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COMPETENCY-BASED PROFESSIONAL DEVELOPMENT NEEDS OF

VOCATIONAL TEACHER EDUCATORS IN ARIZONA

by

Patricia Lou Harrell Wild

_____

A Dissertation Submitted to the Faculty of the

DEPARTMENT OF SECONDARY EDUCATION

In Partial Fulfillment of the Requirements
For the Degree of

DOCTOR OF PHILOSOPHY

In the Graduate College

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THE UNIVERSITY OF ARIZONA
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I hereby recommend that this dissertation prepared under my direction

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ABSTRACT

Because changes in society and in the education field are occurring at an ever accelerating rate, the role of the teacher educator is increasingly complex and demanding. As the tasks and functions of the teacher educators expand, the demand for professional development of those employed as teacher educators increases.

This study assessed the professional development needs of university-based vocational teacher educators in Arizona. The study was done in these steps:

1. A list of competencies needed by university-based vocational teacher educators was developed. This included competencies related to six broad functions of teacher educators: planning/programming, instructing, evaluating, advising, research and development, and professional role.

2. The list of competencies was submitted to vocational education personnel for validation and the competency list was revised. One competency statement was added.

3. Revised competencies were submitted to vocational teachers for reordering according to relative importance.

4. The final list was submitted to university-based
   vocational teacher educators to elicit their
   opinions regarding (a) which competencies they
   would be willing to work on for professional
   development activities, and (b) their preferences
   among selected methods of inservice for the pro-
   fessional development activities.

Analyzing the summarized responses of teacher edu-
cators indicated that respondents ranked activities related
to evaluating as most important for professional develop-
ment. They ranked research and development activities
second in importance, followed by planning/programming,
instructing, professional role, and advising last. Their
rankings were in contrast to those of vocational teachers
who ranked instructing first, followed by planning/
programming, advising, professional role, evaluating, and
last, research and development.

Data from the teacher educators were analyzed to
determine priority ratings for each of the competencies.
Fifteen of the competencies were rated high priority for
professional development activities. Forty were medium
priority and five were low priority. Results indicated that
teacher educators were especially willing to learn more
about (1) helping teachers perform evaluating and research
and development functions, (2) developing specific

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curriculum, (3) working with a variety of educational and support personnel to improve vocational education, (4) new approaches to teaching, (5) helping teachers with youth organizations, (6) influencing vocational legislation, (7) helping teachers with professional growth.

Analyzing the mean ranks for preferences among methods of inservice education indicated that teacher educators most preferred one day workshops by region. The remaining methods were ranked in order of preference for all the competency groups as follows: second, individualized consultants on site; third, two-day workshops by region; fourth, self-instructional learning packages; fifth, one-day workshops statewide; sixth, one-week in-depth seminars; seventh, a few hours a week several weeks in a row; eighth, individualized consultants available by telephone; ninth, two-day workshops statewide; and tenth, individualized consultants who communicate through A.V. cassettes.

The finding that teacher educators were willing to improve on many competencies indicated need for a program of professional development activities carefully developed and coordinated to allow and encourage teacher educators to continuously progress in achievement of competencies. Need for achievement of many competencies would call for a systematically designed professional development program for teacher educators. Since the program would be competency-based it could be individualized and flexible enough to meet

the various needs of the teacher educators at different
locations and in different service areas. Carrying out
the competency-based approach would include development of
competency-based, field-centered activities and assessment
strategies, techniques, and instruments.

CHAPTER 1

INTRODUCTION

This study was designed as one segment of a pro-
fessional needs assessment project done for the Arizona
Department of Education's Division of Career and Vocational
Education. The needs assessment project grew out of the
need for information on which to base decisions about
competency-based teacher education programs. Personnel in
the Arizona Department of Education needed to establish
priorities and allocate funds for professional development
activities according to the priorities established.

Other segments of the needs assessment project
dealt with competency-based professional development needs
of vocational education preservice teachers, and supervisory
personnel. One group of vocational education personnel
whose professional development needs had not been assessed
was university-based vocational teacher educators.

Rationale for the Study

Because changes in the educational field are
occurring at an ever accelerating rate, the role of the
teacher is increasingly complex and demanding. Teacher
educators are expected to perform a wide variety of tasks
and functions. They are called upon to instruct teachers

at preservice and inservice levels in many aspects of education such as functioning in alternative schooling models, developing educational accountability systems, designing curricula sensitive to the diverse needs of students, mainstreaming students with special needs, meeting needs of adults, and eliminating sex-stereotyping. In addition to instructing teachers, the university-based vocational teacher educators are expected to achieve excellence in disciplined inquiry; that is, to examine the scope and purposes of vocational education, to formulate a coherent body of theory, to study policy alternatives, and to develop and disseminate effective techniques and materials. The teacher educators in vocational education are also expected to conduct consultations, field studies, and organizational services and dissemination projects (Woods 1974).

"Programs for preparing teachers will never rise above that which can be accomplished by teacher educators" (Houston 1972, p. 4). In order to meet the challenges of their educational roles, teacher educators need assistance and support to refine or develop needed competencies. As educational changes occur, the tasks and functions of the university-based vocational teacher educators expand and the demand for professional development of those employed as teacher educators increases.

The competency-based approach to teacher education represents one of the most significent trends affecting the

profession. A competency-based system is widely advocated as one of the best structures for the professional development of educational personnel including teacher educators (Peck and Tucker 1973, Hall and Jones 1976, Elam 1971, Denemark and Espinoza 1974). Competency-based education is generating activity and interest at local, state, and federal levels. Some type of competency-based education requirement is now a fact in 34 states. Almost every teacher education institution in the nation is experimenting in one way or another with competency-based efforts (Houston 1972, Parnell 1978). A major thrust in the 1978-1979 Arizona vocational education plan is competency-based vocational education, including the initiation of competency-based modular units of instruction for educators (Arizona Department of Education [ADE] 1978).

There is widespread agreement that professional development programs for teacher educators need to be based on competencies which effective teacher educators must possess (Grasha 1976, Andreyka 1976). Further, these professional development programs need to focus on the discrepancy between competencies needed and those already achieved by teacher educators (Oregon Department of Education 1974, Rakes 1972, Reilly and Dembo 1975).

The sources for competency specification continue to be a concern. Several approaches for specifying competencies to be developed have been identified (Houston 1972).

Any competency-specifying approach should result in speci-
fication of competencies that are actually important to
effective teaching (Finch and Hamilton 1973) and should
incorporate such procedures as theoretical examination,
modification of specifications formulated by other programs,
program and course translation, task analysis, and factor/
cluster analysis with judgments of knowledgeable people in
the educational field (Houston 1975). Knowledgeable people
could be educational personnel at a variety of levels,
including supervisors, teacher educators themselves, and
preservice and inservice teachers who utilize services of
the teacher educators.

Furthermore, "a major difficulty arises in estab-
lishing priorities or in ranking the competencies so that
major attack can be directed toward achievement of the most
important ones" (McGrath 1970, p. 16). Limited resources
and pressing needs of educational personnel necessitate an
additional step to the specification of competencies; that
is, to determine which competencies it is most important
for teacher educators to develop. Assessing current needs
of university-based vocational teacher educators in terms
of the competencies required for increasing their effective-
ness generates a base for rational decision-making regarding
professional development activities for teacher educators
(Kaufman 1972).

Receptivity toward professional development activities has been increased by involving the target audience in the selection of activity topics (National Education Association 1976, Rakes 1972). Professional development activities tend to be more effective for the participants when they perceive the activities as relevant to satisfying their own needs, when they participate in selecting what is to be learned, and when they select and use their own learning style and educational method (Houston 1972, O'Keefe 1974, Bishop 1976).

Literature reviews reveal voids in the existing body of knowledge about teacher educators; namely, the lack of information on specific tasks performed or competencies needed by teacher educators and the rarity of formal structures to provide for professional development of teacher educator competencies (Ingram and Blackhust 1975, Anderson 1975, Heiss 1973).

The Arizona Department of Education had limited resources for funding of professional development activities for university-based vocational teacher educators. Competencies needed by teacher educators had not been clearly identified. Priorities of the teacher educators among all the needed competencies had not been established. No information had been systematically compiled regarding preference of the teacher educators for various methods of presenting professional development activities. Thus a study

was called for to provide the evidence on which to base
funding decisions regarding professional development
activities for university-based vocational teacher educators.

Research Questions

The study was designed to assess the professional
development needs of university-based vocational teacher
educators in Arizona. Specifically, it focused on the
following research questions:

1. What is the relative importance of each competency
   group, in the opinion of respondents?

2. For each competency, what is the priority rating,
   in the opinion of respondents?

3. What are respondents' preferences among selected
   methods of inservice education?

Scope of the Study

This study assessed the professional development
needs of university-based vocational teacher educators in
Arizona. The study was done in these steps:

1. A list of competencies needed by university-based
   vocational teacher educators was developed by the
   researcher.

2. The list of competencies was submitted to Arizona
   vocational education personnel for validation and
   the competency list was revised.

3. The list of competencies was then submitted to Arizona vocational teachers for reordering of competencies according to relative importance.

4. The final list of competencies was submitted to university-based vocational teacher educators to elicit their opinions regarding (a) which competencies they would be willing to work on for professional development activities, and (b) their preferences among selected methods of inservice for the professional development activities.

Assumptions

The following assumptions were made:

1. Opinions of vocational education personnel could be elicited.

2. Replies of vocational education personnel honestly reflected their opinions.

3. The instruments designed for collecting opinons of vocational education personnel were reliable.

Limitations

The study was limited to opinions of Arizona vocational education personnel who were willing to respond to the questionnaires as distributed. The opinions stated by respondents reflected their opinions at the time of data collection. The findings are therefore limited in their

application to these respondents in this state at this time period.

CHAPTER 2

REVIEW OF LITERATURE

The literature was reviewed to afford the background
for this study and is presented in five sections: need for
professional development of teacher educators, rationale for
competency-based approach to professional development,
teacher educator competencies, rationale for needs assess-
ment, and summary.

Need for Professional Development of Teacher Educators

There is widespread agreement that a number of
forces and conditions in society and within the educational
establishment are impacting on the roles and functions of
teacher educators. Society is experiencing a shift from a
long period of highly industrialized capital-intensive and
resource-depleting growth to a period when people everywhere
will be struggling to simplify lifestyles, conserve energy,
and subsist at alarming inflationary economic levels, all
the while trying to preserve a modicum of self-determination
and dignity (Nash and Ducharme 1976, Messanari 1978).

Changes within education itself are impacting on
teacher educators. Houston (1976) cites the frequent use
of terms such as educational reform and teacher renewal in

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teacher education literature as indicative of changes in the
education establishment. Changes that are impacting on the
roles and functions of teacher educators include:

1. Elimination of the teacher shortage. The number of
   children entering public schools has declined as a
   consequence of a decrease in birth rate. This,
   along with the graduation of record numbers of
   teacher education students, has caused a sudden
   change in the supply and demand for teachers. This
   has resulting in a stable teaching force, almost for
   the first time in history (Houston 1976). Likewise
   it has resulted in increased demands that teacher
   educators provide inservice education for these
   career teachers (Corrigan 1974).

2. Movement toward universal secondary education. In
   1900 less than ten per cent of the population grad-
   uated from high school. Today more than ninety per
   cent complete high school and secondary education is
   assumed to be a right of each individual. This has
   caused an ever widening range of students' abili-
   ties, expectations, and motivations with which
   teachers must cope and has increased the demand that
   teacher educators assist teachers to deal effec-
   tively with a wider range of students (Nash and
   Ducharme 1976, Woods 1974).

3. <u>Movement to mandate teaching/learning behaviors and
   outcomes</u>. More and more, legislation at state and
   federal levels is prescribing operating procedures
   in the local school. For example, the passage of
   the Education of All Handicapped Children Act re-
   quired that individual needs of children be assessed
   and that diagnostic-prescriptive modes of instruc-
   tion be applied. Similarly, state level laws have
   specified minimum competency standards for promotion
   and graduation. This has increased demands on
   teacher educators to assist inservice teachers in
   meeting the mandates. An even heavier pressure is
   the need to assist preservice teachers in this area,
   requiring the addition of competencies in already
   overfull perservice teacher education programs
   (Messanari 1978, Woods 1974).

4. <u>Changes in the legislation affecting vocational
   education</u>. While components of vocational education
   such as youth organizations, advisory committees,
   field/community experiences, and a project pattern
   of funding have long been a reality, they have not
   been requirements in the past. Recent amendments
   to the legislation for vocational education mandated
   these components. This increases demands on the
   vocational teacher educators to incorporate these

components into the preservice and inservice voca-
tional teacher education program.

5. Movement toward accountability. Authors state that
education personnel will be held increasingly
accountable for their behavior in the decade ahead.
The movement toward accountability has arisen partly
from the growing conviction that desired educational
outcomes can be specified and measured with reason-
able precision and partly from the increase in con-
cern of lay persons and education personnel that edu-
cational activities yield results commensurate with
the ever-increasing resources being invested (Parnell
1978, Houston 1972, Reilly and Dembo 1975). This
has resulted in increased demands on teacher edu-
cators to design programs to enhance accountability
and to assist others in educational accountability.

6. Movement toward increasing the knowledge base.
There has been a growing realization of the in-
adequacy of the knowledge base which supports the
education of teachers. This increases the demands
on teacher educators to assume leadership in
directing research and in providing a meaningful
linkage between research and teaching (Denemark and
Espinoza 1974, Woods 1974, Houston 1976).

7. Expanding of field-based experiences. There has
been an increasing emphasis by colleges and

universities on expanding the amount and upgrading the quality of field-based experiences for students in preservice teacher education programs. This places extra demands for the inservice education of field-based educational personnel on teacher educators (Denemark and Espinoza 1974, Tittle 1974).

8. Movement toward teacher centers. The enactment of teacher center legislation has lent support to the development of a national network of local, school-based teacher centers with inservice education capabilities. The movement toward teacher centers has been hastened because of the shift to individualizing and personalizing instruction. This has increased the demands on teacher educators to provide leadership in the development of this cooperative approach to inservice education (Denemark and Yff 1974).

Examination of the changing conditions in society, in education, and in vocational education indicates changes in the nature of teacher education and in preparation programs for education personnel (Howey, Yarger, and Joyce 1978; Wayson 1974). Teacher educators are forced to prepare themselves and the students in their teacher education programs to approach education with a new world view (Wayson 1974, Ryan 1974). Recognition of the changes in society and in education and the resulting demands on teacher educators

lead to the conclusion that continuing professional development or inservice education of teacher educators is imperative (Houston 1976, Ryan 1974).

Rationale for Competency-Based Approach to Professional Development

Increased demands have made continuing professional development of teacher educators necessary. The need for professional development calls for a delivery system that will be effective for teacher educators. There has been considerable effort to develop delivery systems that will facilitate learning. One that shows promise is the competency-based approach to professional development.

