

EDUCATION OF THE VOCATIONAL TEACHER-EDUCATOR
IN SELECTED MASTER'S DEGREE
GRANTING INSTITUTIONS

By

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July 1988

DEDICATION

To entire humanity, to entire mankind -- people of all color,
race, creed or religion, political and educational affiliation, do
I solemnly and humbly dedicate this piece of scholastic work.

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As the well-known standing saying goes: A journey of one thousand miles started with a step. Although this writer has apparently reached the "thousandth mile," the component steps were not taken without the graceful and loving guidance of Almighty God. To Him, this writer expresses a lot of gratitude.

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CHAPTER I

INTRODUCTION

In the recent past, a series of revolutionary issues concerning the reformation of the nation's entire school system, orchestrated by public concern have ranged from teacher accountability and the certification of teacher-educators, toward professionalism, to the reports of the Holmes Group's Tomorrow's Teachers and the Carnegie's A Nation Prepared: Teachers of the 21st Century, respectively.

There is a growing national consensus that our future depends on public education. This national consensus has, among other efforts, led the Carnegie and the Holmes Group to produce several reports enumerating steps that need to be taken in order to reform teacher education. In furtherance to these reports, in an open letter urging colleges to be active in school reform, some thirty-seven college heads from across the nation urged their colleagues to help with school reform (Chronicle of Higher Education, 1987). In the Chronicle's report, Mr. Tucker, Chairman of the Carnegie Forum on Education, stated:

The job that has to be done stretches from one end of higher education to the other.... It is not just a matter of establishing and improving professional schools for education. What's taught to potential teachers in the arts and sciences is as important to their competency as what happens in the schools of education, (p. A22).

Specifically, the 37 college heads stated: "The issue before us is not 'teacher education' but the 'education of teachers', a task in

which all our faculties are deeply involved" (ibid.) The Chronicle went further to say that:

Teaching is far more than telling what one knows. It is a complex and difficult task. It is becoming more difficult as our students become ever more diverse. As a field of research, teaching deserves our best minds. As a field of practice, teaching deserves much more attention to how we as teachers can assess the consequence of our teaching on our students (p. A22).

In essence, this insight suggests a more careful examination of the variables concerning the education of the teacher-educator. The responsibilities expected of the teacher-educator demand that teacher-educators themselves be adequately prepared by the institutions responsible for their development (Buzzell, 1987).

Narrowing this to the education of the vocational teacher-educator, since the Carnegie's and the Holmes Group's Reports of 1986, respectively, stressed the problems of educating teachers and identified teacher education programs which succeeded or failed, fell short of addressing the vital issue of educating the teacher-educator, Knight (1987, p. 6) suggested that "Institutions responsible for training vocational teachers and developing their programs for teacher education need to be closely examined to determine if problems exist in the selection and education of the vocational teacher-educator." Particularly striking is the seeming ambivalence which confronts colleges and institutions preparing vocational teacher-educators in regard to setting unified or standardized programs and relevant experiences upon which vocational teacher-educators should be evaluated for certification as professionals. This apparent lack of specific standard criteria among institutions preparing teachers has been pointed out by

Watts (1984, p. 30) as one of the problems. "College faculty who prepare teachers are not required, on an individual basis, to meet any specific criteria which ensure that they have appropriate knowledge and skills to prepare teacher practitioners." With the recent criticisms of, and suggested reforms to teacher education programs, it is appropriate at this time to carry out a research designed to elicit the perceptions or opinions of the teacher-educators who are responsible for developing teachers and their programs. Thus, this study furthers the investigation already started by Knight (1987) as it identifies the needs of present and future vocational teacher-educators for institutions offering master's programs in vocational teacher-education with a view to improve their education and the existing programs in the future.

Statement of the Problem

The problem is that there "is a lack of unity or coherence in requirements for the development of current vocational teacher-educators and what should be done to improve their education in order to develop successful vocational teachers for the technically-oriented, rapidly changing times" - a problem of educating the teacher-educator (Knight, 1987, p. 7).

Need for the Study

Dr. Knight of Oklahoma State University conducted his study among institutions granting doctoral degrees in vocational teacher-education and found that there is a need to unify and maintain coherent teacher education programs throughout the nation. He recommended a follow-up study among institutions granting the master's degree in vocational

education to see if a correlation of similar needs exists among this group. Hence, there is the need for this study to fill this gap as an additional measure toward improving the education and quality of vocational teacher-educator programs.

Purpose of the Study

The purpose of this study was to identify the needs of present and future vocational teacher-educators for institutions offering master's programs in vocational teacher education in order to improve their education and make necessary changes in the existing doctoral programs.

Research Questions

In order to identify the needs of present and future vocational teacher-educators for institutions offering master's programs in vocational teacher education, the study asked the following questions:

1. What educational background experiences have teacher-educators in master's degree granting institutions had to prepare them to be vocational teacher-educators?
2. What specific higher educational experiences have they had to prepare them to be vocational teacher-educators?
3. What specific work experiences did they have to prepare them to be vocational teacher-educators?
4. What university courses did they have to specifically prepare them to become vocational teacher-educators?
5. What curriculum changes (specific courses and other experiences) would they recommend for educating future vocational teacher-educators?

Limitations

This study was limited to institutions granting the master's degree in five or more vocational service areas.

Definitions of Selected Terms

Higher education: As defined by Webster, this is education beyond the secondary level especially education provided by a college or university (Webster's New Collegiate Dictionary, 1977).

Teacher-education: The education or educational activities designed to prepare teachers for specific disciplines or programs.

Teacher-educator: As used in this study, a teacher-educator is one trained or educated in a specific discipline(s) whose responsibility is to educate or train a given group of teachers or would-be teachers, in specific vocational disciplines.

Teacher-educator education: This is the education or educational activities designed to prepare and/or retrain teachers whose responsibility is to prepare other teachers or would-be teachers in specific vocational disciplines.

Vocational coordinators: These are university or institutional coordinators who hold the administrative responsibilities of coordinating all vocational programs in their respective institutions.

Vocational teacher-educator: As used in this study, is a vocational teacher-educator who is the head teacher-educator or the vocational discipline department head, either in Agriculture, Business and Office, DE/Marketing, Health Occupations, Home Economics, Industrial Arts Technology, Technical Education, or Trade and Industrial Education.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The purpose of this study was to identify the needs of present and future vocational teacher-educators for institutions offering master's programs in vocational teacher-education in order to improve their education and to make necessary changes in the existing doctoral programs. Since only teacher-educators in doctoral degree-granting institutions were previously studied by Knight of Oklahoma State University, additional study was carried out to determine if similar needs exist among selected institutions preparing vocational teacher-educators at the master's level.

In today's educational system, there exists series of reports and opinions concerning excellence in teaching, the reformation of the entire school system, and improved teacher education programs among other public concerns (Murray, 1986). Absent from these reports is the vital issue of the problem of educating the teacher-educator, an issue that is at the root of quality education (Tucker and Mandel, 1986; Knight, 1987).

In his recent study, Educating the Vocational Teacher-Educator (1987, p. 6), Knight suggested that:

With increasing national and state interest in, and criticism of, teacher education programs the past few years, institutions responsible for training vocational teachers and developing their programs for teacher

education need to be closely examined to determine if problems exist in the selection and education of the vocational teacher-educator.

One problem in the education of the vocational teacher-educator, as Knight points out, is that there is no standard teacher certification requirement for the teacher-educator in vocational education. Watts (1984, p. 30) said that "the principle of individual certification is not applied to teacher-educators." Watts went on, "College faculty who prepare teachers are not required, on an individual basis, to meet any specific criteria which ensures that they have appropriate knowledge and skills to prepare teacher practitioners." In spite of this anomaly in the education of teacher-educators, Watts points out that generally all fifty states basically model their "standards" after those of accrediting agencies such as the National Council for Accreditation of Teacher Education (NCATE).

The "standards" which each state requires teachers to meet before being certified to teach in the public schools share at least three weaknesses. Thus, according to Watts (1984, p. 30):

First, the standard refers to general criteria but does not address specific requirements. Second, the standard is applied to the staff as a whole instead of to individual faculty members. And third, NCATE accreditation is not mandatory, and there are approximately 800 institutions operating teacher preparation programs which are not NCATE approved.... Consequently, many teacher preparation programs are not influenced by NCATE standards.

Watts (1984, p. 31) had already concluded that at best, "present policies to ensure competent teacher-educators are vague, weak, and generally ineffective." This observation is a true indication of the lack of nationally oriented standards or criteria for the selection, education, and development of vocational teacher-educators. Watts went further to say, "Without an effective strategy, there is ample

opportunity for unqualified individuals to be included in the extremely important task of preparing teachers."

Keppel (1986, p. 19), a former United States Commissioner of Education, says, "The Holmes Group and the Carnegie Task Force are both troubled by the American habit of decreasing standards for entry into teaching during times of teacher shortage." There is no doubt that the mode of selecting and educating or developing our teacher-educators contributes to the low quality of graduates turned out for the nation's industrial systems to consume according to Guilinger (1987).

As reported by the Chronicle of Higher Education (1987, p. A22), Ernest L. Boyer, a former United States Commissioner of Education who heads the Carnegie Foundation for the Advancement of Teaching, testified to the fact that administrators are ambivalent as to what the standards are: "Particularly disturbing is the ambivalence college administrators feel about their overall responsibility..., unclear about what standards to maintain..., issues which many administrators seek to ignore rather than confront." Yet, were true standards adopted in the selection and education of vocational teacher-educators in particular, the present fear of ineffective education of students through poor quality training of vocational teacher-educators would have been a thing of the past (Strickland and Elson, 1987). Institutions preparing vocational teachers and the complementary programs for teacher education for desired competency should of necessity address the following questions found in Knight's study:

- * What background experiences have teacher-educators had to prepare them to be vocational teacher-educators?

- * What specific higher educational experiences have they had to prepare them to be vocational teacher-educators?
- * What special work experiences did they have to prepare them to be vocational teacher-educators?
- * What university courses did they have to specifically prepare them to become vocational teacher-educators?
- * What curriculum changes (specific courses and other experiences) would they recommend for educating future vocational teacher-educators?

Although not stated in Knight's study, another question that deserves close examination would be: What evaluative criteria are to be adopted to ensure the competency and certification of vocational teacher-educators? Well-supported solutions to these questions would go a long way toward initiating the steps toward the much needed national standardization of the certification of the vocational teacher-educator (Pietig, 1987; Ascher and Birchenall, 1987).

Soder (1986, p. 2) said, "America's children need schools in which teachers can learn, in which teachers can thoughtfully investigate and improve professional practice." Soder concluded that to improve the quality of education in the nation's schools, it is imperative that the quality of teachers in them be improved through improved and relevant programs. One way to improve the quality of teachers in the nation's schools would be to improve the selection, programs, and the education of the current/future vocational teacher-educators.

Toward a Solution to the Problem of Educating
the Vocational Teacher-Educator
and Their Certification

From a value perspective, Kroll (1987, p. 5) suggested:

We need a new system of education that reverses the contemporary role of values and mere technical knowledge. True value must be discovered and taught first and throughout society.

Knight (1987, p.3) recommended that leaders, curriculum developers and "professors in institutions offering doctoral programs for developing teacher-educators study" relevant work experiences, college courses and higher education experiences most beneficial in developing teacher-educator abilities in order "to be sure their programs are not overlooking a seldom mentioned but very important teacher competency." Although these are generalized suggestions, still, there are feasible and viable alternatives which institutions preparing vocational teacher-educators could use in the preparation and development of the teacher-educator.

In a recent open letter "urging colleges to be more active in school reform," 37 presidents from across the nation summarized the major arguments posited in the Carnegie Report as saying that "better schools require higher quality teachers, and to attract and hold higher quality teachers, teaching must become a true profession," (emphasis is this author's) (The Chronicle of Higher Education, September 23, 1987, p. A23). The Chronicle went on to say that a "National Board of Professional Teaching Standards has been established" to deal with the issue of certification and professionalization of teaching. In their open letter, the 37 presidents further asserted that:

... to improve teacher preparation we must do more than just look into our teacher education programs. The issue before us is not 'teacher education' but 'the education of teachers' a task in which all our faculties are deeply involved....

