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PERCEIVED UTILITY OF ADULT BASIC EDUCATION TEACHER COMPETENCIES

A Dissertation

Presented for the

Doctor of Education

Degree

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ABSTRACT

The purpose of this study was to cluster Mocker's inventory of competency statements into related groupings and to identify the utility of the competency clusters as they were perceived by professors of adult education, ABE administrators, and ABE teachers.

The study was conducted in two phases. The first phase involved the use of a panel of experts to validate clusters of competency statements drawn from Mocker's inventory. The resulting twelve competency clusters were utilized as a basis for the questionnaire used in the second phase. This questionnaire was mailed to a random sample of local administrators and teachers, state department of education personnel and professors of adult education from Region IV of the United States Office of Education.

Information from the questionnaire was placed in a utility formula developed by Edwards. The utility values were derived from the perceived importance of each competency and the estimated attainment by ABE teachers. The utility values, the importance values, and the attainment values were further explored for significant differences between the three groups using one-way analysis of variance and the Kruskal-Wallis non-parametric test.

Significant differences existed between teachers and professors and between administrators and professors in the utility and attainment values for all the competencies except administrative tasks. In addition, significant differences existed between the utility values of teachers and administrators in knowledge of the general field of adult education and learning theories. There were significant differences in the importance values assigned to competencies related to subject matter mastery and learning theories.

The conclusions were: (1) This study effectively grouped Mocker's list of specific competencies into clusters and provided additional interpretation of his findings. (2) The primary value in using Edward's utility formula is in combining importance and attainment as two dimensions in viewing competencies. (3) Professors are likely to perceive competencies and their attainment differently from persons more closely identified with "field practice."

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CHAPTER I

INTRODUCTION

The demand for professionally prepared adult basic education (ABE) personnel has been steadily growing, largely as a result of increased federal support and awareness of problems associated with illiteracy in the United States. This growth has led to the establishment of specialized teacher training programs and to the need for change in the structure and function of existing programs.

I. PROBLEM

In response to the demand for development of ABE personnel, a significant number of professors in higher education institutions as well as state education personnel have engaged in the establishment of competency-based teacher education programs. However, their work is unprecedented, except for related efforts in public school education and by sporadic efforts in some colleges and universities. Researchers in adult education have only recently begun to develop an empirical footing upon which to develop competency-based education (CBE) programs.

In the general field of adult education, Chamberlain (1961), Aker (1963), and Liveright (1964) pioneered in research designed to identify competencies as a base for

general adult educator preparation programs. Grigsby (1974) and Veri (1974) continued to refine the process of identifying competencies by updating the earlier lists. Fenn (1972) and Smith (1972) were among the first to concentrate on competencies needed by ABE teachers. The most recent and most comprehensive identification of ABE teacher competencies was accomplished by Mocker (1974). However, Mocker suggested that his study be followed by another which would identify the underlying clusters of competencies present in his extensive list of 291 separate items. Mocker also suggested that an effort be made to clarify the relationship among the clusters, and to sort out their relative importance for developers of teacher education programs. In addition, no researcher has attempted to gauge the attainment of competencies by ABE teachers, especially as such attainment may be perceived differently by the several groups concerned with staff development.

The two dimensions of (1) relative importance of competencies and (2) the degree of attainment of competencies by ABE teachers, can be used to identify and describe competencies that have utility for developers of ABE teacher education programs. For example, if a competency is perceived as important to the role of teachers, but teachers have not developed the competency, it can be said to have a high degree of utility for program development. If another

competency is also highly important but is well developed by teachers, it would have less utility for program development. Needed, therefore, is an identification of clusters of competencies and a determination of their relative utility for purposes of designing staff development programs in adult basic education.

II. PURPOSE

The purpose of this study was to cluster Mocker's (1974) inventory of competency statements into related groupings and to identify the utility of the competency clusters as they are perceived by professors of adult education, ABE administrators, and ABE teachers.

This study sought to answer the following questions:

1. What competency clusters underlie the existing list of competency statements?

2. What is the perceived utility of specified clusters of competencies as viewed by professors, administrators and teachers?