Traditionally the knowledges, skills, and attitudes needed by education personnel have not been specifically defined (Houston 1972, Elam 1971, Heiss 1973). The lack of clearly defined outcomes or objectives for professional development activities is felt to hamper the professional development process (Parnell 1978, Howey et al. 1978). Advocates of the competency-based approach to education maintain that the lack of specific objectives and performance criteria causes a nonfocusing in educational activities and a corresponding reduction in ability to measure the effects of educational activities on the learners. Competency-based approaches are designed to overcome this handicap. The basic assumption undergirding

competency-based education at any level is that learning is facilitated when it is based on known and desired objectives.

Competency-based professional development of educational personnel, including teacher educators, derives from instructional activities designed and implemented to produce designated knowledges, skills, and attitudes. The designated knowledges, skills, or attitudes are stipulated and made public in advance. They may take the form of objectives, goals, or competency statements, terms used interchangeably in the literature to refer to desired learner outcomes. The competencies may be achieved through a variety of activities, not necessarily the same for each learner. There is no expectation that all learners take the same amount of time for learning, or that all must reach the highest level of mastery for each competency. Thus, the competency-based approach allows professional development activities to be individualized and personalized (Finch and Hamilton 1973, Houston 1975, Heiss 1973).

The literature shows that a competency-based approach is widely advocated for professional development. This approach allows for learner-centered, individualized activities that focus on learners' needs. Also, it increases accountability since goals or objectives, which are specified and made public in advance, can be compared to achievement. In addition, it is highly endorsed by

vocational educators, including State Department personnel
and teacher educators, in Arizona (ADE 1978).

Teacher Educator Competencies

The review of research showed that several studies
related to the area of competencies necessary to successful
performances of teacher educator roles were underway or had
been completed recently. While none of the researchers
studied competencies needed specifically by university-based
vocational teacher educators, each attempted to identify or
specify competencies of educators in roles closely related
to the roles of university-based vocational teacher edu-
cators. The roles of educators for whom competencies were
identified were as follows:

1. General teacher educators (Associated Organizations
   for Teacher Education [AOTE] 1973; Klopf et al.
   1973; Grasha 1976; McCune, Matthews, and Earle
   1977).

2. School-based teacher educators (Cooper, Houston,
   and Warner 1976).

3. Science education teacher educators (Anderson 1975).

4. Special education teacher educators (Ingram 1974).

5. Technical and industrial education teacher educators
   (Berry 1977).

6. Field-based vocational teacher educators (Cotrell,
   Chase, and Molnar 1972).

Literature concerning approaches to specifying competencies called for incorporating judgment of knowledgeable people in the education field with other procedures such as theoretical examination, modification of specifications formulated by other programs, program and course translation, task analysis, and factor/cluster analysis (Abelson 1972, Houston 1975). A variety of approaches were utilized in the studies to specify competencies:

1. Delphi survey utilizing selected national experts (AOTE 1973, Cotrell et al. 1972).

2. Theoretical examination (Klopf et al. 1973).

3. Various forms of task analysis (McCune et al. 1977, Anderson 1975, Cooper et al. 1976, Grasha 1976).

4. Critical incident technique (Ingram 1974).

5. Modifications of specifications formulated by other programs (Berry 1977).

While each of these research studies utilized acceptable approaches to the specifying of competencies and generated results useful for the intended purposes of each study, no one of the studies yielded a list of competencies that could be adopted for use in the study in Arizona. Competencies identified in prior studies related closely enough to functions and roles of the vocational teacher educators in Arizona so that some from each study were useful for the present study.

There was considerable overlap among the studies of specific competencies or competency groupings related to particular teacher educator functions. Analysis of the listings found in the review of literature resulted in classifications related to six broad functions of teacher educators: planning and programming, instructing, evaluating, advising, research and development, and professional role.

Competencies and competency groupings related to the six broad functions of teacher educators were located in the various studies as follows:

1. Planning/programming--six studies (AOTE 1973, Berry 1977, Cooper et al. 1976, Cotrell et al. 1972, Ingram 1974, McCune et al. 1977).

2. Instructing--eight studies (AOTE 1973, Anderson 1975, Berry 1977, Cooper et al. 1976, Cotrell et al. 1972, Ingram 1974, Klopf et al. 1973, McCune et al. 1977).

3. Evaluating--seven studies (AOTE 1973, Anderson 1975, Berry 1977, Cooper et al. 1976, Cotrell et al. 1972, Grasha 1976, Ingram 1974).

4. Advising--six studies (AOTE 1973, Berry 1977, Cooper et al. 1976, Cotrell et al. 1972, Ingram 1974, Klopf et al. 1973).

5. Research and development--six studies (Anderson
    1975, Berry 1977, Cooper et al. 1976, Cotrell et
    al. 1972, Grasha 1976).

6. Professional role--five studies (AOTE 1973, Berry
    1977, Cooper et al. 1976, Cotrell et al. 1972,
    Klopf et al. 1973).

The specific competency statements which were
generated from the review of related studies for the present
study may be found in Chapter 3.

Rationale for Needs Assessment

Decision makers need information to help make better
decisions for educational planning. Decisions have been
made in the past on the basis of conventional wisdom, expe-
rience of decision makers, expertise of authorities, adop-
tion of current trends or fads, reactive measures to social
pressure, response to "sales pitches" from product
developers or publishers, and tradition. While these
approaches sometimes work, there is no assurance that the
"real" needs, as compared with the "apparent" needs, will be
discovered. Consequently, the formal assessment of needs is
coming to be viewed as an essential and highly desirable
tool for educational management (Coffing and Hutchinson
1974, Oregon State Department of Education 1974, McGrath
1970).

A needs assessment is a systematic procedure for finding out where the gaps are between what learners know and can do and what they should know and be able to do. Needs assessments are conducted to provide information for decisions by educational planners. They help decision makers know how time, people, and educational dollars may be used to do the most good. Needs assessments provide information to help in assigning priorities to the areas of greatest need and to increase accountability to learners, taxpayers, and monitoring agents (Witkin 1975, Coffing and Hutchinson 1974, Kaufman 1972).

Current interest in needs assessment can be attributed in part to educational changes mentioned earlier. There has been a shift in the attitudes of learners in general. They are less willing than in the past to have others define their learning needs without their input. The needs assessment process can disclose information and attitudes or opinions of learners, especially discrepancies between priorities and perceptions of decision makers and those of learners (Witkin 1975, Eastmond 1974, National Education Association 1976). Another reason for renewed interest in needs assessment is that educational agencies are adopting more systematic decision making strategies in response to the demands of learners, taxpayers, and monitoring agencies for increasing accountability.

The lack of information on which to base decisions about professional development activities for teacher educators led to the conclusion that a systematic assessment of their needs should be done.

Summary

The review of literature revealed that changes in society and education and the resulting demands on teacher educators make continuing professional development of university-based vocational teacher educators imperative. Literature showed that a competency-based approach to such professional development was widely advocated. Research studies helped identify competencies related to six broad functions of teacher educators. Literature related to needs assessment supported conducting a systematic assessment of the professional development needs of teacher educators.

The review of literature disclosed no studies focusing specifically on identifying competencies needed by university-based vocational teacher educators. The body of knowledge on which to base decisions about the nature of professional development activities for these teacher educators was lacking. Even more apparent was the lack of any studies focusing on the needs of these teacher educators in Arizona universities. Therefore, the present study focused specifically on competency-based professional development

needs of university-based vocational teacher educators in Arizona.

CHAPTER 3

PROCEDURES

The procedures used in this study of competency-
based professional development needs of university-based
vocational teacher educators in Arizona are described in
the following sections: developing the list of competencies
needed by teacher educators, validating and revising the
competency list, ranking the competencies in order of
importance, and selecting competencies as a basis for
professional development activities.

Developing the List of Competencies Needed by Teacher Educators

A review of the literature describing research in
the area of competencies necessary to successful performance
of teacher educator roles was conducted. Professional
journals, ERIC documents, Dissertation Abstracts, and other
materials were reviewed, using descriptors such as teacher
educators, teacher educator education, vocational teacher
educators, in-service teacher education, professional
development in education, and university education personnel.
An effort was made to include preliminary or intermediate
findings of any research in progress at the time of this
study. Studies were found which generated lists of

competencies through theoretical considerations, task analyses, and collected perceptions of educational personnel. Statements of competencies needed by teacher educators or necessary to successful performance of teacher educator roles were collected.

In order to synthesize the many competencies, competency statements were typed onto index cards and sorted by the researcher. Statements which expressed similar competencies were combined to eliminate duplication.

The competency statements were then sorted into groups according to the teacher education processes they described. The six resulting categories or groups of competencies were labeled as follows:

Competency Group:	Number of Competencies in the Group:
Planning/Programming	13
Instructing	12
Evaluating	7
Advising	11
Research and Development	6
Professional Role	10
	59--Total Number of Competencies

The resulting competency statements are presented in Appendix A.

Validating and Revising the Competency List

The list of 59 competencies needed by university-based vocational teacher educators in Arizona was submitted for validation and then revised. The process of validating and revising the competencies included: developing the instrument, collecting the data, analyzing the results, and revising the list of competencies.

Developing the Instrument

An instrument to record opinions of vocational education personnel in the state of Arizona regarding the competencies needed by university-based vocational teacher educators in Arizona was constructed directly from the list of 59 competencies (Appendix A). The instrument, in the form of a questionnaire employing a dichotomous opinion scale, was constructed to elicit opinions of respondents regarding the necessity of each of the 59 competencies to successful performance of teacher educator roles. Respondents were asked to give their judgments regarding the necessity of each of the 59 competencies by indicating an opinion that the competency was necessary for successful performance of teacher educator roles or that the competency was not necessary for successful performance of teacher educator roles. A dichotomous scale (YES/NO) rather than a continuum was used so that respondents were forced to indicate either acceptance or rejection of each competency

on the competency list as necessary to successful performance of teacher educator roles. Thus the composite data could be viewed as definitive in determining validity of each competency.

Space was provided on the questionnaire for respondents to react in writing to the wording and style of the competency statements, to suggest any additions to or deletions from the list of competencies, and to write any other comments they chose to make.

Collecting the Data

The questionnaires were distributed to vocational education personnel attending a state-wide vocational education conference. Distributing the questionnaire at this conference, which spanned several days, gave the respondents opportunity to complete the questionnaire and return it to the researcher in person. It was felt that this would increase the chances of getting a higher percentage of distributed questionnaires completed and returned. It also gave the researcher opportunity to follow up potential respondents and to answer questions about the research as they arose. Thus the vocational education personnel who were the most likely to be involved with vocational teacher educators in in-service training comprised the group of potential respondents and provided a population base of approximately 1,000 persons attending

this conference. The persons attending the conference represented all the vocational service areas, including agriculture education, business and office education, distributive education, diversified occupations, guidance and counseling, health education, home economics education, and industrial education. They represented educational positions including junior high teachers, high school teachers, community college teachers, school administrators, school district curriculum coordinators or supervisors, teacher educators, and state department personnel. The levels of education represented ranged from those with less than a bachelors to those with a doctorate. They came from a wide range of rural and urban geographic locations within the state of Arizona.

Copies of the questionnaire were distributed to 400 participants. Random distribution was achieved by placing copies of the questionnaire in 400 of the 1,000 conference registration packets. All conference attendees registered at a central location. All registration packets, including the 400 containing questionnaires, were equally accessible to registrars, who handed the packets to conference attendees as they registered. Attention to the question-naires in the packets was drawn by a public announcement at the opening session alerting persons to the presence of the questionnaires and requesting their assistance in completing and returning the questionnaires. Completed questionnaires

were collected by the researcher on or before the last day
of the conference. The researcher attended meetings of the
different vocational service areas and requested persons
to complete and return the questionnaires, and was stationed
at the registration table throughout the conference to
facilitate return of any completed questionnaires.

Two hundred questionnaires, or 50 per cent of those
distributed, were returned. Respondents represented all the
educational positions, all the levels of education, and all
the vocational service areas anticipated (Table 3.1).
"Other" in educational position included a representative
from a parent organization, adult education personnel, and
agency counselors. For level of education, respondents
marking "other" specified industrial training and postdoctoral
levels. For vocation service areas, respondents marking
"other" specified adult education, special needs education,
and career education.

Frequency distributions were computed to summarize
opinions of vocational education personnel regarding the
necessity of each of the 59 competencies to successful
performance of teacher educator roles.

Table 3.1. Descriptive Information About Respondents
            (N = 200)

Descriptive Categories		Number in Each Category
Educational Position:		
Junior high teacher		10
High school teacher		106
Community college teacher		22
School administrator		9
School district curriculum coordinator or supervisor		7
Teacher educator		18
Department of education personnel		4
Other		24
	Total	200
Level of Education:		
Less than a bachelors		6
A bachelors		6
More than a bachelors but less than a masters		52
A masters		29
More than a masters but less than a doctorate		87
A doctorate		10
Other		10
	Total	200
Vocational Area:		
Agriculture education		33
Business and office education		22
Distributive education		11
Diversified occupations		12
Guidance and counseling		14
Health education		10
Home economics		45
Industrial education		26
Other		27
	Total	200

Analyzing the Results

Vocational education personnel indicated their opinions regarding the necessity of each of the listed competencies by responding YES to indicate that the competency was necessary or NO to indicate that the competency was not necessary for successful performance of teacher educator roles.

For a competency to be classified as necessary for successful performance of teacher educator roles the researcher felt that more than a simple majority of the respondents needed to have marked YES. It was not felt, however, that a competency needed to have 100 per cent of the respondents mark YES for the competency to be classified as necessary. Therefore it was decided to classify competencies as necessary when 90 per cent or more of all respondents marked YES or when a majority of teacher educators marked YES.

Inspection of frequency distributions showed that none of the competencies were viewed as necessary by all 200 respondents, but more than 80 per cent of all the respondents viewed each competency as necessary. Further inspection of the data showed that over one-half of the 59 competency statements were viewed as necessary by 95 per cent or more of the respondents. Another 23 of the 59 competencies, or more than one-third, were viewed as necessary by between 90 per cent and 94.5 per cent of the

respondents. The 5 remaining competencies were viewed as necessary by between 80 and 89.5 per cent of the respondents (Table 3.2).

The five competency statements which were viewed as necessary by less than 90 per cent of the respondents were examined in more detail. Responses of teacher educators for each of the five competencies were examined because it was felt that responses of teacher educators themselves should be considered before eliminating any competencies. This examination showed that a majority of the teacher educators marked YES; in fact, more than three-fourths of the responding teacher educators viewed all five of the competencies as necessary. Re-examination of previous studies used as background for this study showed competency statements similar to each of the five competency statements in question in two or more lists of competencies needed by teacher educators. Finally, consideration of actual roles of teacher educators showed that the competencies were closely related to roles actually performed by university based vocational teacher educators in Arizona.

