the value of general education components of teacher education programs?" Table VI shows the mean and standard deviation for each of the questions related to factor number two--research questions number two. The means ranged from 2.26 to 3.58 and the standard deviation ranged from 0.85 to 1.22 for the seven questions. The subjects were undecided as to whether they would have preferred to have taken fewer general education courses in their program, question number one (3.15). It was found that the subjects disagreed with the statement that the grades that they received in their general education courses were higher than those that they received in their professional education courses (teacher education) or in their specialization course work (e.g. nursing, engineering, welding, etc.) (number 32, mean = 2.26). It was also found that the respondents disagreed with the statement (question number 4, mean = 2.30) that general education courses made them think and work harder than their professional or specialization course work. Further, it was found from question number 16 (mean = 2.28) that the respondents were satisfied with their background in general education since the question was negatively phrased.

The only question which may have been interpreted as "agree" was

TABLE VI
 VOCATIONAL TEACHERS' PERCEPTIONS OF THE VALUE OF GENERAL
 EDUCATION COMPONENTS OF TEACHER EDUCATION PROGRAMS
 FACTOR TWO

Question Number	Question	Mean	Standard Deviation
1	I would have preferred to take fewer general education courses in my program.	3.15	1.21
4	My general education courses made me think and work harder than my professional (teacher education) or my specialization course work (e.g. agriculture, cosmetology, management, etc.).	2.30	1.14
6	I wish I had a stronger background in the subject area(s) I am teaching.	2.83	1.22
16	I am not satisfied with my background knowledge in the general education.	2.28	1.03
18	My general education courses have been as helpful to me as my professional (teacher education), and specialization courses (e.g. diesel mechanics, business supervision, etc.).	2.69	1.16
31	My general education courses have been beneficial to me.	3.58	0.93
32	The grades that I received in my general education courses were higher than those I received in my professional (teacher education) or in my specialization course-work (e.g. nursing, engineering, welding, etc.).	2.26	0.85

N = 380

question number 31 and it only has a mean of 3.58 with a standard deviation of 0.93 making it a weak "agree". Question number 31 stated "My general education courses have been beneficial to me".

Research Question Number Three

Sixteen questions in the questionnaire were designed to answer the third research question, "How do vocational teachers believe that extended teacher education programs should be organized?" Table VII shows the mean and standard deviation for each of the questions related to factor number three--research question number three. The means for this section ranged from 2.22 to 3.97 and the standard deviations ranged for 0.80 to 1.13.

Respondents were "undecided" on questions 17, 22, 27, 30, 35, 38, and 45. These questions concerned placing teacher education students in a classroom during the fifth and sixth years of an extended program, increasing the length of student teaching, increasing professional course work, increasing general education course work, and increasing field experiences prior to student teaching. Even though undecided on increasing the length of student teaching, the respondents indicated that extended programs should increase the variety of student teaching (number 41, mean = 3.75, 0.84).

It was found that the subjects believe that extended programs should be the same as existing programs but should have supervised experience (paid) year or entry year with a cooperating teacher who would help the new teacher (question number 9, mean = 3.66, sd = 0.98). Respondents agreed that extended programs should increase the amount of specialization course work (number 23, mean = 3.55, sd = 1.11;

TABLE VII
 VOCATIONAL TEACHERS' BELIEFS CONCERNING THE
 ORGANIZATION OF TEACHER EDUCATION PROGRAMS
 FACTOR THREE

Question Number	Question	Mean	Standard Deviation
5	Extended program should <u>not</u> focus on on-the-job training.	2.28	1.08
8	If I were to change my teacher education program, I would increase the number of general education courses.	2.25	0.95
9	Extended programs should be the same as existing programs but should have supervised experience (paid) year or entry year with a cooperating teacher and faculty who will help the new teacher.	3.66	0.98
17	Extended programs should place teacher education students in the classroom with students during each of the 5-6 years of the program.	3.50	1.13
20	Extended programs should <u>not</u> include course work related to observations of special needs children (e.g. EMH, GAT, Ed/BD, LD).	2.22	0.96
22	Extended programs should increase the length of student teaching.	3.12	1.07
23	If I were to change my teacher education program I would increase the number of specialization courses (e.g. carpentry, agriculture, etc.).	3.55	1.11
27	Extended programs should start with a degree in general education and have the teaching/pedagogy part only in the 5-6th year.	2.31	1.06
29	Extended programs should increase the specialization course work (agriculture, home economics, carpentry, etc.).	3.74	0.96
30	Extended programs should increase professional education (teacher education) courses).	3.29	1.04

TABLE VII (Continued)

Question Number	Question	Mean	Standard Deviation
35	If I were to change my teacher education program, I would increase the number of professional courses (teacher education courses).	3.01	1.08
38	Extended programs should increase general education course work.	2.55	0.99
39	Extended programs should lead to a specialist degree (post-master's) if they are six year programs.	3.97	0.80
41	Extended programs should increase the variety of student teaching (teaching in a variety of settings).	3.75	0.84
44	Extended programs should <u>not</u> lead to a master's degree if they are five year programs.	2.29	1.02
45	Extended programs should increase the field experience (more time in the classroom before student teaching).	3.58	1.05

N = 380

number 29, mean = 3.74, sd = 0.96).

Respondents disagreed with question 44 (mean = 3.58, sd = 1.05) which stated that extended programs should not lead to a master's degree if they are five year programs. They also agreed with question number 39 (mean = 3.97, sd = 0.80) which stated that if extended programs are six years in length they should lead to a specialist degree (post masters).

Disagreement also existed to question 5 (mean = 2.28, sd = 1.08) which stated that extended programs should not focus on on-the-job training. There was disagreement to question number 20 (mean = 2.22, sd = 0.96) which was that extended programs should not include course work related to observations of special needs children.

Research Question Number Four

Seven questions in the questionnaire were designed to answer the fourth research question, "Do vocational teachers believe that the present teacher education programs are adequate?" Table VIII shows the mean and standard deviation for each of the questions related to factor number four--research question number four. Five of the seven questions were in the "undecided" category regarding the adequacy of present teacher education programs. The five questions concerned admission standards, course requirements, and grading standards of teacher education programs as well as one question related to the necessity of extended programs.

The respondents disagreed with question number 24 (mean = 2.19, sd = 1.05), "My BA/BS teacher education program did not adequately prepare me to teach". Further, there was agreement with number 3

TABLE VIII
 VOCATIONAL TEACHERS' BELIEFS REGARDING THE ADEQUACY
 OF PRESENT TEACHER EDUCATION PROGRAMS
 FACTOR FOUR

Question Number	Question	Mean	Standard Deviation
3	When I received my first teaching assignment I knew a sufficient amount of <u>subject</u> matter content to teach without undo stress.	3.94	1.05
7	Admission standards for teacher education are generally too easy.	3.09	1.15
10	Course requirements in teacher education programs are too easy.	2.74	1.04
25	My BA/BS teacher education program did not adequately prepare me to teach.	2.19	1.05
28	Grading standards (the amount of work or skill needed to get a good grade) are too easy in teacher education courses.	2.57	1.04
34	Extended programs are unnecessary since good teachers can be trained in a 4-year program.	3.37	1.04
42	The balance of course work in my BA/BS teacher education program between (general education), professional (teacher education), and specialization (e.g. auto mechanics, nursing, etc.) course work was appropriate.	3.41	0.99

N = 380

(mean = 3.94, sd = 1.05) which stated that when the first teaching assignment was received the respondents knew a sufficient amount of subject matter to teach without undue stress.

Research Hypothesis Number One

There are no significant differences in vocational teachers' perceived need for extended teacher education programs and age, sex, employment status, program area, college classification, community size, preferred size of community in which to work, and ethnic classification.

Age

Question number one in the first section of the questionnaire was designed to divide the respondents into five age categories: (a) 20 to 29 years, (b) 30 to 39, (c) 40 to 49 years, (d) 50 to 59 years, and (e) 60 years old or over. Nineteen questions in section two of the questionnaire were designed to test hypothesis number one. After the means for the 19 questions were sorted into the variable, age, a one way analysis of variance was computed. The computed F ratio of 1.00 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the age variable. There existed no significant differences in vocational teachers' perceived need for extended teacher education programs among the five age groups. Table IX shows the values for the age variable.

Sex

Question number two in the first section of the questionnaire

TABLE IX
PERCEIVED NEED FOR EXTENDED TEACHER
EDUCATION PROGRAMS BY AGE

Source	SS	DF	Var. Est.
Among	384334.27	4	96083.57
Within	8652580.34	90	96139.78
Total	9036914.61	94	
F-Ratio		1.00	
Significance		0.4171	

asked the subjects to indicate their gender (sex). One hundred seventy-two respondents indicated that they were male and 208 checked that they were female. The mean scores for the nineteen questions related to hypothesis number one were sorted into the sex variable. An independent t test was computed to test for differences in the sex variable. An alpha of .05 was selected for significance. The t value of 0.038 was not significant at the selected .05 level; therefore, the hypothesis was not rejected with regard to the sex variable. No significant differences existed in vocational teachers' perceived need for extended teacher education programs between the sexes. Table X presents the values for the sex variable.