The 37 heads of colleges called for the shared commitments of all concerned to work in harmony toward the professionalization of teaching. Nussel (1986), Soder (1986), Keppel (1986), and Pietig (1987) discussed at length the Holmes and the Carnegie propositions for professionalizing teaching. Keppel (1986) summarized plans of both organizations:

The Holmes Group suggests a 'differentiated profession,' with instructors at the bottom, professional teachers in the middle, and career professionals (perhaps 20 percent of the total teaching force) at the top. Teachers would move from one level to the next by demonstrating 'mastery' of important knowledge and skill through multiple evaluations across multiple domains of competence. The Carnegie Task Force proposes a restructuring of the teaching force into four categories: licensed teachers, certified teachers, advanced certification holders, and lead teachers. A National Board for Professional Teaching Standards would determine the knowledge and skills essential for teachers at each level and would certify individuals who meet those standards.

Reacting specifically to the propositions of the Carnegie Forum on Education and the Economy on the professionalization of teaching, the Southern Regional Education Board (SREB) (1986, p. 2) elaborated on the expectations of the National Board of Professional Teaching Standards:

Initially states would license entry-level teachers who hold bachelor's degrees in arts and sciences. A professional lead teacher would supervise beginning teachers. A new national board would develop the standards (educational program standards, certification tests, performance assessment criteria, etc.) that teachers would meet. Initially teachers and/or state(s) would seek national board certification on voluntary basis. The majority of the new board would be made up of other educational professionals and public officials. The board would issue two levels of certification beyond initial state licensure:

Board Certified Teacher (and) Advanced Certificate - lead Teacher.

Though the propositions of the Carnegie Forum sound feasible, the report fails to elaborate on the variables that would determine which teacher fell into a particular level.

In its own perspective toward changing the status of teacher education at large, the Southern Regional Education Board (1986, p. 11) concluded:

Changes in teacher education are needed. There is little argument about this. SREB suggests changes with a revitalized undergraduate program, whose potential in the form of both generally and specifically educated students has hardly been tapped. At the same time, five-year and alternative certification programs should be tested and closely monitored and evaluated. Otherwise, at the end of the experiments no one will know whether different ways of preparing teachers makes a difference in student learning. Too much is at stake to do otherwise. Doing nothing is not an option. Adopting any single new direction en masse, without evidence that less costly alternatives would produce better results, would not be wise.

Curriculum and program developers, as well as standard setters and policy makers for the preparation of vocational teacher-educators should consider some of the salient suggestions made by the Southern Regional Education Board.

In general, Watts' (1984, p. 31) strongly suggested the following measures toward teacher-educator certification:

An effective method of ensuring that all teacher-educators have the appropriate academic preparation, experience, teaching, and scholarly activity must be constructed. To accomplish this, I recommend a national, mandatory, and standardized certification system. This professional certification process should accomplish three objectives. The process should first assure society and the professional clients that each applicant possesses the proper knowledge, skills, and abilities to practice that particular profession. Second, a certification system should ensure the maintenance of professional skills by members throughout their careers.

Third, the process should protect qualified professionals from competition with unqualified persons. The achievement of these three objectives require the identification of criteria for initial certification, requirements for renewal or maintenance of a certificate, and measures to guarantee that only certified professionals teach in teacher education programs.

Specifically, Watts suggests:

1. That requirements for initial certification of teacher-educators include an earned doctorate in education.
2. Completion of a minimum of three years successful teaching experience at the elementary or secondary level.
3. An acceptable score on a standardized, comprehensive examination of pedagogical knowledge. In addition, Knight (1987) made the following two suggestions, that:
 4. Two more years of specific occupational experience in the vocational discipline, and
 5. That the doctoral specification be in vocational teacher education with the dissertation and internship in vocational education as well (p. 31).

These are suggestions which the newly formed National Board of Professional Standards (NBPS) may consider in setting necessary standards for certification. The impact of this board's role toward teacher certification is yet to be seen.

Suggested Actions Toward the Improved Education and Certification of Teacher-Educators

College presidents recently called for sincere commitment among teacher-educators and their institutions toward the reformation of teacher education. They also advised fellow college presidents to take

steps aimed at designating "action officer(s)" for the future propagation of actions aimed at better education of the teacher-educator.

They further asserted, "... we can make a new commitment to enhance the attractiveness of teaching as a career and to improve teacher preparation which, after all, is one of our most direct connections to the school" (Chronicle of Higher Education, September 23, 1987, p. A23).

Although Robinson (1986, p. 1) made general suggestions which could help in the improved education of teachers, his suggestions could also apply to the improved education of the teacher-educator. Robinson suggested that, "...teacher preparation adequate to the demands of the late Twentieth Century and beyond requires the rigor and standards currently associated with professional schools of medicine, law, or business." Very emphatically, Robinson continued:

We have reached the point where it is necessary to create the conditions that allow for the 'professionalization' of teaching if teachers are to be enabled to meet society's expectations for its schools. Striking changes must take place in the manner whereby teachers and other educational professionals are prepared if education is to earn the status of a professional field.... Changes that must take place include a reorganization of the course of study, e.g., a true integration of theory and practice, and a more rigorous scholarly approach to the pedagogical curriculum.

In view of these concerns, Robinson proposed a professional school model which would have "pre-professional," and "professional" phases with the intended goals of developing teachers who have:

- * Commitment to excellence in developing a well-educated person who is thoroughly prepared in his/her teaching field(s) and is also broadly educated;
- * Commitment to excellence in preparation in the science of teaching;

- * Commitment to excellence in patterns of learning and teaching;
- * Commitment to excellence in a lifelong pursuit of knowledge;
- * Commitment to excellence in a lifelong study of teaching;
- * Commitment to excellence via participation in educational changes;
- * Commitment to excellence in approaching the problems of learning and teaching; and
- * Demonstrated concern for, and sensitivity to, the needs of learners.

Finally, as the certification of teacher-educators is an important feature toward the professionalization of teaching, Watts (1984, pp. 31-32) suggested that "The American Association of Colleges for Teacher Education (AACTE) organize a task force to certify teacher-educators."

Summary

In this chapter, this author has discussed some relevant background information concerning the identification of needs of both present and future vocational teacher-educators. From the background information, the review of literature discussed the problem of educating the vocational teacher-educator. It was pointed out that one of the problems emanates from a lack of a unified/coherent national standard for developing and certifying vocational teacher-educators. The review also brought some insights into some of the respected opinions of authorities in the field who proposed some feasible solutions to the above mentioned problem. In discussion was also the variables toward certifying vocational teachers as an attempt at professionalizing teaching. Finally, the review ends by suggesting

relevant actions for improved education and certification of vocational teacher-educators.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was to identify the needs of present and future vocational teacher-educators for institutions offering master's programs in vocational teacher education in order to improve their education and to make necessary changes in the existing doctoral programs. Specifically, vocational teacher-educators coordinating individual vocational program service areas, along with the respective institutional vocational education coordinators were requested to respond to questions which would generate the variables in the education of the vocational teacher-educator/coordinators.

The Instrument

As a follow-up, this study uses the exact instruments applied in Knight's previous study of doctoral degree-granting institutions, but with a different population--the master's degree-granting vocational teacher-educator institutions. According to Bailey (1978, p. 5), replicating a study helps in demonstrating that the findings in the original study were by no means accident or mere coincidence, "... with a different sample, a second confirmation of findings will lend further support to the contention that the hypothesis (if any) cannot be rejected. It is important that the researcher so design his study that it can be replicated by himself or someone else."

Population for the Study

Using the Information Monograph No. 1 prepared by Adams and Diehm (1984) and printed by the University Council for Vocational Education, 231 colleges and universities in the United States which have graduate and undergraduate programs for preparing vocational teachers were identified. Sixty-nine of those 231 institutions grant the master's degree and have five or more vocational education service areas. Because of the nature of the study, the entire population of 69 institutions were used. Of these, 59 institutions have university coordinators of vocational education, to which the instrument titled "Survey of University Vocational Education Coordinators" (Appendix A) was sent. Of the 59 institutions having university vocational education coordinators, one hundred and sixty-five individual vocational teacher-educators were sent the instrument titled "Vocational Teacher-Educator Education Survey" (Appendix B).

Ten of the 69 institutions indicated they have no university vocational-education coordinators. To this effect, nineteen vocational teacher-educators of the respective programs in these ten institutions were sent the questionnaire labeled "Vocational Teacher-Educator Education Survey" (Appendix B). It should be noted that several of the teacher-educators in these master's degree granting institutions are in charge of two or more vocational disciplines such as Trade and Industrial, Industrial Arts (or) Technical Education. Thus, in all, a total of 224 respondents from the 69 institutions were mailed the respective instruments for the study.

Assumptions

This study was founded under the following basic assumptions:

1. As a result of the nonproductive search of the related literature, it was assumed that there were no unified and/or coherent requirements for the development of current vocational teacher-educators.
2. It was assumed that the participants accurately reflected their opinions toward the variables in the education of the vocational teacher-educator.

Collection of Data

The questionnaire, "Survey of University Vocational Education Coordinators," and a cover letter were mailed to each of the university vocational-education coordinators; the questionnaire "Vocational Teacher-Educator Survey," and a cover letter were mailed to each of the teacher-educators in charge of the respective vocational program areas of the institution. These materials are shown in Appendices A and B respectively.

Each of the university vocational education coordinators were requested to do two things: (1) to complete the survey labeled "Survey of University Vocational Education Coordinator" (Appendix A) and return it in the enclosed postage-paid envelope, and (2) to route the enclosed envelopes bearing cover letters and survey instrument titled "Vocational Teacher-Educator Survey" (Appendix B) to the head teacher-educator in each vocational program area of the institution.

Each vocational teacher-educator was requested to complete the enclosed survey and return it in the enclosed postage-paid envelope.

Each of the 19 vocational teacher-educators from the 10 institutions without university vocational-education coordinators were individually mailed the survey titled "Vocational Teacher-Educator Survey" (Appendix B) and requested to complete and return it in the enclosed postage-paid envelope. There was a need for a second mailing or follow-up to the coordinators and teacher-educators respectively, which generated 8 additional responses, thus bringing the total usable response to 64.28 percent.

Analysis of Data

Frequency counts, mean scores, and percentages were used to analyze the responses. The responses were reported on table formats according to each item on the questionnaire. Surveys returned by teacher-educators and university coordinators were also tabulated.

Because of the nature of instruments used in the study, numerical figures could not be assigned to the items for statistical purposes.

CHAPTER IV

ANALYSIS OF DATA

The purpose of this study was to identify the needs of present and future vocational teacher-educators for institutions offering master's programs in vocational teacher education in order to improve their education and to make necessary changes in the existing doctoral programs. Of the 231 universities and institutions in the United States offering graduate and undergraduate programs for preparing vocational teacher-educators, 69 universities and institutions which have five or more vocational programs and granting master's degrees in vocational education were identified for the study. Fifty-nine of these institutions indicated having university vocational education coordinators, while 10 had no such coordinators. From the 69 universities and institutions there were 165 vocational teacher-educators, though 19 of the vocational teachers were from among the 10 institutions having no university vocational coordinators. The 59 university vocational education coordinators were also included in the study. Thus, total surveys sent were 224.

Specifically, study instruments were sent to the identified coordinators of the institutions and to each of the vocational service area department heads in "Agriculture, Business and Office, DE/Marketing, Health Occupations, Home Economics, Industrial Arts/Technology, Technical Education, and Trade and Industrial Education," respectively (as in Knight, 1987, p. 9). Nineteen separate instruments were mailed

directly to each of the nineteen vocational teacher-educators in the institutions having no university vocational education coordinators.

Response Rate

The survey instruments were mailed on October 1, 1987 and the returns came in through November 17, 1987. Responses were received from 44.06 percent, or 26, of the university coordinators and 71.52 percent, or 118, of the teacher-educators respectively. A follow-up letter was mailed on November 3, 1987 to those whose responses were not yet received. This effort brought in no additional responses from university coordinators but eight from teacher-educators. A total of 64.28 percent of the 224 surveys mailed were returned. All the surveys returned by teacher-educators and coordinators were not used in the analysis because some of the returned surveys were sent in blank by teacher-educators or coordinators who have left their institution or whose programs have been closed down. Thus, the percentage of usable surveys returned is 44.06 percent for university coordinators and 71.52 percent for teacher-educators.