Respondents were described by educational position, level of education, and vocational service area. For categories within each descriptor, see Table 3.1. Responses of the vocational education personnel were compared using analysis of variance tests to determine presence of any influence of educational position, level of education, or

Table 3.2. Summary of Participants' Responses Regarding Necessity of Competency
Statements in Each Competency Group (N = 200)

Competency Groups	Number of Competencies Selected from Each Group: Per Cent of Respondents Selecting				Total Number of Competencies per Group
	95%-100%	90%-94.5%	85%-89.5%	80%-84.5%	
1. Planning/Programming	5	7	1	0	13
2. Instructing	8	3	1	0	12
3. Evaluating	3	3	0	1	7
4. Advising	6	5	0	0	11
5. Research and Development	1	3	0	2	6
6. Professional Role	2	8	0	0	10
Total Number of Competencies per Per Cent Category	31	23	2	3	59

vocational service area on composite responses. Results of

the two-way analysis of variance tests are presented in

Table 3.3. Results indicated that there was variance in

responses, at statistically significant levels, that could

be accounted for by all three descriptors.

Table 3.3. Results of Two-Way Analysis of Variance Tests on
Participants' Responses for Position, Educa-
tional Level, and Vocational Area (N = 200)

Variable	F Ratio	Significance of F
Position	4.328	.001
Education Level	2.812	.010
Vocational Area	13.067	.001

In order to locate the variance more specifically,

multiple range tests were done by position, by education

level, and by vocational area for each of the six competency

groups. Results of the multiple range tests indicated that

the respondents who marked health as their vocational area

differed significantly from respondents in other vocational

areas for four of the six competency groups. Results of

the multiple range tests for health respondents are presented

in Table 3.4. Although responses of the health educators

differed significantly from total responses, the health

Table 3.4. Summary of Differences in Multiple Range Scores of Health Respondents from Total Respondents, Multiple Range Tests

Competency Group	Multiple Range Scores		Significance Level of Difference
	Total (N = 200)	Health (N = 10)	
Planning Programming Competencies	.0642	.1615	.053
Instructing Competencies	.0458	.1417	.010*
Evaluating Competencies	.0764	.1517	.008*
Advising Competencies	.0568	.1545	.178
Research and Development Competencies	.0950	.2500	.001*
Professional Role Competencies	.0365	.1900	.000*

*$p \leq .01$.

educators' responses were not considered separately for this study. Thus the health educators' responses are reflected in the composite responses.

Multiple range tests done by position and by educational level revealed no significant difference in responses for any of the six competency groups. Inspection of the nonsignificant tests showed that the differences found in the two-way analyses of variance for position and education

level were of a magnitude not large enough to locate when partitioned into their respective categories.

Revising the List of Competencies

Written comments of respondents were used in revising competency statements that had appeared to be incomplete or unclear to respondents. All comments regarding each competency statement were examined by the researcher.

Comments were typed onto index cards and sorted. Examination of comments showed that the average number of comments made per competency (8.9 comments per competency) was higher for planning/programming competencies than for competencies in any other group. The research and development competencies received the second highest average number of comments per competency (7.3 comments per competency), while professional role competencies received the lowest average number of comments per competency (4.2 comments per competency).

The competency "Assist teachers in developing a total schedule and sequence of courses to complete degree and/or certification requirements" generated more comments (16) than any other competency. Two competencies, "Involves teachers in determining educational needs that might appropriately be met by the vocational teacher education program," and "Directs teachers to relevant vocational

education literature and to agencies and persons outside the university that can provide information on specific aspects of vocational education" generated no comments.

A majority of the comments made by respondents indicated the respondent's degree of agreement or disagreement with specific competency statements. The competency "Conducts, directs, and/or facilitates research studies" generated more negative comments (13) than any other competency. The competency that generated the second highest number of negative comments (12) was "Participates actively on advisory committees for local and state programs in vocational and related areas." Generating the third highest number of negative comments (11) was "Serves on state teams which evaluate local vocational education programs." The comments which indicated agreement or disagreement were noted but generally were not useful for revision of competency statements.

Comments which indicated need for revisions, or suggestions for additions to or deletions from specific competency statements were made by respondents about competencies in all six competency groups. (Table 3.5 presents the original and revised competency statements.) Table 3.5 shows that revisions to improve clarity and completeness were made in 36 of the competency statements, including nine of the planning/programming competencies, eight of the instructing competencies, six of the evaluating

Table 3.5. Original and Revised Statements of Competencies Needed by Teacher
Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
1.0 PLANNING/PROGRAMMING Competencies	1.0 PLANNING/PROGRAMMING Competencies	
1.1 Plans the university vocational teacher education program to develop teachers who can teach success-fully in local school settings.	1.1 Plans the university vocational teacher education program to develop teachers who can teach effectively in various local school settings.	1.1 Plans effective teacher education program.
1.2 Cooperates with others such as sub-ject matter profes-sors, school teachers, educa-tional foundations people and state department of educa-tion personnel to develop and implement the university voca-tional teacher education.	1.2 Cooperates with others such as sub-ject matter profes-sors, school teachers, educa-tional foundations people, business/ community repre-sentatives and state department of educa-tion personnel to develop and implement university vocational teacher education programs that provide real-life experiences.	1.2 Develops realistic teacher education program.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
1.3 Incorporates information from related fields that has implications for vocational education.	1.3 Incorporates information from related fields that has implications for vocational education.	1.3 Incorporates information from related fields.
1.4 Develops university vocational teacher education course objectives, course requirements, instructional activities and options that meet teachers' needs.	1.4 Develops university vocational teacher education course objectives, course requirements, instructional activities and options that meet actual needs of individual teachers.	1.4 Develops pertinent teacher education course.
1.5 Involves teachers in developing the structure of the university teacher education program and courses.	1.5 Continually involves teachers and other educational personnel in developing the structure of the university teacher education program and courses which meet teacher's needs.	1.5 Involves learners in planning.

Table 3.5.--Continued   Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
1.6 Assists teachers in examining their beliefs about vocational education and the effect of those beliefs on program planning.	1.6 Assists teachers in examining their beliefs about vocational education and the effect of those beliefs on program planning.	1.6 Helps teachers examine beliefs.
1.7 Assists teachers to gather and use data about classroom and community environments to make decisions about the vocational program.	1.7 Assists teachers to gather and use data about classroom and community environments to make decisions about the vocational program.	1.7 Helps teachers do needs assessment.
1.8 Assists teachers to develop vocational programs consistent with needs of students and community.	1.8 Assists teachers to acquire skill in developing vocational programs consistent with needs of students, community and society.	1.8 Helps teachers use needs assessments.
1.9 Assists teachers to develop instructional goals and objectives that guide students' learnings.	1.9 Assists teachers to acquire skills in developing instructional goals and objectives that guide students' learning.	1.9 Helps teachers develop meaningful objectives.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
1.10 Assists teachers in selecting and sequencing subject matter to aid student learning.	1.10 Assists teachers in selecting and sequencing subject matter to aid learning of each student.	1.10 Helps teachers select content.
1.11 Assists teachers to develop and/or adapt instructional activities and materials that will aid in achievement of program goals and objectives.	1.11 Assists teachers to develop and/or adapt instructional activities and materials that will aid in achievement of program goals and objectives	1.11 Helps teachers select learning experiences.
1.12 Assists teachers to assess, develop, and/ or procure support services necessary to improve instructional performance.	1.12 Assists teachers to assess, develop, and/ or procure support services necessary to improve instructional performance.	1.12 Helps teachers use support service.
1.13 Participates actively on advisory committees for local and state programs in vocational and related areas.	1.13 Participates actively on advisory committees for local and state programs in vocational and related areas.	1.13 Serves on advisory committees.

Table 3.5.--<u>Continued</u> Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
2.0 INSTRUCTING Competencies	2.0 INSTRUCTING Competencies	
2.1 Demonstrates skills in using a variety of teaching methods such as lecture, discussion, role play, gaming, discovery <u>(not just talk about them)</u>.	2.1 Demonstrates skills in using a variety of teaching methods such as lecture, discussion, role play, gaming, discovery.	2.1 Uses a variety of methods.
2.2 Draws on a background of successful teaching experiences at the level of education for which teachers are being prepared.	2.2 Draws on a background of successful teaching <u>and occupational</u> experiences at the level of education for which teachers are being prepared.	2.2 Has successful background.
2.3 Demonstrates familiarity with and ability to communicate to others contemporary trends and issues in the subject matter field, and education generally.	2.3 Demonstrates familiarity with and ability to communicate to others contemporary trends and issues in the subject matter field, and education generally.	2.3 Knows current trends and issues.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by
              Teacher Educators

Original Competency Statements		Revised Competency Statements		Descriptive Phrase for Each Competency	
2.4	Demonstrates famili-arity with the re-sources of the subject matter field such as books, films, records, professional associa-tions, etc.	2.4	Uses, in teaching, current resources of the subject matter field such as books, films, records, pro-fessional associa-tions, etc.	2.4	Uses current re-sources.
2.5	Assists teachers to improve their under-standing of basic concepts and theories of the subject fields in teaching.	2.5	Assists teachers to improve their under-standing of basic concepts and theories of the subject fields in teaching.	2.5	Helps teacher improve content understanding.
2.6	Uses and/or develops new approaches to teaching which vary procedure and create or renew interest.	2.6	Uses and/or develops new approaches to teaching which vary procedure and create or renew interest.	2.6	Uses new teaching approaches.
2.7	Assists teachers to select and utilize a variety of strategies and models of teach-ing appropriate for the learner and situa-tion.	2.7	Assists teachers to select and utilize a variety of strategies and models of teach-ing appropriate to each learner and situation.	2.7	Helps teachers use a variety of strategies.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
2.8 Assists teachers to design, develop and maintain environments that facilitate learning.	2.8 Assists teachers to design, develop and maintain environments that facilitate learning.	2.8 Helps teachers with learning environment.
2.9 Assists teachers to understand use effective techniques of classroom management.	2.9 Assists teachers to apply effective techniques of classroom management in real settings.	2.9 Helps teachers with classroom management.
2.10 Develops opportunities to observe and analyze vocational education facilities and approaches to working with vocational students.	2.10 Develops opportunities to observe and analyze a variety of vocational education facilities and approaches to working with vocational students.	2.10 Develops a variety of field sites.
2.11 Identifies and maintains field placements, including student-teaching centers, that provide learning environments for teachers.	2.11 Identifies and maintains sites for field experiences including student-teaching centers and occupational centers that provide learning environments for teachers.	2.11 Develops productive field sites.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
2.12 Assists teachers in using youth organizations to enhance the local vocational program and student's achievement.	2.12 Assists teachers in using youth organizations as an integral part of the local vocational program.	2.12 Helps teachers with youth organizations.
3.0 EVALUATING Competencies	3.0 EVALUATING Competencies	
3.1 Serves on state teams which evaluate local vocational education programs.	3.1 Provides constructive input to teams which evaluate local vocational education programs.	3.1 Helps evaluate local programs.
3.2 Establishes and uses criteria for evaluating the appropriateness of the university vocational teacher education program in helping teachers achieve success.	3.2 Establishes, uses and revises when necessary criteria for evaluating the appropriateness of the university vocational teacher education program in helping teachers achieve success.	3.2 Evaluates the teacher education program.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements		Revised Competency Statements		Descriptive Phrase for Each Competency	
3.3	Evaluates own teaching techniques to determine their effectiveness in helping teachers reach their goals.	3.3	Evaluates own teaching, <u>using a variety of techniques</u>, to determine their effectiveness in helping teachers reach their goals.	3.3	Evaluates own teaching.
3.4	Selects appropriate criteria and uses varied methods to measure individual teacher achievement.	3.4	Selects appropriate criteria and uses <u>a</u> <u>variety of proven</u> methods to measure individual teacher achievement.	3.4	Evaluates teachers.
3.5	Provides evaluation techniques that are learning experiences for teachers.	3.5	Provides evaluation techniques that are learning experiences for teachers.	3.5	Helps teachers learn from own evaluation.
3.6	Assists teachers to collect, analyze and interpret data on teacher and student behavior in evaluating instructional effectiveness.	3.6	Assists teachers to collect, analyze, interpret <u>and</u> <u>appreciate</u> using data on teacher and student behavior in evaluating instructional effectiveness.	3.6	Helps teachers evaluate own effectiveness.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by
                       Teacher Educators

Original Competency Statements		Revised Competency Statements		Descriptive Phrase for Each Competency	
3.7	Assists teachers to understand and use techniques and instruments designed to diagnose students' academic and social development needs.	3.7	Assists teachers to understand and use techniques and instruments designed to diagnose students' academic, occupational and social development needs.	3.7	Helps teachers evaluate students.
4.0	ADVISING Competencies	4.0	ADVISING Competencies		
4.1	Establishes and maintains an adequate advising system.	4.1	Establishes and maintains a program advising system that meets needs of teachers.	4.1	Uses adequate advising system.
4.2	Describes types of career opportunities available in the field of vocational education, together with requirements and pros/cons of the various careers.	4.2	Provides information on types of career opportunities available in the field of vocational education, together with requirements and pros/cons of the various careers.	4.2	Provides career information.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
4.3 Specifies requirements, procedures and options for obtaining degree(s) and certification in vocational education and related areas.	4.3 Provides information on requirements, procedures and options for obtaining degree(s) and certification in vocational/occupational education and related areas.	4.3 Provides information about degrees and certification.
4.4 Involves teachers in determining educational needs that might appropriately be met by the vocational teacher education program.	4.4 Involves teachers in determining educational needs that might appropriately be met by the vocational teacher education program.	4.4 Helps teacher see benefits of teacher education program.
4.5 Assists teachers in developing a total schedule and sequence of courses to complete degree and/or certification requirements.	4.5 Assists teachers in developing an individual schedule and sequence of courses to complete degree and/or certification requirements.	4.5 Helps teachers plan individual programs.