Employment Status

The third question in the section one of the questionnaire asked the subjects to indicate how many hours per week that they were employed as something other than as a teacher. Four categories existed from which the respondents were to choose: (a) I am not employed as something other than as a teacher, (b) less than 20 hours per week, (3) 20 to 40 hours per week, and (d) more than 40 hours per week. After the means for the nineteen questions related to hypothesis number one were sorted into the employment variable, a one way analysis of variance was computed to test the hypothesis. The calculated F value of 0.32 was not significant at the selected .05 alpha level; therefore, the hypothesis was not rejected with regard to the employment status variable. No significant differences existed in the vocational teachers' perceived need for extended teacher education programs with regard to the amount that they worked as something other than as a

TABLE X
PERCEIVED NEED FOR EXTENDED TEACHER
EDUCATION PROGRAMS BY SEX

ITEM	Group 1	Group 2
N	19	19
Mean	2.9153	2.9211
Standard Deviation	0.5016	0.4329

t value = 0.0381
df = 36

teacher. Table XI shows the values for the employment status variable.

Certification

Question number four in the demographic section of the questionnaire asked the subjects to indicate the type of teaching certification which they possessed. The categories to be selected from were: (a) no certification, (b) provisional level one or temporary for one year or less, (c) provisional level two or second level temporary for more than one year, (d) standard certification, (e) adult, and (e) other. Nineteen questions in section two of the questionnaire were designed to gather data to test hypothesis number one. Once the means for the nineteen questions were sorted into the certification variable, a one way analysis of variance was calculated. The calculated F ratio of 0.43 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the certification variable. No significant differences existed in the perceived need for extended teacher education programs among the six types of certification which the vocational teachers possessed. Table XII presents the F ratio values for the certification variable.

Education Program Taught

Question number five in the first section of the questionnaire asked the subjects to indicate the program area in which they taught. The categories included: (a) Agriculture Education, (b) Business and Office Education, (c) Health Occupations Education, (d) Home Economics Education, (e) Industrial Arts/Technology Education, (f) Marketing Education, (g) Other, (h) Technical Education, and (i) Trade and

TABLE XI
 PERCEIVED NEED FOR EXTENDED TEACHER
 EDUCATION PROGRAMS BY EMPLOYMENT
 STATUS

Source	SS	DF	Var Est
Among	0.24	3	0.08
Within	17.93	72	0.25
Total	18.17	75	

F- Ratio	0.32
Significance	0.8151

TABLE XII
 PERCEIVED NEED FOR EXTENDED TEACHER
 EDUCATION PROGRAMS BY
 CERTIFICATION TYPE

Source	SS	DF	Var Est
Among	0.68	5	0.14
Within	34.09	108	0.32
Total	34.77	113	

F-Ratio	0.43
Significance	0.8286

Industrial Education. Nineteen questions in section two of the questionnaire were designed to gather data to test hypothesis number one. Once the means for the nineteen questions were sorted into the educational program variable, a one way analysis of variance was calculated. The calculated F ratio of 1.31 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the educational program variable. No significant differences existed in the vocational teachers' perceived need for extended teacher education programs among the program areas in which vocational teachers taught. Table XIII presents the F ratio value for the program area variable.

College Classification

The sixth question in section one of the questionnaire was designed to ascertain the college classification of the subjects. The means of the nineteen questions from section two of the questionnaire were sorted into nine categories of college classification: (a) 0 to 30 college hours, (b) 31 to 60 hours, (c) 61 to 90 hours, (d) 91 to 120 hours, (e) BA/BS degree, (f) BA/BS plus 30 semester hours, (g) MA/MS degree, (h) MA/MS plus 30 hours, and (i) doctorate degree. A one way analysis of variance was computed for the college classification variable to test the hypothesis. The computed F value of 2.39 was significant at the selected .05 alpha level; therefore, the hypothesis was rejected with regard to the college classification variable. Significant differences existed in the perceived need for extended teacher education programs among the college classifications of vocational teachers. Table XIV shows the F values for the college classification

TABLE XIII
 PERCEIVED NEED FOR EXTENDED TEACHER
 EDUCATION PROGRAMS BY PROGRAM
 AREA TAUGHT

Source	SS	DF	Var Est
Among	3.38	8	0.42
Within	52.53	163	0.32
Total	55.92	171	

F-Ratio 1.31
 Significance 0.2401

TABLE XIV
 PERCEIVED NEED FOR EXTENDED TEACHER
 EDUCATION PROGRAMS BY COLLEGE
 CLASSIFICATION

Source	SS	DF	Var Est
Among	9.01	1.13	
Within	76.24	162	0.47
Total	85.25	170	

F-Ratio = *2.39
 Significance = 0.0181
 ETA² = 0.101

variable. Eta squared for the F ratio was 0.101 which indicated a small relationship between the independent variable and the dependent variable. A Tukey's Test was employed to further analyze the significant F value in order to ascertain where the differences existed for the program variable. It was found that persons who held doctorates were more likely to perceive a need for extended teacher education programs than all others with various other college classifications.

Community Size

Question number seven asked the subjects to indicate the size of the community in which they lived. Categories for the variable were: (a) rural area in the country or in a small town of less than 20,000, (b) small town of 20,000 to 50,000 population but not near a larger city, (3) suburban area over 50,000, and (d) urban area of over 50,000 population. After the means were computed for the nineteen questions related to hypothesis number one, they were sorted into the community size variable. A one way analysis of variance was computed to test the hypothesis. The computed F value for the variable (1.11) was not significant at the selected alpha level of .05; therefore, the hypothesis was not rejected with regard to the community size variable. No significant differences existed in vocational teachers' perceived need for extended teacher education programs among the four community sizes. Table XV shows the F values for the community size variable.

Preferred Size of Community in

Which to Work

Question number eight in the first section of the questionnaire

TABLE XV
PERCEIVED NEED FOR EXTENDED TEACHER
EDUCATION PROGRAMS BY SIZE
OF COMMUNITY

Source	SS	DF	Var Est
Among	14.73	3	4.91
Within	317.95	72	4.42
Total	332.68	75	

F-Ratio = 1.11

Significance = 0.3504

asked the respondents to indicate the size of the community in which they would prefer to work. The categories were: (a) a rural area in the country or in a small town of less than 20,000 population, (b) a small town of 20,000 to 50,000 but not near a large city, (c) a suburb of over 50,000, and (d) an urban area of over 50,000 population. The means of the nineteen questions from part two in the questionnaire were sorted into the four categories. A one way analysis of variance was used to test the hypothesis. The calculated F value of 0.03 was not significant at the selected .05 alpha level; therefore, the hypothesis was not rejected with regard to the preferred size of community in which to work variable. The perceived need for extended teacher education programs did not significantly differ among the vocational teachers who preferred to work in the different size communities. Table XVI contains the values for the analysis of variance for the preferred size of community in which to work variable.

Ethnic Classification

The last question in section one of the questionnaire was designed to divide the subjects into seven ethnic classification categories: (a) Caucasian, (b) Black, (c) Hispanic, (d) Oriental, (e) Native American, and (f) Other. No respondents selected Oriental as their ethnic classification. The means from the nineteen questions in part two of the questionnaire, designed to test the first hypothesis, were sorted into the ethnic categories. A one way analysis of variance was utilized to test the hypothesis. The calculated F value of 0.34 was not significant at the selected .05 level; therefore, the hypothesis was not rejected with regard to ethnic classification. No significant

TABLE XVI
PERCEIVED NEED FOR EXTENDED TEACHER
EDUCATION PROGRAMS BY PREFERRED
SIZE OF COMMUNITY IN WHICH
TO WORK

Source	SS	DF	Var Est
Among	0.02	3	0.01
Within	14.14	72	0.20
Total	14.15	75	

F-Ratio = 0.03
Significance = 0.9926

differences existed in vocational teachers' perceived need for extended teacher education programs among the various ethnic classifications. Table XVII shows the results of the analysis of variance for the ethnic classification categories.

Research Hypothesis Number Two

There are no significant differences in vocational teachers' perceptions of teacher education general education components and age, sex, employment status, program area, college classification, community size, preferred size of community in which to work, and ethnic classification.

Age

Question number one in the first section of the questionnaire was designed to divide the respondents into five age categories; (a) 20 to 29 years, (b) 30 to 39 years, (c) 40 to 49 years, (d) 50 to 59 years, and (e) 60 years old or over. Seven questions in section two of the questionnaire were designed to test hypothesis number two. After the means for the seven questions were sorted into the variable, age, a one way analysis of variance was computed. The computed F ratio of 0.32 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the age variable. There existed no significant differences in vocational teachers' perceptions of general education components of teacher education programs among the five age groups. Table XVIII shows the values for the age variable related to research question number two.

TABLE XVII
 PERCEIVED NEED FOR EXTENDED TEACHER
 EDUCATION PROGRAMS BY ETHNIC
 CLASSIFICATION

Source	SS	DF	Var Est
Among	0.64	4	0.16
Within	41.73	90	0.46
Total	42.37	94	

F-Ratio = 0.34
 Significance = 0.8478

TABLE XVIII
 PERCEPTIONS OF TEACHER EDUCATION
 GENERAL EDUCATION COMPONENTS
 BY AGE

Source	SS	DF	Var Est
Among	0.32	4	0.08
Within	9.9830	0.33	
Total	10.30	34	

F-Ratio = 0.24
 Significance = 0.9134

Sex

Question number two in the first section of the questionnaire asked the subjects to indicate their gender (sex). One hundred seventy-two respondents indicated that they were male and 208 checked that they were female. The mean scores for the seven questions related to hypothesis number two were sorted into the sex variable. An independent t test was computed to test for differences in the sex variable. An alpha of .05 was selected for significance. The t value of -0.44 was not significant at the selected .05 level; therefore, the hypothesis was not rejected with regard to the sex variable. No significant differences existed in vocational teachers' perceptions of teacher education general education components with regard to sex. Table XIX presents the values for the sex variable.

