

AN ABSTRACT OF THE THESIS OF

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Title: A STUDY TO DEVELOP A COMPETENCY-BASED PROGRAM
FOR THE PREPARATION OF COMMUNITY
EDUCATION PERSONNEL

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The study had several objectives, the major one being the identification of the common professional competencies necessary for the development of a competency-based program for the preparation of Community Education personnel. Another objective was to determine the degree to which personnel from eleven (11) educational service areas are alike regarding the competencies required for work in their area. Service areas included:

1. Six areas providing educational services to adults:

Community Service Education	Adult Education
Continuing Education	Community Education
Extension Education	Community School Education

(Note: For the purposes of definition, the term Community Education is used to refer to all areas providing educational services to adults.)

2. Five seemingly unrelated service areas that currently have preparatory programs in existence:

Higher Education

Community College Education

Elementary Education

Secondary Education

Career Education

The final objective was to examine the availability of personnel preparatory programs in Community Education throughout the nation, with special emphasis on the Pacific Northwest Region.

An 87-item mail-administered questionnaire was developed by a jury panel of experts (one recognized representative from each of the 11 service areas). A randomly selected population of 220 respondents, 10 instructors and 10 administrators from each service area, were asked to indicate on a five-point Likert type scale the level of proficiency necessary for each competency in relation to their job. Data were analyzed by using analysis of variance and factor analytic techniques.

Selected Findings

The one-way analysis of variance revealed that no significant difference existed between the scores assigned by the respondents to 70 of the 87 competencies. Further analysis, utilizing the Least Significant Difference multiple comparisons test, indicated that Extension educators perceived a lower level of need for competency in

the area of Evaluation of Instruction. No other significant pattern could be identified.

An R-technique factor analysis was used to identify common professional competencies. A three factor solution extracted 56 competencies that had factor loadings of $\pm .45$ or higher. Two of the three factors were identified as follows:

1. Factor I was a general factor with three identifiable sub-factors. Sub-factor Ia was named Planning for Instruction. Sub-factor Ib was named Execution of Instruction. Evaluation of Instruction was the name given to Sub-factor Ib.
2. Factor II was also a general factor including administrative competencies. Sub-factor IIa was named Program Planning and Operation and Sub-factor IIb was given the name School/Community Relations.
3. Factor III contained only two competencies and was not considered identifiable.

Five of the ten highest mean-ranked competencies dealt with the individualization of instruction. The highest mean-ranked competency was, Devise a curriculum which recognizes a wide variety of learning styles and which responds to the individual's learning needs in ways which are acceptable to him. Build Displays was the competency receiving the lowest mean ranking.

A four factor Q solution revealed that all the respondents resemble one another to the degree that only one group, named Oregon Educators, could be identified.

It was determined that no Baccalaureate or Doctoral level study opportunities in Community Education were available in the Pacific

Northwest. It was further determined that a substantial need existed for the development of a Doctoral level program of preparation in the Community Education area.

Recommendations

It was recommended that:

1. A core program developing foundation competencies could be developed to meet the needs of all educational personnel.
2. That a single organizational title, Community Education, could logically be adopted by the six areas currently providing educational services to adults.
3. That an advanced degree program in Community Education be developed at a Northwest institution.
4. That residency requirements be modified but not eliminated, embracing the external or non-traditional degree concept and recognizing that learning may occur without schooling.
5. That further identification of core program competencies be made through additional research.
6. That the theory and practicum program at Oregon State University be evaluated as a potential vehicle for the core program.
7. That the fiscal and educational implications of modified residency and external study be further researched.
8. That the feasibility of the development of an interinstitutional program within the state of Oregon be examined.

A Study to Develop a Competency-Based Program
for the Preparation of Community
Education Personnel

by

Thomas Elvin Grigsby

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A STUDY TO DEVELOP A COMPETENCY-BASED PROGRAM FOR THE PREPARATION OF COMMUNITY EDUCATION PERSONNEL

I. INTRODUCTION

The question no longer exists as to whether or not the education of adults should be an integral part of public and private educational institutions. The problem now is how to organize and equip the education profession. . . for the inevitable task of providing acceptable and proven educational opportunities for each adult at any time in his life when the need occurs. . .

This recommendation to President Nixon from the 1973 report of the National Advisory Council on Adult Education is representative of the current concern for the creation and expansion of an effective system of life-long learning. A number of factors inhibit the development of such a system: (1) limited financial and manpower resources, (2) limited personnel preparatory activities, (3) research that might identify areas of adult program need, (4) the skills or competencies of the manpower that work in this field, and (5) the type and content of educational experiences that might best equip the profession for the task ahead. The problem of equipping the profession with the basic competencies necessary to meet the challenge provides the foundation of this study.

Background of the Problem

The educational system of this country has traditionally committed

the majority of its resources to the service of youth. Education for adults has been a secondary commitment even though many educators now believe that a person must continue to learn throughout his life if he is to cope with the changing nature of this computer-driven society.

This growing concern for life-long learning confronts an area of social practice, education for adults, lacking not only in manpower and research relative to the skills or competencies that manpower needs to function in its work, but also in the basic agreement as to the agency or title that could serve as the organizational locus for the development and coordination of this manpower.

Several service areas of education, such as elementary, secondary, vocational, higher, and community college education have generally been able to agree to a workable definition of their service area and its clientele as well as to the agency or organization responsible for the provision of services. In contrast to the general agreement that exists between these five service areas, the field of educational services for adults is served by a number of groups or organizations identified variously as adult education, community education, community service, continuing education, extension education, and community school education, each working largely independent of the other to serve the needs of adults. Communication and cooperation between agencies utilizing these six different organizational titles have been limited and in most areas are only a relatively recent development.

In Oregon, for example, it was not until March or 1970 that the public agencies involved in the provision of services to adults were directed to work together to share resources and to eliminate unnecessary duplication (22).

In the early formative years of educational services for adults (1900-1947) this lack of coordination was not a major problem. Programs were small and the investment of the public dollar in these programs was insignificant. However, the decades of the fifties and sixties have seen such a rapid expansion of programs and services for adults that the Adult Education Association now estimates that more adults are participating in some type of educational activity "than young people in the formal system" (74).

The 1960 Handbook of Adult Education describes the emerging problem of coordination and communication within the field as ". . . the blooming, buzzing confusion that is adult education in the United States" (46). The 1970 Handbook picks up this issue and suggests that the final answer to the question, who is the real or legitimate educator of adults, will only be answered when the professional skills or competencies of the educator are finally identified and accepted (74).

The above suggests the need for research in the field to identify these professional competencies and to develop personnel preparatory activities designed toward or related to these competency needs. An organized systematic instructional activity should begin to draw the

various segments of this area of social service together in a coordinated approach to the task of providing proven educational opportunities for each adult throughout his lifetime.

Statement of the Problem

The central problem of this study was to examine the performance skills or competencies of community (definition and rationale for the use of this term included in Definitions section) Education personnel and to determine if the competencies required were significantly different from those of personnel in other service areas of education.

The major objectives of the study were:

1. To review national, regional and local personnel preparatory programs for adult personnel to determine:
 - a. Institutions providing programs
 - b. Type of programs offered
2. To develop a research instrument capable of measuring competency significance in 11 service areas of education.
3. To determine if:
 - a. Competencies exist that are common to all education fields.
 - b. Competencies exist that are unique to community education personnel.
 - c. New personnel preparatory programs for community education personnel are necessary.
4. To utilize the findings to suggest a model for the preparation of community education personnel to be offered by the professional school at a degree granting institution.

Rationale of the Study

The early period of community education has not evidenced an urgent need for the development of professional preparatory programs. Generally adequate supplies of personnel have been prepared in some other field and have transferred or adjusted their competencies to accommodate their new responsibilities in community education.

Since 1955, this researcher has had the opportunity to work across the entire field of education, with the years since 1964 spent almost entirely in work in providing educational services to adults. This experience has led to the thesis that a transition is occurring in education that will require the development of a new source of specially trained manpower. The field of educational services for adults will experience a dramatic shift from a peripheral to a co-equal status in the educational spectrum currently committed principally to the education of the young. The impact of this shift will be felt in the colleges and universities who will be called upon to provide the research and programs to meet this anticipated need.

Support for this thesis has been identified and included in this section rather than in the Review of Literature section, since the rationale for the study is both clarified and strengthened by its inclusion at this point.

Since the education of the young has been the major educational

concern of this society, early activities in community education were a peripheral activity of institutions whose main business was something else. Clark, in his study of public adult education, identified five typical characteristics of this peripheral status:

1. It is a secondary administrative responsibility.
2. It does not enjoy a separate plant and capital.
3. It is especially subject to pressure of economy.
4. It must repeatedly be sold to the "powers that be."
5. It has a derivative budget (13).

Most community education programs have encountered some degree of difficulty with one or more of these factors.

However, this marginal status, seen by some as advantageous since it allowed greater flexibility in meeting need, has been greatly influenced by the explosion of enrollments of the 1960's. The emphasis on lifetime learning has created a shortage of manpower adequately trained to cope with the instructional and management needs of a program which has been described as the fastest growing program in this country.

Dr. Paul Miller, President of West Virginia University, speaking to the National Council on Adult Education, recognized this growing need and urged the development of "distinctively competent" faculties for the tasks of adult education (60). Malcolm Knowles supports this concept and argues further that a whole new area of research be launched into the field of andragogy, "the art and science of helping adults to learn." He feels that pedagogy, or the leading of children

along a path of knowledge, is improperly applied to the education of adults. He emphasizes that personnel new to work in adult education, or transferring from another field such as elementary or secondary education, must develop andragogical competence to deal adequately with the special learning needs of adults. ". . . It is the helping of adults to learn, for education is a continuing process, one which begins at birth and ends only with death" (47).

Brown, discussing the problems of staff development in adult education, picks up the distinction advanced by Knowles and states flatly that such programs ". . . should not be a copy of typical teacher training practices." In addition to the fact that the special learning needs of adults must be emphasized, Brown says that the effort is different because it required:

1. Cooperative effort of universities, SDE staff, and local administrators.
2. Extension activities offered both on and off campus.
3. Non-credit and credit workshops on job-related problems.
4. Shared responsibility for implementation by university staff, State Department of Education staff, local administrators, and teachers (9).

Thomas Bailey adds a contemporaneous element to the appeal for a "different" effort. He calls for ". . . a new breed of program. It must deal with today's problems, with today's tools. . . ." (4).

The principal problem presented in the development of a different timely program for the preparation of community education personnel is found in the characteristics of the program and its

personnel. Community Education programs:

1. Are widely scattered, geographically.
2. May be offered both day and night.
3. May be offered year round.
4. Are offered by a multitude of agencies.

The characteristics of community education personnel are widely varied; however, Liveright has made some general conclusions regarding the nature of this group:

1. Few of these have participated in an organized program of graduate study in adult education or hold advanced degrees therein.
2. Most come from other occupations and have moved into adult education after other kinds of employment.
3. Many look upon adult education as a stepping stone rather than as a permanent career.
4. During the past ten years many have moved from adult education to other posts in the educational or community field--many to other administrative posts in education.
5. Their conceptions of the ideal adult educator and of the competencies required for the professional adult educator vary widely.
6. Most of them are action rather than research oriented, and few have made research contributions to the field of adult education.
7. Many are concerned about their status and position as adult educators and do not as yet feel completely identified with this field, or if they do, they feel themselves "second-rate citizens" in the academic hierarchy.
8. There is as yet no clearly defined set of values or code of ethics subscribed to by all of them (53).

Liveright describes the group as practitioners rather than a group of mature professionals. He says that:

The fact that the practitioners of adult education--never at the apex of the pyramid--vary so in the organizations and institutions they represent, their tasks and responsibilities, background, prior education and training, and the fact that they hold such different images of the field, has special implications for a graduate program (53).

Burton Kreitlow, reacting to the absence of agreement regarding the parameters of the field, says that research into this matter must be initiated. "Unless a body of knowledge in adult education is soon developed by vigorous research in the field, it may be concluded that there is no such field" (48).

Liveright summarizes the status of the development of adult education by, "although adult education cannot now be classified as a profession, it clearly meets the criteria of a profession in transition or an emerging profession" (53).

William McGlothlin has developed a framework that he used to study the patterns of professional education for the professions. His initial comment concludes that the purpose of all programs is to provide an adequate supply of adequately trained personnel. In addition, he finds that there are five common objectives or characteristics of all programs of professional study. His framework describes each graduate as having:

1. Competencies to practice his profession, with sufficient knowledge and skill to satisfy its requirements.

2. Social understanding with sufficient depth to place his practice in the context of the society which supports it, and capacity for leadership in public affairs.
3. Personality characteristics which make possible effective practice.
4. Zest for continued study which will steadily increase knowledge, and such reading, investigating and research skills as are necessary to translate zest into action.
5. Enough competence in conducting or interpreting research to enable him to add to human knowledge through either discovery or the application of new truths (57).

The implications that such broad commonalities exist across the various personnel preparatory activities in education give rise to a larger question:

Is there any significant difference in the skills or competencies required for work in the multitude of service areas and positions found in the broad field of education?

The implications of such a question are far-reaching at a time of dwindling enrollments in many areas of education, declining financial resources to meet the demands of the many ongoing programs, and at a time when there is a great clamor for specialty programs for the preparation of community education personnel throughout the United States. These implications have begun to reach into the Northwestern section of the country, which has experienced a dramatic growth in programs for adults in the last 10 years. The Portland, Oregon metropolitan area is a typical example of the growing trend

toward adult participation that has been seen throughout the remainder of the United States.

In 1969, a number of individuals, representing public and private agencies serving adults, met and organized a consortium designed to coordinate many of the public and private services provided for adults. This organization, the Portland Metropolitan Area Adult Education Council, made a number of significant efforts to improve communication with and service to adults. Among their efforts were:

1. The development of a drop-in information/counseling center in the major shopping center of the city.
2. The development of a toll-free telephone information center where information regarding any type of educational activity (full or part time) was available.
3. The use of mobile units to take information throughout the multi-county (five Oregon counties and one southwest Washington county) area.
4. The development of a course review system for the allocation of new classes or programs.

Their most recent efforts have been to research the need in their area for personnel preparatory programs in community education.

The results of their studies indicate that:

1. A large number of currently employed Portland area

personnel are interested in a program leading to a doctorate in Education.

2. The nature of the responsibilities requires that program offerings be made available in area since most individuals are unable to take extended leaves of absence.
3. Programs should be competency based with recognition given to existing competency levels of personnel.
4. The need must be met quickly.
5. The "non-traditional" degree approach, being utilized in other sections of the country (1,000 mile campus in California as an example) is attractive to the interests of the group (68).

The need for personnel development, evidenced by the PMAAC, has been recognized throughout the Northwestern section of the country. Another committee made up of representatives of the Oregon Board of Education, the University of Oregon, the Cooperative Extension Service, the Division of Continuing Education and Oregon State University, has met regularly to consider this growing call for services. A significant situation identified by this committee has been the fact that no college or university in the Northwest offers a degree in Community Education beyond the Masters. This committee has noted that the "non-traditional degree" concept has been suggested as one possible alternative or method of meeting these personnel needs and that an inter-institutional program utilizing present applicable offerings at institutions within the state system of higher education might have both curricular and financial strengths. The conclusion

of this committee was that research was necessary to ". . . study and prepare a plan. . . " for the development of a graduate study program in Adult Education (1).

This study, the identification of the competencies of community education personnel, is limited to the development of one element of the information necessary to develop and implement a study program for the preparation of community education personnel.