The number and percentage of surveys returned by both the teacher-educators and university coordinators are listed on Table I. The response rates were listed according to vocational disciplines of each group of respondents. As can be noted in Table I, university vocational coordinators were located in different certification areas from one institution to the other.

Comments appearing on non-usable returned surveys indicate that not all the population institutions in the study offered all the eight vocational disciplines.

TABLE I
USABLE SURVEYS RETURNED BY THE TEACHER-EDUCATORS AND
UNIVERSITY COORDINATORS OF THE VOCATIONAL
CERTIFICATION DISCIPLINES

Vocational Certification Discipline	Vocational Teacher-Educators Returned Surveys N=165	University Coordinators Returned Surveys N=59	Total Both Groups N=224
Agriculture Teacher-Educators	17	3	20
Business & Office Teacher-Educators	15	1	16
DE/Marketing Teacher-Educators	7	2	9
Health Occupations Teacher-Educators	6	0	6
Home Economics Teacher-Educators	31	2	33
Industrial Arts/ Technology Teacher-Educators	15	3	18
Technical Education Teacher-Educators	16	8	24
Trade & Industrial Teacher-Educators	11	7	18
Total Usable Surveys Returned	118	26	144
Percentage of Returned Surveys	71.52%	44.06%	64.28%

Teacher-Educator Responses

Item #1 on the survey for teacher-educators (Appendix B) deals with the length of service of the teacher-educators as a parameter for measuring the average number of years vocational teacher-educators have put in the service.

Teacher-educator lengths of service revealed in this study bear out the findings of Drs. Thomas Erikson and Gene Gloeckner (1986 University Teaching in Industrial Education: Demographic Factors) that many university professors in industrial and vocational education, on an individual basis may be nearing retirement age, and that a shortage of qualified teacher-educators could exist in the near future. (Table II shows the total mean years of teaching for each vocational discipline.) The lengths of service as vocational teacher-educators ranged from 1 year to 31 years with a 15 year mean of the means.

Responses to Item #2 of the study instrument (Appendix B) shows a number of data which reveals that a good number of vocational teacher-educators have put several years of successful service in teaching before becoming or being recruited as teacher-educators. Table III lists both range of years (0-30 years) and the mean average of 8 years as instructors prior to becoming teacher-educators.

Responses to Item #3 of the instrument shown in Appendix B lists some of the background educational experiences of the teacher-educators in their respective disciplines--most of which have ultimately become their areas of specialization. The associate degree level received the lowest number of respondents indicating the acquisition of such degrees. In some cases, too, several respondents skipped the secondary vocational education degree for no apparent reason. Strikingly, all 17

TABLE II
LENGTH OF SERVICE AS TEACHER-EDUCATORS

Discipline	Number of Respondents	Range of Years	*Mean
Agriculture	17	2 - 31	18 years
Business & Office	15	6 - 24	14 years
DE/Marketing	7	5 - 21	14 years
Health Occupations	6	3 - 22	13 years
Home Economics	31	3 - 21	12 years
Ind. Arts Technology	15	2 - 30	16 years
Technical Ed.	16	1 - 27	13 years
Trade & Industrial	11	4 - 25	18 years
Total Respondents	118	*Mean of the means	15 years

*Mean and mean of the means were rounded off to the nearest whole number. Mean year was obtained by adding the individual number of years as teacher-educators and then divided by the number of respondents in each discipline. Mean of the mean year is the total of mean years divided by the total number of disciplines.

TABLE III
LENGTH OF SERVICE AS AN INSTRUCTOR BEFORE
BECOMING A TEACHER-EDUCATOR

Discipline	Number of Respondents	Range of Years	Mean
Agriculture	17	2 - 20	7 years
Business & Office	15	2 - 18	6 years
DE/Marketing	7	0 - 15	4 years
Health Occupations	6	0 - 14	7 years
Home Economics	31	2 - 30	8 years
Ind. Arts Technology	15	4 - 30	12 years
Technical Ed.	16	0 - 17	7 years
Trade & Industrial	11	1 - 25	9 years
Total Respondents	118	*Mean of the means	8 years

agriculture teacher-educators indicated they had the bachelor's degree in agriculture, while 11 of them had agriculture in secondary school. This phenomenon may suggest the importance which authorities in agricultural education attach to at least a bachelor's degree in agriculture if one intends to be a vocational agriculture teacher-educator. All ten Trade and Industrial Education respondents had both the bachelor's and master's degree, and more than half the Home Economics Education respondents had the master's and doctoral degree.

Table IV indicates that 90 percent of the teacher-educators in the Business and Office Education discipline had both the bachelor's and master's as well as the doctoral degrees in Business and Office

TABLE IV
EDUCATIONAL LEVELS ACHIEVED IN THE SPECIFIC
VOCATIONAL DISCIPLINE BY THE
TEACHER-EDUCATOR

Education levels achieved: (Check and identify all that apply)	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
Secondary Voc. Ed.	9	4	1	1	8	2		2	27
Associate Degree	5	1	1					3	10
Bachelors Degree	14	13	1	3	19	12	8	10	80
Masters Degree	11	13	2	4	20	14	8	10	82
Ph.D. or Ed.D.	6	10	2	2	15	9	5	6	55
Ph.D. or Ed.D. in Voc. Ed.	7	3	1		4	3	4	5	27
Adm. or Higher Ed.									
*Other		2			3	2			7
Total Respondents	17	15	7	6	31	15	16	11	

*Other: (1) Some are post doctoral credit hours required for teacher certification in some states; (2) ABD in Education; (3) RN; (4) SED (Specialist in Education); (5) PDSA (Post Doctoral Studies in Administration).

Education. Except for the associate degree, a great number of teacher-educators indicated having had lower levels of educational experience in the areas for which they are now teacher-educators. As the pursuit and acquisition of higher degrees in vocational education is now a cherished norm, this phenomenon has a tendency toward making it a requirement that people aspiring to be vocational teacher-educators need to possess a degree in the discipline in which they hope to specialize.

Two respondents in Business & Office Education, three in Home Economics, and two in Industrial Arts listed having other degrees or qualifications than the ones listed. Such "Other" degrees listed by these respondents include post-doctoral credit hours required for certification, ABD in Education, RN, SED (Specialist in Education), and PDSA (Post Doctoral Studies in Administration).

Responses to Item #4 revealed the level of education the teacher-educator had before becoming a teacher-educator. Table V indicates that there is a growing tendency for the younger teacher-educator (extrapolated from the number of years of service) to have the doctoral degree at the time of becoming a teacher-educator. This finding is supported by a similar study and observation by Knight (1987). As for the impact of this acquisition of terminal degrees by the current vocational teacher-educators, it could be concluded that the doctoral degree in specific vocational disciplines is most likely to be made a future requirement for one to become a teacher-educator. Overall, most teacher-educators held the doctoral degree when they became teacher-educators.

TABLE V
HIGHEST DEGREE HELD WHEN HIRED
AS A TEACHER-EDUCATOR

Vocational Discipline	BS	MS	Doctoral	Other	Total
Agriculture		5	12		17
Business & Office	1	5	7	2	15
DE/Marketing			7		7
Health Occupations	1	3	2		6
Home Economics		17	14		31
Ind Arts/Technology	1	11	3		15
Technical Ed	2	4	10		16
Trade & Industrial		2	7	2	11
Totals	5	47	62	4	

Data concerning the reasons for which teacher-educators pursued higher degrees indicates that in the arena of academe, vocational teacher-educators are among the progressive. More than 80 of the 118 respondents indicated that they pursued the higher degree either to become a college professor of a vocational discipline or to keep the current job of a vocational teacher-educator. The first and second choices for pursuing the particular degree appeared to be prevalent in all the eight vocational disciplines, hence Table VI listed only the first and second choices with the numbers adjacent to each other.

Most institutions require work experience of a certain period in addition to other criteria before one is admitted into an advanced degree in teacher education. On this premise, Item #6 asked the

TABLE VI

REASONS FOR PURSUING THE DOCTORAL DEGREE:
FIRST CHOICE AND SECOND CHOICE

Questionnaire Choices By Teacher-Educators	Agriculture Ed		Business Ed		DE/Mktg Ed		Health Ed		Home Ec Ed		Ind Arts Ed		Technical Ed		T & I Ed		Totals	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
To be a community college professor																		
To be a public school administrator											2						0	2
To be a vocational/ technical school administrator	1	1													2		3	1
To be a college professor (of a vocational discipline)	6	2	2	1					4	3	2		3		2	1	20	8

TABLE VI (continued)

Questionnaire Choices By Teacher-Educators	Agriculture Ed		Business Ed		DE/Mktg Ed		Health Ed		Home Ec Ed		Ind Arts Ed		Technical Ed		T & I Ed		Totals	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
To keep current job of teacher- educator	3	2	8	1	2	2	3	1	6	5	8	2	5	2	3		48	15
To be an industrial trainer/training specialist												1					1	2
Other (please specify)																		
Personal satisfaction	1						1		2			1	1		1	3	6	4
To do research									1			1						
Did not respond	3		4		1		2		6		6				1		23	
Total	11	5	11	3	3	2	4	1	16	10	10	6	10	3	9	5	77	33

respondents: "What work experiences do you consider of the most value to you in becoming a vocational teacher-educator? (Rank in order of value)." Not all respondents listed or ranked more than one item work experience. However, 26 work experiences, overlapped or were so similar that Knight's (1987) study listed the common ones "generically." Of the 26 generic work experiences, "Occupational Experiences in the Vocational Discipline" and "Secondary Vocational Teaching" were of most value to 74 and 40 of the respondents respectively. "Teaching at the post-secondary level" and "graduate assistant and human/public relations experience" formed the third and fourth most valuable experiences respectively (Table VII). (Note that in several of the items on Table VII there were ties in the number of respondents listing them as most valuable work experiences, thus ignoring the rank order.)

Surprisingly, respondents did not consider experiences such as "internship," "curriculum developing," "research," and "supervision of student teaching," among others, as being important experiences in future program planning for developing teacher-educators, as each scored 1 or had only one respondent listing them as being most valuable.

To identify preparation needs of vocational teacher-educators in order to improve teacher education programs and to help produce effective future programs, respondents were asked: "What college courses or higher education experiences have been most beneficial in helping develop your teacher-educator abilities? Please list in order of value." Respondents were requested to list at least four. Nevertheless, some listed fewer than four and others more. Titles and college/industrial experiences were listed in generic terms. Six most beneficial experiences topped the list (Table VIII). These are

TABLE VII
WORK EXPERIENCE CONSIDERED MOST VALUABLE
IN BECOMING A TEACHER-EDUCATOR

Work Experience Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
1. Occupational experience in the vocational discipline	9	7	4	5	9	19	9	12	74
2. Secondary vocational teaching	9	6	2		12	6	2	3	40
3. Teaching at the post-secondary level	7				6		1		14
4. Graduate assistant	6				4				10
5. Human/Public relations experience	1	6			2			1	10
6. Graduate student	5		1			1			7
7. Vocational courses	6			1					7
8. Business/Staff development	1				6				7
9. Community development experience					6		1		7
10. Member/Advisor of youth club/FFA	3						1	1	5

TABLE VII (continued)

Work Experience Listed by Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
11. Accounting (public)		4							4
12. Occupational development (self)					3			1	4
13. Secondary and community teaching experience		2			2				4
14. High school Vo-Ag student	3								3
15. Research experience		1			1	1			3
16. Sales experience		1			2				3
17. Self-employed business						3			3
18. Military	1	1							2
19. Curriculum development	1								1
20. International work experience	1								1

TABLE VII (continued)

Work Experience Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
21. Consulting		1							1
22. Internship				1					1
23. Volunteer work				1					1
24. Government work						1			1
25. Apprenticeship						1			1
26. Supervision of student teaching							1		1
Total Responses	53	29	7	8	48	32	15	18	210
Total Respondents	17	15	7	6	31	15	16	11	118