Employment Status

The third question in the section one of the questionnaire asked the subjects to indicate how many hours per week that they were employed as something other than as a teacher. Four categories existed from which the respondents were to choose: (a) I am not employed as something other than as a teacher, (b) less than 20 hours per week, (c) 20 to 40 hours per week, and (d) more than 40 hours per week. After the means for the seven questions related to hypothesis number two were sorted into the employment variable a one way analysis of variance was computed to test the hypothesis. The calculated F value of 0.34 was not significant at the selected .05 alpha level; therefore, the hypothesis was not rejected with regard to the employment status variable. No significant differences existed in the vocational

TABLE XIX
PERCEPTIONS OF TEACHER EDUCATION
GENERAL EDUCATION COMPONENTS
BY SEX

ITEM	Group 1	Group 2
N	7	7
Mean	2.7929	2.6743
Standard Deviation	0.4940	0.5233

t value =-0.4359
df = 12

teachers' perceptions of teacher education general education components with regard to the amount that they worked as something other than as a teacher. Table XX shows the values for the employment status variable.

Certification

Question number four in the demographic section of the questionnaire asked the subjects to indicate the type of teaching certification which they possessed. The categories to be selected from were: (a) no certification, (b) provisional level one or temporary for one year or less, (c) provisional level two or second level temporary for more than one year, (d) standard certification, (e) adult, and (e) other. Seven questions in section two of the questionnaire were designed to gather data to test hypothesis number two. Once the means for the seven questions were sorted into the certification variable, a one way analysis of variance was calculated. The calculated F value of 0.17 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the certification variable. No significant differences existed in the perceptions of teacher education general education components among the six types of certification which the vocational teaches possessed. Table XXI presents the F ratio values for the certification variable.

Education Program Taught

Question number five in the first section of the questionnaire asked the subjects to indicate the program area in which they taught. The categories included: (a) Agriculture Education, (b) Business and

TABLE XX

PERCEPTIONS OF TEACHER EDUCATION
GENERAL EDUCATION COMPONENTS
BY EMPLOYMENT STATUS

Source	SS	DF	Var Est
Among	0.35	3	0.12
Within	8.28	24	0.35
Total	8.63	27	

F-Ratio = 0.34
Significance = 0.8003

TABLE XXI

PERCEPTIONS OF TEACHER EDUCATION
GENERAL EDUCATION COMPONENTS
BY CERTIFICATION LEVEL

Source	SS	DF	Var Est
Among	0.34	5	0.07
Within	14.56	36	0.40
Total	14.91	41	

F-Ratio = 0.17
Significance = 0.9702

Office Education, (c) Health Occupations Education, (d) Home Economics Education, (e) Industrial Arts/Technology Education, (f) Marketing Education, (g) Other, (h) Technical Education, and (i) Trade and Industrial Education. Seven questions in section two of the questionnaire were designed to gather data to test hypothesis number two. Once the means for the seven questions were sorted into the educational program variable, a one way analysis of variance was calculated. The calculated F ratio of 0.17 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the educational program variable. No significant differences existed in the vocational educators' perceptions of teacher education general education components among the program areas in which vocational teachers taught. Table XXII presents the F ratio values for the program area variable.

College Classification

The sixth question in section one of the questionnaire was designed to ascertain the college classification of the subjects. The means of the seven questions from section two of the questionnaire were sorted into nine categories of college classification: (a) 0 to 30 college hours, (b) 31 to 60 hours, (c) 61 to 90 hours, (d) 91 to 120 hours, (e) BA/BS degree, (f) BA/BS plus 30 semester hours, (g) MA/MS degree, (h) MA/MS plus 30 hours, and (i) doctorate degree. A one way analysis of variance was computed for the college classification variable to test the hypothesis. The computed F value of 0.17 was not significant at the selected .05 alpha level; therefore, the hypothesis was not rejected with regard to the college classification variable.

TABLE XXII
PERCEPTIONS OF TEACHER EDUCATION
GENERAL EDUCATION COMPONENTS
BY PROGRAM AREA TAUGHT

Source	SS	DF	Var Est
Among	0.53	8	0.07
Within	21.20	54	0.39
Total	21.73	62	

F-Ratio = 0.17

Significance = 0.9933

No significant differences existed in the perceptions of teacher education general education components among the college classifications of vocational teachers. Table XXIII shows the F values for the college classification variable.

Community Size

Question number seven asked the subjects to indicate the size of the community in which they lived. Categories for the variable were: (a) rural area in the country or in a small town of less than 20,000, (b) small town of 20,000 to 50,000 population but not near a larger city, (c) suburban area over 50,000, and (d) urban area of over 50,000 population. After the means were computed for the seven questions related to hypothesis number two, they were sorted into the community size variable. A one way analysis of variance was computed to test the hypothesis. The computed F value for the variable (0.01) was not significant at the selected alpha level of .05; therefore, the hypothesis was not rejected with regard to the community size variable. No significant differences existed in vocational teachers' perceptions of teacher education general education components among the four community sizes. Table XXIV shows the F values for the community size variable.

Preferred Size of Community in Which to Work

Question number eight in the first section of the questionnaire asked the respondents to indicate the size of the community in which they would prefer to work. The categories were: (a) a rural area in

TABLE XXIII

PERCEPTIONS OF TEACHER EDUCATION
GENERAL EDUCATION COMPONENTS
BY COLLEGE CLASSIFICATION

Source	SS	DF	Var Est
Among	2.07	8	0.26
Within	39.68	54	0.73
Total	41.75	62	

F-Ratio = 0.35
Significance = 0.9403

TABLE XXIV

PERCEPTIONS OF TEACHER EDUCATION
GENERAL EDUCATION COMPONENTS
BY COMMUNITY SIZE

Source	SS	DF	Var Est
Among	0.00	3	0.00
Within	6.57	24	0.27
Total	6.58	27	

F-Ratio = 0.01
Significance = 0.9992

the country or in a small town of less than 20,000 population, (b) a small town of 20,000 to 50,000 but not near a large city, (c) a suburb of over 50,000, and (d) an urban area of over 50,000 population. The means of the seven questions from part two in the questionnaire were sorted into the four categories. A one way analysis of variance was used to test the hypothesis. The calculated F value of 0.00 was not significant at the selected .05 alpha level; therefore, the hypothesis was not rejected with regard to the preferred size of community in which to work variable. The perceptions of teacher education general education components did not significantly differ among the vocational teachers who preferred to work in the different size communities. Table XXV contains the values for the analysis of variance for the preferred size of community in which to work variable.

Ethnic Classification

The last question in section one of the questionnaire was designed to divide the subjects into seven ethnic classification categories: (a) Caucasian, (b) Black, (c) Hispanic, (d) Oriental, (e) Native American, and (f) Other. No respondents selected Oriental as their ethnic classification. The means from the seven questions in part two of the questionnaire, designed to test the second hypothesis, were sorted into the ethnic categories. A one way analysis of variance was utilized to test the hypothesis. The calculated F value of 0.54 was not significant at the selected .05 level; therefore, the hypothesis was not rejected with regard to ethnic classification. No significant differences existed in vocational teachers' perceptions of teacher education general education components among the various ethnic

TABLE XXV
PERCEPTIONS OF TEACHER EDUCATION
GENERAL EDUCATION COMPONENTS
BY PREFERRED SIZE OF
COMMUNITY IN WHICH
TO WORK

Source	SS	DF	Var Est
Among	0.00	3	0.00
Within	6.39	24	0.27
Total	6.39	27	

F-Ratio = 0.00
Significance = 0.9998

classifications. Table XXVI shows the results of the analysis of variance for the ethnic classification categories.

Research Hypothesis Number Three

There are no significant differences in vocational teachers' beliefs regarding the organization of extended teacher education programs and age, sex, employment status, program area, college classification, community size, preferred size of community in which to work, and ethnic classification.

Age

Question number one in the first section of the questionnaire was designed to divide the respondents into five age categories: (a) 20 to 29 years, (b) 30 to 39 years, (c) 40 to 49 years, (d) 50 to 59 years, and (e) 60 years old or over. Sixteen questions in section two of the questionnaire were designed to test hypothesis number three. After the means for the sixteen questions were sorted into the variable, age, a one way analysis of variance was computed. The computed F ratio of 0.20 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the age variable. There existed no significant differences in vocational teachers' beliefs regarding the organization of extended teacher education programs among the five age groups. Table XXVII shows the values for the age variable related to research questions number three.

Sex

Question number two in the first section of the questionnaire

TABLE XXVI
 PERCEPTIONS OF TEACHER EDUCATION
 GENERAL EDUCATION COMPONENTS
 BY ETHNIC CLASSIFICATION

Source	SS	DF	Var Est
Among	2.24	4	0.56
Within	32.09	31	1.04
Total	34.33	35	

F-Ratio = 0.54
 Significance = 0.7099

TABLE XXVII
 BELIEFS REGARDING THE ORGANIZATION OF
 EXTENDED TEACHER EDUCATION
 PROGRAMS BY AGE

Source	SS	DF	Var Est
Among	0.31	4	0.08
Within	15.55	40	0.39
Total	15.86	44	

F-Ratio = 0.20
 Significance = 0.9363

asked the subjects to indicate their gender. One hundred seventy two respondents indicated that they were male and 208 checked that they were female. The mean scores for the 16 questions related to hypothesis number three were sorted into the sex variable. An independent t test was computed to test for differences in the sex variable. An alpha of .05 was selected for significance. The t value of 0.55 was not significant at the selected .05 level; therefore, the hypothesis was not rejected with regard to the sex variable. No significant differences existed in male and female vocational teachers' beliefs regarding the organization of extended teacher education programs. Table XXVIII presents the values for the sex variable.