Definition of Terms

"When I use a word, " Humpty Dumpty said. . . "It means just what I choose it to mean--neither more nor less" (11).

Educational services for adults are offered by a number of agencies in the country, and are described by a large number of organizational titles--community service, continuing education, adult education, extension education--to name but a few. Unlike elementary or secondary education, no agreement exists concerning the appropriate title to be given this program. Gundar Myron, an advocate of "community service, " seems to include in his definition every service that could possibly be offered by an institution:

Credit offerings as well as noncredit offerings, day classes as well as evening, on-campus classes as well as off-campus courses or activities, programs for youths as well as adults (65).

Charles Munroe heightens this conflict of definition by suggesting that the terms "Adult Education and Continuing Education are

synonymous and interchangeable terms, " and goes further to suggest a definition nearly identical to that advanced by Myron (62).

A relatively new term finding a growing acceptance in the field is "community education. " The commitment of educators to concentrate their efforts on service to the "community" and the fulfillment of its needs, provides a broad, highly flexible orientation. Van Voorhees emphasizes this as he says:

Community education is the community involving process through which individuals' needs are identified and met regardless of the areas of concern or the organization providing this program (82).

For purposes of definition and continuity in this paper, the term Community Education shall be used to refer to all types of educational services for adults.

Definitions are provided of terms used frequently throughout the study in order that they may be understood within the text:

1. A. N. O. V. A. - Analysis of variance - Technique used to test whether several samples have come from identical populations.
2. Competency - The specific ability or skill needed to perform a specific duty or function.
3. Factor Analysis - A statistical method consisting of
 - a. The ordering of competencies according to the responses of the study population.
 - b. The ordering of respondents according to their responses to the competencies.

4. Service Area - An area of educational service designed to provide a specific function to a specific population. The following 11 service areas were examined in this study:
- a. Higher Education - That educational activity offered by four-year colleges and universities designed to prepare students for baccalaureate and higher degrees.
 - b. Community College Education - That educational activity offered by two-year institutions designed to provide terminal activities as well as activities transferrable to higher education institutions.
 - c. Elementary Education - That educational activity offered in grades 1-8 designed to provide preparation for high school (in some systems grades 7 and 8 are included in secondary).
 - d. Secondary Education - That educational activity offered in grades 9-12 designed to prepare students for post-high school education or for entrance into society.
 - e. Career Education - That educational activity offered throughout the educational spectrum designed primarily to prepare students for the occupational career of their lives.

The following service areas all have as their primary responsibility the meeting of the educational needs of the community not served by the existing formal system. These are the major organizational labels used by institutions in Oregon to describe these services.

Adult Education	Community School Education
Extension Education	Community Education
Continuing Education	Community Services

The Community Education title and definition presented earlier shall be used to represent each of these service areas interchangeably.

5. External Degrees - Non-traditional degree study programs offered by colleges and universities. Programs may include campus-based-community-based or a combination of activities designed to provide easy access to educational services. May involve the award of credit for a variety of non-classroom or non-traditional experiences.
6. Andragogy - The art and science of teaching adults.
7. Pedagogy - The art and science of teaching children.

II. REVIEW OF LITERATURE

The review of literature related to the topic of this study was conducted in three areas: The Lifelong Learning Concept, Personnel Preparatory Programs in Community Education, and Competency-based Studies in Education.

Lifelong Learning

I place my faith for a great future and an effective democracy in Education--Education from the cradle to the grave--for all of life.

Dr. J. W. Fanning
1972

Most Americans would agree that education is important. Since the principle of free educational opportunity was established in Massachusetts in the 17th century, the public has accepted and supported our educational system. The importance of education to the function of a democratic society in America was stated early by Thomas Jefferson when he said, "If a nation expects to be free and ignorant it expects that which never was and never will be."

There are several reasons why education is of even greater importance today. Our technologically oriented society demands more highly educated workers. Venn (83) cites "the shift from manual to cognitive work" as a problem of significance to education and

supports this statement with a United States Census Bureau report projecting that 81.2% of the work force will require some degree of special training by 1975 (79).

Another factor supporting the need for education is research that indicates that education is a major factor in the economic status of the individual. A 1971 United States Census figure showed that the average annual income of college graduates in 1970 was an increase of more than 53% over the average income of high school graduates (79).

The increase in the life expectancy of the population as well as the projected increase in the amount of leisure time that the population can anticipate further heighten the need for education. Bischoff has stated the average life expectancy in 1900 was about 45 in contrast to the expectation today that 80% of the population will live to be more than 60 years (6). Researchers from the Department of Health, Education, and Welfare predict that Americans will have nearly two months more of leisure time each year by the year 2000 (79).

The impact of these changing forces on the job of the educator is receiving growing recognition. Increasingly, professional publications echo the following warning:

The great compelling condition of our work today is the fact that change, change that is swift and sweeping beyond the limits of our wildest dreams, produces a strange new world with overnight rapidity. This acceleration in human affairs creates an impact of immeasurable significance on the forces of education (77).

The traditional task of education has been to prepare the individual for this changing nature of society. The American system has always been based on the premise that this task could be completed by educating the young. This youth-orientation is evident in the definition of education advanced by the American College Testing in 1971 when they said that education is "a formalized activity engaged in during the first 18-25 years of life" (35). The idea that education is the exclusive privilege of the young is being challenged throughout education.

Goldhammer takes up this challenge with the statement that no citizen can ever claim to have completed his education (31). A group of prominent educators meeting at the Galaxy Conference in 1969 criticized the existing system stating that the conventional system could not meet the growing challenges of the society. "The American people desperately need a system of lifelong learning," was the opening declaration of the Galaxy Conference (29). The level of importance they placed on the development of this system was further stated by:

. . . Life-long learning must be an all persuasive influence through which those who are responsible for today's cultural decisions and choices--the adults of our nation--control the present and create the future we want" (29).

This strong statement of support for the lifelong learning concept has been repeated with growing frequency since 1969. Mosely (63) calls for "participation in education throughout our lives." Klevin insists that "Continuous learning is necessary" if people are to function in this changing society (44). The Carnegie Commission feels

that "Society would gain if work and study were mixed throughout a lifetime. . . ." (10). Clark seeks to further define the concept by:

. . . learning is a lifelong process that is as basic to man as eating and sleeping. We must realize that learning begins and terminates with life itself (14).

A strong case for a move away from the exclusive youth orientation of our system is put forth by Rasmussen:

With more extensive adult education it may be possible to reduce the pressure on the supplies of education to adolescents and young adults. . . . There is everywhere a tendency to overload these supplies, because they are considered the baggage for a lifetime. . . (69).

Rasmussen extends his point further by visualizing supply stations available along the entire lifelong journey (69).

Lord and Miller, reviewing current Adult Education literature have found a strong thread running in support of the lifelong education concept. They state that "The myth that education is the domain of the young is one that rapidly is being discounted. " They call for action on the part of educators to meet the adult needs: "The object is to create a new type of educational enterprise" (54).

Rauch, writing in support of the concept, states,

. . . that to maintain oneself as a mature adult one must continuously learn from birth to death, and that 'education', even if it has degrees as stations along the way, has no point when one truthfully can say he has completed it or is now and forevermore an educated man (70).

The Commission on Non-traditional Study has brought forward a statement which seems to best summarize the position of the many

writers on this concept:

Full opportunity to learn is not for the young alone; it is for everyone, in any walk of life, for whatever purposes are beneficial. It is not reserved to a single part of life; it is a recurrent opportunity. It can update a skill or it can broaden the possibilities of a career whether old or new. It can add intellectual zeal and cultural enrichment. It is not the single opportunity of a lifetime; it is the total opportunity for a lifetime (15).

The 1973 National Advisory Council Report to the President, quoted in the Introductory section, states that the question has been answered as to the need for a system of lifelong learning and the task now is to equip the profession to provide for those lifelong needs. The following sections will review the work being done to develop and implement this system.

Personnel Preparation in Community Education

"Adult Education is young as a profession" (51) states the Reports Commission of Professors of Adult Education in their introductory remarks concerning the state of Adult Education as a field of University study. This young profession which offered its first graduate program at Columbia in 1929 or about 44 years ago, is a relative infant when compared with other professional areas in education such as public school teaching and social work, both having professional preparatory programs for more than 100 years.

Webster Cotton describes the modern era of the development of

education services for adults as divided into three periods of growth:

- First Period (1919-1929) - Education for adults became defined as a distinct field of social practice.
- Second Period (1930-1946) - Period of more definition of the field and the development of appropriate subject matter.
- Third Period (1947-present)- Characterized by a movement toward professionalism, including the expansion of personnel preparatory programs (18).

The development of personnel preparatory programs in this field can be examined utilizing Cotton's historical framework.

The first period (1919-1929) saw the development of numerous professional associations, the most significant being The American Association of Adult Education, organized in 1926. Concurrent with this was the development of the first department of Adult Education in the National Education Association which was the Immigrant Education department. In 1924 it became the Department of Adult Education and its charge was broadened to include social reform, reconstruction and progress of the general adult population.

During this same period the first personnel preparatory programs in Adult Education were initiated. In 1917 Columbia University offered a course entitled "Educational Problems of the Adult Immigrant," while other vocationally oriented offerings stimulated by the passage of the Smith-Hughes Act of 1917 were initiated. The term "Adult

Education" first appeared in a course title at Columbia in 1922 (46), and the first graduate offerings were initiated at Columbia in 1929.

The second period (1930-1946) was characterized by a call for more specificity of definition and description (18). Columbia University, responding to this call and to a strong evidence of faculty interest in the area of adult learning, established in 1930 a department of adult education. The first two graduates with Ph. D. 's came in 1935 (46).

In 1931 Ohio State created a department of Adult Education with the University of Chicago and New York University following soon after in 1935. University of Michigan, University of Wisconsin, Florida State and Boston University as well as Cornell, Syracuse, University of California at Los Angeles and the University of California all launched study programs in Adult Education during this period, although not all were graduate or degree oriented offerings.

Indiana and Buffalo universities began Adult Education studies programs in 1947, the first year of the Third Period (1947-present). In 1949 Cornell launched a graduate study program in the field with Syracuse and Michigan universities following in 1951 and 1955 respectively. By 1962, 15 universities had active programs leading to the Masters and Doctorate Degree in Adult Education.

Several writers recognized the need for expanded graduate programs in Adult Education during the early 1960's. The Reports

Committee of the Commission of Professors of Adult Education summarized their position in this statement: "Too few universities are providing opportunities for graduate study in adult education" (51).

This situation has eased somewhat in the last ten years with 59 colleges and universities currently providing one or more graduate courses in Adult Education (67). However, the third International Conference of Adult Education received a report stating that although the United States had significantly expanded graduate training opportunities in Adult Education that: ". . . Adult Education in the United States needs more trained career-oriented personnel. . . . There remains a significant and varied number of gaps and shortages in Adult Education personnel. "

The impact of existing personnel preparatory programs in Adult Education is evident in the annual report of the AEA/USA of doctorates earned in this country. The most recent report of doctorates awarded in 1972 indicated that 130 individuals had completed programs during that year, a figure representing a decrease of 15 from the previous year, and that 1,243 degrees had been awarded since 1935 (41).

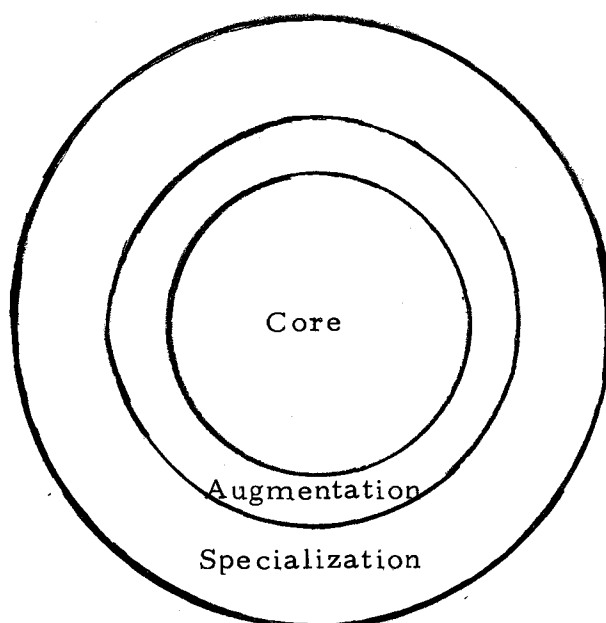
Connellan notes this personnel preparatory activity yet questions the goals and content of these programs, suggesting that little research effort exists that specifically outlines the relevant competencies of personnel in the field (17).

Verner is more specific, stating:

The graduate program in adult education has not received the attention from research that one might expect. . . . Consequently, there are unresolved questions about the content provided graduate programs and whether or not graduate education and adult education provides the kind of learning experiences that lead ultimately to improvement in the field (86).

Verner takes his point further by noting that existing programs for the preparation of personnel are assumed to be appropriate since the field absorbs all the graduates of these programs (86).

A number of models for graduate study in Community Education have been developed. Paul Essert proposed in 1960 his conception of the appropriate model which was the product of his studies of the needs of personnel in the field and at Columbia University. His model consists of three concentric circles made up of core, augmentation and specialization courses:



The core is made up of five one-year courses integrated by seminars with field study and research:

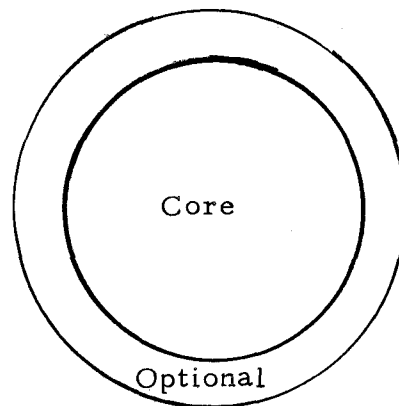
1. Foundations and Principles of Adult Education.
2. Structural Organization of Adult Education in Relation to Social Institutions and Cultural Change.
3. Adult Psychology and Adult Learning.
4. Program Design and Educational Processes for Adults.
5. Integrative Seminar in Adult Education.

The augmentation section of the program would represent about one-fourth of the students' course work and would add breadth and depth to the core program. Psychology, sociology, anthropology are typical courses from this area.

The specialization portion is designed to allow the student to specialize on specific career goals with the requirement that each course be oriented toward work with adults.

The final element of Essert's model was the requirement that the student plan a personal program of self-directed continuing education (23).