TABLE VIII
COLLEGE COURSES AND HIGHER EDUCATION EXPERIENCES
MOST BENEFICIAL IN DEVELOPING
TEACHER-EDUCATOR ABILITIES

Order Of Value	Course or Experience Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
1.	Curriculum development	3	1	2		8	9	4	9	36
2.	Methods of teaching	6	6		1	7	4	3	3	30
3.	Research methods/designs	5	1	1		4	4		5	18
4.	History, principles and philosophy of vocational education/higher education	3	1			2	3		6	15
5.	Supervision of student teachers/ vocational education/supervisory techniques	2	1			8	1			12
6.	Evaluation of vocational education	1				7	1	1	2	12
7.	Vocational courses		4	1			3	1	1	10
8.	Learning theories	1	1			3	1		2	8
9.	Program planning and development	1				2	4			7
10.	Interdepartmental courses									

TABLE VIII (continued)

Order Of Value	Course or Experience Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
11.	Student teaching practicum	1	1		1	2	1			6
12.	Media					4	1			5
13.	Education administration/school personnel management	3				1			1	5
14.	Human resource development	1		1		2				4
15.	Professional association meetings	3		1						4
16.	Cooperative effort with state supervising staff	2	2							4
17.	Practical work experience and college teaching		1			1	1		1	4
18.	Cooperative Voc. Ed programs/courses		2					1		4
19.	Computer communications (application)		2					1		3
20.	Internship - Inservice Training		1			2				3

TABLE VIII (continued)

Order Of Value	Course or Experience Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
21.	Management	2	1							3
22.	Tests and measurement of students					1	2			3
23.	Leadership development			1		1	1			3
24.	Psychology: Educational/school/ development			1		1	1			3
25.	Graduate assistantship					2	1			3
26.	Teaching strategies/experiences in Vo Tech					1	1		1	3
27.	Professional education courses					1	1			2
28.	Organizational behavior courses						1	1		2
29.	Previous vocational background								2	2
30.	Teaching "Career Planning Development" experience	2								2

TABLE VIII (continued)

Order Of Value	Course or Experience Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
31.	Field work with teachers	2								2
32.	Summer inforcement courses	2								2
33.	Undergraduate courses	1				1				2
34.	Marketing courses		1	1						2
35.	Active participation with state education agency	1				1				2
36.	Excellent doctoral advisor		1			1				2
37.	Vocational courses		1		1					2
38.	Counseling techniques		1		1					2
39.	Critical issues and trends in Vo Tech				2					2
40.	Teacher self-assessment/development				1	1				2

TABLE VIII (continued)

Order Of Value	Course or Experience Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
41.	Working with adults in community colleges					1				1
42.	Project director						1			1
43.	Statistics					1				1
44.	Facilities and design					1				1
45.	Industrial safety						1			1
46.	Certification courses						1			1
47.	Electronic courses and application							1		1
48.	Thinking skills and theory					1				1
49.	Workshops, teaching new technology					1				1
50.	Continuous employment					1				1

TABLE VIII (continued)

Order Of Value	Course or Experience Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
51.	Staff development seminars					1				1
52.	State advisory committee on vocational education					1				1
53.	State and national conferences					1				1
54.	University council for vocational education seminars					1				1
55.	Knowledge of characteristics of learners					1				1
56.	Heterogeneous class composition					1				1
57.	Teaching at secondary level		1							1
58.	Foundations of vocational education		1							1
59.	Job/task analysis		1							1
60.	Related work-study		1							1

TABLE VIII (continued)

Order Of Value	Course or Experience Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
61.	Conference attendance		1							1
62.	Teaching assistant (graduate assistantship)	1								1
63.	Active participation in high schools such as visiting staff teachers		1							1
64.	Close association with department chairperson	1								1
65.	Human relations in teaching strategies	1								1
66.	Teaching experience	1								1
67.	Rural sociology	1								1
68.	Grant writing	1								1
	Total Responses	46	37	9	74	74	47	14	32	266
	Total Respondents	17	15	7	6	31	15	16	11	118

Curriculum Development (26%), Methods of Training (22%), Research Methods (14%), Principles/Philosophy/History of Vocational Education (12%), Supervising Student Teaching (9%) and Evaluation (9%), respectively. Other vital courses/experiences which scored lower ranks and which should be considered while developing future program includes Computer Literacy/Application, Conference Attendance, Critical Issues and Trends Impacting on Vocational Education, and Foundations of Vocational Education among others. The percentages in parenthesis indicates the number of respondents listing such "beneficial" course or higher education experiences.

To improve present and future programs of vocational teacher-educators pursuing terminal degrees, Question #8 posited: "What specific existing college courses would you require for all doctoral degree candidates planning to become teacher-educators?" Table IX shows a total of sixty existing college courses which were listed in generic terms for 260 times.

Ten courses which topped the list of 60 possible courses included: Methods of Research Design (25%), Curriculum Development (24%), Philosophy/History/Foundations/Principles of Vocational Education (22%), Methods (Advanced) (13%), Statistics (11%), Supervision of Vocational Education (11%), Psychology of Learning (10%), Student/Program Evaluation (9%), Organization and Administration of Vocational Education (8%), and Evaluation of Teaching (8%). Although other possible courses scored low in the rank order such as "Policy Development and Political Relations," or "Higher Education Administration," both of which scored 1 respectively, they should be considered in future program planning.

TABLE IX
EXISTING COLLEGE COURSES TEACHER-EDUCATORS IDENTIFIED AS
"SHOULD BE REQUIRED TO BECOME A TEACHER-EDUCATOR"

Existing College Courses Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
1. Method of research design	8	6	2		8	7		2	30
2. Curriculum development	1	3	3		6	11	2	2	28
3. Philosophy/history/foundations/principles of vocational education		1	2		16	5	2		26
4. Methods (advanced)	3	6			3	1	2		15
5. Statistics	2	7			2	2			13
6. Supervision of vocational education	2				8		3		13
7. Psychology of learning		1			6	2	1	2	12
8. Student/program evaluation					8	1		2	11
9. Organization and administration of vocational education		1	1	1	5	2			10
10. Evaluation of teaching			2		8				10

TABLE IX (continued)

Existing College Courses Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
11. Computer literacy/application	2	3			1		2		7
12. Learning styles/theories	1	1			2	1		1	6
13. Tests and measurements	2	2				2			6
14. School law/legislation		1		1		2			4
15. Counseling techniques		2		1			1		4
16. Human/public relations	1	1		1					3
17. Program planning	2							1	3
18. Psychology of teaching		3							3
19. Personnel/human resource management		2					1		3
20. Advanced writing course		3							3
21. Grant writing/proposal for securing funds	2								2
22. Leadership in vocational education	2								2

TABLE IX (continued)

Existing College Courses Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
23. Effective teaching	2								2
24. Characteristics of adult learners		2							2
25. Field experience in secondary school		2							2
26. Coop. coordination techniques	1	1							2
27. Human growth/personality development			1					1	2
28. Adult education				1	1				2
29. Developmental psychology				1					1
30. Writing and publishing skills								2	2
31. Contemporary issues impacting on vocational education									
32. Teaching assistantship						1			1
33. Instructional strategies						1			1

TABLE IX (continued)

Existing College Courses Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
34. Industrial safety						1			1
35. Psychology of the work place						1			1
36. Courses in technology assessment							1		1
37. Materials/facility techniques							1		1
38. Internship							1		1
39. Micro teaching/practicum								1	1
40. Reading								1	1
41. Special needs analysis								1	1
42. Implementing technology education								1	1
43. Managing change								1	1
44. School financing/funding								1	1

TABLE IX (continued)

Existing College Courses Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
45. Rural sociology (advanced)	1								1
46. Higher education administration	1								1
47. Improvement of college teaching	1								1
48. Lesson development	1								1
49. Communication skills						1			1
50. Graduate management courses		1							1
51. Seminar procedures		1							1
52. Adult development psychology				1					1
53. Marketing				1					1
54. Applied social psychology					1				1
55. Gerontology-a study of the aging process					1				1
56. Policy development and political relations					1				1

TABLE IX (continued)

Existing College Courses Listed By Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
57. Values of american people					1				1
58. Any course that emphasizes "listening and understanding" what one hears				1					1
59. Occupational/vocational education courses				1					1
60. Teaching thinking skills				1					1
Total Responses	35	50	11	8	79	39	17	20	260
Total Respondents	17	15	7	6	31	15	16	11	118

Question #9 was framed: "Based on your experiences as a teacher-educator, suggest three titles of lessons or suggest three experiences you think should be included in a doctoral program specifically for training teacher-educators." Some 78 possible courses and experiences as generically listed by teacher-educators appear in Table X.

Data from this table can be used to suggest (and augment) duties and competencies as well as methodologies with which to formulate a required 'capstone' course in teacher education which will help the future vocational teacher-educator become an effective, progressive, contributing member of the profession. A closer study of the above tables may well reveal some gold mine courses and experiences to be referred to when formulating future vocational teacher education programs.

Item #10 "Comments," on the questionnaire simply allowed some space on the page for the respondents to make their comments. A few of the respondents took time to respond in most helpful ways. Their comments are reported in their complete unedited context in Appendix D of this study.

The university vocational coordinators were requested to respond to somewhat similar questions to those asked the teacher-educators.

Vocational Coordinator Data

As listed in Table XI, the study revealed that vocational coordinators in these institutions have put in successful years of service as coordinators ranging from 0 years to 28 years with a mean of the mean of 9 years. As a matter of convenience, Table XI was arranged in such a way as to indicate the number of coordinators in specific disciplines of specialization. It does not convey that they are specifically

TABLE X
LESSONS AND EXPERIENCES THAT SHOULD BE INCLUDED IN A DOCTORAL PROGRAM
OF STUDY FOR TRAINING VOCATIONAL TEACHER-EDUCATORS

Lesson or Experience Identified by Teacher-Educators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
1. Curriculum development				3	2	5	4		14
2. Grant writing for securing funds	2	3			2	4		1	12
3. Internship	1	2	1	1	4	1		2	12
4. Industrial experience					1	5	1	4	10
5. Diagnostic/student teacher supervision	3			1	3		2		9
6. Leadership: participation/experience (in)	1				6		2		9
7. Supervision (general)					6	3			9
8. Research methodology	4		1			1	2		8
9. Lesson plan/course syllabi	2	1	3		1				7
10. Vocational student organizations	1	1	1				2	1	6

TABLE X (continued)

Lesson or Experience Identified by Teacher-Educator	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
11. State/local/regional vocational administration			1	1	3			1	6
12. Interpersonal/human/public relations		2		1			1	1	5
13. Facility planning/material design		1					4		5
14. Conferencing/participation/ coordination/technique		1			1	3			5
15. History/philosophy of vocational education					1	4			5
16. Evaluation/program					4		1		5
17. Methods/theories	1					3	1		5
18. Experience (field) teaching vocational education courses	3				1				4
19. Contact with professional associates	1				3				4
20. Experience with school change roles	3				1				4

TABLE X (continued)

Lesson or Experience Identified by Teacher-Educator	Agriculture Ed	Business Ed	DE/Mtkg	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
21. Vocational/professional organizations	1					2		1	4
22. The impact of dynamic technological environment on vocational education						1		3	4
23. Technical writing/reading/arithmetic						1		3	4
24. Dissertation writing with statistical analysis					1		1	1	3
25. Tests and measurements	3								3
26. Planning teacher-educator programs in vocational education	3								3
27. Quality paper publishing	1					2			3
28. How to advise thesis/dissertation candidates	1	1							2
29. Democratic discipline/student discipline	2								2
30. Computer applications	1						1		2

TABLE X (continued)

Lesson or Experience Identified by Teacher-Educator	Agriculture Ed	Business Ed	DE/Mtkg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
31. Student teaching supervision		2							2
32. Classroom management		2							2
33. Coop. Ed. experience			2						2
34. Practicum experience			2						2
35. Counseling: vocational/technical				1		1			2
36. Marketing portfolio/vocational education				1	1				2
37. Learning styles					1	1			2
38. Statistics: parametric and non-parametric					1	1			2
39. Handicapped/gifted/disadvantaged students					2				2
40. Lessons on discipline: theory and practice					1	1			2

TABLE X (continued)

Lesson or Experience Identified by Teacher-Educator	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
41. Initiating and managing change						1		1	2
42. Presenting lessons to "real" classroom peers and video taping the presentation for individual review with instructor input	1								1
43. Teaching assistant						1			1
44. Liability and safety						1			1
45. Adolescent psychology							1		1
46. Teaching in areas that teachers are being trained							1		1
47. Supervision of cadet teachers							1		1
48. Dealing with the university							1		1
49. Democracy and political environment							1		1
50. How to run a committee							1		1

TABLE X (continued)

Lesson or Experience Identified by Teacher-Educator	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
51. Competency-based education							1		1
52. Motivation of the instructional staff							1		1
53. Learning theories									
54. Advanced instructional strategies						1			1
55. Programs within and among state departments						1			1
56. Liaisons in education						1			1
57. Public policy					1				1
58. Needs identification/analysis					1				1
59. Seminars based on research					1				1
60. Adult education					1				1

TABLE X (continued)

Lesson or Experience Identified by Teacher-Educator	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
61. Study instruments/tools methods					1				1
62. Conducting/planning workshops					1				1
63. Stress management					1				1
64. Exposure to project models					1				1
65. Reading/writing across the curriculum					1				1
66. Teaching methods		1							1
67. Programs in vocational education		1							1
68. Student motivation (the how/process)		1							1
69. Appropriate application of learning theories		1							1
70. Individualized instruction		1							1

TABLE X (continued)

Lesson or Experience Identified by Teacher-Educator	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
71. Teaching disciplines other than vocational education courses		1							1
72. Politics of higher education		1							1
73. Time management		1							1
74. Communications				1					1
75. Working with student teachers	1								1
76. Secondary school administration	1								1
77. Improvement of college teaching	1								1
78. International agriculture's role in vocational education	1								1
Total Responses									
Total Respondents	17	15	7	6	31	15	16	11	118

coordinators of the particular discipline under which their numbers appear.