Employment Status

The third question in section one of the questionnaire asked the subjects to indicate how many hours per week that they were employed as something other than as a teacher. Four categories existed from which the respondents were to choose: (a) I am not employed as something other than as a teacher, (b) less than 20 hours per week, (c) 20 to 40 hours per week, and (d) more than 40 hours per week. After the means for the sixteen questions related to hypothesis number three were sorted into the employment variable a one way analysis of variance was computed to test the hypothesis. The calculated F value of 0.09 was not significant at the selected .05 alpha level; therefore, the hypothesis was not rejected with regard to the employment status variable. No significant differences existed in the vocational teachers' beliefs concerning the organization of extended teacher

TABLE XXVIII
BELIEFS REGARDING THE ORGANIZATION
OF EXTENDED TEACHER EDUCATION
BY SEX

ITEM	Group 1	Group 2
N	16	16
Mean	2.9544	3.0989
Standard Deviation	0.5821	0.5414

t value = 0.5451

df = 30

One Tailed Probability = 0.2995

education programs with regard to the amount that they worked as something other than as a teacher. Table XXIX shows the values for the employment status variable.

Certification

Question number four in the demographic section of the questionnaire asked the subjects to indicate the type of teaching certification which they possessed. The categories to be selected from were: (a) no certification, (b) provisional level one or temporary for one year or less, (c) provisional level two or second level temporary for more than one year, (d) standard certification, (e) adult, and (e) other. Sixteen questions in section two of the questionnaire were designed to gather data to test hypothesis number three. Once the means for the sixteen questions were sorted into the certification variable, a one way analysis of variance was calculated. The calculated F value of 0.03 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the certification variable. No significant differences existed in vocational teachers' beliefs regarding the organization of extended teacher education programs among the six types of certification which the vocational educators possessed. Table XXX presents the F ratio values for the certification variable.

Education Program Taught

Question number five in the first section of the questionnaire asked the subjects to indicate the program area in which they taught. The categories included: (a) Agriculture Education, (b) Business and

TABLE XXIX
 BELIEFS REGARDING THE ORGANIZATION OF
 EXTENDED TEACHER EDUCATION PROGRAMS
 BY EMPLOYMENT STATUS

Source	SS	DF	Var Est
Among	0.09	3	0.03
Within	11.32	32	0.35
Total	11.41	35	

F-Ratio = 0.09
 Significance = 0.9667

TABLE XXX
 BELIEFS REGARDING THE ORGANIZATION
 OF EXTENDED TEACHER EDUCATION
 PROGRAMS BY CERTIFICATION
 LEVEL

Source	SS	DF	Var Est
Among	0.09	5	0.02
Within	25.58	48	0.53
Total	25.67	53	

F-Ratio = 0.03
 Significance = 0.9984

Office Education, (c) Health Occupations Education, (d) Home Economics Education, (e) Industrial Arts/Technology Education, (f) Marketing Education Education, (g) Other, (h) Technical Education, and (i) Trade and Industrial Education. Sixteen questions in section two of the questionnaire were designed to gather data to test hypothesis number three. Once the means for the 16 questions were sorted into the educational program variable, a one way analysis of variance was calculated. The calculated F ratio of 0.75 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the educational program variable. No significant differences existed in the vocational teachers' beliefs regarding the organization of extended teacher education programs among the program areas in which vocational educators taught. Table XXXI presents the F ratio values for the program area variable.

College Classification

The sixth question in section one of the questionnaire was designed to ascertain the college classification of the subjects. The means of the 16 questions from section two of the questionnaire were sorted in nine categories of college classification: (a) 0 to 30 college hours, (b) 31 to 60 hours, (c) 61 to 90 hours, (d) 91 to 120 hours, (e) BA/BS degree, (f) BA/BS plus 30 semester hours, (g) MA/MS degree, (h) MA/MS plus 30 hours, and (i) doctorate degree. A one way analysis of variance was computed for the college classification variable to test the hypothesis. The computed F value of 0.18 was not significant at the selected .05 alpha level; therefore, the hypothesis was not rejected with regard to the college classification variable.

TABLE XXXI

BELIEFS REGARDING THE ORGANIZATION
OF EXTENDED TEACHER EDUCATION
PROGRAMS BY PROGRAM AREA

Source	SS	DF	Var Est
Among	2.49	8	0.31
Within	3.040	72	0.42
Total	32.53	80	

F-Ratio = 0.75
Significance = 0.6519

No significant differences existed in the beliefs regarding the organization of extended teacher education programs among the college classifications of vocational teachers. Table XXXII shows the F values for the college classification.

Community Size

Question number seven asked the subjects to indicate the size of the community in which they lived. Categories for the variable were: (a) rural area in the country or in a small town of less than 20,000, (b) small town of 20,000 to 50,000 population but not near a larger city, (c) suburban area over 50,000, and (d) urban area of over 50,000 population. After the means were computed for the sixteen questions related to hypothesis number three, they were sorted into the community size variable. A one way analysis of variance was computed to test the hypothesis. The computed F value for the variable (0.30) was not significant at the selected alpha level of .05; therefore, the hypothesis was not rejected with regard to the community size variable. No significant differences existed in vocational teachers' beliefs regarding the organization of extended teacher education programs among the four community sizes. Table XXXIII shows the F values for the community size variable.

Preferred Size of Community in

Which to Work

Question number eight in the first section of the questionnaire asked the respondents to indicate the size of the community in which they would prefer to work. The categories were: (a) a rural area in

TABLE XXXII
 BELIEFS REGARDING THE ORGANIZATION
 OF EXTENDED TEACHER EDUCATION
 PROGRAMS BY COLLEGE
 CLASSIFICATION

Source	SS	DF	Var Est
Among	1.03	8	0.13
Within	50.73	72	0.70
Total	51.76	80	

F-Ratio = 0.18
 Significance = 0.9916

TABLE XXXIII
 BELIEFS REGARDING THE ORGANIZATION
 OF EXTENDED TEACHER EDUCATION
 PROGRAMS BY COMMUNITY SIZE

Source	SS	DF	Var Est
Among	0.33	3	0.11
Within	11.65	32	0.36
Total	11.99	35	

F-Ratio = 0.30
 Significance = 0.8233

the country or in a small town of less than 20,000 population, (b) a small town of 20,000 to 50,000 but not near a large city, (c) a suburb of over 50,000, and (d) an urban area of over 50,000 population. The means of the 16 questions from part two in the questionnaire were sorted into the four categories. A one way analysis of variance was used to test the hypothesis. The calculated F value of 0.11 was not significant at the selected .05 alpha level; therefore, the hypothesis was not rejected with regard to the preferred size of community in which to work variable. The beliefs concerning the organization of extended teacher education programs did not significantly differ among the vocational teachers who preferred to work in the different size communities. Table XXXIV contains the values for the analysis of variance for the preferred size of community in which to work variable.

Ethnic Classification

The last question in section one of the questionnaire was designed to divide the subjects into seven ethnic classification categories: (a) Caucasian, (b) Black, (c) Hispanic, (d) Oriental, (e) Native American, and (f) Other. No respondents selected Oriental as their ethnic classification. The means from the sixteen questions in part two of the questionnaire, designed to test the third hypothesis, were sorted into the ethnic categories. A one way analysis of variance was utilized to test the hypothesis. The calculated F value of 0.16 was not significant at the selected .05 level; therefore, the hypothesis was not rejected with regard to ethnic classification. No significant differences existed in vocational teachers' beliefs regarding the organization of extended teacher education programs among the various

TABLE XXXIV
BELIEFS REGARDING THE ORGANIZATION
OF EXTENDED TEACHER EDUCATION
PROGRAMS BY PREFERRED SIZE
OF COMMUNITY IN WHICH
TO WORK

Source	SS	DF	Var Est
Among	0.11	3	0.04
Within	11.53	32	0.36
Total	11.64	35	

F-Ratio = 0.11

Significance = 0.9555

ethnic classifications. Table XXXV shows the results of the analysis of variance for the ethnic classification categories.

Research Hypothesis Number Four

There are no significant differences in vocational teachers' beliefs regarding the adequacy of teacher education programs and age, sex, employment status, program area, college classification, community size, preferred size of community in which to work, and ethnic classification.

Age

Question number one in the first section of the questionnaire was designed to divide the respondents into five age categories: (a) 20 to 29 years, (b) 30 to 39 years, (c) 40 to 49 years, (d) 50 to 59 years, and (e) 60 years old or over. Seven questions in section two of the questionnaire were designed to test hypothesis number four. After the means for the seven questions were sorted into the variable, age, a one way analysis of variance was computed. The computed F ratio of 0.17 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the age variable. There existed no significant differences in vocational teachers' beliefs regarding the adequacy of teacher education programs among the five age groups. Table XXXVI shows the values for the age variable related to research question number three.