Malcolm Knowles has put forth a model which he calls "Role Theory." One role is seen as an "education" for which certain societal and professional expectations exist. Knowles' model consists of two concentric circles made up of a core program of common professional competencies and an optional ring of activities:



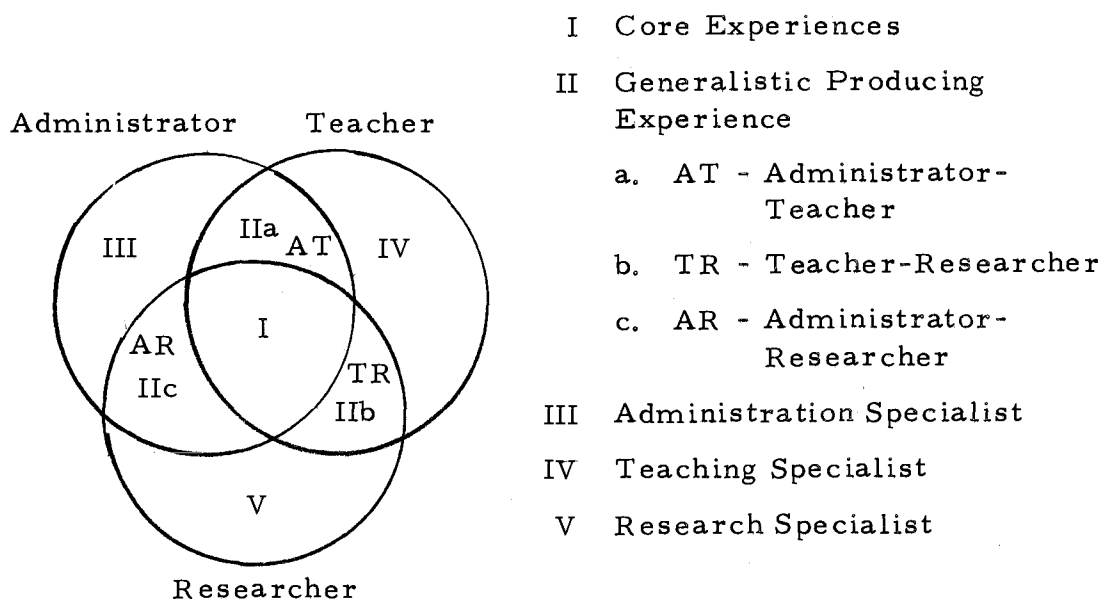
The basis for program planning would be answers to these questions:

1. What are the functions required in the roles of each kind of educational specialist?
2. What are the competencies required to perform each of the above functions?
3. What are the cognitive, affective, and psychomotor learnings that make up each competency?
4. What are the objectives in terms of behavioral change, which will affect these learnings?
5. What program of learning activities will achieve these objectives according to a design that provides for continuity, sequence, and integration of the learnings?

The program constructed around the answers to these questions would be competency-based. The student would move from the role of a receiver of subject matter to a responsible seeker or inquirer of competency achievement (45).

Veri proposed a graduate program based on the idea that there are three roles that a student might prepare himself for--administrator, teacher, researcher. Veri postulated that each role was made up of many common experiences regardless of the position held. The

study program was visually represented by three circles:



The core (area I) would be made up of learning experiences which establish the theoretical and conceptual bases of Adult Education.

Area II is to provide a general acquaintance of other areas of specialization.

Areas III, IV and V are designed for specialization while providing some cross-development of competencies in each area (84).

The literature related to personnel programs in Community Education is growing; however, the majority of the materials identified are related to graduate level activities. Miller (58) in his study of institutions offering personnel preparatory programs in the field, found little evident concern for undergraduate activities. Smith (73) found some reference to undergraduate activities, but only in the very narrow field of Adult Basic Education. Jensen et al., studying the

field as an area of university study, seemed to imply that this field is only emerging and that we will see in the future the development of extensive pre-service activities at the baccalaureate level (51).

A recent study of the institutions in the United States that offer degrees in Community Education found only limited availability of baccalaureate level programs. Specific details relative to the availability of study opportunities in Community Education are reported in Chapter IV (p. 49).

It is apparent that the current emphasis in Community Education is on the development of graduate level personnel development activities. The development of the emerging concept of the "non-traditional" or "external" degree program reviewed in the following section of this chapter may influence the development of undergraduate activities in this field.

The literature related to personnel preparation in Community Education has an increased reference to "non-traditional or external" degree programs. The PMAAC study mentioned earlier indicates that the majority of their respondents feel that the development of the "non-traditional" or "external" approach is vital to the success of personnel preparatory activities in the Portland, Oregon metropolitan area (68).

Fred Harclerod, President of the American College Testing program, has stated that the demand for change that was so evident in

the educational history of the 1960's, has led to an increasing demand for innovative, non-traditional approaches to higher education in the United States (35). The Chancellor of the California State Universities and Colleges has described these non-traditional, "external" degree programs as an outward reaching concept available to qualified students of all ages who find it difficult or impossible to be a part of the regular campus scene. The Chancellor questions the effectiveness of the older "traditional" approach to education and states:

. . . We have, however, realized more slowly than society as a whole that these institutionalized modes and trappings are working less well all the time, that we are being outpaced on many fronts and that our current systems, as I stated more than a year ago, 'are on the edge of failure'. . . (21).

The growing inadequacy of this traditional system is characterized by the American College Testing as discriminatory against students whose work or family responsibilities prevent them from attending regular classes on the campus. The "campus residency" requirements of the traditional system results in human potential going to waste (35).

Kleis and Butcher found in their studies of "external" type study programs that a widespread interest and need existed for this type activity and that between 25 and 30 million adults were involved. They noted that these activities were conducted by churches, community organizations, business and industry, the armed forces, the public schools, as well as in colleges and universities, which served fewer

than 25% of the participants. They suggested further that if this off-campus unconventional approach were utilized or available in degree programs, that the enrollments in the colleges and universities would increase dramatically (43).

Robert Finch, commenting on the concept of the "external" program, has recognized that there are inherent dangers in a system where persons proceed from pre-school through college without ever being exposed to other "real world" experiences. He calls for "variations in this system" that provide challenge for everyone it touches wherever they are, whatever they might be doing (26).

The call for a "new way" is not entirely contemporaneous; however, the response in higher education was not seen until the early 1950's when the Brooklyn College initiated a special degree in the liberal arts. From 1959 to 1970 many institutions launched similar programs. The University of Oklahoma, which offered a Bachelor of Liberal Studies degree in 1961, has indicated that this program has shown such popularity and widespread interest that they received requests for information about the program from more than 100 colleges and universities during 1971 alone (35).

In 1960 the Center for the Study of Liberal Education for Adults was established in 1960 to assist with the development of special degree programs. Their first conference was attended by 10 colleges and universities who heard reports from faculty members involved in

the University of Oklahoma program. As evidence of the growth of interest in this concept, a similar conference in 1970 was attended by representatives of more than 85 colleges and universities (35).

Liveright (52) has studied the characteristics of degree programs, traditional as well as non-traditional, and has broken these programs down according to four variables:

1. The amount of credit which must be earned through regular on-campus classes.
2. The total residence requirements.
3. The extent to which special methods and media are utilized.
4. The extent to which the credit hour system is replaced by other means of measuring and reporting progress.

Applying these variables he sees degree programs as falling into six categories:

1. Degree programs with set number of credit hours earned in regular classes (this includes most United States Baccalaureate programs).
2. Degree programs with special goals and content, part-time and evening classes, but with the regular number of required hours in classes (including programs such as NYU associate in Arts and the John Hopkins Master of Liberal Arts).
3. Degree programs with some flexibility concerning when, where and how the prescribed program may be taken and with some

flexibility in residency (includes some evening college programs, work-study and certain correspondence and TV programs).

4. Degree programs which provide for credit by experience, proficiency exams and off-campus programs. Degree still based on accumulation of a set number of credit hours (includes programs at Brooklyn and Queens College).
5. Degree programs in which the objectives, curriculum content and methodology have been changed to meet student needs and interests (includes programs at Oklahoma, Syracuse, South Florida, Brigham Young University, as well as others).
6. Degree programs based entirely upon credit by examination (includes University of London and South Africa and New York University).

The majority of the programs classified as "special" degree programs that were identified in Liveright's study were designed to provide a broad liberal education rather than to develop a professional or vocational competence. However, the latest programs that have been developed have had a higher degree of professional orientation. Nova and Walden Universities are two examples of new programs where the total institution was created with the sole purpose of providing professional degrees through external degree activities (52).

Twenty colleges and universities came together in 1970 to create a consortium called the University Without Walls. This group created

a non-traditional degree program that offers the ultimate in flexibility. Participating institutions, both large and small, public and private, inner-city and rural, predominantly black and predominantly white, two year and four year, secular and non-secular, are located throughout the United States--from the West to the East, from the deep South to just below the Canadian border (see Appendix A, p. 94 for participating institutions). Each institution develops its own program; however there are some common elements:

1. A broad age-range of students is included.
2. Students, faculty and administrators jointly design and develop the institutional program.
3. Special seminars are offered to students and faculty entering programs for the first time.
4. Flexible time-units are worked out between the student and his instructor/advisor.
5. A variety of learning settings (classroom, non-classroom, field seminars, internships) are utilized.
6. Adjunct faculty are used extensively in the program (specialists in the field having practical expertise).
7. Effort is made to concentrate on affective as well as cognitive learning.
8. Students may work toward any goal, regardless of its orientation.

The University Without Walls program now serves several thousand students and interest among institutions has grown to the extent that 40 new American institutions and several international institutions are negotiating to join the U. W. W. (15).

Although the "non-traditional" concept is growing in favor throughout education, some individuals are still skeptical of the value of such activity. Dr. Lewis Mayhew states that the current interest in these programs could well be "a fad, fraud or romantic fantasy" (56). He believes that these programs are based on a number of untested yet fundamental assumptions:

1. There is an assumption that there is a demand (as contrasted with need) for such programs. Mayhew states the University of Pittsburgh nearly went bankrupt when it assumed that a need for a year round tri-mester system equaled the demand.
2. There is an assumption that a blend of programmed materials, independent study, some television activities with a little face-to-face contact and evaluation produced equivalent educational gains at equal or less cost to those of traditional programs.
3. There is an assumption that a need exists to increase the number of educated people in this country.
4. There is an assumption that a credential conscious society will accept an "external" degree as generally equal to a "traditional" degree.

5. There is an assumption that legislators will support a moderately expensive program that has so little tangible visibility in a local community.
6. There is an assumption that such a program will increase access to education for disadvantaged individuals.

Mayhew questions these assumptions and states that he feels that the future of such programs is in doubt. However, he suggests that even though he is quite skeptical, he does believe that external degree programs should be explored, and adopted where appropriate. He believes that the call for "non-traditional" educational activities may bring about ". . . a general loosening of requirements and regulations in the mainstream" programs which he sees as beneficial (56).

Dr. S. I. Hayakawa, arguing for change in this traditional or mainstream system of higher education, has commented, ". . . The fact that we are modeling ourselves on 18th and 19th century institutions has been bugging me for a long time." He calls for the development of a system flexible enough to allow a student to study his way around the world, checking in with educational institutions along the way for reinforcement and evaluation (37).

The Chancellor of the State University of New York, Ernest Boyer, is a strong advocate of the "non-traditional" external degree program. He summarizes well the position of the growing number of advocates of the external degree concept:

I am convinced that, in nearly every way, the conditions which produced the classic 'fortress' approach to higher learning have vanished and that a new kind of collegiate model must emerge, one that reflects the social conditions of our time (8).

The final section of this review of literature will examine research activities related to competency-based personnel preparatory progress.

Competency Based Programs in Education

The Adult Education Association, in their effort to examine Adult Education as a field of university study, commented on the "State of the Art" as it related to the development of competent professional personnel:

Too few of the agencies that operate programs for the education of adults, have clearly defined the responsibilities of their personnel, established criteria for the selection of personnel with the competencies to carry out these responsibilities and provided adequate training for continuous development of these competencies (51).

Psychologists, studying the behavior of man and the higher animals have advanced the theory that one significant factor in the motivation of an individual is the "need for competence." This theory suggests that the higher animal, man, enjoys producing change in the environment, especially when he can predict and control that change. Harlow, in his examinations of this theory found that the higher animals, even in infancy, demonstrate a need to manipulate

objects as well as abstractions, with motivation waning when a situation has been explored to the point that it no longer presents new possibilities. The importance of this activity of exploration or competency search to the intellectual development of the individual is found to be critical in Harlow's studies (36).

The Commission on the Reorganization of Secondary Education published in 1918 the Cardinal Principles of Secondary Education which can be viewed as an early effort to capitalize on this "need for competence" factor and as a foundation for present-day competency-based curricula. The seven aims of this report set forth, rather crudely, categories or competency areas of life activity. The direction of this committee was that the scope of the curriculum be defined or developed within these seven areas and that the success of the program be determined by the level of performance achieved by each student in each area (16).

During the same year, Bobbitt published what was probably the first full length book on curriculum theory. In the first volume Bobbitt outlined the job of the curriculum developer: "Our profession is confronted with the huge practical task of defining innumerable specific objectives; and then of determining the countless pupil experiences that must be induced by way of bringing children to attain these objectives" (7).

This emphasis on the identification of clearcut objectives was not common in the educational writings of that time. However, the idea that educational objectives must be specific and scientifically drawn from life activities and determined in advance of all curricular planning was strongly infused into the educational literature of the early 1930's as evidenced by the "Review of Education Research" published in 1931, which devoted its entire issue to the subject (39).

During this same period the "Behaviorist" school of psychological thought found it appropriate to adopt Bridgman's concept of physical definition by the use of operations to measure a construct rather than the use of dictionary synonyms. The behaviorists called these "point-at-able" behaviors which evidenced the presence of a given construct (39).

Tyler and Smith were influenced by this "point-at-able" concept in their initial work describing the eight-year study. Their book "Appraising Recording Student Progress" published in 1942 stated three assumptions regarding the importance of educational objectives:

1. It was assumed that education is a process which seeks to change the behavior patterns of human beings.
2. The kinds of changes in behavior patterns in human beings which the school seeks to bring about are its educational objectives.
3. The educational program is appraised by finding out how far the objectives of the programs are actually being realized (72).

These assumptions became known in the 1950's as the "Tyler Rationale" and were strongly supported by French in later curriculum development work (28).

Considerable research has been conducted throughout education that has contributed to the growing significance of the competency-based approach to curriculum development. The field of Vocational Education has been a leader in this research, as evidenced by numerous studies by Courtney and Halfin (20), Gianini (30), Gunderson (33), Martin (55), and others. Cottrell made a significant contribution to this area of research by identifying a basic list of competencies that have served as the foundation skills for numerous studies (19).

Florida State researchers have identified 317 competencies that they believe "undergird a professional teaching practice" for elementary and secondary teachers (28). Lessinger has built upon this research to identify the skills or competencies that educational managers need to serve as instructional leaders in elementary and secondary education (49).

The community education field has only recently seen competency studies become a part of curricular research efforts. One of the earliest studies was conducted by Chamberlain who examined the competencies of working adult educators and experienced graduate students. His study produced a list of 45 rank ordered competencies which he suggested should become the basis for graduate study (12).

The evaluation of the effectiveness of graduate study programs in adult education was the concern of Aker, who developed an evaluation tool containing 18 categories and 223 competencies. Aker felt that adequately trained graduates of personnel preparatory programs in Adult Education should have no difficulty demonstrating competence in these areas and suggested further that some type of certification be given to these who passed the exam (2).

Booth and Verner demonstrated that the adult education instructor must not only have competencies in subject matter and the ability to gain the acceptance of the instructional group, but must also have a distinctly developed instructional competency (85).

Subsequent adult-related competency studies have been conducted throughout the country (17, 59, 73). All studies have demonstrated that competencies of adult education personnel can be identified and that these competencies can be used as the basis for curriculum development. The studies reviewed, conducted in Florida, Oregon, Utah, Michigan, and California, have demonstrated no significant regional difference in the competencies utilized by adult education personnel. It would appear that the competencies necessary for successful work in adult education in Oregon are similar to those of personnel throughout the country and the competencies developed in a personnel preparatory program in Oregon would be applicable to work in the field throughout the country.

Summary

The review of literature was conducted in three areas:

1. The lifelong learning concept.
2. Personnel preparatory programs in Community Education.
3. Competency-based studies in Education.

The most recent literature relative to the lifelong learning concept supports the thesis that a transition is occurring in American education from the almost exclusive youth orientation to one of learning throughout a lifetime.

The potential impact of this transition on the preparation of manpower specifically trained to deal with the special needs of this new group of learners is significant. Yet, only limited responses can be identified relative to new Community Education related research and manpower development activities.