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Table 3.5.--Continued   Original and Revised Statements of Competencies Needed by
                        Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
4.6 Assists teachers to develop, implement and assess plans for continuing individual professional growth.	4.6 Assists teachers to develop, implement and assess plans for continuing individual professional growth.	4.6 Helps teachers with professional education.
4.7 Directs teachers to relevant vocational education literature and to agencies and persons outside the university that can provide information on specific aspects of vocational education.	4.7 Directs teachers to relevant vocational education literature and to agencies and persons outside the university that can provide information on specific aspects of vocational education.	4.7 Helps teachers use other career resources.
4.8 Assists teachers to develop interpersonal skills and effective communication with students, colleagues and others.	4.8 Assists teachers to develop decision-making skills, self-awareness, interpersonal skills and effective communication with students, colleagues and others.	4.8 Helps teachers with advising skills.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
4.9 Helps teachers recognize the existence of personal or academic problems that affect teaching success, and provides assistance to solve them.	4.9 Helps teachers recognize the existence of personal or academic problems that affect teaching success, and provides assistance to solve them.	4.9 Helps teachers with personal problems.
4.10 Permits teachers to express concerns or differences of opinion, and helps resolve them.	4.10 Permits teachers to express concerns or differences of opinion, and helps resolve them.	4.10 Helps teachers resolve concerns.
4.11 Provides suggestions and assistance (including letters of recommendation) to teachers seeking employment.	4.11 Provides suggestions and assistance (including letters of recommendation) to teachers seeking employment.	4.11 Helps teachers with employment.
5.0 RESEARCH AND DEVELOPMENT Competencies	5.0 RESEARCH AND DEVELOPMENT Competencies	
5.1 Evaluates soundness of and interprets research findings in vocational education and related areas.	5.1 Evaluates soundness of and interprets research findings in vocational education and related areas.	5.1 Uses related research.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements		Revised Competency Statements		Descriptive Phrase for Each Competency	
5.2	Conducts, directs and/or facilitates research studies.	5.2	Conducts, directs and/or facilitates research studies.	5.2	Conducts research studies.
5.3	Develops instructional materials and strategies which adequately support vocational programs when none are available.	5.3	Develops up-to-date instructional materials and strategies which adequately support vocational programs when such materials are needed.	5.3	Develops instructional experiences.
5.4	Directs research and development projects supported by private, state and/or federal funds.	5.4	Directs research and development projects supported by private, state and/or federal funds.	5.4	Directs research projects.
5.5	Assists with state-wide curriculum development in own and related subject matter areas.	5.5	Assists with state-wide curriculum development in own and related subject matter areas.	5.5	Helps develop curriculum.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
5.6 Assists teachers to incorporate current educational research and development findings into instructional practices.	5.6 Assists teachers to incorporate current educational research and development findings into instructional practices.	5.6 Helps teachers use research.
5.7 No original statement.	5.7 Assists teachers in understanding how to apply for and conduct specially funded programs/projects.	5.7 Helps teachers with funded projects.
6.0 PROFESSIONAL ROLE Competencies	6.0 PROFESSIONAL ROLE Competencies	
6.1 Show respect, concern and compassion for individuals.	6.1 Show respect, concern and compassion for individuals regardless of differences.	6.1 Shows respect for all individuals.
6.2 Uses appropriate avenues to keep abreast of professional development, societal needs and technological advances.	6.2 Uses avenues appropriate to keeping abreast of professional development, societal needs and technological advances.	6.2 Keeps up with advances.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
6.3 Accepts and adjusts to change and serves as a change agent within the profession.	6.3 Accepts and adjusts to change and serves as a change agent within the profession.	6.3 Serves as a change agent.
6.4 Demonstrates desire to continue personal and professional development.	6.4 Demonstrates desire to continue personal and professional development.	6.4 Continues professional development.
6.5 Holds membership in and knows the purposes, programs and services of appropriate professional organizations.	6.5 Knows the purposes, programs and services of and participates in appropriate professional organizations.	6.5 Participates in professional organizations.
6.6 Demonstrates effective planning, organizational and management skills.	6.6 Demonstrates effective planning, organizing and managing skills.	6.6 Uses effective managing skills.
6.7 Assists teachers to develop a personal teaching style consistent with both their own and their school's philosophy.	6.7 Assists teachers to develop a personal teaching style consistent with both their own and their school's philosophy.	6.7 Helps teachers with philosophy.

Table 3.5.--Continued Original and Revised Statements of Competencies Needed by
Teacher Educators

Original Competency Statements	Revised Competency Statements	Descriptive Phrase for Each Competency
6.8 Assists teachers to develop, implement and assess individual professional growth plans.	6.8 Assists teachers to develop, implement and assess individual professional growth plans.	6.8 Helps teachers plan own growth.
6.9 Assists teachers to become increasingly competent and independent in professional roles.	6.9 Assists teachers to become increasingly competent and independent in professional roles.	6.9 Helps teachers become competent and independent.
6.10 Acts independently or in concert with others to invluence legislation affecting vocational education.	6.10 Acts independently or in concert with others to influence legislation affecting vocational education.	6.10 Influences legislation.

competencies, six of the advising competencies, two of the
research and development competencies, and five of the
professional role competencies, and that a seventh compe-
tency statement was added to the research and development
competencies. Descriptive phrases for each of the
competency statements were developed by the researcher for
the purposes of the present report, and are presented along
with the revised statements in Table 3.5. The descriptive
phrases will be used for the remainder of this report for
the sake of brevity.

A number of comments were made which indicated that
the total list of competencies could probably not be
achieved by any one teacher educator. Respondents indicated
that individual teacher educators might have to select
from the competencies specific ones to be achieved. These
comments supported the need to have competencies ranked in
order of relative importance.

Ranking the Competencies in Order of Importance

Many vocational education personnel responding to
the validation questionnaire made comments which supported
the need to rank competencies in order of their relative
importance. It was felt that opinions of vocational
teachers regarding the relative importance of each of the
competencies should be sought. Information regarding
relative importance of the competencies was felt to be

potentially useful because the need for establishing priorities among the competencies was recognized. Vocational teachers were chosen to provide the information because they were the group that would be most directly influenced by teacher educators.

The validated and revised list of competencies was used to develop a questionnaire (Appendix B) designed to solicit opinions of vocational teachers regarding the relative importance of the competencies within each of the six competency groups, and the relative importance of each of the six competency groups.

The questionnaire was distributed to preservice and inservice vocational teachers attending vocational teacher education classes at Arizona State University, Northern Arizona University, and The University of Arizona during the first summer session, 1978. Summer school schedules for the three universities were checked to locate any vocational teacher education classes being taught. The vocational teacher educators who were teaching these classes were contacted to secure permission to distribute questionnaires to their class members. Questionnaires were distributed in a total of five classes at the three universities. All of the members of each of the classes chose to participate. The total number of respondents was 95. While they represented a variety of vocational service areas, agriculture teachers and

diversified occupations teachers were not represented due to the composition of the classes. A range of levels of education was represented with a cluster of respondents (22) who had less than a bachelors degree and another, larger, cluster (46) who had more than a bachelors degree but less than a masters degree. Respondents came from a range of school sizes and represented geographic locations widely dispersed throughout the state.

Vocational teachers ranked the six competency groups in order of importance. They also ranked the competencies within each of the six competency groups in order of importance. To reorder the six competency groups according to importance, frequency distributions of the rankings were compiled and mean rank scores were computed. To reorder the individual competencies within each group according to importance, frequency distributions of those rankings were compiled and mean rank scores were computed.

Examination of the mean rank scores of each competency group indicated the opinion of the respondents regarding the relative importance of each of the competency groups (Table 3.6). Respondents ranked the Instructing competency group as most important and the Research and Development competency group as least important.

The mean scores for the relative importance of the competencies within each competency group were used to reorder the lists. Resulting priority ranks for each

Table 3.6. Ranking of Importance of Competency Groups by
Vocational Teachers (N = 95)

Ranking in Order of Importance	Competency Groups
1st	Instructing
2nd	Planning/Programming
3rd	Advising
4th	Professional Role
5th	Evaluating
6th	Research and Development

competency are presented for each of the competency groups

in Tables 3.7 through 3.12.

Selecting Competencies for Professional
Development Activities

This section describes the process of selecting

competencies for professional development activities. The

process included: developing the instrument, collecting the

data, and analyzing the results.

Developing the Instrument

The reconstructed competency list was used to

develop a final questionnaire (Appendix C). This question-

naire was designed to provide input for deciding which

competencies should be selected for professional development

Table 3.7. Relative Importance (by Ranks) of Instructing
Competencies According to Vocational Teachers
(N = 95)

Relative Importance (Rank)[a]	Competency Statements (Descriptive Phrases)[b]	
1	2.1	Uses a variety of methods
2	2.6	Uses new teaching approach
3	2.2	Has successful background
4	2.7	Helps teachers use a variety of strategies
5	2.3	Knows current issues and trends
6	2.4	Uses current resources
7	2.9	Helps teachers with classroom management
8	2.8	Helps teachers with learning environments
9	2.5	Helps teachers improve content understanding
10	2.10	Develops a variety of field sites
11	2.11	Develops productive field sites
12	2.12	Helps teachers with youth organizations

[a]As perceived by 95 vocational teachers.

[b]For full-length competency statements, see
Table 3.5.

Table 3.8. Relative Importance (by Ranks) of Planning/
Programming Competencies According to Voca-
tional Teachers (N = 95)

Relative Importance (Rank)[a]		Competency Statements (Descriptive Phrases)[b]
1	1.8	Helps teachers use needs assessment
2	1.2	Develops realistic teacher education programs
3	1.4	Develops pertinent teacher education programs
4	1.1	Plans effective teacher education program
5	1.9	Helps teachers develop meaningful objectives
6	1.10	Helps teachers select content
7	1.5	Involves learners in planning
8	1.7	Helps teachers do needs assessments
9	1.11	Helps teachers select learning experiences
10	1.3	Incorporates information from related fields
11	1.12	Helps teachers use support services
12	1.6	Helps teachers examine beliefs
13	1.13	Serves on advisory committees

[a]As perceived by 95 vocational teachers.

[b]For full-length competency statements, see
Table 3.5.

Table 3.9. Relative Importance (by Ranks) of Advising
Competencies According to Vocational Teachers
(N = 95)

Relative Importance (Rank)[a]	Competency Statements (Descriptive Phrases)[b]	
1	4.1	Uses adequate advising system
2	4.8	Helps teachers with advising skills
3	4.3	Provides information about degrees and certification
4	4.2	Provides career information
5	4.5	Helps teachers plan individual programs
6	4.6	Helps teachers with professional education programs
7	4.9	Helps teachers with personal problems
8	4.4	Helps teachers see benefits of teacher education program
9	4.10	Helps teachers resolve concerns
10	4.7	Helps teachers use other career resources
11	4.11	Helps teachers with employment

[a]As perceived by 95 vocational teachers.

[b]For full-length competency statements, see Table 3.5.

Table 3.10. Relative Importance (by Ranks) of Professional
Role Competencies According to Vocational
Teachers (N = 95)

Relative Importance (Rank)[a]		Competency Statements (Descriptive Phrases)[b]
1	6.1	Shows respect for all individuals
2	6.6	Uses effective managing skills
3	6.7	Helps teachers with philosophy
4	6.2	Keeps up with advances
5	6.4	Continues professional develop-ment
6	6.3	Serves as a change agent
7	6.9	Helps teachers become competent and independent
8	6.8	Helps teachers plan own growth
9	6.5	Participates in professional organizations
10	6.10	Influences legislation

[a]As perceived by 95 vocational teachers.

[b]For full-length competency statements, see
Table 3.5.

Table 3.11. Relative Importance (by Ranks) of Evaluating
Competencies According to Vocational Teachers
(N = 95)

Relative Importance (Rank)[a]		Competency Statements (Descriptive Phrases)[b]
1	3.5	Helps teachers learn from own evaluation
2	3.3	Evaluates own teaching
3	3.7	Helps teachers evaluate students
4	3.4	Evaluates teachers
5	3.6	Helps teachers evaluate own effectiveness
6	3.2	Evaluates the teacher education program
7	3.1	Helps evaluate local programs

[a]As perceived by 95 vocational teachers.

[b]For full-length competency statements, see
Table 3.5.

Table 3.12. Relative Importance (by Ranks) of Research and
            Development Competencies According to
            Vocational Teachers (N = 95)

Relative Importance (Rank)[a]		Competency Statements (Descriptive Phrases)[b]
1	5.3	Develops instructional experiences
2	5.6	Helps teachers use research
3	5.7	Helps teachers with funded projects
4	5.5	Helps develop curriculum
5	5.1	Uses related research
6	5.4	Directs research projects
7	5.2	Conducts research studies

[a]As perceived by 95 vocational teachers.

[b]For full-length competency statements, see Table 3.5.

activities. The questionnaire was constructed to elicit opinions of university-based vocational teacher educators in Arizona. Respondents were asked to indicate whether they would participate in professional development activities related to each competency. They were also asked whether they believed that other teacher educators they worked with should participate in professional development activities related to each competency. The competency groups had been ordered to reflect the opinions of vocational teachers regarding the relative importance of each competency group. The competencies within each competency group had been ordered to reflect the opinions of vocational teachers as well.

The questionnaire also elicited information regarding preferences for methods of inservice education for each competency group. The questionnaire listed several methods of inservice education and asked respondents to rank them according to preference. The various methods of inservice education were ones that it was anticipated would be familiar to the teacher educators because they had been previously used in the state for professional development activities. The listed delivery systems were ones that would be in the realm of possibility for the Arizona Department of Education or other agencies to use in conducting professional development activities.

Descriptive data were collected from respondents so that the responding sample could be described to those who might wish to use results of the study. Descriptive data included name of school, vocational service area, rank, tenure status, and number of years teaching.

The researcher attempted to make initial telephone or personal contact with all university-based vocational teacher educators to secure their cooperation. Then questionnaires were either mailed or delivered in person to those teacher educators willing to participate. To secure as many responses as possible, questionnaires were distributed to homes or offices of teacher educators and were distributed in person to teacher educators attending a state-wide vocational education conference. Questionnaires were also mailed to any known university-based vocational teacher educators who had not been reached by telephone or personal contact. The distribution of questionnaires was done in this manner to assure receiving input from all vocational teacher educators who were willing to respond. When time schedules permitted, the researcher was present while the questionnaire was being completed to answer questions the participant might have, and to collect the completed questionnaire. Teacher educators were contacted by phone and in person to collect questionnaires that had not been returned. Follow-up to secure completed questionnaires was conducted until potential respondents

either returned the questionnaire or indicated that they would not.

The questionnaires were distributed to a total of 30 vocational teacher educators in the state. There were 25 respondents, representing 83-1/3 per cent of the possible respondents.

The breakdown of respondents by descriptive data categories is presented in Table 3.13. As Table 3.13 shows, respondents represented all three universities and all but one of the vocational service areas.

Approximately half of the respondents were tenured, and years of experience ranged from 1 year to 37 years in the teacher educator role. All anticipated ranks were represented. Those marking "other" for rank included three lecturers and four persons employed by university-based vocational teacher educators to carry on projects funded by the Arizona Department of Education.