3. Do significant differences exist among the utilities as perceived by professors, administrators, and teachers?

III. LIMITATIONS

This study was conducted within the following constraints:

1. Any limitations or judgments peculiar to the research by Mocker (1974);

2. The geographical area within which data were collected;

3. Limitations inherent in the questionnaire technique;

4. The lack of reliability assessment.

IV. DEFINITION OF TERMS

The following terms have been defined for use in this study.

Competency: an orchestration of personal knowledge, skills, and attitudes relevant to the accomplishment of tasks.

Performance: "What the teacher actually does, i.e., observable behavior" (Dill, 1974).

Utility: that attribute of an entity or concept which makes it useful or beneficial to the individual or system involved.

Utility values: the product of the perceived importance value and the attainment value of the competency.

Attainment value: the difference between ideal attainment and the estimated attainment of a competency by most ABE teachers.

Importance value: the weighted score assigned a competency as it relates to other competencies and the role of the ABE teacher.

Competency-based education: a program which reflects the identification of competencies necessary for successful functioning in a teaching position. The competencies are explicitly stated, made public, and include a variety of learning experiences designed for their attainment.

> Adult basic education. Education for adults whose inability to speak, read, or write the English language constitutes a substantial impairment of their ability to get or retain employment commensurate with their real ability, which is designed to help eliminate such inability and raise the level of education of such individuals with a view to making them less likely to become dependent on others, to improving their ability to benefit from occupational training and otherwise increasing their opportunities for more productive and profitable employment, and to making them better able to meet their adult responsibilities (P. L. 91-230) (NAPCAE, 1975, pp. 16-17).

Teachers: instructional staff in direct contact with the ABE student, including teachers' aides, and counselors.

Administrators: supervisory personnel responsible for developing and managing ABE programs. These individuals have major responsibility for administration rather than instruction, and usually have no direct contact with the students. This group consists primarily of state department personnel and local program supervisors, but includes learning center directors.

Professors: persons holding academic rank in a college or university who are responsible for preservice and/or inservice educational programs for adult education teachers and administrators.

V. ORGANIZATION OF THE STUDY

Chapter I introduces the study, presenting the problem, purpose, limitations, and definition of terms. Chapter II includes a review of related literature concerning competency-based education, adult educator competencies, adult basic education competencies, and utility concepts. Chapter III reports the procedures utilized in this study, including the population and sample; instrumentation; the two-stage methodology, and the data analysis. The findings of the study are presented in Chapter IV. Chapter V includes a summary of the study, conclusions, and recommendations for research and practice.

CHAPTER II

REVIEW OF RELATED LITERATURE

The literature is presented in four categories of information related to the central theme of this study. These categories include:

1. Competency-based education (CBE);
2. The identification and analysis of general adult educator competencies;
3. Studies of adult basic education competencies; and,
4. The concept and measurement of utility.

I. COMPETENCY-BASED EDUCATION

The development of CBE programs for preparing elementary school teachers received widespread attention in 1968, when ten different programs funded by the U. S. Office of Education Elementary Models Project were designed on a competency-based approach to teacher education. In the years since, at least 60 percent of the states have linked teacher certification requirements to some form of competency base. A number of colleges and universities have followed suit, incorporating CBE into undergraduate teacher preparation programs (Houston and Howsam, 1972; Meeth, 1974).

The recency of development of CBE programs has contributed to ambiguity in terminology used to describe such programs. One area of confusion relates to the distinction between the terms competency-based education and performance-based education. For the most part, the terms are used synonymously, although some writers make special distinctions in the use of the terms. To some, performance-based education refers to end behaviors that can be objectively identified and directly assessed. Others consider actual performance as less important than underlying competencies defined in terms of knowledge, understandings, and attitudes. Some writers, on the other hand, refer to competency as the "ability to do," relating closely to other definitions of performance (Houston and Howsam, 1972). This overlap in terms is illustrated by the distinction found in Grigsby's (1974) and Meeth's (1974) definitions. Grigsby defines competencies as the specific ability or skill needed to perform a specific duty or function (p. 14). Meeth defines competence as "the minimum knowledge, skills, values and/or attitudes a person can be certified to possess, based on a set of criteria or level of expectation" (p. 6).