TABLE XI
LENGTH OF SERVICE AS VOCATIONAL
COORDINATOR

Discipline	Number of Respondents	Range of Years	Mean Years
Agriculture	3	11 - 18	14
Business & Office	1	0 - 17	17
DE/Marketing	2	11 - 19	15
Health Occupations	0	0 - 0	0
Home Economics	2	3 - 6	4
Ind. Arts Technology	3	1 - 12	6
Technical Ed.	8	1 - 13	6
Trade & Industrial	7	0 - 28	12
Total Respondents	26	Mean of the mean	9

The length of service put in as instructors before becoming coordinators ranges from 0 to 30 years (Table XII). The implication is that on the average, our university vocational coordinators are steadily approaching retirement age. The education of present and future vocational teacher-educators also needs to emphasize the development of future vocational education leaders who may be called one day to take up the responsibilities of leadership left by retired coordinators.

TABLE XII
LENGTH OF SERVICE AS AN INSTRUCTOR
BEFORE BECOMING A COORDINATOR

Discipline	Number of Respondents	Range of Years	Mean Year
Agriculture	3	3 - 12	6.0
Business & Office	1	4	4.0
DE/Marketing	2	5 - 6	5.5
Health Occupation	0	0 - 0	0.0
Home Economics	2	7 - 30	18.5
Industrial Arts	3	10 - 30	18.0
Technical Education	8	2 - 26	10.0
Trade & Industrial	<u>7</u>	<u>5 - 20</u>	<u>15.0</u>
Total Respondents	26	Mean of the mean	10.0

Only 19 coordinators representing all eight disciplines except Health Occupations revealed their educational backgrounds. Six had secondary vocational education diplomas, two had associate degrees, 16 had bachelor's, 17 had the master's, 13 the Ed.D. or Ph.D. degree, but only eight obtained Ed.D. or Ph.D. degrees specifically in vocational education (Table XIII). One coordinator obtained another degree identified as CAGS in Human Relations.

One could then sum up that our vocational coordinators are well educated (judging from the degrees obtained) for the leadership positions they are occupying.

TABLE XIII
EDUCATIONAL LEVELS ACHIEVED IN THE
SPECIFIC VOCATIONAL DISCIPLINE
BY THE COORDINATOR

Educational Levels Achieved (check all that apply)	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
Secondary Vocational Education	2		2			1		1	6
Associate Degree						1	1		2
Bachelor's Degree	2	1	2		2	3	2	4	16
Master's Degree	2	1	2		2	3	2	5	17
Ed.D. or Ph.D.		1	1		1	1	6	3	13
Ed.D. or Ph.D. in Vocational Education	3		1			2	2		8
Administration of Higher Education									
Other: CAGS Human Relations					1				1
Total Respondents	3	1	2	0	2	3	8		11
Total Responses									70
Did Not Respond									7

When hired as a coordinator, 73 percent, or 19 of the 26 coordinators, had the doctoral degree; 19 percent, or 5 of the coordinators, held the master's degree, and only 4 percent, or 1 of the coordinator, had a degree other than the master's or doctor's (Table XIV).

With the majority of the vocational coordinators having doctoral degrees at the time of being hired, there is an indication that a doctoral degree in vocational education might be made a requirement for one to become a professional vocational teacher-educator/coordinator.

TABLE XIV
HIGHEST DEGREE HELD WHEN HIRED
AS A COORDINATOR

Vocational Discipline	Bachelor's Degree	Master's Degree	Doctoral Degree	Other Degree	Total Responds
Agriculture		1	2		3
Business			1		1
DE/Mktg			2		2
Health					
Home Ec			1	1	2
Ind. Arts			3		3
Technical		2	6		8
T & I		2	4		6
Total Degrees		5	19	1	25
Did Not Respond					1

Just like the teacher-educators, vocational program coordinators pursued the doctoral degree for several reasons. Particularly striking, nine of the coordinators, as indicated in Table XV, revealed that they pursued the doctoral degree for the purpose of becoming "a college professor of their vocational discipline," six of the coordinators pursued the degree "to be vocational teacher-educators," while two pursued the degree "to keep their current job (as teacher-educators)." One coordinator wanted the degree "to be a public school administrator" and the coordinators did not share their opinion about this topic.

Work experiences considered most valuable to these coordinators in becoming a vocational coordinator were listed in Table XVI. As did vocational teacher-educators, "occupational experience in the vocational discipline" was identified by coordinators as the most valuable; six thought "teacher-educator" experience the next valuable work experience, while five thought the experience of "secondary vocational teaching and chairperson" as the next valuable work experience. Surprisingly, the experience of being a "vocational adult education instructor" was identified by only one coordinator as being a valuable experience. Nevertheless, the 26 coordinators identified 24 valuable work experiences ranging from "occupational experience in the vocational discipline" to "industrial consulting" in becoming a vocational coordinator.

Data concerning college courses and higher education experiences most beneficial in developing coordinator abilities are presented in Table XVII. Eight of the coordinators identified "administration of vocational education/supervision; administering educational department; public administration; and administration courses" as courses and experiences most beneficial in developing coordinator abilities.

TABLE XV
COORDINATOR'S REASON FOR PURSUING THE
DOCTORAL DEGREE: FIRST CHOICE

Questionnaire Choices By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
To be a community college professor									
To be a public school administrator	1								1
To be a vocational/technical school administrator									
To be a vocational teacher-educator		1	1		1	1		2	6
To be a college professor of (vocational discipline)						1	4	3	9
To keep my current job (teacher-educator						1	1		2
To be an industrial trainer/training specialist									
Other (please specify)									
Personal satisfaction							1		1
To do research									
Did not respond	1		1		1		2	2	7
Total	3	1	2		2	3	8	7	26

TABLE XVI
WORK EXPERIENCE CONSIDERED MOST VALUABLE IN BECOMING
A VOCATIONAL COORDINATOR

Work Experience Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
1. Occupation experience in vocational discipline	2		2			3	1	1	9
2. Teacher-educator			1				1	4	6
3. Secondary vocational teaching and					2	2		1	5
4. University/post secondary teaching						2	1	1	4
5. Graduate course work						1	2		3
6. Office administration experience							1	2	3
7. Business experience that emphasizes service								3	3
8. Work as research associate							2		2
9. University faculty member	1								1
10. Sales representative experience		1							1

TABLE XVI (continued)

Work Experience Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
11. Teacher coordinator of high school		1							1
12. State department staff member for professional learning				1					1
13. On-the-job dealings in vocational politics							1		1
14. Vocational adult education instructor							1		1
15. Working with people/human/public relations						1			1
16. Project work with vocational teachers						1			1
17. Student of vocational education						1			1
18. Trainer in private sector						1			1
19. Pastoral work/experience									
20. Proposal/grant writing						1			1

TABLE XVI (continued)

Work Experience Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
21. Supervising student teachers in public school							1		1
22. Working with migrant education							1		1
23. Variety of counseling positions							1		1
24. Industrial counseling								1	1
Total responses	3	1	4		3	10	17	13	50
Total respondents	3	1	2		2	3	8	7	26

TABLE XVII
COLLEGE COURSES AND HIGHER EDUCATION EXPERIENCES MOST
BENEFICIAL IN DEVELOPING COORDINATOR ABILITIES

Courses and Experiences Listed by Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
1. Administration of Vocational Education/Supervision 1) administering education department, 2) public administration, 3) administration courses						1	4	3	8
2. Curriculum Design courses							1	2	3
3. History/Philosophy of Vocational Education							1	2	3
4. Teaching									
5. Public relations/human relations									
6. University level committee experience	2								2
7. Personnel management courses		1						1	2
8. Coordinator of vocational programs (doctoral level courses)									
9. Psychology								1	1

TABLE XVII (continued)

Courses and Experiences Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
10. Legislation/legislation courses						1			1
11. Industrial Psychology	1								1
12. Culture and personality	1								1
13. Organizational theory	1								1
14. College level committee experience	1								1
15. Work day planning		1							1
16. Teacher education experience			1						1
17. State supervision experience			1						1
18. Being a vocational student			1						1
19. Coop. Ed. in the field			1						1
20. Masters degree in vocational education/ HEE program					1				1

TABLE XVII (continued)

Courses and Experiences Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
21. Special "sabbatical" leave to work with State department in schools					1				1
22. Evaluation and instructional strategies					1				1
23. College department coordinator chairman					1				1
24. AHEA-AVA National Center vocational education workshops					1				1
25. Working on a variety of grants						1			1
26. Working with industry to plan training courses						1			1
27. Adult vocational education courses						1			1
28. Junior and community college courses						1			1
29. Courses that teach processes							1		1
30. Organizational behavior courses							1		1

TABLE XVII (continued)

Courses and Experiences Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
31. Models of change							1		1
32. Project work at National Center on CBI and CBE							1		1
33. Program planning course							1		1
34. Writing proposal for funding							1		1
35. Consulting with schools/teachers in vocational education									
36. Department chairmanship							1		1
37. Research courses							1		1
38. Counseling psychology							1		1
39. Coordinating various programs							1		1
40. Coordinating credit programs									

TABLE XVII (continued)

Courses and Experiences Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
41. Industrial teaching courses								1	1
42. Experience which required organization and intelligent use of <u>all</u> resources								1	1
43. Managerial other than human relations courses								1	1
44. Workshop/seminars								1	1
45. Practical experience								1	1
46. All work toward Ed.D. in vocational education									1
Total responses	6	2	4		5	6	13	16	52
Total respondents	3	1	2		2	3	8	7	26

"Curriculum design courses" and "history/philosophy of vocational education" were respectively identified by three coordinators as being the next set of beneficial courses and/or experiences in developing coordinator abilities. Although 46 courses and experiences were identified as being beneficial in developing coordinator abilities, 76.10 percent or 35 of them were identified by single individuals.

When asked to identify existing college courses which should be required to become a coordinator, seven of the coordinators identified "administration/supervision of vocational education" as a "should be required course." "Principles/philosophy of higher education" was the next existing college course similarly identified. In all, 37 "existing college courses" including "Legal aspects of all areas" were identified as necessary courses for one to become a coordinator. These data are presented in Table XVIII.

Finally, the coordinators were requested to identify specific lessons and experiences that should be included in a doctoral program of study for training vocational coordinators (Table XIX). Four coordinators identified "Internship in supervising student teachers and high school level/vocational education coordination experience," and two identified "Seminars," "Time Management," and "Helping, Facilitating/Mentoring" as "should be included" in a doctoral program of study for training future vocational coordinators. A total of 49 possible lessons and experiences were identified.

Item #10 "Comments," allowed space for the vocational coordinators to also respond openly. Only one vocational coordinator responded, which appears as #9 on the list of comments in Appendix D.