Analyzing the Results

University-based vocational teacher educators indicated their opinions regarding (1) whether they would participate in professional development activities related to each competency, (2) whether they believed that other teacher educators with whom they worked should participate in professional development activities related to each competency, and (3) preference for each of the methods of

Table 3.13. Descriptive Information About Respondents
            (N = 25)

Descriptive Categories		Number in Each Category
University:		
Arizona State University		7
Northern Arizona University		5
The University of Arizona		13
	Total	25
Rank:		
Instructor		1
Assistant Professor		2
Associate Professor		5
Professor		10
Other		7
	Total	25
Tenure:		
Yes		13
No		12
	Total	25
Vocational Service Area:		
Agriculture		4
Business and Office		2
Distributive Education		2
Diversified Occupations		1
Guidance and Counseling		2
Health		0
Home Economics		9
Industrial Education		5
	Total	25
Number of Years as a Teacher Educator:		
1-5 years		6
6-10 years		7
11-15 years		4
16-20 years		3
20-25 years		3
37 years		1
	Total	25

inservice. Opinions of the respondents were summarized by computing frequency distributions and means for each competency, each competency group, and each method of in-service. Rankings were determined for each competency group and for each method of inservice. Ratings were determined for each of the competencies within each competency group.

The relative importance of each competency group to the respondents was determined. To determine relative importance, mean scores for each competency group were computed. Mean scores were arrived at by: (1) adding all yes responses for all items in each group, and then (2) dividing by the total number of items in that group. This procedure resulted in an arithmetic mean for each competency group. The six resulting means were used to rank order the competency groups according to preferences expressed by the respondents.

Each of the competency statements was rated using responses of the teacher educators. Responses to "I would participate in professional development activities related to this activity," and responses to "I believe that other teacher educators I work with should participate" were added together. This resulted in a participation score for each competency that could be used to determine priority ratings for professional development activities.

The competencies were assigned priority ratings to facilitate reporting of competencies that should be selected for professional development activities. The competencies were classified into three priority categories as follows:

1. High priority--participation score was 38-50 (more than 75% of all possible responses).

2. Medium priority--participation score was 26-37 (51% to 75% of all possible responses).

3. Low priority--participation score was 0-26 (50% or less of all possible responses).

The preferences for each of the methods of in-service education expressed by respondents were summarized. Summarized responses were used to compute mean scores for each of the listed methods. The resulting mean scores were used to rank order the methods from most preferred to least preferred. This procedure was repeated for each of the six competency groups.

CHAPTER 4

FINDINGS OF THE STUDY

This study was conducted to assess the professional
development needs of university-based vocational teacher
educators in Arizona. Data collected were described and
analyzed to determine relative importance to the respondents
of the following competency groups: instructing, planning/
programming, advising, professional role, evaluation, and
research and development. Data were also used to rate each
of the competencies according to priorities for professional
development activities and to identify preferences for the
selected methods of inservice education for each competency
group.

Results of the data analysis are presented in the
following sections: relative importance of each competency
group, priority ratings for competencies in each group, and
preferences among methods of inservice for each competency
group.

Relative Importance of Each
Competency Group

Analyzing the summarized responses indicated that
respondents ranked activities related to evaluating as most
important for professional development, and activities

related to advising as least important (Table 4.1). These preferences are in contrast to the ranking indicated by vocational teachers who ranked instructing first, followed by planning/programming, advising, professional role, evaluating, and last, research and development (Table 4.1).

Table 4.1. Comparison of Rankings of Importance of Competency Groups by Vocational Teachers and Teacher Educators

Competency Group	Ranks by Teachers (N = 95)	Ranks by Teacher Educators (N = 25)
Instructing	1	4
Planning/Programming	2	3
Advising	3	6
Professional Role	4	5
Evaluating	5	1
Research and Development	6	2

Priority Ratings for Competencies
in Each Group

Data describing the priority ratings were separated in this section according to relation of the competencies to (1) evaluating, (2) research and development, (3) planning/programming, (4) instructing, (5) professional role, and (6) advising.

Evaluating

Evaluating was ranked highest in importance for professional development activities by the teacher educators. In the group of seven competencies, four were rated as high priority for professional development activities (Table 4.2). The other three were rated as medium priority. Results indicated that teacher educators were especially willing to learn more about helping teachers perform evaluating functions. Their willingness to learn more about evaluating their own programs was also indicated.

Research and Development

Research and development was ranked second highest in importance for professional development activities by the teacher educators. In the group of seven competencies, four were rated as high priority for professional development activities (Table 4.3). The other three were rated as medium priority. Results indicated that teacher educators were especially willing to learn more about assisting

Table 4.2.   Priority Ratings of Teacher Educators for
Evaluating Competencies (N = 25)

Competency Statements (Descriptive Phrases)[b]	Participation Score	Priority Rating[a]
1. Helps teachers learn from own evaluation.	38	High
2. Evaluates own teaching.	36	Medium
3. Helps teachers evaluate students.	38	High
4. Evaluates teachers.	39	High
5. Helps teachers evaluate own effectiveness.	38	High
6. Evaluates the teacher education program.	37	Medium
7. Helps evaluate local programs.	35	Medium

[a]High priority = 38-50 (more than 75%); medium priority = 26-37 (51% to 75%); low priority = 0-25 (50% or less).

[b]For full-length competency statements, see Table 3.5.

Table 4.3. Priority Ratings of Teacher Educators for
Research and Development Competencies (N = 25)

Competency Statements (Descriptive Phrases)[b]	Participation Score	Priority Rating[a]
1. Develops instructional experiences.	38	High
2. Helps teachers use research.	39	High
3. Helps teachers with funded projects.	39	High
4. Helps develop curriculum.	39	High
5. Uses related research.	33	Medium
6. Directs research project.	37	Medium
7. Conducts research studies.	34	Medium

[a]High priority = 38-50 (more than 75%); medium priority = 26-37 (51% to 75%); low priority = 0-25 (50% or less).

[b]For full-length competency statements, see Table 3.5.

teachers to perform research and development functions and to learn about developing specific curriculum and materials. They were only slightly less willing to learn to conduct their own research and development.

Planning/Programming Competencies

Planning/programming was ranked third highest in importance for professional development activities by the teacher educators. In the group of 13 competencies three were rated high priority for professional development activities (Table 4.4). Nine were rated medium priority and one was rated low priority. Results indicated that teacher educators were especially willing to learn more about working with a variety of educational and support personnel to improve vocational teacher education. Respondents indicated least willingness to learn more about helping teachers with developing objectives.

Instructing Competencies

Instructing was ranked fourth (out of six) in importance for professional development activities by the teacher educators. In the group of 12 competencies, two were rated as high priority for professional development activities (Table 4.5). The other ten were rated medium priority. Teacher educators indicated considerable willingness to learn more about new approaches to teaching, and more about helping teachers with youth organizations. They

Table 4.4. Priority Ratings of Teacher Educators for Planning/Programming Competencies (N = 25)

Competency Statements (Descriptive Phrases)[b]	Participation Scores	Priority Ratings[a]
1. Helps teachers use needs assessment.	37	Medium
2. Develops realistic teacher education programs.	40	High
3. Develops pertinent teacher education programs.	33	Medium
4. Plans effective teacher education program.	32	Medium
5. Helps teachers develop meaningful objectives.	23	Low
6. Helps teachers select content.	30	Medium
7. Involves learners in planning.	37	Medium
8. Helps teachers do needs assessments.	30	Medium
9. Helps teachers select learning experiences.	30	Medium
10. Incorporates information from related fields.	38	High
11. Helps teachers use support services.	38	High
12. Helps teachers examine beliefs.	34	Medium
13. Serves on advisory committees.	33	Medium

[a]High priority = 38-50 (more than 75%); medium priority = 26-37 (51% to 75%); low priority = 0-25 (50% or less).

[b]For full-length competency statements, see Table 3.5.

Table 4.5.   Priority Ratings of Teacher Educators for
Instructing Competencies (N = 25)

Competency Statements (Descriptive Phrases)[b]	Participation Scores	Priority Ratings[b]
1. Uses a variety of methods.	31	Medium
2. Uses new teaching approaches.	41	High
3. Has successful background.	26	Medium
4. Helps teachers use a variety of strategies.	36	Medium
5. Knows current issues and trends.	35	Medium
6. Uses current resources.	27	Medium
7. Helps teachers with classroom management.	33	Medium
8. Helps teachers with learning environments.	35	Medium
9. Helps teachers improve content understanding.	28	Medium
10. Develops a variety of field sites.	30	Medium
11. Develops productive field sites.	29	Medium
12. Helps teachers with youth organizations.	40	High

[a]High priority = 38-50 (more than 75%); medium priority = 26-37 (51% to 75%); low priority = 0-25 (50% or less).

[b]For full-length competency statements, see Table 3.5.

indicated least willingness to participate in activities related to sites for field experiences, current resources, and teaching/occupational background.

Professional Role Competencies

Professional role was ranked fifth, or next to last in importance for professional development activities by the teacher educators. In the group of ten competencies, one was rated high priority for professional development activities (Table 4.6). Eight were rated as medium priority and one was rated low priority. Teacher educators were especially willing to learn more about influencing vocational legislation. They were also willing to learn more about societal and educational changes and to learn more about helping teachers with professional growth.

Advising Competencies

Advising was ranked as last in importance for professional development activities by the teacher educators. In the group of eleven competencies, one was rated high priority for professional development activities (Table 4.7). Seven were rated as medium priority and three were rated low priority. Teacher educators again indicated that they were especially willing to learn more about helping teachers with professional growth. They were least willing to learn more about helping teachers with degree and certification requirements and employment.

Table 4.6. Priority Ratings of Teacher Educators for
Professional Role Competencies (N = 25)

Competency Statements (Descriptive Phrases)[b]	Participation Scores	Priority Ratings[a]
1. Shows respect for all individuals.	25	Low
2. Uses effective managing skills.	31	Medium
3. Helps teachers with philosophy.	30	Medium
4. Keeps up with advances.	37	Medium
5. Continues professional development.	31	Medium
6. Serves as a change agent.	36	Medium
7. Helps teachers become competent and independent.	31	Medium
8. Helps teachers plan own growth.	37	Medium
9. Participates in professional organizations.	30	Medium
10. Influences legislation.	39	High

[a]High priority = 38-50 (more than 75%); medium priority = 26-37 (51% to 75%); low priority = 0-25 (50% or less).

[b]For full-length competency statements, see Table 3.5.

Table 4.7. Priority Ratings of Teacher Educators for
           Advising Competencies (N = 25)

Competency Statements (Descriptive Phrases)[b]	Participation Scores	Priority Ratings[a]
1. Uses adequate advising system.	32	Medium
2. Helps teachers with advising skills.	37	Medium
3. Provides information about degrees and certification.	28	Medium
4. Provides career information.	35	Medium
5. Helps teachers plan individual programs.	23	Low
6. Helps teachers with professional education programs.	39	High
7. Helps teachers with personal problems.	35	Medium
8. Helps teacher see benefits of teacher education program.	32	Medium
9. Helps teachers resolve concerns.	23	Low
10. Helps teachers use other career resources.	30	Medium
11. Helps teachers with employment.	21	Low

[a]High priority = 38-50 (more than 75%); medium priority = 26-37 (51% to 75%); low priority = 0-25 (50% or less).

[b]For full-length competency statements, see Table 3.5.

Preferences Among Methods of Inservice Education for Each Competency Group

Analyzing the mean ranks for preferences among methods of inservice education indicated that the highest ranked method (that is, the one most preferred by university-based vocational teacher educators for use in professional development activities related to all the competency groups) was one-day workshops by region. This method was ranked first by respondents for all six competency groups (Table 4.8).

The second highest ranking method for all competency groups was individualized consultants available on site. This method was ranked second for four of the competency groups and third for two of the competency groups.

The third ranking method for all competency groups was two-day workshops by region, which was ranked second for two of the competency groups and third for four of the competency groups.

The remaining methods were ranked in order of preference for all the competency groups as follows: fourth, self-instructional learning packages; fifth, one-day workshops statewide; sixth, one week in-depth seminars; seventh, a few hours a week several weeks in a row; eighth, individualized consultant available by telephone; ninth, two-day workshops statewide; and tenth, individualized consultants who communicate through A.V. cassettes.

Table 4.8. Preferences of Teacher Educators (by Rank) for Methods of Inservice
Education for Each Competency Group and Overall

Delivery Systems	Evaluating	Research and Development	Planning/ Programming	Instructing	Professional Role	Advising	Overall
	Rank	Rank	Rank	Rank	Rank	Rank	Rank
One Day Workshops:							
By Region	1	1	1	1	1	1	1
Statewide	6	5	5	6	5	5	5
Two Day Workshops:							
By Region	3	3	2	2	3	3	3
Statewide	9	7	8	8	9	10	9
One Week In-Depth Seminars	5	4	4	5	7	8	6
Few Hours a Week, Several Weeks	8	6	6	7	10	6	7
Learning Packages	4	8	7	4	4	4	4
Consultants:							
On Site	2	2	3	3	2	2	2
By Telephone	7	9	9	9	6	6	8
A.V. Cassettes	10	10	10	10	7	9	10

CHAPTER 5

CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS

Data were collected to provide information on which to base decisions about professional development activities of university-based vocational teacher educators in Arizona.

A summary of data collected to answer the research question "What is the relative importance of each competency group, in the opinion of respondents?" showed that the evaluating competency group was ranked highest by the respondents. The remaining competency groups were ranked as follows: research and development, second; planning/programming, third; instructing, fourth; professional role, fifth; and advising, sixth (last). Respondents viewed the evaluating and research and development functions as most important for professional development at this time, and would be most willing to learn more about these topics. They would be least willing to learn more about professional role and advising competencies.

In the review of literature, the movements toward accountability and increasing the knowledge base were cited as educational changes which have increased demands on teacher educators. It is likely that teacher educators' willingness to learn more about evaluating and research and

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development reflected pressures they might have felt in response to these increased demands.

The degree of willingness to participate in professional development activities was remarkably high for all the competency groups. It would seem, then, that the respondents were very receptive to the general concept of improving their own professional competence. These results seem to support the need for professional development of teacher educators called for in the literature reviewed.

Data were analyzed to determine priority ratings for each competency. Analysis showed that 15 of the 60 competencies were rated high priority for professional development activities. Another 40 competencies were rated medium priority and only 5 were rated low priority. Inspection of the results indicated that many of the medium priority competencies had received participation scores in the upper limits of the medium priority range. These scores were numerically very close to scores of the high priority competencies. Overall, responses for willingness to participate were thought to be generally very high since more than 50 per cent indicated such willingness for 55 of the 60 competencies. Therefore, it was concluded that university-based vocational teacher educators in Arizona were very willing to participate in professional development activities related to the competencies necessary for successful performance of teacher educator roles.

Inspection of the five low priority competencies revealed that one was related to planning/programming, one to professional role, and three to advising. No data were collected to explain low priority ratings, so reasons could only be speculated. It could be that the teacher educators felt competent in these areas; it could be that they felt these competencies not necessary to successful performance of teacher educator roles; or it could be that other competencies were simply higher priority. Whatever the reasons, it seems logical that receptivity of teacher educators toward activities related to these competencies would likely be very limited.