Dill's (1974) definition of competence relates to the purpose of this study, and her distinction between performance and competence seems to reflect the most widely accepted differentiation to be made in the terms. Dill defines

performance as "what the teacher actually does, i.e., observable behavior" (Microfiche Abstract). Competence is defined as:

> The underlying, tacit knowledge which a teacher possesses, including knowledge of content, pedagogy, and sociocultural settings. It is not a systematic inventory of items, but a system of generative process in the mind of the teacher that he or she is capable of storing and utilizing (Microfiche Abstract).

Components of CBE Programs

The literature refers to numerous attempts to specify the contents of a CBE program. Houston and Howsam (1972) describe six criteria of CBE. The first criterion is that learner objectives are specified in behavioral terms. The second criterion requires a procedure be established to determine whether teacher performance meets a pre-specified level of mastery. Criterion three would call for one or more modes of instruction pertinent to the objectives, through which learning experiences may take place. The fourth criterion specifies that the learning experiences must be directly related to one or more specific competencies. The last criterion is that CBE programs must place accountability for meeting the specified criteria on the learner.

Certain essential elements and related characteristics have been generally accepted as constituting a CBE program. Elam (1971, pp. 6-12) presents the components which he believes are vital to CBE program development. The components

consist of (1) essential elements; (2) implied characteristics; and (3) related, desirable characteristics. The five essential elements include:

1. The teaching competencies that are to be demonstrated are role-derived, specified in behavioral terms, and made public.

2. Assessment criteria are competency-based, specifying mastery levels, and made public.

3. Assessment requires performance as prime evidence of mastery, although student knowledge is taken into account.

4. A student's rate of progress through the program depends on demonstrated competency.

5. The instructional program facilitates the development and evaluation of specific competencies.

The second set of components encompasses the implied characteristics which are:

1. Individualization of the instructional program.

2. Continual feedback.

3. Systematic plan for progression through program.

4. Emphasis on exit requirements.

5. Modularization of units of material.

6. Accountability for both the individual student and the entire program.

Lastly, the related, desirable characteristics are listed as:

1. A field-based setting for experiential learning.

2. A broad base for decision making.

3. Availability of protocol and training materials.

4. Student participation in decision making.

CBE applies not only to undergraduate and graduate teacher preparation programs, but also applies to inservice education activities. This emphasis on a preservice-inservice continuum is illustrated by a list of CBE components developed by Weber, et al. (1973). These authors would include the following as ends toward which CBE programs should be directed:

1. Learning related to specific knowledge or teaching performances;

2. Self-renewal;

3. Timely delivery of instruction, that is, when the student needs it;

4. The development of competencies on the basis of task analysis using teacher input;

5. Public statements of the possible alternative objectives and instructional routes; and

6. Developing personal growth through other alternatives than university-based courses.

Teacher Effectiveness

One of the assumptions underlying CBE programs is that the teacher trained within such a framework will be more

effective in the classroom. However, there is little evidence to support one teaching method over others, and even less evidence of a direct relationship between teacher competencies and student achievement.

Depending on the research study being cited, various personal traits and teacher behaviors are said to affect learning. Rosenshine and Furst (1971) conducted a comprehensive review of literature in which they concluded that the nine variables which have the highest correlation with student achievement are the following:

1. Clarity of presentation;
2. Variety of activities;
3. Enthusiasm;
4. Task orientation and/or businesslike behavior;
5. Student opportunity to learn criterion material;
6. Avoidance of extreme criticism;
7. Positive responses to students;
8. Use of structuring comments by teacher; and
9. Use of multiple levels of questions.

Their research also indicated eleven variables which did not show significant or consistent relationship with achievement. These variables include:

1. Nonverbal approval;
2. Praise;
3. Teacher warmth;

4. Ratio of all indirect to all direct behaviors;
5. Number of different teacher behaviors (flexibility);
6. Number of questions;
7. Questions classified into two levels;
8. Teacher talk;
9. Student talk;
10. Teacher experience; and
11. Teacher attitude toward subject matter.