The characteristics of Community Education programs and personnel require that alternative study opportunities be provided that deal with specific learning needs at or near the location of the students' field base. The external degree concept and the competency or performance-based curriculum concept appear to be ideally suited to the special needs of potential Community Education students. However, only limited use is being made of these concepts in the manpower development activities of the field.

III. DESIGN OF THE STUDY

This study was an investigation of professional education competencies of personnel from 11 service areas of Education. The purpose of the study was to determine if competencies exist that were unique to performance as a community education staff member.

Selection of the Population

The sample for this study was randomly selected from personnel working in 11 service areas of education in the state of Oregon. Twenty individuals (10 administrators and 10 instructors) currently employed in each of 11 areas participated in the research project:

<u>Service Area</u>	<u>Instructors</u>	<u>Administrators</u>	<u>Total</u>
Adult Education	10	10	20
Extension Education	10	10	20
Community Education	10	10	20
Continuing Education	10	10	20
Community Service	10	10	20
Community School	10	10	20
Elementary Education	10	10	20
Secondary Education	10	10	20
Career Education	10	10	20
Community College	10	10	20
Higher Education	<u>10</u>	<u>10</u>	<u>20</u>
Total	110	110	220

The analysis of data generated by similar studies by Halfin and Courtney (34), Lindahl (50), Miller (58), Smith (73) as well as the 19-state, seven-occupational area study by Cotrell (19), suggested that no significant regional difference existed among the perceived competency levels of personnel in education. Therefore, it was assumed a valid approach to confine the selection of the population to the state of Oregon. A table of random numbers was used to select names from personnel lists provided by the Oregon Board of Education, The Oregon Community College Association, The Northwest Center for Community Education, The State System of Higher Education, The Division of Continuing Education, The Oregon State Extension Service and The Oregon Education Association.

Preparation of the Instrument

The instrument used in this study was a survey-type questionnaire designed for administration by mail. The questionnaire contained 87 professional education competencies combined with a five-point Likert-type scale which enabled the respondent to judgmentally identify the level of proficiency for each competency.

The development of the instrument was accomplished in three stages:

1. Related literature on professional competencies was reviewed

to identify similar research problems and related methodological studies.

2. An instrument developed by Gunderson (33), Lindahl (50) and Martin (55), and an instrument utilized by Spaziani () were identified. The process utilized in the developmental process of the initial questionnaire and the process utilized by Spaziani to modify it for use with secondary instructors seemed satisfactory for basic utilization in this study.
3. An instrument was created and submitted to a jury panel of experts made up of one recognized leader in each service area (see Appendix B, p. 95). The panel utilized a modified Delphi procedure to modify the questionnaire to create an instrument that might be used by both instructors and administrators from the 11 service areas represented. The panel made a substantial revision of the original questionnaire, revising 38 items, rejecting 13 items, and adding 3 new items.
4. A revised questionnaire was submitted to five graduate students at Oregon State University and five from Oregon College of Education to field check the clarity of administration instructions (see Appendix C, p. 96).

The Dependent Variable

The dependent variable in this study was a score assigned by

respondents that indicated the level of proficiency that they felt necessary for each of 87 professional competencies. Personnel, both instructors and administrators, from 11 service areas of education were asked to evaluate the importance of each competency in relation to their job. Each of the 87 competencies was assigned a score based on the following Likert-type scale with response values ranging from a low of 1.0 to a high of 5.0.

1. My work as an educator requires no proficiency with this competency.
2. My work as an educator requires slight proficiency with this competency.
3. My work as an educator requires moderate proficiency with this competency.
4. My work as an educator requires considerable proficiency with this competency.
5. My work as an educator requires complete proficiency with this competency.

The Statistical Design

The central problem of this study was to identify the professional educational competencies needed by Community Education personnel. The general design of the study included the following:

1. The population for the study consisted of randomly selected

personnel from 11 service areas of education in Oregon. (The service areas included six areas currently providing educational services for adults and five areas which have existing personnel preparatory programs.) The sample of 198 individuals (9 instructors and 9 administrators from each of 11 service areas) provided research data by completing an 87-item mail-administered questionnaire.

2. Respondents were asked to react to each of 87 competencies in the questionnaire by recording the level of proficiency required to function in their jobs. The responses were reported on a five-point Likert-type scale, with response values ranging from a low of 1.0 to a high of 5.0.

3. A one-way ~~classification~~ analysis of variance was used to test the hypothesis that no significant difference existed between and among the perceptions of personnel from the 11 service areas.

The test statistic for the hypothesis was the F statistic with the .01 significance being used for the assessment of differences.

The Least Significant Difference (L. S. D.) test was used to determine where specific differences existed when the hypothesis was rejected.

4. The data were further analyzed through the use of two factor analytic modes--the R modes and the Q modes. The two techniques provided the following information.

- R Mode - This factor analytic mode ordered the competencies according to the respondents included in the study. The relationship of every competency with every other competency was examined and a clustering of competencies was provided. A matrix containing 87 intercorrelated competencies was generated from the 198 respondents. The 87 competencies were clustered in a way that best reported the largest percentage of common variance.
- Q Mode - The Q mode ordered the respondents according to the competencies included for the study. A 198 respondent intercorrelation matrix based upon data furnished on the 87 competencies was generated. This provided a measure of commonality among respondents and indicated the degree that respondents resembled each other in their perception of the importance of competencies to their job.

The data collected by submitting an 87-item mail-administered questionnaire to 198 respondents (18 respondents from each of 11 service areas) were checked, coded and transferred to data cards for computer analysis.

IV. PRESENTATION OF THE FINDINGS

The analysis of the data collected for the study is presented in four sections. The first section outlines the availability on the national, regional and state levels of personnel preparation programs in Community Education. Section II presents the results of the analysis of variance between the competency means of the 198 respondents from the 11 service areas. The third section outlines the results of the R mode factor analysis of 87 competencies. The final section presents the Q mode factor analysis of 198 respondents.

Personnel Preparatory Programs in Community Education

The initial objective of this study was to review the national, regional and state level personnel preparatory programs in Community Education.

A review of the Community Education manpower development activities of American colleges and universities revealed the uncoordinated, struggling condition that seems to best characterize this emerging field of social practice.

Many attempts have been made in the past to examine this manpower development system and to establish a communication or coordination link within the field. Fasler (25) looked at the training

of leaders and teachers in the field as early as 1936, with Houle (40) following in 1941 with the first of several subsequent studies of the opportunities for professional study in Adult Education.

Hendrickson and Spence (38), Ingham et al. (42), Scates (71), Svenson (76) and others have studied the problem more recently; however, each of the studies was limited in some way by the criteria utilized to select the study population. A recent example of the criteria problem is found in a report made in 1973 by the Commission of Professors of Adult Education. This study purports to represent all the institutions offering Community Education personnel development in the United States and Canada, even though the population of the research was limited to members of the National Association for Public Continuing and Adult Education (67).

In addition to the limitations of the studies mentioned above, the previous reports dealt almost exclusively with graduate level activities, providing little or no information about undergraduate study opportunities.

At the time that the research into the initial objective of this study was begun, a report by Griffith and Cloutier (32) became available for review. This report, which explores the availability of personnel preparatory activities in every college and university in America, is complete through September, 1973 and represents the

most detailed and exhaustive study of this subject that has been identified.

Since the report was timely and since the research techniques utilized were acceptable, the findings of the Griffith-Cloutier report were utilized to satisfy the initial objective of this study, augmented by information available concerning programs in the Pacific Northwest.

Griffith and Cloutier made a number of basic decisions in their study to avoid the narrowness of earlier studies:

1. The population would not be restricted to Adult Education Association members.
2. The population would not be restricted to graduate programs.
3. The population would not be restricted to programs using "Adult Education" as a formal name.
4. The population would include all institutions of Higher Education that confer Baccalaureate, Graduate and Professional degrees.

The initial mailing of the study went to the presidents of all the degree granting institutions in this country. One thousand nine hundred and thirty-six institutions were asked if they offered or planned to offer by September, 1973 a degree program in this area. Of the total population, 1,804 or 93% replied.

Four hundred and four institutions replied that they provided one or more programs for adult educators. Because of the misinterpretation of the original wording, a second mailing was made to differentiate

between continuing education classes for adults and degree programs for adult educators.

The terminology or definitions utilized in the second mailing outlined more clearly the area of study that Griffith'Cloutier were concerned with. They used the term "Degree programs for training adult educators" to mean only college or university sequence of systematic learning experiences sanctioned by a college or university by an academic title and designated by the term "Adult Education" or any equivalent term or any sequence such as those terminated by a certificate of advanced studies or a diploma.

Eighty-five institutions replied that they had or planned to have such programs in operation, although only 57 currently had operational offerings. It was also identified that some institutions provided more than one type of degree, hence the number of degrees offered exceeds the number of institutions involved. This research was the first to report the existence of undergraduate personnel preparation, even though only nine such programs were found to be operating. The following is a profile of the types of degrees that are currently being offered:

<u>Type of Degree</u>	<u>No. of Institutions Offering</u>
Bachelor of Science	9
Master of Arts	32
Master of Science	25
Master of Education	17

<u>Type of Degree</u>	<u>No. of Institutions Offering</u>
Advanced Master of Arts	1
Doctor of Education	28
Doctor of Philosophy	26
<u>Special Degrees</u>	
Advanced Graduate Specialist	1
Certificate of Advanced Graduate Study	1
Certificate of Advanced Study	3
Certificate of Administration of Adult Education Program	1
Certificate of Specialization	1
Professional Diploma	1
Education Specialist	6
Specialist Certificate	1

These researchers found no significant movement toward the adoption of a single organizational title for these professional activities.

Debate rages on over the correct definition of 'Adult Education' with some guardians of the faith clinging tenaciously to this term while other equally dedicated individuals seek to promote the use of a variety of other terms such as continuing education, extension education, community education, and community services (33).

The following information portrays the lack of unity so far as an organizational title is concerned. Even though Adult Education was the name used by the majority of the programs, it was apparent that the new or developing programs are being offered with "community" or a combination of titles such as adult and extension or community and adult included in the title.

Organizational Titles of Staff Preparatory Programs

<u>Title of Program</u>	<u>No. Using Title</u>
Adult Education	28
Adult & Community College Education	1
Adult & Community Education	1
Adult & Continuing Education	6
Adult & Extension Education	1
Adult & Higher Education	1
Adult & Vocational Education	2
Adult & Basic Continuing Education	1
Adult Education Administration	3
Adult Religious Education	1
Continuing Education	4
Community Development	3
Extension Administration	2
Extension Education	6
Community Education	2
Educational Services	1
Human Resource Development	1

The report of the colleges and universities offering programs, the name of their program and the type of degree offered (reported in Appendix D, p. 103) indicates that only four institutions provide personnel preparatory activities in the Northwest area of the United States:

1. Oregon State University - Masters in Adult Education
2. Washington State University - Masters in Extension Education
3. Western Washington State University - Masters in Adult Education
- Administration
4. Seattle University - Masters in Adult Education
- Administration

The University of British Columbia also offers degrees in this area, although they are outside of the geographical area of this study.

Alaska, Hawaii, Idaho, Montana, and Nevada currently have no degree programs available for the preparation of Community Education personnel.

Although some courses are available to undergraduates in the four Northwest graduate programs, no degrees are available at the undergraduate level.

In addition to the four degree programs indicated above, a limited number of courses in Community Education were identified in other northwestern schools.

The current offerings in Community Education or related fields were reviewed at each of the colleges and universities in Washington and Oregon. The University of Oregon was the only institution identified (other than the four with degree programs) that offered courses that could be related specifically to the field of educational services for adults. Related courses or areas included:

1. Survey of Adult Education - one 3-hour course offered as an overview of the field.
2. Gerontology - several courses available related to this field.
3. Community service - several related courses offered as a part of the degree in social work.

Portland State University offers a unique program leading to a Doctorate in Urban Studies that seems to be related directly to the competencies of educators that deal with school/community relations as well as program planning and evaluation. Because of the proximity of this program to a major source of potential students, it is important that Portland State University be involved in any future program development.

The initial objective of the dissertation was to review the availability on the national, regional and state level of personnel preparatory programs in Community Education. The information collected regarding this objective is briefly summarized in this section.

1. Eighty-five institutions, colleges and/or universities currently offer some type of degree program designed to prepare community education personnel.
2. Nine institutions provide a baccalaureate degree in this field.
3. The organizational title most commonly used for these programs was "Adult Education" (28 programs); however, newer or emerging programs seem to be broadening their title to include more functions, such as Community Education.
4. Four Institutions in the Pacific Northwest offer degrees in this area, including Seattle University, Western Washington State College, Washington State University and Oregon State University. The University of British Columbia in Canada offers degrees in

this field, although they are outside the geographical area of this study.

5. No undergraduate or doctorate degrees are available in the Northwest (except at University of British Columbia which offers a doctorate in the field).
6. Alsaka, Hawaii, Idaho, Montana and Nevada have no degree programs.
7. The University of Oregon and Portland State University offer study programs that might be complementary to a degree for Community Education personnel.

Analysis of Variance Procedures

The null hypothesis, that there were no significant differences among the mean scores of the personnel for the 11 service areas of education related to the 87 competencies, was tested, utilizing a one-way classification analysis of variance. Eighty-seven individual hypotheses were tested, one for each competency.

The test statistic for each hypothesis was the F statistic with the .01 level of significance being used to assess for differences. The computed value of F was less than the critical value of 2.41 at the .01 level of significance for 70 competencies. Hence, the null hypothesis was retained for 70 competencies and rejected for 17

competencies. The results of the analysis of variance are presented in Appendix E.

The analysis of variance test does not compare individual means with other means. Therefore, on the 17 items where a significant difference was indicated, an a priori Least Significant Differences test was utilized to determine where the significant differences existed. The results of the L. S. D. test are shown in Table 1.

For the a priori testing, mean #2, Extension Educators, was selected as the comparative mean for the L. S. D. test, since it appeared to represent the lowest mean score in each rejected item. The results of the test indicated that on three items, items 19, 35 and 52, there was a significantly different response made by Extension Educators as compared to all the other service areas. In contrast, there was no significant difference in the mean scores of item 41. The only pattern that seemed apparent in this analysis was the Extension Educators did not consider competencies related to student evaluation as critical to the performance of their responsibilities as compared with the other educators of the study.

Factor Analysis Techniques

Factor analysis was used to identify the statistical relationships for the competencies included in the study. This technique clustered

Table 1. Results of Multiple Comparisons - L. S. D. Test at .01 Level of Significance.

Item no.	Critical L. S. D. Value	Multiple Comparisons									
		M11=M2	M10=M2	M9=M2	M8=M2	M7=M2	M6=M2	M5=M2	M4=M2	M3=M2	M1=M2
13	1.018	Retain	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject
19	0.944	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject
21	0.986	Reject	Reject	Reject	Reject	Reject	Retain	Retain	Reject	Retain	Retain
25	0.897	Retain	Reject	Retain	Reject	Reject	Retain	Retain	Retain	Reject	Reject
35	1.012	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject
38	1.068	Retain	Retain	Retain	Reject	Reject	Retain	Retain	Reject	Retain	Reject
41	1.475	Retain	Retain	Retain	Retain	Retain	Retain	Retain	Retain	Retain	Retain
44	0.971	Retain	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Retain	Reject
52	1.109	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject
55	1.031	Retain	Reject	Retain	Reject	Reject	Reject	Reject	Reject	Retain	Retain
63	1.022	Reject	Reject	Reject	Reject	Reject	Retain	Retain	Reject	Retain	Reject
69	1.076	Reject	Reject	Retain	Reject	Retain	Reject	Retain	Reject	Reject	Retain
71	0.952	Retain	Reject	Retain	Reject	Retain	Retain	Retain	Retain	Retain	Retain
72	0.990	Reject	Reject	Reject	Reject	Reject	Retain	Retain	Reject	Retain	Reject
73	0.828	Retain	Retain	Retain	Reject	Reject	Retain	Retain	Retain	Retain	Retain
76	0.867	Reject	Reject	Reject	Reject	Reject	Retain	Retain	Reject	Retain	Reject
29	1.008	Retain	Retain	Retain	Retain	Reject	Retain	Retain	Reject	Reject	Retain

competencies to best account for all the variability present in the respondents' ratings of each competency.