Teacher educators expressed their preferences for methods of inservice education that might be available to them. Analysis of their responses showed that the highest ranked method was one day workshops by region. It was interesting to note that this was the highest ranked method for all six competency groups. Clearly, this is the method that the respondents preferred most for professional development activities. While no data were collected to explain preferences, it may be that teacher educators preferred this method because of job pressures. They may feel that one day at a time for their own inservice education is all they can manage, and they may wish to eliminate the time and expense necessary to travel to statewide meetings. The second most preferred method was to have consultants

available on site. This method, too, may have been pre-
ferred because of its convenience to the teacher educators.

Among the least preferred methods was self-
instructional learning packages. It is believed that this
method was not popular because it may generally be per-
ceived that packaged learning is not flexible enough to
meet a variety of needs and learning styles.

Informal comparison of responses of teacher educa-
tors to responses of vocational teachers revealed an inter-
esting contrast. Responses of teacher educators showed that
evaluating and research and development were the most
important competency groups, as already reported. This was
in marked contrast to the earlier responses of vocational
teachers who indicated that these two were the least im-
portant functions for teacher educators. This contrast in
responses of teachers and teacher educators could be because
of differing pressures on the two groups caused by societal
and educational changes referred to earlier. Decisions
regarding selection of professional development activities
for teacher educators would be very different if they were
based solely on expressed opinions of either group. If
selection had been based on opinions of the vocational
teachers, then priorities of teacher educators would not
have been addressed, and their receptivity toward the pro-
fessional development activities would likely be reduced
(National Education Association 1976, O'Keefe 1974). On

the other hand, opinions of vocational teachers are important in decision-making since they are the ones served by teacher educators. It would seem beneficial to make teacher educators aware of the contrasting opinions of vocational teachers. This would be likely to increase receptivity of teacher educators toward activities selected with the teachers' opinions in mind (Bishop 1976, O'Keefe 1974, Houston 1972).

A summary of data analysis and corresponding conclusions led to the following conclusions:

1. Professional development activities for university-based vocational teacher educators in Arizona would be well-received by the teacher educators.

2. The teacher educators would be most willing to participate in activities focused on learning more about evaluating and research and development.

3. They would also be willing to participate in selected activities related to other functions if these activities focused on specific high priority competencies.

4. Professional development activities designed as one day workshops by region would be best received by teacher educators. Follow-up utilizing consultants available on site would also have high probability of being well received.

5. Consideration of the opinions of vocational teachers by decision-makers would likely alter decisions regarding selection of competencies on which to base professional development activities, since teachers' opinions contrasted so sharply to opinions of teacher educators.

6. The finding that teacher educators were willing to improve on many competencies indicated need for a program of professional development activities carefully developed and coordinated to allow and encourage teacher educators to continuously progress in achievement of competencies. Need for achievement of many competencies would call for a systematically designed professional development program for teacher educators. Since it would be competency-based, it could be individualized and flexible enough to meet the various needs of the teacher educators at different locations and in different service areas. Carrying out the competency-based approach would include development of competency-based, field-centered activities and assessment strategies, techniques, and instruments.

Competency-based assessment of professional development needs is recommended as an early step in decision-making. Recommendations for further study include:

1. A similar assessment of professional development
    needs of university-based vocational teacher edu-
    cators in other states and reassessment in Arizona
    to update and expand information regarding their
    needs.

2. Additional studies to validate competencies for
    other states.

3. Studies to measure effectiveness of various methods
    and procedures used in implementing competency-based
    professional development.

4. Studies to compare professional development needs
    of teacher educators to other vocational personnel
    such as supervisors and administrators.

5. Studies to evaluate the effects of needs assessment
    on the decision-making process.

APPENDIX A

QUESTIONNAIRE TO VALIDATE COMPETENCIES NEEDED BY UNIVERSITY-BASED VOCATIONAL TEACHER EDUCATORS IN ARIZONA

THE UNIVERSITY OF ARIZONA

TUCSON, ARIZONA 85721

COLLEGE OF AGRICULTURE
SOCIAL AND HUMAN RESOURCES
SCHOOL OF HOME ECONOMICS

May 25, 1978

Dear Colleagues,

We need your help with our study, "Competency Based Professional Development Needs of Vocational Teacher Educators in Arizona." Specifically, we need your input for establishing priorities for competencies needed by vocational teacher educators.

This questionnaire is being distributed to selected vocational education personnel in Arizona because we need your responses in order to help teacher educators be better prepared to serve you in the future.

Responses of all participants will be grouped and presented to teacher educators for their use as they make decisions about which competencies they want to develop or improve within themselves. Grouped responses may also be used by University of Arizona Home Economics Education personnel in reporting to the Arizona Department of Education, in meeting graduate school requirements, and in publications. Only U of Az. Home Economics Faculty, and the statistician and clerical aides assisting with the study will have access to individual responses. In order to keep your responses completely anonymous, we are not asking you to sign a consent form. Rather, if this questionnaire is completed, it will be assumed that consent has been given.

It will take approximately 30 minutes of your time to complete the questionnaire. There will be no costs or risks to you. You may withdraw from completing the questionnaire or elect not to respond to any of the questionnaire items without incuring any ill will.

If you are willing to participate, please complete the attached questionnaire and return it to the researcher. If you have any questions, please do not hesitate to ask the researcher or one of us listed below.

Thank you for your assistance.

Sincerely,

Peggy Wild

Peggy Wild, Instructor
Home Economics Education
Phone: 884-3059

Doris E. Manning, Professor
Home Economics Education
Phone: 884-2530

kjm

Statistical Data:

POSITION: (Check one)

____1. Arizona State Department personnel

____2. junior high teacher

____3. high school teacher

____4. coordinator or supervisor

____5. counselor

____6. other(specify)_____

VOCATIONAL AREA: (Check all that apply)

____1. Agriculture

____2. Business and Office

____3. Distributive Education

____4. Diversified Occupations

____5. Guidance and Counseling

____6. Health

____7. Home Economics

____8. Industrial Arts

____9. Other(specify)_____

EDUCATION LEVEL: (Check highest degree)

____1. less than a bachelors

____2. a bachelors

____3. more than a bachelors but less than a masters

____4. a masters

____5. more than a masters but less than a doctorate

____6. a doctorate

____7. other(specify)_____

SIZE OF SCHOOL:

____ 0-399

____ 400-799

____ 800-1199

____ 1200-1599

____ 1600-1599

____ 2000 and over

LOCATION OF SCHOOL:

____ Rural

____ Suburban

____ Inner City

____ Other(specify)_____

CRITICAL PROFESSIONAL DEVELOPMENT NEEDS OF VOCATIONAL TEACHER EDUCATORS IN ARIZONA
PHASE 2: ESTABLISHING PRIORITIES FOR COMPETENCIES NEEDED BY VOCATIONAL TEACHER EDUCATORS

Information: This form is designed to collect data regarding your opinions about these "competencies needed by university based vocational teacher educators". That is, to find out how you rank competencies from MOST IMPORTANT to LEAST IMPORTANT for teacher educators to successfully perform their roles.

The university based vocational teacher education program is defined as what the teacher educators do for vocational education personnel, including both those preparing to be vocational teachers (pre-service) and those already in the field (in-service). In all the competency statements which follow, the term "teacher" refers to both pre-service and in-service teachers, and "teacher educator" refers to the university based personnel who work in the pre-service and/or in-service vocational teacher education program.

DIRECTIONS: Consider each competency carefully. For each of the 6 groups of competencies, indicate your ranking of each statement using "1" to indicate the highest ranking (MOST IMPORTANT) competency in the group, "2" to indicate the second highest ranking, and so on. NOTE: If you feel that 2 or more competencies in a group are equally important, you may so indicate by using the same number for each of the competencies. In the last section of the form, indicate your ranking of each group of competencies by using "1" to indicate the most important group of competencies, and so on.

COMPETENCY STATEMENT	Ranking (1 = MOST IMPORTANT competency 2 = SECOND MOST IMPORTANT competency and so on)
1.0 PLANNING/PROGRAMMING Competencies	
1.1 Plans the university vocational teacher education program to develop teachers who can teach effectively in various local school settings.	Rank _____ (from #1 through #13)
1.2 Cooperates with others such as subject matter professors, school teachers, educational foundations people, business/community representatives and state department of education personnel to develop and implement university vocational teacher education programs that provide real-life experiences.	Rank _____
1.3 Incorporates information from related fields that has implications for vocational education.	Rank _____
1.4 Develops university vocational teacher education courses including course objectives, course requirements, instructional activities and options that meet actual needs of individual teachers.	Rank _____
1.5 Continually involves teachers and other educational personnel in developing the structure of the university teacher education program and courses which meet teachers' needs.	Rank _____
1.6 Assists teachers in examining their beliefs about vocational education and the effect of those beliefs on program planning.	Rank _____
1.7 Assists teachers to gather and use data about classroom and community environments and needs to make decisions about the vocational program.	Rank _____
1.8 Assists teachers to acquire skill in developing vocational programs consistent with needs of students, community and society.	Rank _____
1.9 Assists teachers to acquire skill in developing instructional goals and objectives that guide students' learnings.	Rank _____
1.10 Assists teachers in selecting and sequencing subject matter to aid learning of each student.	Rank _____
1.11 Assists teachers to develop and/or adapt instructional activities and materials that will aid in achievement of program goals and objectives.	Rank _____
1.12 Assists teachers to assess, develop, and/or procure support services necessary to improve instructional performance.	Rank _____
1.13 Participates actively on advisory committees for local and state programs in vocational and related areas.	Rank _____

COMPETENCY STATEMENT	Ranking (1 = MOST IMPORTANT competency 2 = SECOND MOST IMPORTANT competency and so on)
2.0 INSTRUCTING Competencies	
2.1 Demonstrates skills in using a variety of teaching methods such as lecture, discussion, role play, gaming, discovery.	Rank _____ (from #1 through #12)
2.2 Draws on a background of successful teaching and occupational experiences at the level of education for which teachers are being prepared.	Rank _____
2.3 Demonstrates familiarity with and ability to communicate to others contemporary trends and issues in the subject matter field, and education generally.	Rank _____
2.4 Uses,in teaching, current resources of the subject matter field such as books, films, records, professional associations.	Rank _____
2.5 Assists teachers to improve their understanding of basic concepts and theories of the subject fields in teaching.	Rank _____
2.6 Uses and/or develops new approaches to teaching which vary procedure, and create or renew interest.	Rank _____
2.7 Assists teachers to select and utilize a variety of strategies and models of teaching appropriate to each learner and situation.	Rank _____
2.8 Assists teachers to design, develop and maintain environments that facilitate learning.	Rank _____
2.9 Assists teachers to apply effective techniques of classroom management in real settings.	Rank _____
2.10 Develops opportunities for teachers to observe and analyze a variety of vocational education facilities and approaches to working with vocational students.	Rank _____
2.11 Identifies and maintains sites for field experiences, including student-teaching centers and occupational centers, that provide learning environments for teachers.	Rank _____
2.12 Assists teachers in using youth organizations as an integral part of the local vocational program.	Rank _____
3.0 EVALUATING Competencies	
3.1 Provides constructive input to teachers which evaluate local vocational programs.	Rank _____ (from #1 through #7)
3.2 Establishes,uses and revises when necessary criteria for evaluating the appropriateness of the university vocational teacher education program in helping teachers achieve success.	Rank _____
3.3 Evaluates own teaching, using a variety of techniques, to determine their effectiveness in helping teachers reach their goals.	Rank _____
3.4 Selects appropriate criteria and uses a variety of proven methods to measure individual teacher achievement.	Rank _____
3.5 Provides evaluation techniques that are learning experiences for teachers.	Rank _____
3.6 Assists teachers to collect, analyze, interpret and appreciate using data on teacher and student behavior in evaluating instructional effectiveness.	Rank _____
3.7 Assists teachers to understand and use techniques and instruments designed to diagnose students' academic,- occupational and social development needs.	Rank _____

COMPETENCY STATEMENT	Ranking (1 = MOST IMPORTANT competency 2 = SECOND MOST IMPORTANT competency and so on)
4.0 ADVISING Competencies	
4.1 Establishes and maintains program advising system that meets needs of teachers.	Rank _____ (from #1 through #11)
4.2 Provides information on types of career opportunities available in the field of vocational education, together with requirements and pros/cons of the various careers.	Rank _____
4.3 Provides information on requirements, procedures and options for obtaining degree(s) and certification in vocational/occupational education and related areas.	Rank _____
4.4 Involves teachers in determining educational needs that might appropriately be met by the vocational teacher education program.	Rank _____
4.5 Assists teachers in developing an individualized schedule and sequence of courses to complete degree and/or certification requirements.	Rank _____
4.6 Assists teachers to develop, implement and assess plans for continuing individual professional growth.	Rank _____
4.7 Directs teachers to relevant vocational education literature and to agencies and persons outside the university that can provide information on specific aspects of vocational education.	Rank _____
4.8 Assists teachers to develop decision making skills, self-awareness, interpersonal skills and effective communication with students, colleagues and others.	Rank _____
4.9 Helps teachers recognize the existence of personal or academic problems that affect teaching success, and provides assistance to solve them.	Rank _____
4.10 Permits teachers to express concerns or differences of opinion, and helps resolve them.	Rank _____
4.11 Provides suggestions and assistance (including letters of recommendations) to teachers seeking employment.	Rank _____
5.0 RESEARCH AND DEVELOPMENT Competencies	
5.1 Evaluates soundness of and interprets research findings in vocational education and related areas.	Rank _____ (from #1 through #7)
5.2 Conducts, directs and/or facilitates research studies.	Rank _____
5.3 Develops up-to-date instructional materials and strategies which adequately support vocational programs when such materials are needed.	Rank _____
5.4 Directs research and development projects supported by private, state and/or federal funds.	Rank _____
5.5 Assists with state-wide curriculum development in own and related subject matter areas.	Rank _____
5.6 Assists teachers to incorporate current educational research and development findings into instructional practices.	Rank _____
5.7 Assists teachers in understanding how to apply/or and conduct specially funded programs/projects.	Rank _____

COMPETENCY STATEMENT	Ranking (1 = MOST IMPORTANT competency 2 = SECOND MOST IMPORTANT competency and so on)
6.0 PROFESSIONAL ROLE Competencies	
6.1 Shows respect, concern and compassion for individuals regardless of differences.	Rank _____ (from #1 through #10)
6.2 Uses avenues appropriate to keeping abreast of professional development, societal needs and technological advances.	Rank _____
6.3 Accepts and adjusts to change and serves as a change agent within the profession.	Rank _____
6.4 Demonstrates desire to continue personal and professional development.	Rank _____
6.5 Knows the purposes, programs and services of and participates in appropriate professional organizations.	Rank _____
6.6 Demonstrates effective planning, organizing and managing skills.	Rank _____
6.7 Assists teachers to develop a personal teaching style consistent with both their own and their school's philosophy of education.	Rank _____
6.8 Assists teachers to develop, implement and assess individual professional growth plans.	Rank _____
6.9 Assists teachers to become increasingly competent and independent in professional roles.	Rank _____
6.10 Acts independently or in concert with others to influence legislation affecting vocational education.	Rank _____

For this last section, indicate your ranking of each of the 6 groups of competencies by using "1" to indicate the MOST IMPORTANT competency group and so on.