Sex

Question number two in the first section of the questionnaire asked the subjects to indicate their gender. One hundred seventy-two

TABLE XXXV
 BELIEFS REGARDING THE ORGANIZATION
 OF EXTENDED TEACHER EDUCATION
 PROGRAMS BY ETHNIC
 CLASSIFICATION

Source	SS	DF	Var Est
Among	0.73	4	0.18
Within	45.85	40	1.15
Total	46.58	44	

F-Ratio = 0.16
 Significance = 0.9555

TABLE XXXVI
 BELIEFS REGARDING THE ADEQUACY
 OF TEACHER EDUCATION
 PROGRAMS BY AGE

Source	SS	DF	Var Est
Among	0.28	4	0.07
Within	27.85	65	0.43
Total	28.13	69	

F-Ratio = 0.17
 Significance = 0.9525

respondents indicated that they were male and 208 checked that they were female. The mean scores for the seven questions related to hypothesis number four were sorted into the sex variable. An independent t test was computed to test for differences in the sex variable. An alpha of .05 was selected for significance. The t value of -0.728 was not significant at the selected .05 level; therefore, the hypothesis was not rejected with regard to the sex variable. No significant differences existed in male and female vocational teachers' beliefs regarding the adequacy of teacher education programs. Table XXXVII presents the values for the sex variable.

Employment Status

The third question in section one of the questionnaire asked the subjects to indicate how many hours per week that they were employed as something other than as a teacher. Four categories existed from which the respondents were to choose: (a) I am not employed as something other than as a teacher, (b) less than 20 hours per week, (3) 20 to 40 hours per week, and (d) more than 40 hours per week. After the means for the seven questions related to hypothesis number four were sorted into the employment variable, a one way analysis of variance was computed to test the hypothesis. The calculated F value of 0.19 was not significant at the selected .05 alpha level; therefore, the hypothesis was not rejected with regard to the employment status variable. No significant differences existed in the vocational teachers' beliefs concerning the adequacy of teacher education programs with regard to the amount that they worked as something other

TABLE XXXVII
BELIEFS REGARDING THE ADEQUACY
OF TEACHER EDUCATION
PROGRAMS BY SEX

ITEM	Group 1	Group 2
N	7	7
Mean	3.1236	3.1057
Standard Deviation	0.6187	0.6773

t value = -0.0728

df = 12

One Tailed Probability = 0.4704

than as a teacher. Table XXXVIII shows the value for the employment status variable.

Certification

Question number four in the demographic section of the questionnaire asked the subjects to indicate the type of teaching certification which they possessed. The categories to be selected from were: (a) no certification, (b) provisional level one or temporary for one year or less, (c) provisional level two or second level temporary for more than one year, (d) standard certification, (e) adult, and (e) other. Seven questions in section two of the questionnaire were designed to gather data to test hypothesis number four. Once the means for the seven questions were sorted into the certification variable, a one way analysis of variance was calculated. The calculated F value of 0.56 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the certification variable. No significant differences existed in vocational teachers' beliefs regarding the adequacy of teacher education programs among the six types of certification which the vocational educators possessed. Table XXXIX presents the F ratio values for the certification variable.

Education Program Taught

Question number five in the first section of the questionnaire asked the subjects to indicate the program area in which they taught. The categories included : (a) Agriculture Education, (b) Business and Office Education, (c) Health Occupations Education, (d) Home Economics Education, (e) Industrial Arts/Technology Education, (f) Marketing

TABLE XXXVIII
 BELIEFS REGARDING THE ADEQUACY OF
 TEACHER EDUCATION PROGRAMS
 BY EMPLOYMENT STATUS

Source	SS	DF	Var Est
Among	0.36	3	0.12
Within	32.94	52	0.63
Total	33.30	55	

F-Ratio = 0.19
 Significance = 0.9021

TABLE XXXIX
 BELIEFS REGARDING THE ADEQUACY OF
 TEACHER EDUCATION PROGRAMS
 BY CERTIFICATION LEVEL

Source	SS	DF	Var Est
Among	1.33	5	0.27
Within	36.86	78	0.47
Total	38.19	83	

F-Ratio = 0.56
 Significance = 0.7311

Education, (g) Other, (h) Technical Education, and (i) Trade and Industrial Education. Seven questions in section two of the questionnaire were designed to gather data to test hypothesis number four. Once the means for the seven questions were sorted into the educational program variable, a one way analysis of variance was calculated. The calculated F ratio of 0.34 was not significant at the .05 alpha level; therefore, the hypothesis was not rejected with regard to the educational program variable. No significant differences existed in the vocational teachers' beliefs regarding the adequacy of teacher education programs among the program areas in which vocational educators taught. Table XL presents the F ratio values for the program area variable.

College Classification

The sixth question in section one of the questionnaire was designed to ascertain the college classification of the subjects. The means of the seven questions from section two of the questionnaire were sorted into nine categories of college classification: (a) 0 to 30 college hours, (b) 31 to 60 hours, (c) 61 to 90 hours, (d) 91 to 120 hours, (e) BA/BS degree, (f) BA/BS plus 30 semester hours, (g) MA/MS degree, (h) MA/MS plus 30 hours, and (i) doctorate degree. A one way analysis of variance was computed for the college classification variable to test the hypothesis. The computed F value of 0.48 was not significant at the selected .05 alpha level; therefore, the hypothesis was not rejected with regard to the college classification variable. No significant differences existed in the beliefs regarding the adequacy of teacher education programs among the college

TABLE XL
BELIEFS REGARDING THE ADEQUACY OF
TEACHER EDUCATION PROGRAMS
BY PROGRAM AREA

Source	SS	DF	Var Est
Among	1.55	8	0.19
Within	66.73	117	0.57
Total	68.28	125	

F-Ratio = 0.34

Significance = 0.9486

classifications of vocational teachers. Table XLI shows the F values for the college classification variable.

Community Size

Question number seven asked the subjects to indicate the size of the community in which they lived. Categories for the variable were: (a) rural area in the country or in a small town of less than 20,000, (b) small town of 20,000 to 50,000 population but not near a larger city, (c) suburban area over 50,000, and (d) urban area of over 50,000 population. After the means were computed for the seven questions related to hypothesis number four, they were sorted into the community size variable. A one way analysis of variance was computed to test the hypothesis. The computed F value for the variable (0.02) was not significant at the selected alpha level of .05; therefore, the hypothesis was not rejected with regard to the community size variable. No significant differences existed in vocational teachers' beliefs regarding the adequacy of teacher education programs among the four community sizes. Table XLII shows the F values for the community size variable.

Preferred Size of Community in Which to Work

Question number eight in the first section of the questionnaire asked the respondents to indicate the size of the community in which they would prefer to work. The categories were: (a) a rural area in the country or in a small town of less than 20,000 population, (b) a small town of 20,000 to 50,000 but not near a large city, (c) a suburb

TABLE XLI
 BELIEFS REGARDING THE ADEQUACY OF
 TEACHER EDUCATION PROGRAMS BY
 COLLEGE CLASSIFICATION

Source	SS	DF	Var Est
Among	2.70	8	0.34
Within	83.75	119	0.70
Total	86.45	127	

F-Ratio = 0.48
 Significance = 0.8688

TABLE XLII
 BELIEFS REGARDING THE ADEQUACY OF
 TEACHER EDUCATION PROGRAMS
 BY COMMUNITY SIZE

Source	SS	DF	Var Est
Among	0.03	3	.001
Within	22.09	52	0.42
Total	22.13	55	

F-Ratio = 0.02
 Significance = 0.9943

of over 50,000, and (d) an urban area of over 50,000 population. The means of the seven questions from part two in the questionnaire were sorted into the four categories. A one way analysis of variance was used to test the hypothesis. The calculated F value of 0.06 was not significant at the selected .05 alpha level; therefore, the hypothesis was not rejected with regard to the preferred size of community in which to work variable. The beliefs concerning the adequacy of teacher education programs did not significantly differ among the vocational teachers who preferred to work in the different size communities. Table XLIII contains the value for the analysis of variance for the preferred size of community in which to work variable.

Ethnic Classification

Question number nine in section one of the questionnaire divided the subjects into seven ethnic classification categories: (a) Caucasian, (b) Black, (c) Hispanic, (d) Oriental, (e) Native American, and (f) Other. No respondents selected Oriental as their ethnic classification. The means from the seven questions in part two of the questionnaire, designed to test the fourth hypothesis, were sorted into the ethnic categories. A one way analysis of variance was utilized to test the hypothesis. The calculated F value of 0.30 was not significant at the selected .05 level; therefore, the hypothesis was not rejected with regard to ethnic classification. No significant differences existed in vocational teachers' beliefs regarding the adequacy of teacher education programs among the various ethnic classifications. Table XLIV shows the results of the analysis of variance for the ethnic classification categories.

TABLE XLIII
 BELIEFS REGARDING THE ADEQUACY OF
 TEACHER EDUCATION PROGRAMS BY
 PREFERRED SIZE OF COMMUNITY
 IN WHICH TO WORK

Source	SS	DF	Var Est
Among	0.07	3	0.02
Within	21.47	52	0.41
Total	21.55	55	

F-Ratio = 0.06
 Significance = 0.9805

TABLE XLIV
 BELIEFS REGARDING THE ADEQUACY OF
 TEACHER EDUCATION PROGRAMS BY
 ETHNIC CLASSIFICATION

Source	SS	DF	Var Est
Among	1.12	4	0.28
Within	60.38	65	0.93
Total	61.50	69	

F-Ratio = 0.30
 Significance = 0.8758

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to ascertain vocational teachers' attitudes regarding extended teacher education programs. Toward this goal, this chapter presents the summary of the study, the conclusions, and recommendations from the data collected.