TABLE XVIII

EXISTING COLLEGE COURSES COORDINATORS IDENTIFIED AS
"SHOULD BE REQUIRED TO BECOME A COORDINATOR"

Existing College Courses	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
1. Administration/supervision of vocational education	1		1			2		3	7
2. Principles/philosophy of higher education			1		1	1			3
3. Internship in administration: business and industrial coordination	1						1		2
4. Grant writing: a course in grant proposal/writing		1				1			2
5. Vocational education curriculum					1	1			2
6. Interpersonal relations/personnel management/human relations					1			1	2
7. Junior and community college courses						1	1		2
8. Research/applied methodology							1	1	2
9. Statistics	1						1		2

TABLE XVIII (continued)

Existing College Courses	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
10. Personalities theories	1								1
11. Leadership	1								1
12. Organizational theory	1								1
13. Personnel supervision and evaluation	1								1
14. Futures planning	1								1
15. Special education		1							1
16. Work day coordination		1							1
17. Teacher education			1						1
18. Managerial communications			1						1
19. Educational finance						1			1
20. Legislation						1			1

TABLE XVIII (continued)

Existing College Courses	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
21. Coordination techniques in vocational education						1			1
22. Models of change							1		1
23. Organizational behavior							1		1
24. Design, development and implementation of programs							1		1
25. Instructional design							1		1
26. Issues in adult and vocational education							1		1
27. History and philosophy of vocational education							1		1
28. Technical education								1	1
29. Dissertation							1		1
30. Communication skills							1		1
31. Counseling psychology							1		1

TABLE XVIII (continued)

Existing College Courses	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
32. Internship/issues in counseling							1		1
33. "Instructor and methods are more important than course content. Go for the best organized and 'people oriented' instructor"								1	1
34. Curriculum supervision								1	1
35. Technical writing								1	1
36. Personnel management								1	1
37. Legal aspects in all areas								1	1
Total responses	8	3	4		3	9	14	10	51
Total respondents	3	1	2		2	3	8	7	26

TABLE XIX
LESSONS AND EXPERIENCES THAT SHOULD BE INCLUDED
IN A DOCTORAL PROGRAM OF STUDY FOR TRAINING
VOCATIONAL COORDINATORS

Lesson Or Experience Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
1. Internship in supervising student teachers; high school level; and vocational education coordination	1		2					1	4
2. Seminars	1					1			2
3. Helping, facilitating, mentoring							2		2
4. Time Management								2	2
5. Required observations and reading	1								1
6. Supervising student teaching	1								1
7. Experience in state department education	1								1
8. Managing university departmental budget	1								1
9. Selecting new/replacement personnel	1								1
10. Planning and leading conferences		1							1

TABLE XIX (continued)

Lesson Or Experience Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
11. Writing a request for proposal		1							1
12. Practicum experience with coordinator			1						1
13. Practicum with state supervisor			1						1
14. Practicum with teacher-educator			1						1
15. Certification theory and practices		1							1
16. Budget meetings "give and take (how to rob Peter to pay Paul)"					1				1
17. "Coins have two sides, so do problems, let's work them out and look at both sides"					1				1
18. How to plan schedules that meet and suit a variety of needs					1				1
19. Political Issues in Vocational Education						1			1
20. Something dealing with future forecasting						1			1

TABLE XIX (continued)

Lesson Or Experience Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
21. Educational Finance						1			1
22. Proposal writing						1			1
23. Maintaining financial records						1			1
24. Locating Funds						1			1
25. Current regulations concerning vocational education						1			1
26. Internship in business/industry							1		1
27. Models of Change							1		1
28. Organizational behavior							1		1
29. Involvement in research							1		1
30. Development project							1		1
31. Field work with vocational education instructor/administrator							1		1

TABLE XIX (continued)

Lesson Or Experience Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
32. Curriculum development work with instructors							1		1
33. How to consult with schools/teachers							1		1
34. Technical writing							1		1
35. Adult learning theory							1		1
36. Teaching at both secondary and community college in vocational education							1		1
37. Funding research and equipment							1		1
38. The adult student re-entry issue							1		1
39. Office management - process of papers							1		1
40. "In a specific area, assess needs, develop programs, obtain resources, and provide service"								1	1
41. Work with a board of control or legislature, sell a program to acceptance								1	1

TABLE XIX (continued)

Lesson Or Experience Listed By Coordinators	Agriculture Ed	Business Ed	DE/Mktg Ed	Health Ed	Home Ec Ed	Ind Arts Ed	Technical Ed	T & I Ed	Totals
42. Work as an intern with a successful administrator, ask for specific assignment and responsibilities after the intern has proven him/herself								1	1
43. Writing concise reports							1		1
44. Planning strategies								1	1
45. Visitation to public schools, see their programs								1	1
46. Visitation to public schools and interacting with the various coordinators								1	1
47. Work in industry								1	1
48. Work with industrial boards								1	1
49. Creating a budget without the benefit of having the flexibility to really do so i.e., have a bunch of "givers" and only a few to go around								1	1
Total Responses	7	3	5		3	8	16	13	55
Total Respondents	3	1	2		2	3	8	7	26

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATION

Summary

The purpose of this study was to identify needs of present and future vocational teacher-educators for institutions offering master's programs in vocational teacher-education in order to improve their education and to make necessary changes in the existing doctoral programs. Specifically, respondents were asked open-ended questions to elicit information concerning the number of years of service, either as instructors, vocational teacher-educators, or vocational coordinators; background or educational levels achieved and courses or experiences that should be included in doctoral programs designed to train coordinators and vocational teacher-educators.

The study was designed to answer the following questions:

1. What educational background experiences have teacher-educators in masters degree granting institutions had to prepare them to be vocational teacher-educators?
2. What specific higher educational experiences have they had to prepare them to be vocational teacher-educators?
3. What specific work experiences did they have to prepare them to be vocational teacher-educators?
4. What university courses did they have to specifically prepare them to become vocational teacher-educators?

5. What curriculum changes (specific courses and other experiences) would they recommend for educating future vocational teacher-educators?

The populations for this study were university vocational program coordinators and vocational teacher-educators in 69 universities and institutions from across the nation offering five or more vocational programs and granting master's degrees in vocational education. The entire population was used in the study, hence there was no need for random sampling. Because some teacher-educators are in charge of two or more disciplines (at the time of this study), there were only 165 vocational teacher-educators from among the 69 universities and institutions and 59 university coordinators used in the research group.

The data analysis, first, considered the survey return rates of both teacher-educators and coordinators; second, the number of years of service expended by these groups; third, the questions specifically addressed to teacher-educators; and fourth, the questions specifically addressed to coordinators in this study were analyzed.

Findings

The length of service as a teacher-educator ranged from 1 to 31 years with an average of 15 years of experience (Table II). Prior to becoming vocational teacher-educators, most respondents had from 0 to 30 years of experience as vocational instructors with a group average of 8 years (Table III). Lengths of service as a vocational coordinator ranged from 0 to 28 with a group mean of 9 years of service. Prior to becoming coordinators, most coordinators had from 0 to 30 years of service with a total group mean of 10 years (Table XI and Table XII).

Although university coordinators were asked to identify the variables involved in the education of present and future vocational coordinators, it was found that the variables which they recommended were similar to those recommended by teacher-educators. With these general findings on the length of services expended by both teacher-educators and coordinators, the findings to all of the questions already mentioned are discussed below:

Research Question #1: What educational background experiences have teacher-educators in masters degree granting institutions had to prepare them to be vocational teacher-educators?

Based on the data generated by the survey instruments it was found that at some point in time of the careers of teacher-educators, certain needs in their lives and careers led to the pursuit of one or more degree in vocational education. Specifically, the following findings resulted from the study as listed in Table IV:

1. All vocational disciplines indicated having teacher-educators who have had vocational courses in secondary schools.
2. Only five Agriculture teacher-educators, one Business/Office education educator, one DE/Marketing educator, and three Technical and Industrial educators indicated having an associate degree in their respective vocational discipline.
3. Of the 118 teacher-educators in the study 68 percent held bachelor's, 70 percent master's, and 70 percent Ed.D. and/or Ph.D. degrees in all the eight vocational disciplines.

Specifically, of the 80 bachelor's degrees, 18 percent were Agriculture teacher-educators, 16 percent Business/Office educators, 24 percent Home Economics educators; 15 percent

Industrial Arts and Technology educators, and 13 percent Technical and Industrial educators hold degrees in the specific disciplines.

4. Of the master's degrees, five disciplines had the highest number of teacher-educators who possess the degree. These are: Agriculture (13%); Business and Office (16%); Home Economics (24%); Industrial Arts Technology (17%); and Technical and Industrial (12%).
5. Of the 82 doctoral degrees, 67 percent were in studies other than vocational education, while 33 percent were specifically obtained in vocational education. Specifically, 16 percent of Agriculture teacher-educators held one type of doctoral degree or the other; 16 percent of Business and Office educators hold one type of degree or the other; 23 percent of Home Economics educators; 15 percent of Industrial Arts Technology educators; 11 percent of Technical educators; 13 percent of Technical and Industrial; 4 percent of DE/Marketing; and 0 percent of Health educators hold some type of doctoral degree.
6. Two teacher-educators in Business/Office; three in Home Economics; and two in Industrial Arts Technology indicated having "other" degrees which were listed as post-doctoral credit hours required for teacher certification: ABD in Education; RN; SED (Specialist in Education); and PDSA (Post-Doctoral Studies in Administration).

Research Question #2: What specific higher educational experience have they had to prepare them to be vocational teacher-educators?

The following findings as indicated in Table V are as follows:

1. Five vocational teacher-educators held only the bachelor degree when they became teacher-educators. Of the 118 respondents, 40 percent held the masters degree, 3 percent specialist degrees, while 53 percent held the doctoral degree when they were hired as teacher-educators.
2. Most respondents held the doctoral degree when they became teacher-educators, indicating the importance attached to this degree as one of the criteria for future aspirants to become teacher-educators.
3. For specific disciplines, 14 percent Home Economics educators; 9 percent Industrial Arts Technology educators held the masters degree while 10 percent Agriculture educators, 12 percent Home Economics educators and 8 percent Technical educators held the doctoral degree at the time they became teacher-educators. Although not stated in Table V, newer vocational teacher-educators who have had not more than 10 years experience tend to possess more of the doctoral degrees in their vocational discipline, an observation also made in a study conducted by Knight (1987).

Research Question #3: What specific work experiences did they have to prepare them to be vocational teacher-educators?

The findings made in this study were as follows:

1. The 118 respondents in this study listed 26 generic work experiences considered most valuable in preparing one to become a vocational teacher-educator (Table VII). Specifically, it was found that 63 percent of the respondents

considered "Occupational Experiences in the Vocational Discipline" as the most valuable work experience in becoming a teacher-educator. "Secondary Vocational Teaching" was considered by 34 percent of the respondents as the next most valuable work experience in becoming a teacher-educator.

2. The next two most valuable work experiences in becoming a teacher-educator included "Teaching at the Post-secondary Level" (12%); "Graduate Assistant" (8%). The numbers inserted in parenthesis indicates the percentage of respondents who identified each of the work experiences.

Research Question #4: What university courses did they have to specifically prepare them to become vocational teacher-educators?

As indicated in Table VIII, the study generated the following findings:

1. All the 118 respondents in the eight vocational disciplines generated a summarized total of 66 college courses and higher education experiences (from a total list of 266 items) considered most beneficial in developing teacher-educator abilities. "Curriculum Development" was listed by 31 percent of the respondents as being most beneficial in their preparation. In addition, 25 percent of the respondents have had "Methods of Teaching" and feel it is most beneficial in developing their abilities as teacher-educators.
2. The next two sets of courses/experiences most beneficial in developing teacher-educator abilities identified by 15 and 13 percent of the respondents respectively were: Methods of Research Design (15%); History, Principles, and Philosophy of

Vocational Education/Higher Education (13%); Supervision of Students, Vocational Education or Supervising Techniques (10%).

Research Question #5: What curriculum changes (specific courses and other experiences) would you recommend for educating future vocational teacher-educators?