COMPETENCY GROUP	Ranking (1 = MOST IMPORTANT competency 2 = SECOND MOST IMPORTANT competency and so on)
1.0 PLANNING/PROGRAMMING Competencies	Rank _____ (from #1 through #6)
2.0 INSTRUCTING Competencies	Rank _____
3.0 EVALUATING Competencies	Rank _____
4.0 ADVISING Competencies	Rank _____
5.0 RESEARCH AND DEVELOPMENT Competencies	Rank _____
6.0 PROFESSIONAL ROLE Competencies	Rank _____

APPENDIX B

QUESTIONNAIRE TO ESTABLISH PRIORITIES OF VOCATIONAL TEACHERS FOR TEACHER EDUCATOR COMPETENCIES

THE UNIVERSITY OF ARIZONA

TUCSON, ARIZONA 85721

COLLEGE OF AGRICULTURE
SOCIAL AND HUMAN RESOURCES
SCHOOL OF HOME ECONOMICS

August 10, 1977

Dear Colleagues,

The attached questionnaire has been devised to determine the competencies that "should" be possessed by vocational teacher educators (that is university-based personnel who work in pre-service and/or in-service vocational teacher education). The instrument has been compiled from several existing competency lists.

This is part of a state-wide needs assessment for inservice education being conducted by the University of Arizona for the Arizona State Department of Education, Division of Career and Vocational Education. The purpose of the project is to produce needed information upon which the Division may base decisions for inservice education of teacher educators.

All responses are anonymous and will be held in strict confidence, and no attempt has been or will be made to identify your individual responses. Your inclusion in this project is voluntary, and you may withdraw your participation or elect not to respond to any of the questionnaire items without incurring ill will from either the University of Arizona or Arizona State Department of Education. However, we are particularly interested in obtaining your responses. Those of you at this conference are in a good position to tell us what competencies are needed by university based teacher educators.

As a member of this population, your assistance is vital to the success of the project. Please complete the attached questionnaire and return it to Margaret Barkley when you turn in your plan of action or to Peggy Wild at the registration table before you leave the conference, or if you wish more time to reflect on your answers, we will give you a stamped self-addressed envelope which we are asking you to return prior to Monday, August 16, 1977. Other phases of this project are dependent on analysis of the data from this questionnaire.

Thank you for your assistance.

Sincerely,

Doris E. Manning, Professor

Peggy Wild, Instructor

PW/lfh

COMPETENCIES NEEDED BY VOCATIONAL TEACHER EDUCATORS

Information: This form is designed to collect data regarding competencies which you feel university based vocational teacher educators "should" possess. That is, which competencies, in your opinion, are necessary to successful performance of teacher educator roles.

> The university based vocational teacher education program is defined as what the teacher educators do for vocational education personnel, including both those preparing to be vocational teachers (pre-service) and those already in the field (in-service). In all the competency statements which follow the term "teacher" refers to both pre-service and in-service teachers, and "teacher educator" refers to the university based personnel who work in the pre-service and/or in-service vocational teacher education program.

Participation in this project is completely voluntary; however, your participation is encouraged so that the data base for decision making can be as complete as possible. Your responses are completely anonomus and all data will be grouped for analysis and interpretation.

Statistical Data: Please fill out these three columns as indicated.

POSITION	EDUCATION LEVEL	VOCATIONAL AREA
(check all that apply)	(check highest degree)	(check all that apply)
1__Arizona state department personnel	1__less than a bachelors	1__Agriculture
2__teacher educator	2__a bachelors	2__Business & Office
3__junior high teacher	3__more than a bachelors but less	3__Distributive Education
4__high school teacher	than a masters	4__Diversified Occupation
5__community college teacher	4__a masters	5__Guidance & Counseling
6__school administrator	5__more than a masters but less	6__Health
7__school district curriculum	than a doctorate	7__Home Economics
coordinator or supervisor	6__a doctorate	8__Industrial Education
8__other (specify)_____	7__other (specify_____	9__other (specify)_____

DIRECTIONS: Please consider each competency carefully. Circle "YES" - if you feel the competency is needed by vocational teacher educators (necessary to successful performance of teacher educator roles). Circle "NO" if you feel the competency is not needed by vocational teacher educators (not necessary to successful performance of teacher educator roles).

Use the space provided to the right of each category of competencies to make comments or to add any competencies which have not been included in the list but which you feel the vocational teacher educator should have.

Competency needed by vocational teacher educators:	Yes	No	Comments and/or Additions
1.0 PLANNING/PROGRAMMING competencies			
1.1 Plans the university vocational teacher education program to develop teachers who can teach successfully in local school settings.	YES	NO	
1.2 Cooperates with others such as subject matter professors, school teachers, educational foundations people and state department of education personnel to develop and implement the university vocational teacher education program.	YES	NO	
1.3 Incorporates information from related fields that has implications for vocational education.	YES	NO	
1.4 Develops university vocational teacher education courses including course objectives, course requirements, instructional activities and options that meet teachers' needs.	YES	NO	
1.5 Involves teachers in developing the structure of the university teacher education program and courses.	YES	NO	
1.6 Assests teachers in examining their beliefs about vocational education and the effect of those beliefs on program planning.	YES	NO	
1.7 Assists teachers to gather and use data about classroom and community environments to make decisions about the vocational program.	YES	NO	

Competency needed by vocational teacher educators:	Yes	No	Comments and/or Additions
1.8 Assists teachers to develop vocational programs consistent with needs of students and community.	YES	NO	
1.9 Assists teachers to develop instructional goals and objectives that guide students' learnings.	YES	NO	
1.10 Assists teachers in selecting and sequencing subject matter to aid student learning.	YES	NO	
1.11 Assists teachers to develop and/or adapt instructional activities and materials that will aid in achievement of program goals and objectives.	YES	NO	
1.12 Assists teachers to assess, develop, and/or procure support services necessary to improve instructional performance.	YES	NO	
1.13 Participates actively on advisory committees for local and state programs in vocational and related areas.	YES	NO	
2.0 INSTRUCTING competencies			
2.1 Demonstrates skills in using a variety of teaching methods such as lecture, discussion, role play, gaming, discovery (not just talk about them).	YES	NO	
2.2 Draws on a background of successful teaching experiences at the level of education for which teachers are being prepared.	YES	NO	
2.3 Demonstrates familiarity with and ability to communicate to others contemporary trends and issues in the subject matter field, and education generally.	YES	NO	
2.4 Demonstrates familiarity with the resources of the subject matter field such as books, films, records, professional associations, etc.	YES	NO	
2.5 Assists teachers to improve their understanding of basic concepts and theories of the subject fields in teaching.	YES	NO	
2.6 Uses and/or develops new approaches to teaching which vary procedure and create or renew interest.	YES	NO	
2.7 Assists teachers to select and utilize a variety of strategies and models of teaching appropriate for the learner and situation.	YES	NO	
2.8 Assists teachers to design, develop and maintain environments that facilitate learning.	YES	NO	
2.9 Assists teachers to understand and use effective techniques of classroom management.	YES	NO	
2.10 Develops opportunities to observe and analyze vocational education facilities and approaches to working with vocational students.	YES	NO	
2.11 Identifies and maintains field placements, including student-teaching centers, that provide learning environments for teachers.	YES	NO	
2.12 Assists teachers in using youth organizations to enhance the local vocational program and students' achievement.	YES	NO	

Competency needed by vocational teacher educators:	Yes	No	Comments and/or Additions
3.0 EVALUATING competencies			
3.1 Serves on state teams which evaluate local vocational education programs.	YES	NO	
3.2 Establishes and uses criteria for evaluating the appropriateness of the university vocational teacher education program in helping teachers achieve success.	YES	NO	
3.3 Evaluates own teaching techniques to determine their effectiveness in helping teachers reach their goals.	YES	NO	
3.4 Selects appropriate criteria and uses varied methods to measure individual teacher achievement.	YES	NO	
3.5 Provides evaluation techniques that are learning experiences for teachers.	YES	NO	
3.6 Assists teachers to collect, analysis and interpret data on teacher and student behavior in evaluating instructional effectiveness.	YES	NO	
3.7 Assists teachers to understand and use techniques and instruments designed to diagnose students' academic and social development needs.	YES	NO	
4.0 ADVISING competencies			
4.1 Establishes and maintains an adequate advising system.	YES	NO	
4.2 Describes types of career opportunities available in the field of vocational education, together with requirements and pros/cons of the various careers.	YES	NO	
4.3 Specifies requirements, procedures and options for obtaining degree(s) and certification in vocational education and related areas.	YES	NO	
4.4 Involves teachers in determining educational needs that might appropriately be met by the vocational teacher education program.	YES	NO	
4.5 Assists teachers in developing a total schedule and sequence of courses to complete degree and/or certification requirements.	YES	NO	
4.6 Assists teachers to develop, complement and assess plans for continuing individual professional growth.	YES	NO	
4.7 Directs teachers to relevant vocational education literature and to agencies and persons outside the university that can provide information on specific aspects of vocational education.	YES	NO	
4.8 Assists teachers to develop interpersonal skills and effective communication with students, colleagues and others.	YES	NO	
4.9 Helps teachers recognize the existence of personal or academic problems that affect teaching success, and provides assistance to solve them.	YES	NO	
4.10 Permits teachers to express concerns or differences of opinion, and helps resolve them.	YES	NO	
4.11 Provides suggestions and assistance (including letters of recommendations) to teachers seeking employment.	YES	NO	

Competency needed by vocational teacher educators:	Yes	No	Comments and/or Additions
5.0 RESEARCH AND DEVELOPMENT competencies			
5.1 Evaluates soundness of and interprets research findings in vocational education and related areas.	YES	NO	
5.2 Conducts, directs and/or facilitates research studies.	YES	NO	
5.3 Develops instructional materials and strategies which adequately support vocational programs when none are available.	YES	NO	
5.4 Directs research and development projects supported by private, state and/or federal funds.	YES	NO	
5.5 Assists with state-wide curriculum development in own and related subject matter areas.	YES	NO	
5.6 Assists teachers to incorporate current educational research and development findings into instructional practices.	YES	NO	
6.0 PROFESSIONAL ROLE competencies			
6.1 Shows respect, concern and compassion for individuals.	YES	NO	
6.2 Uses appropriate avenues to keep abreast of professional development, societal needs and technological advances.	YES	NO	
6.3 Accepts and adjusts to change and serves as a change agent within the profession.	YES	NO	
6.4 Demonstrates desire to continue personal and professional development.	YES	NO	
6.5 Holds membership in and knows the purposes, programs and services of appropriate professional organizations.	YES	NO	
6.6 Demonstrates effective planning, organizational and management skills.	YES	NO	
6.7 Assists teachers to develop a personal teaching style consistent with both their own and their school's philosophy.	YES	NO	
6.8 Assists teachers to develop, implement and assess individual professional growth plans.	YES	NO	
6.9 Assists teachers to become increasingly competent and independent in professional roles.	YES	NO	
6.10 Acts independently or in concert with others to influence legislation affecting vocational education.	YES	NO	

APPENDIX C

QUESTIONNAIRE TO ESTABLISH PRIORITIES AND PREFERENCES OF TEACHER EDUCATORS FOR COMPETENCIES AND METHODS OF DELIVERY

THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

COLLEGE OF AGRICULTURE
SOCIAL AND HUMAN RESOURCES
SCHOOL OF HOME ECONOMICS

July 14, 1978

Dear Teacher Educator,

We need your help with the FINAL PHASE (!) of our project, "Competency Based Professional Development Needs of Vocational Teacher Educators in Arizona", which we are conducting for the Arizona Department of Education. Specifically, we need you to tell us which of the "Competencies Needed by University Based Vocational Teacher Educators" should be used as a basis for professional development activities, which of the activities you and your colleagues might participate in, and what sort of delivery system(s) you would prefer.

The list of "Competencies Needed by University Based Vocational Teacher Educators" was derived from a review of the literature and was then validated and revised using input from vocational educators attending the Arizona Vocational Education Conference in August, 1977.

The revised list of competencies was used to develop a questionnaire that was distributed during June, 1978. That questionnaire asked vocational teachers to rank six competency groups; (1) planning/programming, (2) instructing, (3) evaluating, (4) advising, (5) research and development, and (6) professional role according to their importance. It also asked them to rank the individual competencies within each group according to importance. The attached questionnaire presents the competencies in each group and the competency groups in the order of importance assigned by the vocational teachers.

This final questionnaire is being distributed to university based vocational teacher educators at ASU, NAU, and U of A. Your input is being used in this last phase of the study so that we can recommend professional development activities that will meet your needs.

Your responses will be grouped with responses of the other teacher educators and used in reporting to the Arizona Department of Education. Grouped data will also be used in completing dissertation requirements and in generating articles for possible publication. Only personnel working on this project will have access to the data and only in order to compile grouped responses. In order to keep your responses completely anonymous, we are not asking you to sign a consent form. Rather, if this questionnaire

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is completed, it will be assumed that your consent to use the data in the ways stated herein has been given.

It will take approximately 45 minutes of your time to complete the questionnaire. There will be no costs or risks to you. You may withdraw from completing the questionnaire or elect not to respond to any of the questionnaire items without incurring any ill will.

If you are willing to participate, please complete the attached questionnaire and return it to the researcher. If you have any questions, please do not hesitate to ask one of us.

Thank you for your assistance in helping us identify your professional needs and concerns.

Sincerely,

Peggy Wild

Peggy Wild, Instructor　　　　　　　Doris E. Manning, Professor
Home Economics Education　　　　　　Home Economics Education
Phone:　884-3059　　　　　　　　　　Phone:　884-2530

kjm

A NEEDS ASSESSMENT STUDY
Arizona Department of Education and
Home Economics Education, University of Arizona

COMPETENCY-BASED PROFESSIONAL DEVELOPMENT NEEDS OF VOCATION TEACHER
EDUCATORS IN ARIZONA FINAL PHASE: SELECTING COMPETENCIES
FOR PROFESSIONAL DEVELOPMENT ACTIVITIES

INFORMATION: This form is designed for you to record your opinions
about which of these "Competencies Needed by University Based Vo-
cational Teacher Educators" you would select for professional develop-
ment activities. Remember, the competency groups and the competen-
cies within each group are presented in the order of importance as-
signed by vocational teachers, with most important listed first and
least important listed last.