There were four specific research questions and four specific hypotheses for the study. The research questions were:

1. Do vocational teachers perceive a need for extended teacher education programs?
2. How do vocational teachers perceive the value of general education components of teacher education programs?
3. How do vocational teachers believe that teacher education programs should be organized?
4. Do vocational teachers believe that the present teacher education programs are adequate?

The subjects of this study were individuals who were teachers of vocational subjects in AVA Region Four which included Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma, and Texas. The population for the study was 8,141. Three hundred eighty-four of the 600 questionnaires which were mailed to the randomly selected subjects were completed and returned.

The questionnaire was divided into two sections: a personal

section used to gather demographic data and other personal data, and a section which asked 49 questions related to the four factors listed in the research questions. The questions in section two utilized a Lichert type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The literature review consisted of three major areas: a discussion of the major reports calling for reform in teacher education, a discussion of existing models of extended teacher education programs, and discussion of various universities and states' plans for reforming teacher education.

Summary

An analysis of the data revealed that vocational teachers were generally undecided as to whether or not extended teacher education programs were needed. The educators were undecided as to whether they would have preferred to have taken fewer general education courses in their program. The grades that they received in their general education courses were not higher than those that they received in their professional education courses or in their specialization course work. They were satisfied with their background in general education and believed that it was beneficial to them.

Vocational teachers were undecided on the following issues: whether to place teacher education students in classrooms during the fifth and sixth years of an extended program, increasing the length of student teaching, increasing professional course work, increasing general education course work, and increasing field experiences prior to student teaching. Even though undecided on increasing the length of

student teaching, they believed that extended programs should increase the variety of student teaching experience. They did believe that extended teacher education programs should increase the specialization course work and course work related to observations of special needs children. They thought that extended programs should be the same as existing programs but have a paid, supervised internship and that extended programs should focus on on-the-job training.

Vocational teachers also believed that if extended programs were five years in length, they should terminate in a masters degree. Further, they agreed that if extended programs are six years in length they should lead to a specialist degree beyond the masters degree even though they were opposed to requiring six years to complete a teacher education program.

Vocational teachers were undecided on the adequacy of present teacher education programs. However, they did report that they believed that their baccalaureate degrees in education adequately prepared them to teach.

These beliefs or attitudes were the same for all but one of the groups of vocational teachers regardless of their age, sex, employment status, program area taught, college classification, community size of residence, preferred size of community in which to work, or ethnic classification. It was found that persons who held doctorate degrees were more likely to perceive a need for extended teacher education programs than those with other college classifications.

Conclusions

Conclusions from this research are:

1. Vocational teachers are generally undecided as to whether or not extended teacher education programs are needed.

2. Vocational teachers who possess doctorate degrees are more likely to believe that there is a need for extended teacher education programs.

3. Vocational teachers are satisfied with the general education components of teacher education programs.

4. Vocational teachers are generally undecided on how extended teacher education programs should be organized; however, they do believe that:

A. Teacher education programs should not require six years to complete.

B. Student teaching should involve a variety of settings and breadth of experiences.

C. Programs should include more course work in the teaching specialization.

D. Programs should include more course work dealing with special needs populations.

E. Programs should include a paid, supervised entry year experience with aid from cooperating faculty.

F. Programs should focus on on-the-job training.

G. Extended programs should terminate in degrees.

Candidates should be awarded the masters degree for five year programs and the specialist degree for six year programs.

5. Vocational teachers are undecided on the adequacy of present teacher education programs in general.

6. Vocational teachers believe that their baccalaureate degrees adequately prepared them to teach.

7. Vocational teachers, regardless of age, sex, employment status, program area, college classification (except doctorates--see number two), size of residence community, preferred size of community in which to live, or ethnic classification are likely to hold the same attitudes regarding extended teacher education programs.

Recommendations

This study has provided information concerning the attitudes of vocational teachers concerning extended teacher education programs which was previously unavailable. The information presented in this study should be useful to persons involved in considering decisions regarding teacher education program redesign. Persons involved in teacher education redesign might include teacher educators, department heads of teacher education units, deans of colleges of education, university vice presidents, university presidents, university boards of regents, teachers, public school administrators, politicians, and concerned citizens.

The following recommendations are offered:

1. The results of this study and other future studies should be carefully considered by those who may have input into the decisions regarding the redesign of teacher education.

2. Vocational teachers should be educated as to the positive and negative aspects of extending teacher education programs.

3. If extended vocational teacher education programs are implemented they should require no more than five years to complete and should terminate in a masters degree.

4. If extended vocational teacher education programs are implemented they should include more course work related to the teaching specialization and in dealing with special needs populations.

5. If extended vocational teacher education programs are implemented they should include a paid internship which includes a variety of settings.

6. Vocational teachers should be considered similarly with regard to their attitudes concerning extending teacher education programs.

The following recommendations are offered for further study:

1. The attitudes of vocational administrators, state department staff, vocational teacher educators, industry representatives, and citizens should be ascertained concerning extending teacher education programs beyond the traditional baccalaureate degree.

2. The implications of extending vocational teacher education programs should be examined with regard to the recruitment of teacher candidates, the graduation rate of candidates, and the placement of graduates.

3. The merits and faults of the various extended teacher education models should be carefully examined.

4. Extended teacher education programs should be piloted in vocational education to collect data in order to make sound decisions regarding the efficacy of such programs.

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APPENDIXES

APPENDIX A
QUESTIONNAIRE

ATTITUDES TOWARD EXTENDED TEACHER EDUCATION PROGRAMS

Please make a check on the appropriate line beside your response.

1. What is your age?
 - a. _____ 20-29 years
 - b. _____ 30-39 years
 - c. _____ 40-49 years
 - d. _____ 50-59 years
 - e. _____ 60 or over

2. What is your sex?
 - a. _____ Male
 - b. _____ Female

3. If you are employed in something other than as a teacher, how much do you work?
 - a. _____ I am not employed in something other than as a teacher
 - b. _____ Less than 20 hours per week
 - c. _____ 20 to 40 hours per week
 - d. _____ More than 40 hours per week

4. What certification do you now hold?
 - a. _____ No certification
 - b. _____ Provisional level 1 or temporary (1 year or less)
 - c. _____ Provision level 2 or 2nd level temporary (more than 1 year.)
 - d. _____ Standard
 - e. _____ Adult
 - f. _____ Other (Please specify): _____

5. What is the program area in which you teach?
 - a. _____ Trade and Industrial Education
 - b. _____ Agriculture Education
 - c. _____ Home Economics Education
 - d. _____ Health Occupations Education
 - e. _____ Industrial Arts/Technology Education
 - f. _____ Business and Office Education
 - g. _____ Marketing Education
 - h. _____ Technical Education
 - i. _____ Other (please specify) _____

6. What is your college classification?

- a. _____ 0-30 college hours
- b. _____ 31-60 college hours
- c. _____ 61-90 college hours
- d. _____ 91-120 college hours
- e. _____ BA/BS
- f. _____ BA/BS + 30 semester hours
- g. _____ MA/MS
- h. _____ MA/MS + 30 semester hours
- i. _____ Doctorate

7. Presently, I reside in:

- a. _____ A rural area in the country or in a town of less than 20,000
- b. _____ A small town not near a larger city (20,000 to 50,000)
- c. _____ A suburban area (suburb of city over 50,000)
- d. _____ An urban area (city over 50,000)

8. I would prefer to work in (choose only one):

- a. _____ A rural area in the country or in a town of less than 20,000
- b. _____ A small town not near a larger city (20,000 to 50,000)
- c. _____ A suburban area (suburb of a city over 50,000)
- c. _____ An urban area (city over 50,000)

9. What is your ethnic classification?

- a. _____ Caucasian
- b. _____ Black
- c. _____ Hispanic
- d. _____ Oriental
- e. _____ Native American
- f. _____ Other (Please specify): _____

PLEASE EXPRESS YOUR OPINION ON EACH ITEM BELOW BY CIRCLING THE APPROPRIATE NUMBER:

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. I would have preferred to take fewer general education (liberal arts) courses in my program.	1	2	3	4	5
2. Extended programs should discourage the marginal students from becoming teachers.	1	2	3	4	5
3. When I received my first teaching assignment I knew a sufficient amount of <u>subject</u> matter content to teach without undo stress.	1	2	3	4	5
4. My liberal arts (general education) courses made me think and work harder than my professional (teacher education) or my specialization coursework (e.g. agriculture, cosmetology, management, etc.)	1	2	3	4	5
5. Extended program should <u>not</u> focus on on-the-job training.	1	2	3	4	5
6. I wish I had a stronger background in the subject area(s) I am teaching.	1	2	3	4	5
7. Admission standards for teacher education are generally too easy.	1	2	3	4	5
8. If I were to change my teacher education program, I would increase the number of liberal arts courses (general education).	1	2	3	4	5
9. Extended programs should be the same as existing programs but should have supervised experience (paid) year or entry year with a cooperating teacher and faculty who will help the new teacher.	1	2	3	4	5
10. Course requirements in teacher education programs are too easy.	1	2	3	4	5
11. Participation in an extended program is likely to make teachers knowledgeable in a number of broad discipline areas.	1	2	3	4	5
12. If extended teacher education programs were mandated, they should require at least 5 years to complete.	1	2	3	4	5