The following findings were extracted from data presented in Table IX and Table X of the study:

1. Sixty different kinds of existing college courses or experiences were identified by teacher-educators as "should be required to become a teacher-educator" and are summarized from a total of 260 different items listed by the 118 teacher-educator respondents.
2. Specifically, it was found that 25 percent of the respondents thought that "Methods of Research Design" should be made a requirements for one to become a teacher-educator, while 24 percent identified "Curriculum Development" and 22 percent identified "Philosophy, History, Foundations and Principles of Vocational Education" respectively as "Should Be Required" courses to become a teacher-educator.
3. Seventy-four different kinds of lessons and experiences which should be included in a doctoral program of study for training vocational teacher-educators (Table X) were identified by the 118 respondents and summarized from 234 various items suggested or listed.
4. Specifically, 12 percent of the respondents identified "Curriculum Development" as lessons/experiences which should be included in a doctoral program of study for training

teacher-educators, while 10 percent respectively listed "Grant Writing for Securing Funds" and "Internship" as the next lessons/experiences which should be included in a doctoral program of study for training teacher-educators. It is noteworthy to observe that most of these generic lessons and experiences are identified or appear several times in each of the responses to each question addressed in the different tables.

On reasons for pursuing the doctoral degree in the specific vocational discipline, teacher-educators and vocational coordinators responded alike, which are seen in Table VI and Table XV respectively. "To be a college professor of (vocational discipline)" ranked number one among the responses of both groups as the main reason for pursuing the doctoral degree. Thirty-six teacher-educators and nine coordinators named this as their first choice. "To be a vocational teacher-educator" was ranked by both groups as the number two reason for pursuing the doctoral degree.

The 26 coordinators listed 24 work experiences considered most valuable in becoming vocational coordinators (Table XVI). This group identified the four top-ranked work experiences as: Occupational experience in the vocational discipline (35%); teacher-educator (30%); secondary vocational teaching and chairperson (19%); and university/post-secondary teaching (15%). The coordinators identified forty-six generic college courses and higher education experiences most beneficial in

developing coordinator abilities. Of the 46 suggestions, three came out on top of the list. These are: administration of vocational education/supervision, administering educational department; public administration, and administration courses (31%); curriculum design courses (12%); and History/philosophy of vocational education (12%) (Table XVII).

Thirty-seven existing college courses were identified by the 26 coordinators as "should be required to become a coordinator." Of this thirty-seven, Administration/Supervision of Vocational Education was ranked the top most by 27 percent of the coordinators. Principles/Philosophy of Higher Education and Internship in Administration, Business and Industrial coordination were ranked the next top by 12 percent and 8 percent of the coordinators respectively (Table XVIII).

The coordinators also identified 49 lessons and experiences that should be included in a doctoral program of study for training vocational coordinators (Table XVIII) with four top most ranked. These are: Internship in supervising student teachers in high school level and in vocational education coordination (15%); seminars (8%); helping, facilitating/mentoring (8%); and time management (8%).

9. Finally, it was the finding of this study that teacher-educators and coordinators responded similarly to the reasons for pursuing the doctoral degree, such as in work experiences considered most valuable in becoming a teacher-educator and coordinator, college courses and higher education experience most beneficial, existing college courses

to be required and courses/lessons/experiences that should be included in a doctoral program of study for training teacher-educators and coordinators respectively.

Conclusions

From the findings of this study, a general conclusion is that there was a substantial agreement between teacher-educators in this study and teacher-educators in the study conducted by Knight in that "requirements" to become a teacher-educator should have a commonality. Where differences did exist, teacher-educators in Knight's study were more likely to suggest or identify the "requirements" in a more concentrated manner or to a greater degree than teacher-educators who participated in this study. Specifically, a substantial agreement existed among the vocational teacher-educators in this study in the variables in educating present and future teacher-educators. There was also agreement among vocational coordinators in this study on the necessary requirements for educating present and future vocational education coordinators.

Teacher-educators have had some good educational background while being prepared as vocational teacher-educators judging from their listed educational backgrounds. The conclusions drawn from the data presented in this study were that as teacher-educators move toward the professionalization of their training, the doctorate degree may be made one of the criteria for professional certification. The generic and numerous experiences listed by the respondents indicated that virtually all work experience(s) (especially "Occupational Experience in the Vocational Discipline") are important in the training of vocational teacher-educators. Its logical implication would then be that when setting future programs of study for teacher-educators, these and

similar work experiences as listed in Table VII need to be carefully considered as requirements for becoming a teacher-educator.

Teacher-educators have had, and recommend the specific five basic courses in vocational teacher education programs. These courses were:

1. Curriculum Development.
2. Methods of Teaching.
3. Research Methods.
4. History and Principles of Vocational Education.
5. Philosophy of Vocational Education.

It was concluded that when asked to suggest curriculum changes (specific courses and other experiences) for educating future vocational teacher-educators, teacher-educators identified courses or experiences for which they are familiar with. Based on their personal encounters with such lessons/experiences as teacher-educators, they thought that program planners for future vocational educators need to examine such "lessons/experiences/courses" for inclusion in the training of vocational teacher-educators. Finally, it was the conclusion of this study that even if other "requirements" to become a teacher-educator were not given immediate attention, the doctorate degree would be made an important criterion for one to become a teacher-educator.

Recommendations

The following basic recommendations are made:

1. It is recommended that vocational educational authorities consider "occupational experience in the vocational discipline" and "secondary vocational teaching (work) experience" as part of the requirements in becoming a teacher-educator.

2. It is recommended that courses/experience such as "Curriculum Development," "Methods of Teaching," and "Research Methods/Design" be considered as basic requirements in developing future teacher-educators as they have been "most beneficial in developing" present teacher-educator abilities.
3. It is recommended that program planners for the educating of vocational teacher-educators strongly consider "Curriculum Development," "Occupational experiences in the vocational discipline," "Methods of Teaching," "Research Methods/Design," and "History, Principles and Philosophy of Vocational Education/Higher Education" (among other lessons/experiences identified in this study) as important elements to be included in the standards or requirements for educating present and future vocational teacher-educators.
4. Due to the spread of the variables (identified as work experiences, courses, and lessons) in educating/training present and future vocational teacher-educators, it is recommended that administrators and program planners and coordinators in institutions offering doctoral programs for developing teacher-educators carefully study these variables as appearing in Table VI through Table XIX for requirements of educating teacher-educators and coordinators.

Since many of the identified lessons may not be in existing courses, a "Capstone" course as also suggested by Knight (1987) should be considered as a requirement on the doctoral degree plan for teacher-educators. Such a "capstone" course could be designed as "Foundations of Vocational Teacher

Education," "Introduction to Vocational Teacher Education," or "Overview of Programs in Vocational Teacher Education."

5. It is also recommended that all institutions offering programs in developing vocational teacher-educators use the list of all variables or competencies or cross-check them against the list of competencies currently being used in these institutions to adjust any existing gaps in the teacher-educator program.
As can be noted on the comments appearing in Appendix D, it is difficult to recommend only one or two courses for a doctoral degree program. In view of this, it is further recommended that a somewhat unified but standard specific doctoral program for the vocational teacher-educator be developed for future teacher-educators.
6. It is further recommended that national agencies (such as AVA) for setting standards of professional teacher-educators consider the recommendations for course requirements identified in this study and make selections of the ones that would form basic standards/criteria for granting professional certification. Along the same line, it is further recommended that unified requirements for the development of current and future vocational teacher-educators be maintained throughout the nation.
7. Finally, this study identified the needs of present and future vocational teacher-educators for institutions offering the master's degree programs in vocational teacher education in order to improve their education and to make necessary changes in the existing programs. Therefore, it is recommended that a

similar study be conducted with teacher-educators and coordinators in institutions, colleges, and universities offering the bachelor's degree program in vocational education to see if similar needs exist.

BIBLIOGRAPHY

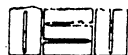
1. Adams, Dewey A., and Diehm, Edbbera A., Vocational Teacher Education Programs in the United States: Information Monograph No. 1, University Council for Vocational Education, January 1984
2. Ascher, Gordon and Joan M. Birchenall, "Raising Standards and Increasing Access," Vocational Education Journal, Alexandria, Virginia: American Vocational Association, 1987.
3. Bailey, Kenneth D., Methods of Social Research, New York: The Free Press, A Division of Macmillian Publishing Co., Inc., 1978.
4. Buzzell, Charles H., "AVA's Teacher Education Initiative," Vocational Education Journal, Virginia: American Vocational Association, May 1987, p. 10.
5. Erekson, Thomas and Gloeckner, Gene, University Teaching In Industrial Education: Demographic Factors, presented at AVA in December 1986.
6. Guilinger, Jim, "Teacher Preparation and The Profession," American Vocational Association, Dallas, Texas: American Vocational Association, May 1987, p. 11.
7. Keppel, Francis, "A Field Guide to the Land of Teachers," Phi Delta Kappan, Bloomington, Indiana: Phi Delta Kappan, September 1986.
8. Knight, Clyde B., "Educating the Vocational Teacher Educator," Unpublished Research Study, Oklahoma State University, 1987.
9. Kroll, Paul, The Plain Truth Magazine, Pasadena, California: The Plain Truth, September 1987.
10. Murray, Frank B., "Goals for the Reform of Teacher Education: An Executive Summary of the Holmes Group Report," Phi Delta Kappan, Bloomington, IN: Phi Delta Kappan, September 1986, pp. 28-32.
11. Nussel, Edward J., "What the Holmes Group Report Doesn't Say," Journal of Teacher Education, Bloomington, Ind: Phi Delta Kappan, Vol. XXXV #131, 1986.
12. Pietig, Jeanne, "On Making the Education of Teachers Intellectually Sound," Teacher Education Quarterly, Vol. 14 #1, California: Drakker Publications, Winter 1987, pp. 33-39.

13. Robinson, Donald W., "The Preparation of Educators in Oklahoma: A Case For Professional School of Education," presented to the State Regents for Higher Education Task Force in Teacher Education, Stillwater, Oklahoma State University, October 1986.
14. Soda, Roger, "Pot Pourri: Tomorrow's Teachers for Whom and For What: Missing Propositions in the Holmes Group Report," Journal of Teacher Education, November/December 1986, p. 3.
15. Southern Regional Education Board, "Features of Reports on Teacher Education 1986," Regional Spotlight, Atlanta: Southern Regional Education Board, 1986.
16. Southern Regional Education Board, "Major Reports on Teacher Education: What Do They Mean for States?" Regional Spotlight, Atlanta: Southern Regional Education Board, Vol. XV #1, October 1986.
17. Strickland, Deborah C. and Donald Elson, "Graduation Requirements and Vocational Enrollment," Vocational Education Journal, Virginia: American Vocational Association, May 1987, pp. 41-47.
18. The Carnegie Forum on Education and the Economy, "Report-A Nation Prepared: Teachers for the 21st Century," Washington, D.C.: Forum on Education and the Economy, Spring 1986.
19. The Chronicle of Higher Education, "An Open Letter from 37 College Heads Urging Colleges to be Active in School Reform," September 23, 1987.
20. The Holmes Group, "The Holmes Group Report, Tomorrow's Teachers," Michigan: The Holmes Group, 1986.
21. Tucker, Marc and David Mandel, "The Carnegie Report: A Call for Redesigning the Schools," Phi Delta Kappan, Bloomington, Ind.: Phi Delta Kappan, September 1986, pp. 24-27.
22. Watts, Doyle, "Teacher Educators Should Be Certified," Journal of Teacher Education, No. 35, January-February 1974, pp. 30-31.
23. Webster's New Collegiate Dictionary, Massachusetts: G and C Merriam Co., 1977.

APPENDICES

APPENDIX A

CORRESPONDENCE I AND SURVEY INSTRUMENT TO UNIVERSITY
VOCATIONAL EDUCATOR COORDINATORS



Oklahoma State University

SCHOOL OF OCCUPATIONAL AND ADULT EDUCATION

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

October 1, 1987

Dear Vocational Education Coordinator:

We are conducting an in-depth research on educating the vocational teacher educator. Since you are a coordinator of vocational education and offer a variety of specializations leading toward the vocational certificate at your university, your experience and expertise and that of your faculty will be most valuable and essential to the effectiveness of the study.

We are really asking two favors of you. One, that you complete the survey labeled "Survey of University Vocational Education Coordinators" and return it in the enclosed postage-paid envelope. Two, that you route the enclosed letters and survey sheets labeled "Vocational Teacher Educator Survey" to the head teacher educator in each of your areas of vocational specialization. Please ask each to respond to the appropriate survey.