DEFINITIONS: Teacher= both pre-service and in-service
                                             teachers
                     Teacher Educator= university based personnel who
                                        work in pre-service and/or in-
                                        service programs
           Teacher Education Program= what the university based
                                      teacher educators do to prepare
                                      vocational teachers (pre-service)
                                      and to help those already in the
                                      field (in-service)
Professional Development Activities= various activities designed for
                                     teacher educators, to increase
                                     competence of teacher educators
                                     who participate

DIRECTIONS: Consider each competency. Circle "Yes" or "No" to in-
            dicate your opinion regarding two things:

            (1) Whether YOU would participate in professional
                 development activities related to this competency.
            (2) Whether you think other teacher educators you work
                 with should participate in professional development
                 activities related to this competency.

            If you care to comment on any of the competency statements,
            or wish to add to or delete any, please record your thoughts
            in the COMMENTS column.

            On the questionnaire, you will see that a variety of types
            of delivery systems are listed after each group of com-
            petencies. Please rank the delivery systems, using "1"
            to indicate your first choice for a delivery system for
            that group of competencies, "2" to indicate your second
            choice, etc. If you have ideas for delivery systems other
            than those listed which whould better meet your needs, please
            list them in the space provided.

COMPETENCY STATEMENTS: COMMENTS:

	I would participate in professional development activities related to this competency.	I believe that other teacher educators I work with should participate.	
•1.0 INSTRUCTING Competencies	(Circle One)	(Circle One)	
1.1 Demonstrates skills in using a variety of teaching methods such as lecture, discussion, role play, gaming, discovery.	Yes No	Yes No	
1.2 Uses and/or develops new approaches to teaching which vary procedure, and create or renew interest.	Yes No	Yes No	
1.3 Draws on a background of successful teaching and occupational experiences at the level of education for which teachers are being prepared.	Yes No	Yes No	
1.4 Assists teachers to select and utilize a variety of strategies and models of teaching appropriate to each learner and situation.	Yes No	Yes No	
1.5 Demonstrates familiarity with and ability to communicate to others contemporary trends and issues in the subject matter field, and education generally.	Yes No	Yes No	
1.6 Uses, in teaching, current resources of the subject matter field such as books, films, records, professional associations.	Yes No	Yes No	
1.7 Assists teachers to apply effective techniques of classroom management in real settings.	Yes No	Yes No	
1.8 Assists teachers to design, develop and maintain environments that facilitate learning.	Yes No	Yes No	
1.9 Assists teachers to improve their understanding of basic concepts and theories of the subject fields in teaching.	Yes No	Yes No	
1.10 Develops opportunities for teachers to observe and analyze a variety of vocational education facilities and approaches to working with vocational students.	Yes No	Yes No	
1.11 Identifies and maintains sites for field experiences, including student-teaching centers and occupational centers, that provide learning environments for teachers.	Yes No	Yes No	
1.12 Assists teachers in using youth organizations as an integral part of the local vocational program.	Yes No	Yes No	

(Indicate your preference for each of the 10 delivery systems listed by using "1" to indicate your first preference, etc. Please write any ideas for delivery systems other than the ones listed here.)

DELIVERY SYSTEMS FOR PROFESSIONAL DEVELOPMENT ACTIVITIES RELATED TO TEACHER EDUCATOR COMPETENCIES:		YOUR RANKING: (1 = most preferred)
One-day workshops:		
by region ---		_____
statewide ---		_____
Two-day workshops:		
by region ---		_____
statewide ---		_____
One-week in-depth seminars ---		_____
A few hours a week, several weeks in a row ---		_____
Self-instructional learning packages -----------------------------		_____
Individualized consultants:		
available on site ---		_____
available by telephone ---		_____
communicate through A.V. cassettes -----------------------------		_____
Others: _____ -----------------------------		_____
_____ -----------------------------		_____
_____ -----------------------------		_____

COMPETENCY STATEMENTS:	I would participate in professional development activities related to this competency.	I believe that other teacher educators I work with should participate.	COMMENTS:
2.0 PLANNING/PROGRAMMING Competencies	(Circle One)	(Circle One)	
2.1 Assists teachers to acquire skill in developing vocational programs consistent with needs of students, community and society.	Yes No	Yes No	
2.2 Cooperates with others such as subject matter professors, school teachers, educational foundations people, business/community representatives and state department of education personnel to develop and implement university vocational teacher education programs that provide real-life experiences.	Yes No	Yes No	
2.3 Develops university vocational teacher education courses including course objectives, course requirements, instructional activities and options that meet actual needs of individual teachers.	Yes No	Yes No	
2.4 Plans the university vocational teacher education program to develop teachers who can teach effectively in various local school settings.	Yes No	Yes No	
2.5 Assists teachers to acquire skill in developing instructional goals and objectives that guide students' learnings.	Yes No	Yes No	
2.6 Assists teachers in selecting and sequencing subject matter to aid learning of each student.	Yes No	Yes No	
2.7 Continually involves teachers and other educational personnel in developing the structure of the university teacher education program and courses which meet teachers' needs.	Yes No	Yes No	
2.8 Assists teachers to gather and use data about classroom and community environments and needs to make decisions about the vocational program.	Yes No	Yes No	
2.9 Assists teachers to develop and/or adapt instructional activities and materials that will aid in achievement of program goals and objectives.	Yes No	Yes No	
2.10 Incorporates information from related fields that has implications for vocational education.	Yes No	Yes No	
2.11 Assists teachers to assess, develop, and/or procure support services necessary to improve instructional performance.	Yes No	Yes No	
2.12 Assists teachers in examining their beliefs about vocational education and the effect of those beliefs on program planning.	Yes No	Yes No	
2.13 Participates actively on advisory committees for local and state programs in vocational and related areas.	Yes No	Yes No	

(Indicate your preference for each of the 10 delivery systems listed by using "1" to indicate your first preference, etc. Please write any ideas for delivery systems other than the ones listed here.)

DELIVERY SYSTEMS FOR PROFESSIONAL DEVELOPMENT ACTIVITIES RELATED TO TEACHER EDUCATOR COMPETENCIES:		YOUR RANKING: (1 = most preferred)
One-day workshops:		
by region		____
statewide		____
Two-day workshops:		
by region		____
statewide		____
One-week in-depth seminars		____
A few hours a week, several weeks in a row		____
Self-instructional learning packages		____
Individualized consultants:		
available on site		____
available by telephone		____
communicate through A.V. cassettes		____
Others: _____		____
_____		____
_____		____

	COMPETENCY STATEMENTS:	I would participate in professional development activities related to this competency.		I believe that other teacher educators I work with should participate.		COMMENTS:

3.0 ADVISING Competencies

3.1 Establishes and maintains program advising system that meets needs of teachers.	Yes	No	Yes	No
3.2 Assists teachers to develop decision making skills, self-awareness, interpersonal skills and effective communication with students, colleagues and others.	Yes	No	Yes	No
3.3 Provides information on requirements, procedures and options for obtaining degree(s) and certification in vocational/occupational education and related areas.	Yes	No	Yes	No
3.4 Provides information on types of career opportunities available in the field of vocational education, together with requirements and pros/cons of the various careers.	Yes	No	Yes	No
3.5 Assists teachers in developing an individualized schedule and sequence of courses to complete degree and/or certification requirements.	Yes	No	Yes	No
3.6 Assists teachers to develop, implement and assess plans for continuing individual professional growth.	Yes	No	Yes	No
3.7 Helps teachers recognize the existence of personal or academic problems that affect teaching success, and provides assistance to solve them.	Yes	No	Yes	No
3.8 Involves teachers in determining educational needs that might appropriately be met by the vocational teacher education program.	Yes	No	Yes	No
3.9 Permits teachers to express concerns or differences of opinion, and helps resolve them.	Yes	No	Yes	No
3.10 Directs teachers to relevant vocational education literature and to agencies and persons outside the university that can provide information on specific aspects of vocational education.	Yes	No	Yes	No
3.11 Provides suggestions and assistance (including letters of recommendation) to teachers seeking employment.	Yes	No	Yes	No

(Indicate your preference for each of the 10 delivery systems listed by using "1" to indicate your first preference, etc. Please write any ideas for delivery systems other than the ones listed here.)

DELIVERY SYSTEMS FOR PROFESSIONAL DEVELOPMENT ACTIVITIES RELATED TO TEACHER EDUCATOR COMPETENCIES:		YOUR RANKING: (1 = most preferred)
One-day workshops:		
by region	-----	_____
statewide	-----	_____
Two-day workshops:		
by region	-----	_____
statewide	-----	_____
One-week in-depth seminars	-----	_____
A few hours a week, several weeks in a row	-----	_____
Self-instructional learning packages	-----	_____
Individualized consultants:		
available on site	-----	_____
available by telephone	-----	_____
communicate through A.V. cassettes	-----	_____
Others: _____	-----	_____
_____	-----	_____
_____	-----	_____

COMPETENCY STATEMENTS:	I would participate in professional development activities related to this competency.	I believe that other teacher educators I work with should participate.	COMMENTS:
4.0 PROFESSIONAL ROLE Competencies	(Circle One)	(Circle One)	
4.1 Shows respect, concern and compassion for individuals regardless of differences.	Yes No	Yes No	
4.2 Demonstrates effective planning, organizing and managing skills.	Yes· No	Yes No	
4.3 Assists teachers to develop a personal teaching style consistent with both their own and their school's philosophy of education.	Yes No	Yes No	
4.4 Uses avenues appropriate to keeping abreast of professional development, societal needs and technological advances.	Yes No	Yes No	
4.5 Demonstrates desire to continue personal and professional development.	Yes No	Yes No	
4.6 Accepts and adjusts to change and serves as a change agent within the profession.	Yes No	Yes No	
4.7 Assists teachers to become increasingly competent and independent in professional roles.	Yes No	Yes No	
4.8 Assists teachers to develop, implement and assess individual professional growth plans.	Yes No	Yes No	
4.9 Knows the purposes, programs and services of and participates in appropriate professional organizations.	Yes No	Yes No	
4.10 Acts independently or in concert with others to influence legislation affecting vocational education.	Yes No	Yes No	

(Indicate your preference for each of the 10 delivery systems listed by using "1" to indicate your first preference, etc. Please write any ideas for delivery systems other than the ones listed here.)

DELIVERY SYSTEMS FOR PROFESSIONAL DEVELOPMENT ACTIVITIES RELATED TO TEACHER EDUCATOR COMPETENCIES:		YOUR RANKING: (1 = most preferred)
One-day workshops:		
by region		___
statewide		___
Two-day workshops:		
by region		___
statewide		___
One-week in-depth seminars		___
A few hours a week, several weeks in a row		___
Self-instructional learning packages		___
Individualized consultants:		
available on site		___
available by telephone		___
communicate through A.V. cassettes		___
Others: _____		___
_____		___
_____		___

COMPETENCY STATEMENTS:	I would participate in professional development activities related to this competency.	I believe that other teacher educators I work with should participate.	COMMENTS:
5.0 EVALUATING Competencies	(Circle One)	(Circle One)	
5.1 Provides evaluation techniques that are learning experiences for teachers.	Yes No	Yes No	
5.2 Evaluates own teaching, using a variety of techniques, to determine their effectiveness in helping teachers reach their goals.	Yes · No	Yes No	
5.3 Assists teachers to understand and use techniques and instruments designed to diagnose students' academic, occupational and social development needs.	Yes No	Yes No	
5.4 Selects appropriate criteria and uses a variety of proven methods to measure individual teacher achievement.	Yes No	Yes No	
5.5 Assists teachers to collect, analyze, interpret and appreciate using data on teacher and student behavior in evaluating instructional effectiveness.	Yes No	Yes No	
5.6 Establishes, uses and revises when necessary criteria for evaluating the appropriateness of the university vocational teacher education program in helping teachers achieve success.	Yes No	Yes No	
5.7 Provides constructive input to teachers whoch evaluate local vocational programs.	Yes No	Yes No	

(Indicate your preference for each of the 10 delivery systems listed by using "1" to indicate your first preference, etc. Please write any ideas for delivery systems other than the ones listed here.)

DELIVERY SYSTEMS FOR PROFESSIONAL DEVELOPMENT ACTIVITIES RELATED TO TEACHER EDUCATOR COMPETENCIES:		YOUR RANKING: (1 = most preferred)
One-day workshops:		
by region		_____
statewide		_____
Two-day workshops:		
by region		_____
statewide		_____
One-week in-depth seminars		_____
A few hours a week, several weeks in a row		_____
Self-instructional learning packages		_____
Individualized consultants:		
available on site		_____
available by telephone		_____
communicate through A.V. cassettes		_____
Others: _____		_____
_____		_____
_____		_____

	COMPETENCY STATEMENTS:	I would participate in professional development activities related to this competency.	I believe that other teacher educators I work with should participate.	COMMENTS:

COMPETENCY STATEMENTS:	(Circle One)	(Circle One)	COMMENTS:
6.0 RESEARCH AND DEVELOPMENT Competencies			
6.1 Develops up-to-date instructional materials and strategies which adequately support vocational programs when such materials are needed.	Yes No	Yes No	
6.2 Assists teachers to incorporate current educational research and development findings into instructional practices.	Yes No	Yes No	
6.3 Assists teachers in understanding how to apply/or and conduct specially funded programs/projects.			
6.4 Assists with state-wide curriculum development in own and related subject matter areas.	Yes No	Yes No	
6.5 Evaluates soundness of and interprets research findings in vocational education and related areas.	Yes No	Yes No	
6.6 Directs research and development projects, supported by private, state and/or federal funds.			
6.7 Conducts, directs and/or facilitates research studies.	Yes No	Yes No	

(Indicate your preference for each of the 10 delivery systems listed by using "1" to indicate your first preference, etc. Please write any ideas for delivery systems other than the ones listed here.)

DELIVERY SYSTEMS FOR PROFESSIONAL DEVELOPMENT ACTIVITIES RELATED TO TEACHER EDUCATOR COMPETENCIES:		YOUR RANKING: (1 = most preferred)
One-day workshops:		
by region		____
statewide		____
Two-day workshops:		
by region		____
statewide		____
One-week in-depth seminars		____
A few hours a week, several weeks in a row		____
Self-instructional learning packages		____
Individualized consultants:		
available on site		____
available by telephone		____
communicate through A.V. cassettes		____
Others: _____		____
_____		____
_____		____

Descriptive Information

University

_____ Arizona State University

_____ Northern Arizona University

_____ University of Arizona

Rank

_____ Instructor

_____ Assistant Professor

_____ Associate Professor

_____ Professor

_____ Other (specify) _____

Vocational Service Area

_____ 1. Agriculture

_____ 2. Business and Office

_____ 3. Distributive Education

_____ 4. Diversified Occupations

_____ 5. Guidance and Counseling

_____ 6. Health

_____ 7. Home Economics

_____ 8. Industrial Arts

_____ 9. Other (specify)_____

Tenure

_____ Yes

_____ No

Number of years as a Teacher Educator _____.

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