Selection of a Factor Loading Value

Fruchter (29) recommended the decision on the factor loading level to consider as a cutoff be based on the consideration of the following formula:

Loading of .2 or less	- insignificant
Loading of .2 to .3	- low
Loading of .3 to .5	- moderate
Loading of .5 to .7	- high
Loading of .7 or above	- very high

For the present study competencies with factor loadings of $\pm .45$ and higher were recorded as being clustered within a factor.

R Mode Factor Analysis

The data of this study were analyzed for 3, 4, 5 and 12 factor solutions. The three-factor solution accounted for 53 competencies with factor loadings of $\pm .45$ or higher. The four-factor solution accounted for 52 competencies with factor loadings of $\pm .45$ or higher. The five-factor solution accounted for 56 competencies of $\pm .45$ or higher. The 12-factor solution accounted for 49 competencies with factor loadings of $\pm .45$ or higher.

Factors were judgmentally assigned, and are intended to represent the general nature of the competencies loaded under each factor. The generated factors and their subfactors are shown below.

Factor I - Instruction. Factor I, the largest factor, accounted for 36.41% of the common variance. Three subfactors were identified within Factor I.

Subfactor Ia, Planning, included 13 competencies with a factor loading of $\pm .45$ or higher. Table 2 presents the competencies clustered under this subfactor.

Subfactor Ib, Execution, included 8 competencies with a factor loading of $\pm .45$ or higher. Table 3 presents the competencies clustered under this factor.

Subfactor Ic, Evaluation, included 8 competencies with a factor loading of $\pm .45$ or higher. Table 4 presents the competencies clustered under this subfactor.

Factor I also contained 4 spurious competencies which are included in Table 4. A total of 33 competencies were found to be clustered under Factor I.

Factor II - Administration. Twenty-three competencies with factor loadings of $\pm .45$ or higher were clustered under Factor II. Two distinct subfactors were identified under Factor II.

Subfactor IIa, Program Planning and Operation, included 12 competencies. Table 5 presents the competencies clustered under this factor.

Table 2. Factor I - Instruction. Sub-factor Ia - Planning.

Item no.	Competency	Factor Loading	Mean Score
3	Identify formalized criteria in the selection of textbooks	.47	3.38
20	Select instructional materials for the learning experiences	.46	4.06
19	Use student record-keeping procedures	.54	3.61
8	Identify the various stages in the development or maturation of the individual	.46	3.76
24	Relate the instructional units to the course of study	.54	3.93
38	Maintain anecdotal records as a part of the student's cumulative folder	.54	3.17
45	Select appropriate audio-visual materials for instructional purposes	.45	3.82
53	Describe similarities and differences between two or more educational philosophies	.46	3.45
68	Develop audio-visual materials for instructional purposes	.49	3.48
71	Provide specific information to students concerning the nature and requirements of occupations	.49	3.75
73	Use the information contained in professional journals for the improvement of instruction	.54	3.85
76	Use the guidance and counseling services which are available to you	.46	3.74
83	Identify the analyze language patterns in the classroom and the larger community that have implications for teaching and learning	.56	3.39

Table 3. Factor I - Instruction. Sub-factor Ib - Execution.

Item no.	Competency	Factor Loading	Mean Score
1	Give a classroom demonstration that is meaningful to the individual student	.57	4.08
2	Use questions during the classroom presentations to aid student learning	.49	3.99
36	Make a classroom lesson meaningful to the individual student	.50	4.07
49	Utilize prescribed classroom organizational plans	.52	3.32
52	Develop daily instructional units	.62	3.40
62	Summarize the classroom lesson	.70	3.58
65	Maintain attention during classroom presentations	.63	3.59
70	Relate current events to classroom instruction	.57	3.59

Table 4. Factor I - Instruction. Sub-factor Ic - Evaluation.

Item no.	Competency	Factor Loading	Mean Score
13	Select available standardized tests to measure achievement	.47	3.27
21	Construct objective tests to measure achievement	.63	3.70
35	Use the results of standardized tests for instructional purposes	.58	3.28
44	Assess the difficulty, validity and reliability of teacher made tests	.64	3.57
55	Interpret the norming data associated with standardized tests	.50	3.22
63	Write performance tests to measure achievement	.67	3.60
72	Identify specific learning disabilities	.67	3.50
81	Involve the student in self-evaluation	.52	3.87
<u>Spurious Competencies</u>			
9	Devise a curriculum which recognizes a wide variety of learning styles and which responds to individual learner needs in ways which are acceptable to him	.41	4.18
10	Adjust the instructional program to accommodate the various stages in the development or maturation of the individual	.41	4.00
40	Develop appropriate course objectives	.41	4.10
86	Utilize behavior modification techniques	.41	3.52

Table 5. Factor II - Administration, Sub-factor IIa - Program Planning and Operation.

Item no.	Competency	Factor Loading	Mean Score
4	Use the innovative provisions of Federal legislation	.48	3.28
12	Develop budget-keeping procedures	.50	3.58
31	Outline details of budget for the area of responsibility of the educator	.61	3.61
32	Identify funding sources for service area budget	.63	3.43
37	Plan necessary steps to gain funding of budgeted items	.59	3.62
46	Participate in the preparation and implementation of guidelines and procedures for the selection of new staff personnel	.49	3.74
48	Evaluate application materials of applicants for employment	.61	3.54
51	Identify sources of income supporting area of responsibility	.67	3.47
56	Participate in the preparation and implementation of guidelines and procedures for staff salary and welfare negotiations	.58	3.31
58	Identify the services of resource persons from state and local agencies responsible for education	.49	3.79
67	Supervise the work of other staff personnel	.53	3.72
79	Participate in the preparation of educational specifications for new educational facilities	.50	3.68
84	Participate in the development of a long range plan for operation, including enrollment projections, personnel fiscal and facility needs	.58	3.71

Subfactor IIb, School/Community Relations, included 8 competencies. Table 6 presents the competencies clustered under this factor.

Factor II also contained 3 spurious competencies that are included in the items presented in Table 6.

Although the three-factor solution was selected as the best solution for the purposes of this research, it is important to mention that several of the competencies that did not have factor loadings that were high enough to be included under a given factor did have high mean scores. These competencies should not be overlooked as curriculum developers begin to design programs for the preparation of Community Education personnel. Competencies involved in this situation are those numbered 5, 11, 18, 23, 27, 33, 34, 42, 64, 80 and 82. Each of these competencies had mean scores of 3.75 or greater.

The cumulative percentage of the common variance increased as the number of factors increased. Table 7 lists the common variance accounted for in the 12-factor solution (also included are the common variances found in the 3, 4 and 5-factor solutions).

The computer was used to generate a group of random numbers equal to the total number of real data responses included in the study. The random data were then analyzed using the R technique with a six-factor solution. This process was utilized to remove any question that the real and random data might be the same. The real data were shown

Table 6. Factor II - Administration. Sub-factor IIb - School/Community Relations.

Item no.	Competency	Factor Loading	Mean Score
26	Organize local advisory committees	.62	3.77
41	Conduct community surveys for the purposes of improving instruction	.56	3.58
57	Interpret the educational program to the community	.52	3.89
59	Organize studies of community characteristics utilizing appropriate survey instruments, sampling techniques and information sources	.56	3.37
60	Use the services of the local education advisory committees	.59	3.72
61	Take responsibility for leadership in civic community activities	.50	3.40
75	Evaluate publications as communication devices to intended publics	.49	3.51
<u>Spurious Competencies</u>			
50	Provide special educational activities for the handicapped	.41	3.32
54	Maintain the necessary report forms required by state agencies	.42	3.53
85	Identify and analyze language patterns in the classroom and the larger community that have implications for teaching and learning	.40	3.74

Table 7. Percentage of Common Variance for the R Mode Analysis.

Factor	Percentage	Cumulative Percentage
1	36.41181	36.41
2	22.17702	58.58
3	8.34971	66.93
4	7.05704	73.99
5	5.29413	79.28
6	4.65733	83.94
7	3.59507	87.54
8	3.36476	90.90
9	3.05413	93.96
10	2.76266	96.72
11	2.62717	99.35
12	2.41595	101.76

as very reliable from Factor I through Factor II. Figure 1 illustrates the comparison of the real and randomized data.

The most meaningful factor analytic solution of the four imposed on the data was the three-factor solution.

The three-factor solution is presented in tables which provide the named factors, factor loadings, means, and standard deviations of those competencies with factor loadings of $\pm .45$ but moderately high factor loadings are also included where their identification aided in the interpretation and naming of factors.

Table 8 summarizes the ten highest and the ten lowest mean ranked competencies. The four highest means and five out of the highest ten are competencies dealing with the individualization of instruction. The standard deviation of these ten highest mean items indicated a relatively high level of agreement among respondents. A lower level of agreement was indicated in the standard deviations of the lowest mean scores.

Results of the Q Technique Factor Analysis

A Q technique factor analysis program was used to examine the relationship of each respondent with every other respondent and to order them according to competencies. The Q technique has been described as an ideal method for finding the degree to which two people resemble one another with regard to the tests in question.

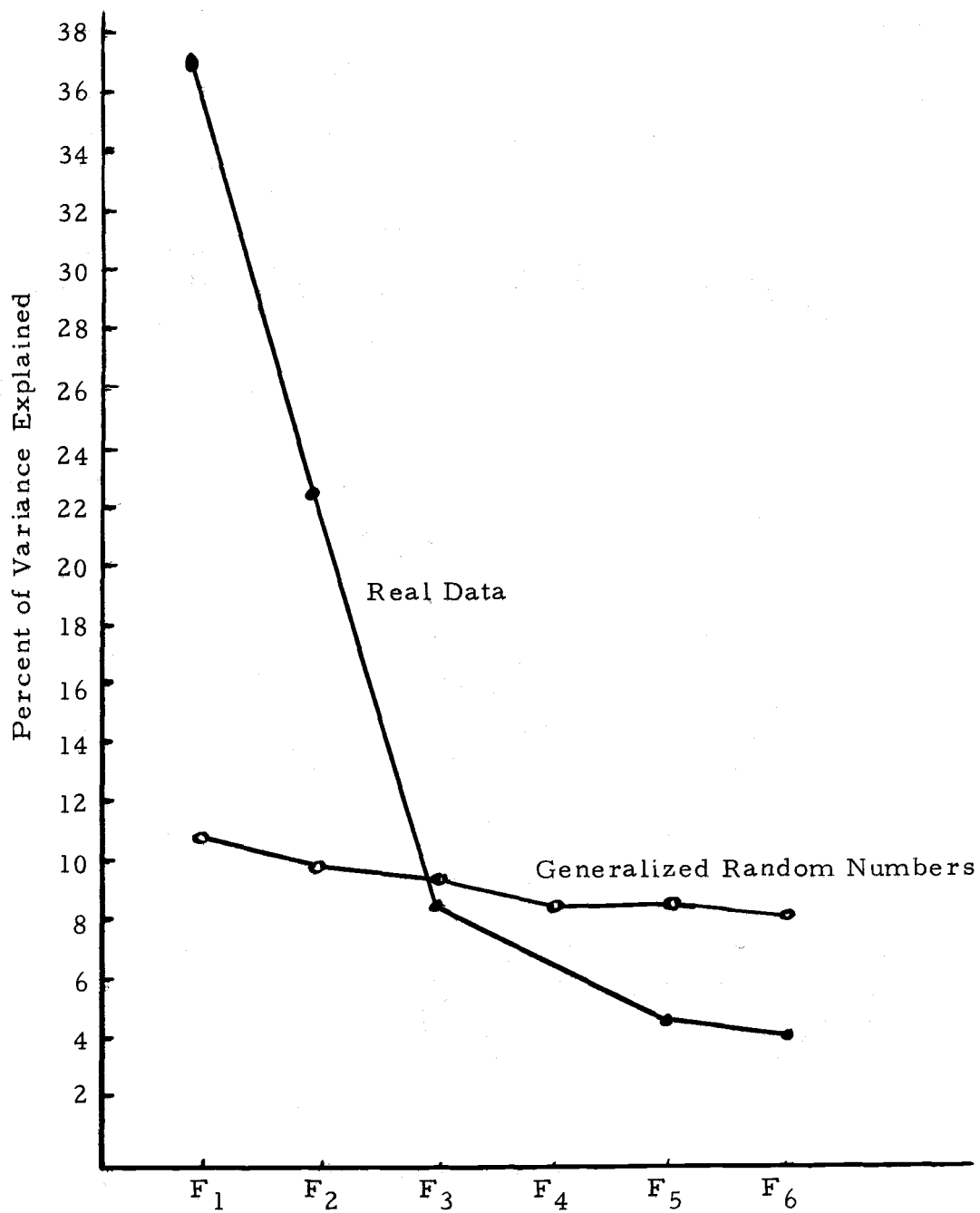


Figure 1. Comparison of Real Data Versus Random Data.

Table 8. Highest and Lowest Mean Competency Scores.

Item no.	Competency	Rank	Mean	Standard Deviation	Clustered in Factor
<u>Highest Mean Scores</u>					
9	Devise a curriculum which recognizes a wide variety of learning styles and which responds to the individual learning needs in ways which are acceptable to him	1	4.18	0.91	1 c
40	Develop appropriate course objectives	2	4.10	0.91	1 c
1	Give a classroom demonstration that is meaningful to the student	3	4.08	1.03	1 c
36	Make a classroom lesson meaningful to the individual student	4	4.07	1.13	1
20	Select instructional materials for the learning experiences	5	4.06	0.92	1
17	Conduct periodic up-dating of the course of study in regard with recent educational, social and economic trends	6	4.04	0.87	
66	Utilize group leadership skills	7	4.03	0.92	
10	Adjust the instructional program to accommodate the various stages in the development and maturation of the individual	8	4.00	1.01	1
2	Use questions during the classroom presentations to aid student learning	9	3.99	1.03	1
18	Recognize the scope of the educator's professional competence as a counselor and select and refer to appropriate specialists those problems beyond the qualified level of competence	10	3.31	1.25	2

(Continued on next page)

Table 8. (Continued)

Item no.	Competency	Rank	Mean	Standard Deviation	Clustered in Factor
<u>Lowest Mean Scores</u>					
56	Participate in the preparation and implementation of guidelines and procedures for staff welfare negotiations	78	3.31	1.25	2
4	Use the innovative provisions of Federal Education Legislation	79.5	3.28	1.29	2
35	Use the results of standardized tests for instructional purposes	79.5	3.28	1.25	1
78	Write articles for news releases	81	3.28	1.22	2
15	Secure appropriate on-the-job training positions for students	82	3.277	1.30	2
13	Select available standardized tests to measure achievement	83	3.272	1.26	1
77	Use programmed learning materials	84	3.25	1.11	
54	Maintain the necessary report forms required by state agencies	85	3.22	1.28	
38	Maintain anecdotal records as a part of the student's cumulative folder	86	3.17	1.29	1
29	Build displays	87	3.15	1.22	

The criterion for the selection of the cutoff value for the factor solution was the same as was utilized with the R technique. A four-factor solution was used to analyze the data.