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
13. Participation in an extended program is likely to make teachers subject matter experts in a single academic discipline.	1	2	3	4	5
14. Extended programs which expand the liberal arts component will leave insufficient time for needed specialization courses (e.g., construction, engineering, nursing, etc.)	1	2	3	4	5
15. Extended programs should encourage students who are marginally motivated to become teachers.	1	2	3	4	5
16. I am not satisfied with my background knowledge in the liberal arts (general education).	1	2	3	4	5
17. Extended programs should place teacher education students in the classroom with students during each of the 5-6 years of the program.	1	2	3	4	5
18. My general education (liberal arts) courses have been as helpful to me as my professional (teacher education), and specialization courses (e.g. diesel mechanics, business supervision, etc.).	1	2	3	4	5
19. Extended teacher education programs (5 years or more for a first teaching degree) are desirable.	1	2	3	4	5
20. Extended programs should <u>not</u> include coursework related to observations of special needs children (e.g., EMH, G/T, ED/BD, LD).	1	2	3	4	5
21. Extended programs will increase shortages of teachers where shortages already exist.	1	2	3	4	5
22. Extended programs should increase the length of student teaching.	1	2	3	4	5
23. If I were to change my teacher education program I would increase the number of specialization courses (e.g. carpentry, agriculture, etc.)	1	2	3	4	5
24. A master's degree should be the minimum educational level for a beginning teacher.	1	2	3	4	5
25. My BS/BA teacher education program did not adequately prepare me to teach.	1	2	3	4	5

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
26. If extended teacher education programs were mandated, they should require at least 6 years to complete.	1	2	3	4	5
27. Extended programs should start with a liberal arts (subject matter) degree and have the teaching/pedagogy part only in the 5-6th year.	1	2	3	4	5
28. Grading standards (the amount of work or skill needed to get a good grade) are too easy in teacher education courses.	1	2	3	4	5
29. Extended programs should increase the specialization coursework (agriculture, home economics, carpentry, etc.)	1	2	3	4	5
30. Extended programs should increase professional education (teacher education) coursework.	1	2	3	4	5
31. My general education (liberal arts) courses have been beneficial to me.	1	2	3	4	5
32. The grades that I received in my general education (liberal arts) courses were higher than those I received in my professional (teacher education) or in my specialization coursework (e.g. nursing, engineering, welding, etc.).	1	2	3	4	5
33. Extended programs will be too expensive for the average teacher education candidate.	1	2	3	4	5
34. Extended programs are unnecessary since good teachers can be trained in a 4-year program.	1	2	3	4	5
35. If I were to change my teacher education program, I would increase the number of professional courses (teacher education courses).	1	2	3	4	5
36. Extended programs will require too much time for the average person.	1	2	3	4	5
37. Participation in extended programs is unlikely to make teachers more capable of conveying knowledge to students.	1	2	3	4	5
38. Extended programs should increase general education (liberal arts) coursework.	1	2	3	4	5

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
39. Extended programs should lead to a specialist degree (post-master's) if they are six year programs.	1	2	3	4	5
40. Early field experiences are less likely in an extended program.	1	2	3	4	5
41. Extended programs should increase the variety of student teaching (teaching in a variety of settings).	1	2	3	4	5
42. The balance of course work in my BS/BA teacher education program between liberal arts (general education), professional (teacher education), and specialization (e.g. auto mechanics, nursing, etc.) coursework was appropriate.	1	2	3	4	5
43. Four years is <u>not</u> enough time to adequately prepare in both subject matter and teaching pedagogy.	1	2	3	4	5
44. Extended programs should <u>not</u> lead to a master's degree if they are five year programs.	1	2	3	4	5
45. Extended programs should increase the field experience (more time in the classroom before student teaching).	1	2	3	4	5
46. Teachers who complete extended programs will not be more mature than graduates of 4 years.	1	2	3	4	5
47. Extended programs are necessary because there is too much content to be taught in a 4-year program.	1	2	3	4	5
48. Participation in extended programs is unlikely to make teachers more knowledgeable about their jobs.	1	2	3	4	5
49. Extended programs which greatly expand the liberal arts component (general education) will leave insufficient time for needed professional courses (e.g., educational psychology courses, methods of teaching, etc.).	1	2	3	4	5

APPENDIX B

PILOT STUDY RESULTS

ATTITUDES TOWARD EXTENDED TEACHER
EDUCATION PROGRAMS
(Pilot Study--Okla.)

QUESTIONS RELATED TO EXTENDED PROGRAMS (N=136)

<u>MEAN</u>	<u>ITEM #</u>	<u>ITEM</u>
3.805	11	Extended programs will be too expensive for the average teacher ed. candidate.
3.780	12	Extended programs are unnecessary since good teachers can be trained in a 4-yr program.
3.720	13	Extended programs will increase shortages of teachers where shortages already exist.
3.561	8	Extended programs will require too much time for the average person.
3.488	15	Extended programs which greatly expand the liberal arts component will leave insufficient time for needed professional courses (e.g., educational psychology courses).
3.341	3	Participation in extended programs is unlikely to make teachers more capable of conveying knowledge to students.
3.244	2	Participation in extended programs is unlikely to make teachers more knowledgeable about their jobs.
3.148	6	Teachers who complete extended programs will not be more mature than graduates of 4 yrs.
3.146	14	Early field experiences are less likely in an extended program.
3.122	9	Extended programs should discourage the marginal students from becoming students.
3.037	4	Participation in an extended program is likely to make teachers knowledgeable in a number of broad discipline areas.
2.732	16	Extended programs which expand the liberal arts component will leave insufficient time for needed

- specialization courses (e.g., methods courses).
- 2.565 33 If extended teacher education programs were mandated, they should require at least 5 yrs to complete.
- 2.531 5 Participation in an extended program is likely to make teachers subject matter experts in a single academic discipline.
- 2.392 1 Extended teacher education programs (5 yr or more for a first teaching degree) are desirable.
- 2.235 7 Extended programs are necessary because there is too much content to be taught in a four-yr program.
- 2.198 28 Four years is not enough time to adequately prepare in both subject matter and teaching pedagogy.
- 2.195 10 Extended programs should encourage students who are marginally motivated to become teachers.
- 1.839 29 A master's degree should be the minimum educational level for a beginning teacher.
- 1.756 34 If extended teacher education programs were mandated, they should require at least 6 yrs to complete.

QUESTIONS RELATED TO LIBERAL ARTS COMPONENTS

- 3.451 17 My general education (liberal arts) courses have been beneficial to me.
- 3.346 18 I would have preferred to take fewer general education (liberal arts) courses in my program.
- 3.159 21 I wish I had a stronger background in the subject area(s) I am teaching.
- 2.573 19 My general education (liberal arts) courses have been as helpful to me as my professional and specialization courses.
- 2.268 20 I am not satisfied with my background knowledge in the liberal arts.

- 1.989 22 My liberal arts (general education) courses made me think and work harder than my professional/specialization coursework.
- 1.943 23 The grades that I received in my general education (liberal arts) courses were higher than those I received in my professional/specialization coursework.

QUESTIONS REGARDING THE PERCEIVED ADEQUACY OF TEACHER ED

- 3.897 27c If I were to change my teacher education program, I would increase the number of specialization courses.
- 3.713 25 When I received my first teaching assignment I knew a sufficient amount of subject matter content to teach without undo stress.
- 3.583 26 The balance of coursework in my BS/BA teacher education program between liberal arts, professional and specialization coursework was appropriate.
- 3.575 27b If I were to change my teacher education program, I would increase the number of professional courses.
- 2.885 30 Admission standards for teacher education are generally too easy.
- 2.695 24 My BS/BA teacher education program did not adequately prepare me to teach.
- 2.517 31 Course requirements in teacher education programs are too easy.
- 2.287 32 Grading standards (the amount of work or skill needed to get a good grade) are too easy in teacher education courses.
- 2.063 27a If I were to change my teacher education program, I would increase the number of liberal arts courses.

QUESTIONS REGARDING THE POSSIBLE ORGANIZATION OF E.P.

- 3.867 35d Extended programs should increase the

- field experience (more time in the classroom before student teaching).
- 3.850 35c Extended programs should increase the specialization coursework.
- 3.720 35f Extended programs should increase the variety of student teaching (teaching in a variety of settings).
- 3.667 41 Extended programs should lead to a specialist degree (post-master's) if they are six year programs.
- 3.667 37 Extended programs should be the same as existing programs but should have supervised experience (paid) year or entry year with a cooperating teacher and faculty who will help the new teacher.
- 3.540 36 Extended programs should place teacher education students in the classroom with students during each of the 5-6 yrs of the program.
- 3.321 35b Extended programs should increase professional education coursework.
- 3.205 35e Extended programs should increase the length of student teaching.
- 2.092 38 Extended programs should start with a liberal arts (subject matter) degree and have the teaching/pedagogy part only in the 5-6th yr.
- 2.069 40 Extended programs should not lead to a master's degree if they are five yr programs.
- 2.062 35a Extended programs should increase general education (liberal arts) coursework.
- 1.954 39 Extended programs should not include coursework related to observations of special needs children (e.g., EMH, G/T, ED/BD, LD).
- 1.920 42 Extended programs should not focus on on-the-job training.