We will be happy to send the results of the study to you when it is completed. Thank you for sharing your expertise.

Sincerely,

Clyde B. Knight, Ed.D.
Associate Professor T&I Ed

Onyema Gilbert Nkwocha
Research Assistant

Enclosure



SURVEY OF UNIVERSITY VOCATIONAL EDUCATION COORDINATORS

Name and Title (this is optional)

1. I have been a vocational coordinator for ____ years.
2. Prior to becoming a vocational coordinator I was: (check all that apply)
 - ____ a. Vo Ag instructor for ____ years.
 - ____ b. Home Ec instructor for ____ years.
 - ____ c. T&I instructor for ____ years.
 - ____ d. Tec Ed instructor for ____ years.
 - ____ e. BOE instructor for ____ years.
 - ____ f. Health Occupations instructor for ____ years.
 - ____ g. DE instructor for ____ years.
 - ____ h. Ind Arts instructor for ____ years.
 - ____ i. Other _____ for ____ years.
3. Background vocational educational levels I have achieved: (check and identify all that apply)
 - ____ a. Secondary Vocational Ed in _____.
 - ____ b. Associate degree in _____.
 - ____ c. BS degree in _____.
 - ____ d. MS degree in _____.
 - ____ e. Ph.D. or Ed.D. in _____.
 - ____ f. Other _____.
4. What degree did you hold when you became a coordinator?
_____ in _____.

5. If you now hold or are working toward an Ed.D. or Ph.D., please check the applicable reasons you pursued the higher degree. (If for more than one reason, identify 1st, 2nd, and 3rd choice.)

☐ To be a community college professor

☐ To be a public school administrator

☐ To be a vocational/technical school administrator

☐ To be a vocational teacher educator

☐ To be a college professor of _____

☐ To be a high school counselor

☐ To keep my current job as a/an _____

☐ To be an industrial trainer/training specialist

☐ To be an industrial personnel officer

☐ Other (please specify) _____

6. What work experiences do you consider of the most value to you in becoming a vocational coordinator? (Rank in order of value)

(1) _____

(2) _____

(3) _____

7. What college courses or higher education experiences have been most beneficial in helping develop your coordinator abilities? (Please list in order of value)

(1) _____

(2) _____

(3) _____

(4) _____

8. What three specific existing college courses would you require for all doctoral degree candidates planning to become coordinators?

Titles:

- (1) _____
(2) _____
(3) _____

9. Based on your experiences as a coordinator, suggest three titles of lessons or suggest three experiences you think should be included in a doctoral program specifically for training coordinators.

- (1) _____
(2) _____
(3) _____

10. Comments:

APPENDIX B

CORRESPONDENCE II AND SURVEY INSTRUMENT TO
VOCATIONAL TEACHER-EDUCATORS



Oklahoma State University

SCHOOL OF OCCUPATIONAL AND ADULT EDUCATION

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

October 1, 1987

Dear Vocational Teacher Educator:

This survey is being made to improve preparation of vocational teacher educators for the future. As a current vocational teacher educator, you are the greatest source of information available for developing a pragmatic and realistic approach to having only the best educational training for the vocational teacher educators who teach the vocational teachers of the future.

Your taking time to answer and return the enclosed survey will be appreciated and help improve teacher education. The survey results will be instrumental in developing new courses and initiating any needed changes in doctoral programs for teacher educators and administrators.

We will be most happy to send you the results of the survey when it is completed. All you need do is send us your address or enclose your card with the survey.

Again, thanks for sharing your expertise with us.

Sincerely,

Clyde B. Knight, Ed.D.
Associate Professor T&I Ed

Onyema Gilbert Nkwocha
Research Assistant

Enclosure



VOCATIONAL TEACHER EDUCATOR EDUCATION SURVEY

Name and Title (this is optional)

1. I have been a vocational teacher educator for ____ years.
2. Prior to becoming a vocational teacher educator I was: (check all that apply)
 - ____ a. Vo Ag instructor for ____ years.
 - ____ b. Home Ec instructor for ____ years.
 - ____ c. T&I instructor for ____ years.
 - ____ d. Tec Ed instructor for ____ years.
 - ____ e. BOE instructor for ____ years.
 - ____ f. Health Occupations instructor for ____ years.
 - ____ g. DE instructor for ____ years.
 - ____ h. Ind Arts instructor for ____ years.
 - ____ i. Other _____ for ____ years.
3. Background vocational educational levels I have achieved: (check and identify all that apply)
 - ____ a. Secondary Vocational Ed in _____.
 - ____ b. Associate degree in _____.
 - ____ c. BS degree in _____.
 - ____ d. MS degree in _____.
 - ____ e. Ph.D. or Ed.D. in _____.
 - ____ f. Other _____.
4. What degree did you hold when you became a teacher educator?

_____ in _____.

5. If you now hold or are working toward an Ed.D. or Ph.D., please check the applicable reasons you pursued the higher degree. (If for more than one reason, identify 1st, 2nd, and 3rd choice.)

☐ To be a community college professor

☐ To be a public school administrator

☐ To be a vocational/technical school administrator

☐ To be a vocational teacher educator

☐ To be a college professor of _____

☐ To be a high school counselor

☐ To keep my current job as a/an _____

☐ To be an industrial trainer/training specialist

☐ To be an industrial personnel officer

☐ Other (please specify) _____

6. What work experiences do you consider of the most value to you in becoming a vocational teacher educator? (Rank in order of value)

(1) _____

(2) _____

(3) _____

7. What college courses or higher education experiences have been most beneficial in helping develop your teacher educator abilities? (Please list in order of value)

(1) _____

(2) _____

(3) _____

(4) _____

8. What three specific existing college courses would you require for all doctoral degree candidates planning to become teacher educators?

Titles:

- (1) _____
(2) _____
(3) _____

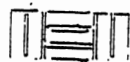
9. Based on your experiences as a teacher educator, suggest three titles of lessons or suggest three experiences you think should be included in a doctoral program specifically for training teacher educators.

- (1) _____
(2) _____
(3) _____

10. Comments:

APPENDIX C

CORRESPONDENCE III - FOLLOW-UP LETTER TO
BOTH VOCATIONAL TEACHER-EDUCATORS
AND VOCATIONAL EDUCATION
COORDINATORS



Oklahoma State University

SCHOOL OF OCCUPATIONAL AND ADULT EDUCATION

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

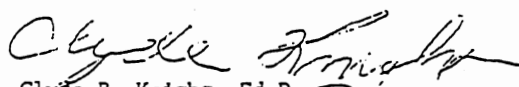
November 3, 1987

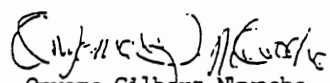
Dear Vocational Teacher Educator/Coordinator:

In early October, we sent you a letter requesting assistance in a research project being conducted at the School of Occupational and Adult Education here at Oklahoma State University. We need your help with the enclosed survey and hope you will share your thoughts with us.

We would appreciate it if you would complete and mail us the survey in the enclosed postage-paid envelope. If you have already mailed us your response, please disregard this letter. At this time, we would like to thank you for your cooperation.

Sincerely,


Clyde B. Knight, Ed.D.
Associate Professor T&I Ed


Onyema Gilbert Nkwocha
Research Assistant



APPENDIX D

COMMENTS BY PARTICIPANTS
OF THE STUDY

Comments by Participants
of the Study

The survey asked for comments at the end of the questionnaire. The following quotations are exactly as the respondents worded them:

1. "Involvement with college students and school systems and the interaction of the two is very important. Having a chance to work with pre-service teachers and to 'practice' supervision skills during their student teaching was not beneficial in my preparation."
2. "Many things should be included in one's doctoral program. First among others, no person should be admitted to a doctoral program without previous secondary school experience. Supervision/mentor is critical. The doctoral candidate in teacher education should be considered as an intern would be in medicine; having professional rank, though less than the 'permanent' university faculty. Student teacher supervision, teaching, attending meetings conferences... all (are) important."
3. "I draw heavily on my experience in business and administration management skills, especially in problem solving abilities. A teacher-educator must be open to new dimensions of technology and the directions of a shifting job market. The division of labor in some areas is becoming more general, yet other areas are becoming more specialized."
4. "Concern about vocational educator preparation is necessary. In my experience, though, vocational educators are prepared

adequately even for the collegiate level; however, professors in business (finance, accounting, marketing, and management) as a whole are unprepared for teaching responsibilities. Yet, they are awarded higher salaries than those who are prepared for doing an 'excellent job' of teaching! I believe all individuals who teach... at whatever level... should be required to 'learn how to teach' at the same point! (Hopefully before being offered a contract)."

5. "Some experience working with a state department of vocational education would be beneficial."
6. "Above experiences: To be flexible as to time/focus/etc. If emphasis is to be on teacher-educators, do not remove them from their areas of expertise. Provide opportunities to integrate work experience/present responsibilities to formulate new/added expertise."
7. "There appears to be no good substitute for a minimum of on-the-job experience in organizations apart from the public school system, followed by pre-service preparation. Actual public school teaching experience and then a doctoral program for people who are serious about the profession."
8. "I continue to find vocational educators, both secondary and post-secondary, to be an isolated (even increasingly so) group which can neither communicate with peers outside their discipline (nor) even solve problems with associates within their discipline at other levels of instruction. We are our own worst enemies."

9. "We require the following for our Ed.D. and Ph.D. degrees:

Major - 30 semester hours - minimum

Research Skills - 12-18 hours minimum (12 Ed.D.; 18 Ph.D.)

Foundations of Learning - 6 semester hours minimum

Organization of Management - 6 semester hours minimum

Dissertation - 18 semester hours minimum

Internship - 6 semester hours minimum

To be able to pick three college courses out of these requirements is almost impossible because they are all important."

VITA ²

Onyema Gilbert Nkwocha

Candidate for the Degree of
Doctor of Education

Thesis: EDUCATION OF THE VOCATIONAL TEACHER-EDUCATOR IN SELECTED
MASTER'S DEGREE GRANTING INSTITUTIONS

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born at Amuzi, Nigeria, the son of Mazi Ezenwa
V., and Adaure J. Nkwocha.

Education: Graduated from Central School Amuzi, Amuzi, Imo,
Nigeria, in December 1971; obtained high school diploma from
Community Secondary School Amuzi, Amuzi, Imo, in May 1975;
received National Certification in Education in Business
Studies, Accounting Major and Minor in Economics and Commerce
from National Teachers' College Gombe, Bauchi, in May 1980;
received Certificates in Part I Professional Examination
in General Principles of Law and Economics of Industry from
the Society of Company and Commercial Accountants Bristol,
Great Britain, in May 1981; received Bachelor of Science
degree in Technical Education, with concentration in
Mid-Management Technology from Oklahoma State University,
Stillwater, in July 1984; completed requirements for the Master
of Science degree with area of concentration in Human Resource
Development (HRD) at Oklahoma State University in December,
1986; completed requirements for the Doctor of Education
degree with major in Occupational and Adult Education
(Administration in OAED) at Oklahoma State University
in July 1988.

Professional Experience: Fisheries Assistant, Imo State Ministry
of Agriculture and Natural Resources, 1976-1977;
Student-Banker-in-Training (Industrial Training Fund), African
Continental Bank, Enugu, 1979; Vice President, National Theatre
Group, NTTC, Gombe, 1979-1980; Student teacher, Eruku

Secondary-Commercial, Illorin, 1979; President Amuzi Press Club, Amuzi, 1978-1980; Member, National Youth Service Corps (NYSC), Port Harcourt, 1980-1981; Senior Accounting Instructor, Obiangwu Secondary-Commercial School, Imo, Nigeria, 1981-1982; Member, American Society for Training and Development (ASTD), 1984-1986; Member, Association of MBA Executives, Inc., 1985-1986; Researcher, Oklahoma State University, 1985-1986; Manager of Operations and Overseas Coordinator, Ezenwa and Sons Motor Transport Co. Amuzi, Nigeria, 1980-1986; Researcher, Oklahoma State University, 1985-1988; presented a paper: "Research Tool Development: The Organizational Training Support Inventory" (which was the result of my master's thesis) with Dr. John L. Baird (Associate Professor, OSU) at the 28th Annual Adult Education Conference Proceedings at the University of Wyoming, May 21-23, 1987; Member, The Iota Lambda Sigma Fraternity, 1987.