Factor I accounted for 91.88% of the common variance. One hundred ninety-one respondents were clustered under Factor I, with factor loadings ranging from .90 to .99. Seven respondents clustered under Factor I with factor loadings of .85 to .89. No loadings of any consequence were found on the remaining factors.

Factor I was named Oregon Educational Personnel. The remaining factors were considered uninterpretable. Results of Q mode analysis are presented in Appendix F (p. 112).

V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The central purpose of this study was to develop a competency-based program for the preparation of Community Education personnel. The major objectives, procedures and findings of the study are summarized in the following section.

Objective I. To determine the extent to which manpower development activities in Community Education are available across the United States.

Related literature including national program surveys and 1973-1974 catalogs from all colleges and universities in Washington and Oregon were examined. The findings of this activity revealed that:

1. The eastern and mid-western sections of the country have reasonable access to masters and doctoral level study programs.
2. Baccalaureate level programs are practically non-existent with only nine programs currently in operation.
3. Four institutions in Washington and Oregon offer master level programs in this area (Washington State University, Seattle University, Western Washington State College, and Oregon State University).
4. No baccalaureate or doctoral level study opportunities exist in

the seven states in the Northwest (Alaska, Hawaii, Oregon, Washington, Idaho, and Montana).

5. Portland State University and the University of Oregon provide potentially related study programs.

Objective II. To develop a research instrument capable of measuring competency significance across 11 service areas of education:

1. Adult Education
2. Extension Education
3. Community Education
4. Continuing Education
5. Community Service Education
6. Community School Education
7. Elementary Education
8. Secondary Education
9. Career Education
10. Community College Education
11. Higher Education

The six organizational titles used by agencies in Oregon that provide educational services for adults as well as five other service areas that currently have personnel preparation programs were chosen for this study. A 99-item questionnaire (this original questionnaire was the product of several previous competency studies in other service areas) was submitted to a jury panel of experts made up of one recognized representative from each of these 11 service areas. The panel used a modified Delphi technique to create an 87-item questionnaire designed to be administered by mail. The final instrument was field tested before submission to the 220 members of the study population.

Objective III. To identify:

1. Competencies common to personnel from the 11 service areas of education.
2. Competencies unique to Community Education personnel.
3. The need for new programs in the Pacific Northwest for the preparation of Community Education personnel.

The responses of the study population were analyzed statistically utilizing a one-way analysis of variance F statistic, and a factor analysis procedure incorporating Q and R mode analysis. The results of these tests indicated:

1. That no significant differences in the responses could be identified in 70 of the 87 items on the questionnaire. A Least Significant Differences test was utilized on the 17 rejected items to determine where the differences existed among the service areas of the study. It was determined that Extension Educators reacted differently from the other areas relative to evaluation of instruction competencies. No other pattern could be identified.
2. That no significant differences existed between and among the service areas of the study. No competencies unique to Community Education were identified.
3. The R mode factor analysis identified two significant factors (instruction and administration) that have special implications to curriculum development.

4. The Q mode analysis identified only one factor which clustered 91.8% of the respondents. This factor was named Oregon Educators since no other single descriptive term seemed appropriate.

Objective IV. To utilize the findings of the study to recommend an organizational framework for a new Community Education personnel development program.

The results of the review of literature and the statistical analyses applied to the data produced a number of implications for future curriculum development in Community Education personnel preparation.

1. That a basic foundational competency-based program can be developed that will not only service the needs of Community Education personnel, but also those of the many other service areas across the field of education.
2. That any new program should provide options for specialization as well as for the development of generalists.
3. That the concept of lifelong learning may soon be so universally accepted as to require the development of a substantially greater supply of trained manpower.
4. That the "non-traditional" or external degree concept must be incorporated into existing and future manpower development

activities in order to more adequately serve the needs of a rapidly changing society.

Conclusions

The study of the need for and the content of additional personnel preparatory programs in Community Education, as well as a professional career as an educator spanning 18 years at all levels of educational activities, has led to the following conclusions.

1. That all educational services for adults should be consolidated under a single title. The conclusion of this research was that there is no significant difference in the roles and responsibilities of the personnel of the many variously titled agencies providing educational services for adults in Oregon.
2. That the organizational titles used to describe these services be Community Education. The acceptance of any single title by everyone within this field would probably be hastened if such a title were to include a number of terms such as Continuing Community Extension Adult School Educational Services. The practicality of such a title is obviously in question. Therefore it is suggested that the broadest, least restrictive term be selected and paired with "Education" to title this program. It is suggested that a major responsibility of personnel in this field is to recognize that many different types of communities exist

within a given geographical area. Racial, social, political, religious and many other types of communities exist, each with its unique variety of special needs and its peculiar mix of clientele. Such communities are not always made up solely of adults yet the entire "community" still requires attention. This term enjoys increased recognition across the nation as evidenced by the incorporation of this title in the Lifelong Learning Act of 1974. The Oregon Legislature recognized the importance of this "community" concept as early as 1961 when they mandated that all the two-year post-high school institutions in the state include the term in their names.

3. That a basic core program be developed that would provide instruction in the foundation competencies found to be universally important to personnel from all service areas of education. A significant conclusion of this study was that the personnel from all the service areas examined use essentially the same type and level of professional competencies. A competency-based core program would be economically sound from the standpoint of the utilization of fiscal and manpower resources, as well as socially and educationally stimulating, since personnel from all areas of education would share common educational experiences. All students would participate in these foundational experiences, until the identified level of competence was reached, regardless

of whether they were undergraduate or graduate students. An open entry/open exit policy would be utilized to accommodate varying levels of competency at entry. Field-based as well as campus-based instruction would be offered, to provide experiences in both theory and practice, and to accommodate the needs of persons who are unable to attend a full-time campus-based program.

4. That an advanced degree or professional certificate program in Community Education be developed. The Pacific Northwest is currently without any degree study opportunities in this field beyond the Masters degree. Over 150 individuals in the Portland, Oregon area alone have indicated their interest in a Doctoral study program. The Doctor of Arts in Teaching has been suggested as a possible solution or alternative; however, this research indicates that the Doctorate in Education would be the primary choice of this group.
5. That any new degree program in this field incorporate the "non-traditional" or "external" degree concept. The traditional campus-based programs, constructed around a rigid framework of residency requirements, cannot meet the needs of the personnel in the field. The various characteristics of the positions in this field, such as the 12-month operation, split shift work assignments, the widely dispersed locations of the work centers,

as well as the increased costs of education and living which make extended periods of residency increasingly beyond the means of all educators, suggest that the critical moment has arrived for the implementation of this concept. College and university educators have long resisted the economic fact of life that they must redesign their product to stay abreast of the demands of a changing work environment and to remain fiscally sound and organizationally intact. The folly of the widely held and cherished concept that "education" and "schooling" are terms that can and must be used interchangeably demands the immediate review of all educators. Educators must recognize that not only can valid "education" occur away from the "school" or campus, but that these learning experiences, taking place in "non-traditional," previously unacceptable learning environments, have potentially important fiscal implications relative to the long-term survival of our educational establishments.

6. That all degree candidates be required to spend a minimum period away from their work assignment and on the campus of the degree granting institution. Advocates of the total "external" degree experience ignore the importance of new thoughts, ideas and learning environments to the development of the individual. The student who never leaves his home environment must share his learning experiences with colleagues with whom he works

each day, always risking the possibility that the supervisor or other dominant person will discount or interpret new concepts in such a manner that no new growth takes place.

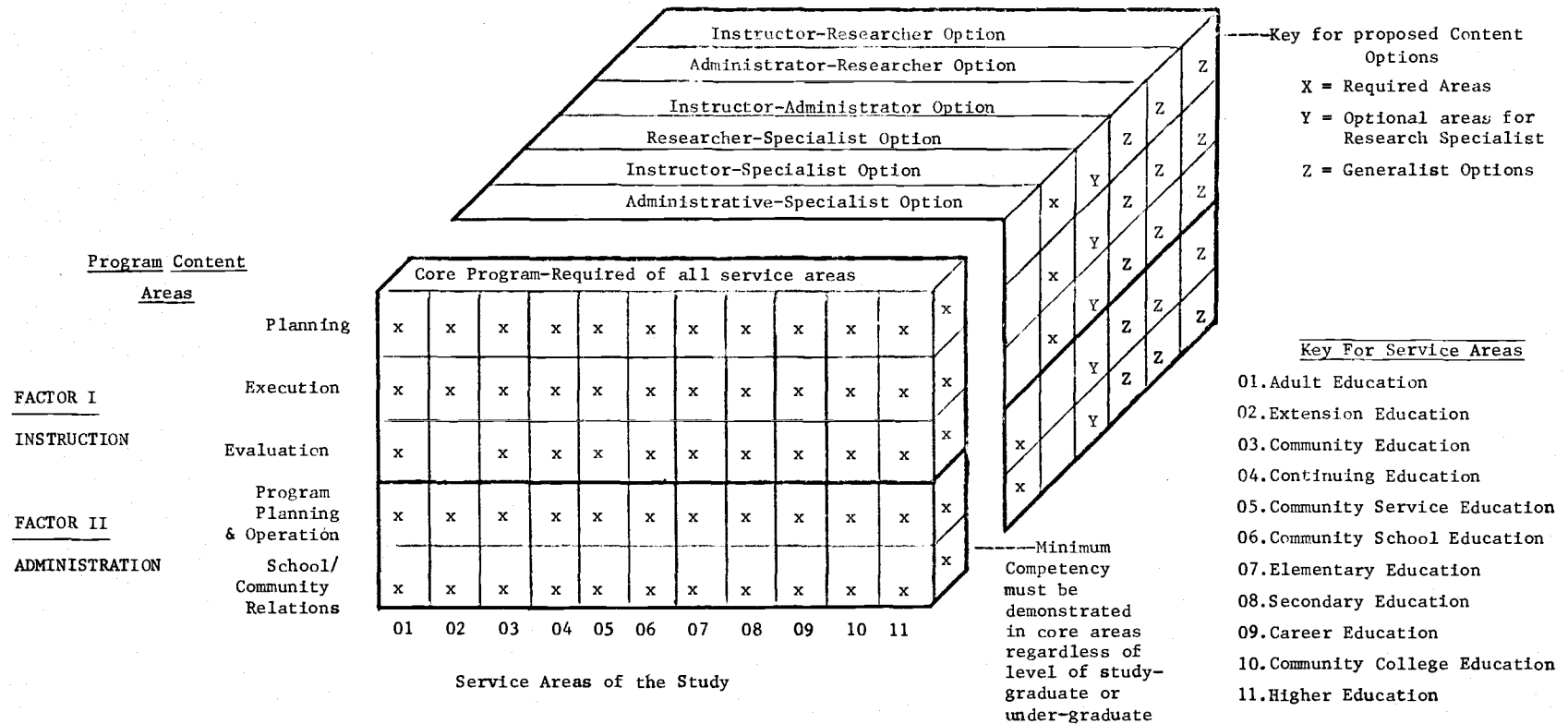
7. That a model for personnel development ^{be} developed that incorporates the concepts put forth by Veri (84, p. 25) with the addition of such factors as the field-based, campus-based activities plus the implications of the full implementation of the performance-based curriculum. The following conceptual diagram is an attempt to interpret visually all of the factors suggested above (Figure 2).

Recommendations

The findings and conclusions derived from this study suggest several recommendations.

1. That further study be conducted to identify the full range of the professional competencies necessary to adequately prepare educational personnel. Although the 80 competencies of the study represent a solid cross-sectional outline of the basic competencies of the personnel in the field, it is recognized that a large number of potentially related skills were not examined, due to the need for the development of a research instrument that respondents would be willing to complete.

Figure 2. A Conceptual Model for the Preparation of Community Education Personnel



2. That study be initiated into the external degree concept to determine:
 - a. If comparable learning occurs with that of the totally campus-based program.
 - b. The extent to which the external degree differs from the traditional program as far as the efficient use of fiscal, physical, and manpower resources are concerned.
3. That research be undertaken to determine the best percentage relationship between the field-based and the campus-based learning experiences.
4. That the theory and practicum program recently initiated at Oregon State University for the preparation of educational personnel be researched to determine the feasibility of using it as the core program suggested in the conclusions section of this paper. It would be necessary to identify the competencies developed by this program as well as the degree to which the existing program is meeting the needs of a widely varied clientele.
5. That further study be undertaken to determine the feasibility of an interinstitutional program involving the three major universities in the state of Oregon as well as the other public and private colleges of the state wherever practical.
6. That further study be conducted to determine the minimum level of residency that should be maintained within any degree program.

Implementing the recommendations of this study will provide a rational base on which to make decisions relative to the development and revision of programs for the preparation of personnel. Informed educators need never fear change nor change out of fear.

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APPENDICES

APPENDIX A

UNIVERSITY WITHOUT WALLS
PARTICIPATING INSTITUTIONS

Antioch College
Yellow Springs, Ohio

Bard College
Annandale-on Hudson, New York

Chicago State University
Chicago, Illinois

Friends World College
Westburg, New York

Goddard College
Plainfield, Vermont

Howard University
Washington, D. C.

Laretto Heights College
Denver, Colorado

University of Massachusetts
Amherst, Massachusetts

University of Minnesota
Minneapolis, Minnesota

Morgan State College
Baltimore, Maryland

New College
Sarasota, Florida

New York University
New York, New York

Northeastern Illinois State
University
Chicago, Illinois

Roger Williams College
Bristol, Rhode Island

Skidmore College
Sarasota, Florida

Shaw University
Raleigh, North Carolina

University of South Carolina
Columbia, South Carolina

Staten Island Community College
Staten Island, New York

Stephens College
Columbia, Missouri

Westminster College
Fulton, Missouri

APPENDIX B
JURY PANEL OF EXPERTS

Adult Education	Cliff Norris Oregon Board of Education Salem, Oregon
Extension Education	Dr. Lew Oester Oregon State University Extension Corvallis, Oregon
Community Education	Dr. James Sherburne Oregon State University Corvallis, Oregon
Continuing Education	Dr. Duane Andrews Division of Continuing Education Corvallis, Oregon
Community Service Education	Harry Jacoby, President Umpqua Community College Roseburg, Oregon
Community School Education	Larry Horyna Community Ed. Development Center Eugene, Oregon
Elementary Education	Dr. Leon Lessinger, Dean School of Education University of South Carolina
Secondary Education	Dr. Stan Williams, Dean School of Education Oregon State University Corvallis, Oregon
Career Education	Dr. Wayne Courtney Oregon State University Corvallis, Oregon
Community College Education	Dr. Raymond Needham, President Linn-Benton Community College Albany, Oregon
Higher Education	Dr. Thomas Dahl University of Oregon Eugene, Oregon

APPENDIX C

Professional Education Competencies of Selected Educational Personnel

Personnel Questionnaire

Oregon State University
(1973-74)

Dear Education Colleague:

The School of Education, Oregon State University, is in the process of developing criteria for the modification of personnel preparatory programs. You are being asked to participate in a research project that will develop a profile of the professional competencies that are necessary for successful work in the field of education.