EXPECTATIONS OF TEACHING AS A PROFESSION

- 4.233 46 Teachers are not paid an adequate salary.
- 4.138 49 Many teachers take on additional school tasks (e.g., bus driving, coaching) to supplement their income.
- 4.069 45 Teachers expect to make a living wage (adequate wage) by teaching.
- 4.000 48 I believe that most teachers (more than 50%) have to work at another job (either during the summer or during the school year) to supplement their income.
- 3.908 56 All classroom teachers need to return to graduate school periodically for additional coursework.
- 2.471 50 Teachers are not respected in my community.
- 2.446 43 If all teachers had additional coursework beyond the BA/BS then teacher salaries would be more adequate.
- 2.047 47 If extended programs were implemented, more students would choose education as their major.
- 1.644 44 Teachers with an MA/MS degree should not expect to make more money than those with a BS/BA degree.

GENERAL QUESTIONS REGARDING TEACHING

- 4.184 54 I am teaching in the field for which I trained/studied.
- 4.035 51 When I began my college education, I did not plan to go to school for more than four years to complete my degree.
- 2.655 53 I am taking coursework so that I can get a better job.
- 1.918 55 I teach at least one course per year in a minor or collateral area (not my major).
- 1.851 57 I do not need to upgrade my teaching skills in areas that I currently teach.

1.802 52 I am not satisfied with my teaching job.

FACTORS THAT AFFECT TEACHERS WHO POSSESS A BS/BA
(N=106)

3.662 59 When I was an undergraduate, I would have been hard pressed to afford an additional year of college if it had been required for my degree program.

3.514 65 I completed my undergraduate program in 4 years.

3.371 62 As an undergraduate, I received some money from my parents to help support me in school.

2.681 64 As an undergraduate, I was married and I had to work to pay household expenses while going to school.

2.338 60 As an undergraduate, I had a scholarship which helped with my expenses.

2.662 58 As an undergraduate, I had access to enough money to go to school as long as was necessary to complete my degree program.

2.044 61 As an undergraduate, I did not work to support myself and to pay my college expenses.

2.041 63 As an undergraduate, I was married and my spouse's income provided support for my college expenses.

FACTORS THAT AFFECT TEACHERS WHO DO NOT POSSESS A BS/BA
(N=30)

4.400 75 I have already learned alot about being an effective teacher.

4.143 72 I am married and I have to work to pay household expenses while I am going to school.

4.143 69 I work to support myself and my college expenses.

- 3.643 67 If additional time were required in my degree program, I might not have enough money to complete it.
- 3.400 73 I will (or have) to attend at least one summer session to complete my degree.
- 3.372 74 I am enjoying my teacher education program.
- 3.267 76 My course load is about right.
- 3.000 71 I am married and my spouse's income provides support for my college expenses.
- 2.400 77 My course load is too heavy.
- 2.214 68 I have or could get a scholarship to provide money for my education.
- 1.786 66 I (or my parents) have enough money to be able to go to school as long as is needed to complete my degree program.
- 1.429 70 I receive some money from my parents to help support me in college.

APPENDIX C

COVER LETTER



Oklahoma State University

SCHOOL OF OCCUPATIONAL AND ADULT EDUCATION
COLLEGE OF EDUCATION

January 4, 1988

STILLWATER, OKLAHOMA 74078-0406
CLASSROOM BUILDING 406
(405) 624-6275

Dear Colleague,

Did you know that it has been projected that within the next few years all teachers will be required to have a masters' degree or its equivalent before they can receive their first teaching certificate?

Changes are taking place across the nation regarding the way America's teachers are educated. These changes have come from within colleges of education and have been further spurred by national reports which are critical of teacher education. Both the Carnegie Forum (A Nation Prepared: Teachers for the 21st Century May, 1986) and the Holmes Group (Tomorrow's Teachers 1986) have recommended (a) greater emphasis on liberal arts subject matter training for teachers (e.g., in natural science, social science, humanities, etc.), (b) placing professional education (pedagogy) courses in a fifth or graduate year, and (c) increasing standards for entry into the teaching profession. Already a number of schools of education across the nation have instituted required five year teacher preparation programs, among them are the University of Virginia, and the University of Kansas. In California, state law requires a fifth year of study for teacher certification, the first four years being in general education followed by a year of specialization. In Texas, the state legislature has passed legislation which in effect has abolished undergraduate teacher education programs beginning fall, 1987 and require a fifth year program in professional (teacher education) courses for certification.

Those who propose changes in teacher education do not consider the affects of their proposals on other areas such as vocational education. Little or no information exists on such a move's impact on vocational education. You have been randomly selected as a part of a regional study--American Vocational Education Region IV--to contribute to this database. Therefore, we would like to have your opinions regarding the possible effects of extending the requirements for a first teaching certificate.

The attached questionnaire should take less than 20 minutes to complete. Please return the completed questionnaire in the enclosed self addressed stamped envelope. Thank you for your assistance in this important matter.

Sincerely,

Ray E. Sanders

Clyde B. Knight



Celebrating the Past . . . Preparing for the Future

APPENDIX D

UNSOLICITED QUESTIONNAIRE COMMENTS

UNSOLICITED QUESTIONNAIRE COMMENTS

1. "I got my degree when I was 33 years old. I went to 4 colleges in 3 states. In all three universities where I took general education classes, I found they had very little to do with what happens in a classroom. Maybe only experience can teach those things?"
2. "Should not students in extended programs be paid the 5th year of the program by "teacher contract" and be allowed to count that year towards retirement?"
3. "I feel that I was well prepared to teach after 4 years!"
4. "Need more specialized coursework and less general education. I teach courses where I only had one college course on."
5. "I think that if colleges would do their job--4 years is an adequate time! I am vitally opposed to extended programs as outlined in your letter."
6. "I feel that the education I received in four years prepared me to be a good teacher, but I attended OSU, the College of Home Economics where you are ready to teach after four years; where most of the fellow teachers in my school system attended other colleges and did not get the well-rounded education I received and were not ready for the classroom experience."
7. "Who in the _____ would ask such stupid questions! Four years is too much school!"
8. "Without commensurate increases in salary, benefits, and professional recognition, extended programs will not attract the necessary numbers of people needed for teaching. Maturity is achieved through experiences (ie. teaching) and not through additional time spent class prior to teaching. I fear extending programs will pass the point of diminishing returns and produce people burdened with theory but totally unfettered by practical experience. Thank you for the opportunity to express my opinions."
9. "If general education, that is English, history, etc., had been keeping up with vocational education all these years we would not be receiving all the criticism we are presently getting. My education courses were taught by home economics educators and because they were knowledgeable about the subject matter, they could much better prepare me for teaching."

10. "If it's worth anything, I don't think any 5th year program can be as beneficial as actual field experience."
11. "I was not sure that I wanted to teach until I did my student teaching. I would have learned more had I had some field experiences sooner."
12. "Are colleges needing more money? How asinine can you be!"
13. "I would not hire a teacher in any field with a masters degree and no experience."
14. "Who would be foolish enough to think up a _____ idea like requiring more schooling?"
15. "I am very in favor of extended teacher programs but we also need more money."
16. "Let's not let the general education tail wag the vocational education dog. Vocational education should establish its needs, standards, and priorities and communicate them effectively to the people behind the extended movement. We'll lose some good vocational educators if we try to dose them too heavily with 'Will Shakespeare' and 'music appreciation' 101. I'm afraid but we could all use some more world geography, economics, etc."
17. "Until pay scales for teachers are made comparable to that paid by industry, teacher education programs will continue to receive criticisms. Education candidates interested in math, science, or any of the technical trades will not stay in education an additional year. They will take advantage of the high paying jobs that industry has to offer. Until pay rates are adjusted, the old saying 'those who can - do and those who can't do - teach' will be the order."
18. "What we need is a little more student teaching time, around 12 weeks and more observation time for the student. Also some profs in the college classes who know what the _____ they are talking about. How long has it been since you were in a classroom?"
19. "I don't think that a teacher can get enough education. Adding a year is great if it is not just more of the same old stuff."

2
VITA

Ray Edmund Sanders

Candidate for the Degree of

Doctor of Education

Thesis: VOCATIONAL TEACHERS' ATTITUDES TOWARD EXTENDED TEACHER
EDUCATION PROGRAMS

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born in Gardena, California, March 25, 1957, the son of Roy E. and Mary F. Sanders. Married to Catherine LaRosa December 20, 1975.

Education: Graduated from Poteau High School, Poteau, Oklahoma in May 1975; received Bachelor of Science in Trade and Industrial Education in July, 1980; received a Master of Science in Technical Education in May, 1985; completed the requirements for the Doctor of Education degree at Oklahoma State University, Stillwater, Oklahoma in May 1988.

Professional Experience: Teacher of Automotive Mechanics at Boswell High School, Boswell, Oklahoma, from August, 1979 to May, 1980; Instructor and Department Chair of Automotive Service Management at Carl Albert Junior College, Poteau, Oklahoma, from August, 1980 to December, 1985; Visiting Instructor of Occupational and Adult Education at Oklahoma State University, from January, 1985 to present.

Professional Organizations: Oklahoma Technical Society Board of Directors and Editor of The Journal of Technology, Phi Delta Kappa Foundation President, Phi Kappa Phi, Iota Lambda Sigma Faculty Advisor, American Vocational Association Trade and Industrial Education Research Committee Member, Kappa Delta Phi, Vocational Industrial Clubs of America, National Association of Industrial and Technical Teacher Educators, National Deans' List.

Publications: Author of six journal articles in vocational and adult education.