Attached is a list of competencies that have been identified as being of some degree of importance to educational personnel in the discharge of their responsibilities. The attached list was developed by a jury panel of eleven members, each representing a separate service area of education. This panel examined a competency-based questionnaire that was the product of several national and state research studies, and modified the instrument to create an acceptable research tool for this study. Specific instructions are included on the instrument, however two items of special interest bear mention here:

1. This instrument is designed to collect information from instructors as well as administrators. Although the wording of some items may seem related only to the role of the instructor or the administrator, the respondent is requested to reply to each item according to the degree that it is perceived that each competency expands their ability to carry out this current job assignment. For example, Item #43 - Develop appropriate course objectives - may appear initially to be related only to the job of the instructor. However, an administrator probably needs some level of competence in this area if he is to serve as an instructional leader.
2. Each questionnaire has been numbered to determine follow-up contacts. No other use will be made of that number in this project, and all responses will be treated confidentially.

In order to meet the time scheduled for the completion of this phase of the project, it is requested that the questionnaire be completed and returned as soon as possible. Your cooperation and assistance is greatly appreciated.

Sincerely,

Henry A. TenPas
Division Director of Undergraduate Studies

Tom E. Grigsby
Research Assistant

STAFF QUESTIONNAIRE

Professional Education Competencies of
Selected Educational Personnel

Purpose of the Questionnaire: The purpose of this questionnaire is to seek your assistance in providing information that will be useful in the development of curriculum for colleges and universities seeking to offer relevant staff development programs and courses for education personnel.

Instructions for Completion of the Questionnaire

- A. In the spaces provided below, check () the appropriate service area in which you spend the majority of your professional time:

- | | |
|---------------------------------|--------------------------|
| () Higher Education | () Adult Education |
| () Extension Education | () Secondary Education |
| () Career Education | () Community Education |
| () Community School Education | () Elementary Education |
| () Community Service Education | () Continuing Education |
| () Community College Education | |

- B. The following questions are included to provide an informational profile of respondents:

- | | |
|------------------------------|---|
| 1. Present Major Assignment: | 3. Teaching and/or Administrative Experience: |
| () Instructor | |
| () Administrator | |
| | <u>Teaching</u> <u>Administrative</u> |
| | () 1-5 years () |
| | () 6-10 years () |
| 2. Age: | () 11 or more () |
| () Under 40 | years |
| () Over 40 | |

- C. This questionnaire contains professional education competencies for staff personnel in Education. You are being asked to indicate the level of proficiency YOU FEEL is NECESSARY for each competency in relation to YOUR CURRENT JOB ASSIGNMENT. Please respond to each item. Do not spend too much time with any particular item. We are primarily concerned with how You Feel about the competencies needed by personnel in your particular assignment.
- D. For Each Item please circle the rating (1, 2, 3, 4, 5) which most closely represents your feeling.

Here is an example:

What proficiency must you have in your work as an educator in the ability to:

- | | <u>No</u> | <u>Slight</u> | <u>Moderate</u> | <u>Considerable</u> | <u>Complete</u> |
|----------------------------|-----------|---------------|-----------------|---------------------|-----------------|
| 1. Develop Objective tests | 1 | 2 | 3 | 4 | 5 |

This person in marking the "5" rating felt that his job required complete proficiency with this activity.

PROFESSIONAL EDUCATIONAL COMPETENCIES

Survey Instrument

	No	Slight	Moderate	Considerable	Complete
What proficiency must you have in your work as an educator - ability to:					
1. Give a classroom demonstration that is meaningful to the individual student.	1	2	3	4	5
2. Use questions during the classroom presentations to aid student learning	1	2	3	4	5
3. Identify formalized criteria in the selection of textbooks	1	2	3	4	5
4. Use the innovative provisions of Federal education legislation (i. e., ESEA, VEA, HEA, etc.)	1	2	3	4	5
5. Purchase appropriate equipment and supplies for instructional purposes	1	2	3	4	5
6. Arrange for and conduct field trips	1	2	3	4	5
7. Provide appropriate practice for classroom learning experience	1	2	3	4	5
8. Identify the various stages in the development or maturation of the individual	1	2	3	4	5
9. Devise a curriculum which recognizes a wide variety of learning styles and which responds to the individual learner's needs in ways which are acceptable to him	1	2	3	4	5
10. Adjust the instructional program to accommodate the various stages in the development or maturation of the individual	1	2	3	4	5
11. Identify components of the learning process and the various psychological factors which influence learning	1	2	3	4	5
12. Develop budget-keeping procedures	1	2	3	4	5
13. Select available standardized tests to measure achievement	1	2	3	4	5
14. Identify community referral resources including health, welfare, educational and counseling services	1	2	3	4	5
15. Secure appropriate on-the-job training positions for students	1	2	3	4	5
16. Interpret the results of interest inventories	1	2	3	4	5
17. Conduct periodic up-dating of the course of study in regard with recent educational, social and economic trends	1	2	3	4	5
18. Recognize the scope of the educator's professional competence as a counselor and to select and refer to appropriate specialists those problems beyond the identified level of competence	1	2	3	4	5
19. Use student record-keeping procedures	1	2	3	4	5

	No	Slight	Moderate	Considerable	Complete
20. Select instructional materials for the learning experiences	1	2	3	4	5
21. Construct objective tests to measure achievement	1	2	3	4	5
22. Know the legal provisions of teacher liability	1	2	3	4	5
23. Involve the students in the planning of instruction	1	2	3	4	5
24. Relate the instructional units to the course of study	1	2	3	4	5
25. Know the State's plan for education in your service area	1	2	3	4	5
26. Organize local advisory committees	1	2	3	4	5
27. Identify potential consumers of the educational offering	1	2	3	4	5
28. Use directive and non-directive counseling techniques to help students solve personnel and social problems	1	2	3	4	5
29. Build displays	1	2	3	4	5
30. Interpret your educational philosophy in writing	1	2	3	4	5
31. Outline the details of a budget for the area of responsibility of the educator	1	2	3	4	5
32. Identify funding sources for service area budget	1	2	3	4	5
33. Draw from personal avocational interests to enrich instruction	1	2	3	4	5
34. Develop communication media to communicate with potential consumers of the educational offering	1	2	3	4	5
35. Use the results of standardized tests for instructional purposes	1	2	3	4	5
36. Make a classroom lesson meaningful to the individual student	1	2	3	4	5
37. Plan steps necessary to gain funding of budgeted items	1	2	3	4	5
38. Maintain anecdotal records as a part of the student's cumulative folder	1	2	3	4	5
39. Provide appropriate practice for skill learning experiences	1	2	3	4	5
40. Develop appropriate course objectives	1	2	3	4	5
41. Conduct community surveys for purposes of improving instruction	1	2	3	4	5
42. Use the information contained in professional journals for personal improvement purposes	1	2	3	4	5
43. Be familiar with requirements and provisions of the laws of the state affecting areas of responsibility	1	2	3	4	5
44. Assess the difficulty, validity and reliability of teacher made tests	1	2	3	4	5
45. Select appropriate audio-visual materials for instructional purposes	1	2	3	4	5

	No	Slight	Moderate	Considerable	Complete
46. Participate in the preparation and implementation of guidelines and procedures for selection of new staff personnel	1	2	3	4	5
47. Conduct an interview of applicants for employment	1	2	3	4	5
48. Evaluate application materials of applicants for employment	1	2	3	4	5
49. Utilize prescribed classroom organizational plans	1	2	3	4	5
50. Provide special educational activities for the handicapped	1	2	3	4	5
51. Identify source of income supporting area of responsibility	1	2	3	4	5
52. Develop daily instructional units	1	2	3	4	5
53. Describe similarities and differences between two or more educational philosophies	1	2	3	4	5
54. Maintain the necessary report forms required by state agencies	1	2	3	4	5
55. Interpret the norming data associated with standardized tests	1	2	3	4	5
56. Participate in the preparation and implementation of guidelines and procedures for staff salary and welfare negotiations	1	2	3	4	5
57. Interpret the education program to the community	1	2	3	4	5
58. Identify the services of resource persons from state and local agencies responsible for education	1	2	3	4	5
59. Organize studies of community characteristics utilizing appropriate survey instruments, sampling techniques and information sources	1	2	3	4	5
60. Use the services of local education advisory committees	1	2	3	4	5
61. Take responsibilities for leadership in civic community activities	1	2	3	4	5
62. Summarize the classroom lesson	1	2	3	4	5
63. Write performance tests to measure achievement	1	2	3	4	5
64. Utilize management techniques for program planning and operation	1	2	3	4	5
65. Maintain attention during classroom presentations	1	2	3	4	5
66. Utilize group leadership skills	1	2	3	4	5
67. Supervise the work of other staff personnel	1	2	3	4	5
68. Develop audio-visual materials for instructional purposes	1	2	3	4	5
69. Write subjective tests to measure achievement	1	2	3	4	5
70. Relate current events to classroom instruction	1	2	3	4	5
71. Provide specific information to students concerning the nature and requirements of occupations	1	2	3	4	5

		No	Slight	Moderate	Considerable	Complete
72.	Identify specific learning disabilities	1	2	3	4	5
73.	Use the information contained in professional journals for the improvement of instruction	1	2	3	4	5
74.	Operate audio-visual equipment	1	2	3	4	5
75.	Evaluate publications as communication devices to intended publics	1	2	3	4	5
76.	Use the guidance and counseling services which are available to you	1	2	3	4	5
77.	Use programmed learning materials	1	2	3	4	5
78.	Write articles for news release	1	2	3	4	5
79.	Participate in the preparation of educational specifications for new educational facilities	1	2	3	4	5
80.	Conduct follow-up studies for purposes of determining the effectiveness of instruction	1	2	3	4	5
81.	Involve the student in self-evaluation	1	2	3	4	5
82.	Provide continuous feedback system to staff and/or students concerning adequacy of performance	1	2	3	4	5
83.	Identify the analyze language patterns in the classroom and the larger community that have implications for teaching and learning	1	2	3	4	5
84.	Participate in the development of a long range plan for operation, including enrollment projections, personnel, fiscal and facility needs	1	2	3	4	5
85.	Identify and analyze social patterns in the classroom and the larger community that have implications for teaching and learning	1	2	3	4	5
86.	Utilize behavior modification techniques	1	2	3	4	5
87.	Contrast adult/youth learner characteristics	1	2	3	4	5

APPENDIX D

Institutions Providing Degrees in Community Education in the United States

Institution providing program	Name of program	Type of degree offered							
		B. S.	B. A.	M. S.	M. A.	M. Ed.	Ed. D.	Ph. D.	Specialist
Auburn University	Adult Education	x		x			x		
Arizona State	Adult Education				x		x	x	
Univ. of Arizona	Adult & Continuing Education				x	x			
Azuza Pacific	Community Development				x				
Azuza Pacific	Extension Education				x				
San Francisco State	Adult Education				x				
U. S. I. U.	Adult Education				x				x
Calif. Berkeley	Adult Education				x		x	x	
U. C. L. A.	Adult Education				x		x	x	
Colorado State	Continuing Education					x			
Univ. of Connecticut	Adult Education				x				
Federal City College	Community Development	x							
George Washington	Adult Education				x		x		x
George Washington	Human Resource Development				x		x		x
Howard University	Adult & Continuing Education				x	x			x
Florida Atlantic	Adult Education				x		x		
Florida Atlantic	Community Education				x		x		
Florida State	Adult Education			x	x		x	x	
Univ. S. Florida	Adult & Vocational Education				x				

(Continued on next page)

Appendix D. (Continued)

Institution providing program	Name of program	Type of degree offered							
		B. S.	B. A.	M. S.	M. A.	M. Ed.	Ed. D.	Ph. D.	Specialist
Georgia Southern	Adult Education					x			
Univ. of Georgia	Adult Education			x	x		x		
Univ. of Chicago	Adult Education				x			x	x
Indiana-Bloomington	Adult Education			x	x		x	x	
Iowa State	Adult & Extension Education			x				x	
Univ. of Iowa	Adult Education				x			x	
Kansas State	Adult Education			x				x	
Morehead State	Adult & Continuing Education				x				
Louisiana State	Extension Education			x				x	
New Orleans Baptist	Adult Education					(Rel.)			x
Morgan State	Adult Education	x		x					
Univ. of Maryland	Extension Education	x		x				x	x
Boston University	Adult Education					x	x		x
Michigan State	Continuing Education				x		x	x	x
Univ. of Michigan	Community Development			x	x	x	x	x	
Western Michigan	Community Education				x		x		x
Mississippi State	Adult Education					x	x		x
Univ. of Missouri	Adult & Higher Education			x			x	x	x
Univ. of Nebraska	Adult Education			x				x	
City U. of New York	Adult & Community Education			x					
Columbia Teachers College	Adult & Continuing Education				x		x	x	x

(Continued on next page)

Appendix D. (Continued)

Institution providing program	Name of program	Type of degree offered							
		B. S.	B. A.	M. S.	M. A.	M. Ed.	Ed. D.	Ph. D.	Specialist
Cornell	Extension Education			x			x	x	
State U. of New York	Adult Basic & Continuing Education			x					
Syracuse University	Adult Education			x	x		x	x	
Univ. of Rochester	Continuing Education			x					
North Carolina State	Adult & Community College Ed.			x			x		x
Univ. of N. Carolina	Adult Education				x	x		x	
Ohio State	Adult Education				x			x	
Ohio State	Adult & Vocational Education	x				x		x	
Ohio State	Extension Administration	x				x		x	
Oregon State	Adult Education					x			
U. of S. Carolina	Adult & Continuing Education					x			
North American Baptist	Continuing Education			x					
Memphis State	Adult Education			x					
S. W. Baptist Seminary	Adult Religious Education					(Rel.)			
Univ. of Utah	Adult Education Administration			x			x		x
Virginia Polytechnic	Adult & Continuing Education			x			x		
Seattle University	Adult Education Administration			x	x				
Univ. of Milwaukee	Adult Education Administration					x			x
U. of Wisc. Madison	Adult Education			x	x		x		
U. of Wisc. Madison	Extension Education			x					x
U. of Wisc. Madison (Continued on next page)	Extension Administration	x		x				x	

Appendix D . (Continued)

Institution providing program	Name of program	Type of degree offered							
		B. S.	B. A.	M. S.	M. A.	M. Ed.	Ed. D.	Ph. D.	Specialist
Western Washington	Adult Education Administration			x					
Washington State	Extension Education			x					
Univ. of Wyoming	Adult Education				x		x	x	

APPENDIX E

Results of the Analysis of Variance - F Statistic

Item no.	Sample group means											Computed F value	Tabular F value	Hypothesis decision
	\bar{X}_1	\bar{X}_2	\bar{X}_3	\bar{X}_4	\bar{X}_5	\bar{X}_6	\bar{X}_7	\bar{X}_8	\bar{X}_9	\bar{X}_{10}	\bar{X}_{11}			
1	3.94	4.14	3.66	4.05	4.38	3.61	4.22	4.16	4.16	4.27	4.27	1.06	2.41	Retain
2	3.94	4.00	3.66	3.23	3.61	3.77	3.94	4.22	4.33	4.22	4.38	1.12	2.41	Retain
3	3.55	2.44	2.94	3.55	3.33	3.27	3.72	3.72	3.72	3.44	3.55	2.40	2.41	Retain
4	3.50	2.27	3.11	3.66	3.55	3.22	3.23	3.38	3.22	2.72	3.61	2.33	2.41	Retain
5	3.88	3.00	3.83	3.61	3.77	3.72	4.00	4.00	4.11	3.83	4.00	1.66	2.41	Retain
6	3.05	3.22	3.55	3.77	3.61	3.83	3.77	3.88	3.77	3.11	3.66	1.51	2.41	Retain
7	4.05	3.16	3.22	3.77	3.61	3.61	3.94	3.17	4.05	4.00	4.27	1.56	2.41	Retain
8	3.94	3.61	3.33	3.88	3.77	3.83	3.94	4.00	4.00	3.66	3.94	1.02	2.41	Retain
9	4.77	3.88	4.11	4.05	4.11	4.22	3.83	4.16	4.32	4.33	4.16	1.43	2.41	Retain
10	4.38	4.00	3.72	4.05	4.00	3.44	4.11	3.88	4.00	4.33	4.05	1.19	2.41	Retain
11	4.05	4.00	3.38	3.61	3.94	3.77	3.83	4.22	3.94	4.05	3.83	0.93	2.41	Retain
12	3.11	3.55	3.77	3.88	3.88	3.72	3.72	3.38	3.33	3.88	3.16	1.20	2.41	Retain
13	3.66	1.94	3.05	3.44	3.72	3.22	3.77	3.83	3.11	3.27	2.94	3.71	2.41	Reject
14	4.11	3.55	4.05	3.50	3.72	3.61	3.61	3.77	3.33	3.72	3.44	0.95	2.41	Retain
15	2.83	2.38	3.16	3.44	3.33	3.32	3.50	3.72	3.55	3.11	3.61	1.64	2.41	Retain
16	3.50	2.77	3.27	3.50	3.61	3.94	4.00	3.77	3.22	3.11	3.61	1.23	2.41	Retain
17	4.27	4.16	3.94	3.72	3.77	3.72	3.77	4.00	4.22	4.44	4.38	1.80	2.41	Retain
18	4.05	3.94	3.61	4.16	3.83	3.83	4.05	4.05	4.05	3.94	4.11	0.48	2.41	Retain
19	3.77	1.83	3.22	4.33	3.77	3.61	3.88	3.94	4.00	3.77	3.55	6.33	2.41	Reject

(Continued on next page)

Appendix E. (Continued)

Item no.	Sample group means											Computed F value	Tabular F value	Hypothesis decision
	\bar{X}_1	\bar{X}_2	\bar{X}_3	\bar{X}_4	\bar{X}_5	\bar{X}_6	\bar{X}_7	\bar{X}_8	\bar{X}_9	\bar{X}_{10}	\bar{X}_{11}			
20	4.22	3.77	3.66	3.72	4.05	3.77	4.27	4.22	4.50	4.05	4.44	1.91	2.41	Retain
21	3.38	2.66	3.38	4.16	3.55	3.50	3.88	4.22	4.05	4.00	3.94	2.89	2.41	Reject
22	3.55	2.94	3.72	3.55	3.77	3.44	4.00	3.72	3.72	4.22	3.50	1.27	2.41	Retain
23	3.77	4.22	3.44	3.88	3.77	3.50	4.00	4.11	3.72	3.32	4.38	2.07	2.41	Retain
24	4.00	3.77	4.00	3.88	3.83	3.33	3.77	4.05	4.38	4.05	4.33	1.35	2.41	Retain
25	3.94	2.22	4.27	3.44	3.22	3.16	4.00	4.11	3.32	3.94	3.77	3.33	2.41	Reject
26	3.27	4.38	3.88	3.33	3.83	4.05	3.72	3.66	3.66	3.88	3.77	1.35	2.41	Retain
27	3.77	4.05	4.22	3.50	3.88	4.05	3.83	3.83	3.77	4.27	3.88	0.99	2.41	Retain
28	3.88	3.38	3.13	3.33	3.22	3.66	3.94	3.77	3.50	3.27	4.00	1.32	2.41	Retain
29	2.38	2.55	3.77	3.61	3.38	3.50	3.61	3.22	2.77	2.83	3.00	2.86	2.41	Reject
30	3.72	3.05	4.11	3.94	3.61	3.83	3.83	3.72	3.00	3.61	3.72	1.52	2.41	Reject
31	3.44	3.16	4.05	3.44	3.55	3.77	3.33	3.66	3.66	4.00	3.66	0.88	2.41	Reject
32	3.27	3.27	3.38	4.05	3.50	3.66	3.50	3.33	3.11	3.38	3.27	0.73	2.41	Reject
33	3.66	3.55	4.16	3.66	3.72	3.94	4.00	3.83	3.27	3.72	3.88	0.94	2.41	Reject
34	3.72	4.05	4.33	3.38	3.83	3.88	3.88	3.94	3.44	3.00	3.72	1.19	2.41	Reject
35	3.72	1.88	3.38	3.61	3.38	3.11	3.94	3.38	3.33	3.16	3.16	3.52	2.41	Reject
36	3.94	4.22	3.83	3.94	4.33	3.44	4.05	4.11	4.00	4.16	4.72	1.43	2.41	Retain
37	3.61	3.38	3.88	3.72	3.66	3.61	3.55	3.83	3.77	3.61	3.66	0.31	2.41	Retain
38	2.88	2.16	3.22	3.72	3.00	3.00	3.94	3.44	3.22	3.16	3.11	2.47	2.41	Reject
39	3.61	3.32	4.05	3.66	3.77	3.50	3.94	3.94	3.11	3.11	4.05	1.01	2.41	Retain
40	4.16	4.05	4.22	4.00	3.88	3.66	3.83	4.16	4.16	4.55	4.44	1.47	2.41	Retain

(Continued on next page)

Appendix E. (Continued)

Item no.	Sample group means											Computed F value	Tabular F value	Hypothesis decision
	\bar{X}_1	\bar{X}_2	\bar{X}_3	\bar{X}_4	\bar{X}_5	\bar{X}_6	\bar{X}_7	\bar{X}_8	\bar{X}_9	\bar{X}_{10}	\bar{X}_{11}			
41	3.16	3.55	4.16	3.55	3.44	4.33	3.88	3.50	3.27	3.61	2.94	2.49	2.41	Reject
42	3.72	3.61	3.66	4.22	3.94	3.55	4.00	3.88	3.66	4.05	4.16	1.13	2.41	Retain
43	3.72	3.27	3.83	3.77	3.44	3.66	3.66	3.94	3.55	4.05	3.83	0.71	2.41	Retain
44	3.88	2.38	3.22	3.88	3.44	3.55	4.05	4.00	3.66	3.83	3.33	3.22	2.41	Reject
45	3.44	3.72	3.72	3.61	4.11	3.33	4.05	4.00	4.16	3.83	4.05	1.33	2.41	Retain
46	3.55	3.94	3.72	4.00	3.50	4.05	3.66	3.22	3.94	3.88	3.72	0.85	2.41	Retain
47	3.27	3.84	3.88	3.88	3.84	4.05	3.50	3.05	3.72	3.72	3.44	0.93	2.41	Retain
48	2.94	3.83	3.72	3.77	3.83	3.88	3.44	3.00	3.72	3.44	3.38	1.18	2.41	Retain
49	3.11	2.55	3.83	3.61	3.00	2.94	4.05	3.44	3.33	3.22	3.50	2.27	2.41	Retain
50	3.77	2.33	3.44	3.27	3.61	3.38	3.72	3.50	3.16	3.22	3.11	2.07	2.41	Retain
51	3.22	3.38	3.50	3.77	3.44	3.66	3.16	3.33	3.44	3.61	3.66	0.45	2.41	Retain
52	3.11	1.88	3.05	3.38	3.66	3.27	3.88	4.55	3.55	3.55	3.50	4.53	2.41	Reject
53	3.33	2.88	3.50	3.88	3.44	3.55	3.55	3.88	3.38	3.11	3.44	1.22	2.41	Retain
54	3.77	3.83	3.33	3.50	3.83	3.38	3.22	3.77	3.55	3.27	3.38	0.62	2.41	Retain
55	3.05	2.05	3.05	3.83	3.22	3.44	4.05	3.61	3.94	3.38	2.83	3.66	2.41	Reject
56	3.27	3.00	3.38	3.50	3.38	3.61	3.66	3.33	3.22	3.22	2.83	0.67	2.41	Retain
57	4.05	3.89	3.88	3.83	3.72	4.22	4.05	3.88	4.00	4.00	3.27	0.95	2.41	Retain
58	3.72	3.88	4.00	4.00	3.89	3.77	3.88	3.94	3.55	3.61	3.83	0.38	2.41	Retain
59	3.33	3.22	3.44	3.94	3.38	4.16	3.22	3.27	3.16	3.11	2.88	1.54	2.41	Retain
60	3.44	3.77	4.00	3.38	3.83	3.77	3.77	3.27	3.72	4.22	3.72	1.01	2.41	Retain
61	3.50	3.72	3.38	3.94	3.27	3.77	3.38	3.16	2.77	3.22	3.33	1.47	2.41	Retain

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Appendix E. (Continued)

Item no.	Sample group means											Computed F value	Tabular F value	Hypothesis decision
	\bar{X}_1	\bar{X}_2	\bar{X}_3	\bar{X}_4	\bar{X}_5	\bar{X}_6	\bar{X}_7	\bar{X}_8	\bar{X}_9	\bar{X}_{10}	\bar{X}_{11}			
62	3.22	2.94	3.05	3.94	3.33	3.38	3.77	4.22	3.77	3.61	4.11	2.07	2.41	Retain
63	3.55	2.50	3.27	3.88	3.44	3.22	3.88	4.11	3.83	4.05	3.83	2.82	2.41	Reject
64	4.00	3.72	3.94	3.27	3.66	3.72	4.16	3.50	3.94	4.11	4.00	1.27	2.41	Retain
65	3.44	3.55	3.16	3.83	3.38	3.00	3.61	4.16	3.77	3.77	3.83	1.19	2.41	Retain
66	4.05	4.22	3.88	3.94	3.77	4.05	3.94	4.00	4.05	4.11	4.27	0.42	2.41	Retain
67	3.66	3.77	3.66	3.83	3.88	4.05	3.61	3.16	4.11	3.55	3.61	0.81	2.41	Retain
68	3.00	3.61	3.38	3.44	3.61	3.05	3.55	4.11	3.77	3.27	3.50	1.33	2.41	Retain
69	3.27	2.22	3.44	3.50	3.27	3.05	3.83	4.11	3.22	3.55	3.88	2.90	2.41	Reject
70	3.22	3.38	2.83	3.61	3.38	3.72	3.94	4.33	3.27	3.72	4.11	2.34	2.41	Retain
71	3.77	3.11	3.33	3.38	3.38	3.83	3.88	4.22	4.00	4.61	3.77	2.77	2.41	Reject
72	4.05	2.61	3.00	3.77	3.44	3.05	3.61	3.94	3.72	3.66	3.61	2.60	2.41	Reject
73	3.94	3.38	3.16	4.11	3.88	3.22	4.27	4.33	3.83	4.05	4.16	3.31	2.41	Reject
74	3.11	3.33	3.77	3.88	3.77	3.44	3.72	4.00	3.44	3.61	3.61	0.92	2.41	Retain
75	3.16	3.66	3.83	3.61	3.61	4.16	3.77	3.11	3.22	2.94	3.50	1.87	2.41	Retain
76	3.88	2.88	2.28	4.11	3.72	3.22	3.88	4.05	4.05	4.00	3.94	2.83	2.41	Reject
77	3.27	2.77	3.38	3.61	3.05	3.16	3.44	3.38	3.22	3.27	3.22	0.67	2.41	Retain
78	3.00	3.50	3.94	3.00	3.44	3.88	3.16	3.11	2.83	2.83	3.44	1.90	2.41	Retain
79	3.38	2.88	3.88	4.05	3.50	3.77	3.77	3.50	3.94	4.00	3.83	1.67	2.41	Retain
80	3.88	3.44	3.33	3.94	3.61	3.55	4.16	3.77	4.05	4.16	3.83	1.35	2.41	Retain
81	3.66	3.44	3.88	3.94	3.50	3.77	3.88	3.94	4.22	4.16	4.22	1.12	2.41	Retain
82	4.22	4.00	4.05	3.83	3.38	3.72	4.16	4.11	4.11	4.16	3.88	1.36	2.41	Retain

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Appendix E. (Continued)

Item no.	Sample group means											Computed F value	Tabular F value	Hypothesis decision
	\bar{X}_1	\bar{X}_2	\bar{X}_3	\bar{X}_4	\bar{X}_5	\bar{X}_6	\bar{X}_7	\bar{X}_8	\bar{X}_9	\bar{X}_{10}	\bar{X}_{11}			
83	3.61	2.61	3.00	4.11	3.66	3.55	3.38	3.66	3.33	3.11	3.27	1.92	2.41	Retain
84	3.83	3.88	4.11	3.44	3.61	3.72	3.50	3.33	3.72	3.88	3.83	0.73	2.41	Retain
85	3.72	3.77	3.72	4.00	3.77	4.00	3.66	3.72	3.33	3.66	3.77	0.47	2.41	Retain
86	3.55	3.50	3.38	3.88	3.33	3.72	3.66	3.83	3.55	3.44	2.88	1.02	2.41	Retain
87	3.72	3.11	3.55	3.77	3.88	2.94	3.83	3.22	3.61	3.38	3.66	1.27	2.41	Retain

APPENDIX F

RESULTS OF Q MODE ANALYSIS

Respondent No.	Factor Loading	Respondent No.	Factor Loading	Respondent No.	Factor Loading
001	.88	039	.96	077	.96
002	.98	040	.96	078	.97
003	.95	041	.95	079	.97
004	.98	042	.94	080	.98
005	.92	043	.96	081	.97
006	.93	044	.96	082	.86
007	.94	045	.97	083	.96
008	.87	046	.98	084	.95
009	.93	047	.97	085	.94
010	.96	048	.91	086	.99
011	.96	049	.90	087	.96
012	.98	050	.96	088	.96
013	.97	051	.97	089	.96
014	.93	052	.89	090	.96
015	.98	053	.91	091	.97
016	.96	054	.97	092	.96
017	.97	055	.93	093	.95
018	.98	056	.98	094	.97
019	.93	057	.89	095	.97
020	.93	058	.97	096	.96
021	.91	059	.97	097	.96
022	.93	060	.97	098	.95
023	.98	061	.97	099	.96
024	.95	062	.96	100	.92
025	.96	063	.97	101	.91
026	.95	064	.95	102	.90
027	.95	065	.91	103	.96
028	.98	066	.91	104	.96
029	.96	067	.97	105	.97
030	.94	068	.97	106	.96
031	.97	069	.97	107	.94
032	.93	070	.97	108	.96
033	.92	071	.96	109	.98
034	.92	072	.96	110	.96
035	.95	073	.96	111	.93
036	.96	074	.91	112	.96
037	.92	075	.95	113	.96
038	.95	076	.97	114	.96

(Continued on next page)

Appendix . (Continued)

Respondent No.	Factor Loading	Respondent No.	Factor Loading	Respondent No.	Factor Loading
115	.97	142	.95	171	.97
116	.97	144	.98	172	.97
117	.97	145	.97	173	.93
118	.96	146	.94	174	.96
119	.98	147	.94	175	.92
120	.96	148	.97	176	.89
121	.96	149	.97	177	.97
122	.97	150	.95	178	.93
123	.97	151	.97	179	.93
124	.96	152	.94	180	.97
125	.95	153	.93	181	.96
126	.97	154	.92	182	.91
127	.92	155	.98	183	.98
128	.92	156	.90	184	.91
129	.98	157	.98	185	.95
130	.98	158	.85	186	.98
131	.99	159	.98	187	.98
132	.96	160	.95	188	.97
133	.93	161	.97	189	.98
134	.98	162	.97	190	.97
135	.98	163	.93	191	.90
136	.98	164	.93	192	.96
137	.97	165	.98	193	.98
138	.96	166	.97	194	.95
139	.97	167	.97	195	.95
140	.96	168	.98	196	.96
141	.96	169	.98	197	.96
142	.96	170	.96	198	.97