A review of literature by Gage (1972) identified four aspects of a teacher's personality that do have research data to substantiate their importance in the teaching-learning situation.

These four aspects are:

1. Warmth
2. Indirectness
3. Cognitive organization
4. Enthusiasm.

The importance of the first variable, warmth, is not consistent with the finding by Rosenshine and Furst, who reported that teacher warmth was not significantly related to student achievement. Such conflicting results and the relatively few studies with acceptable methodology contribute to the uncertainty surrounding the issue of teacher effectiveness. Both Rosenshine (1974) and Gage (1972) stress the

need for continuing study of the relationship between competency variables and teacher effectiveness.

II. ADULT EDUCATOR COMPETENCIES

Most research related to adult educator competencies centers on graduate education programs. The identification of general adult educator competencies began with a study by Chamberlain (1961), who identified forty-five competencies for practicing adult educators. Practitioners rank ordered Chamberlain's items according to their importance for the general field. The resulting statements were used to develop a set of objectives for a curriculum in graduate adult education.

Aker (1963) also was concerned with the effectiveness of graduate adult education programs. He sought to establish criteria for evaluating graduate study by (1) reviewing literature for appropriate evaluation methods, (2) identifying and classifying behavioral objectives related to graduate programs, and (3) surveying students and graduates of adult education programs. Aker identified eighteen groupings of 223 behavioral objectives. His panel of sixteen professors selected twenty-three of the items as most relevant to graduate programs.

Liveright (1964) worked within a theoretical framework developed by William McGlothlin to arrive at competencies of

graduates of adult education programs. Liveright's five competencies were:

1. Competence to practice one's profession;
2. Social understanding;
3. A philosophy and set of values which make effective practice possible;
4. A zest for continued study; and,
5. Competence in conducting and interpreting research.

Another study dealt with general competencies of adult educators. Grigsby (1974) conducted a study to develop a competency-based program for community education personnel. Community education refers to all types of educational services for adults. It therefore requires general adult educator competencies. Grigsby's study identified 87 adult educator competencies which were rated by individuals in eleven service areas, i.e., offerings designed to provide a specific service to a specific population. The results revealed no significant differences in the ratings among the service areas, except for extension educators who felt that student evaluation was not critical to their job.

Veri (1974) initiated a study to develop a "Competencies Assessment Survey" for adult educators. His list of competencies was derived from previous investigations which used adult educators as respondents. His five major categories of required competencies were:

1. Personal attributes;
2. Knowledge of the workings of society or societal affairs;
3. Knowledge of the basic principles of adult education;
4. Knowledge of adult psychology; and
5. The ability to plan and implement adult education programs.

Each of these broad categories contains a list of competency statements that are broken down into more specific behaviors. At the date of this writing, only Veri's scale had been developed, and the study was still in progress.

III. ADULT BASIC EDUCATION COMPETENCIES

Competency-based education in ABE is in a relatively youthful stage of development. However, development is occurring simultaneously on two fronts, one led by researchers interested in the identification and assessment of the importance of ABE teacher competencies, and the other involves efforts by state and regional program personnel who are more directly concerned with the design and implementation of CBE programs.

Research Reports

Smith (1972) conducted a study to determine competencies needed by ABE teachers as perceived by teachers. The

subjects in this study were a randomly selected sample of teachers in Washington, Oregon, and Idaho. These teachers were asked to rate 100 competency statements using a Likert-type scale. Smith found no significant differences in perceptions of ABE teachers in the three states and no significant differences among teachers with elementary versus secondary certification.

Fenn (1972) identified a list of knowledge, skills, understandings, and attitudes needed to achieve minimum effectiveness in an ABE teaching situation. Thirty-four competency statements were rated according to importance by a selected and random sample of teachers, students, county administrators, state department of education personnel and professors of adult education in Florida. Employing Kendall's Coefficient of Concordance, Fenn found that there were no significant differences among the judges' rankings.

Aker's (1974) review of CBE literature concentrated on competencies which were deemed most crucial to effective teaching. The competencies were identified by research on learner performance and teaching effectiveness. Aker limited more detailed information on teaching strategies to six competency areas. According to Aker, an effective ABE teacher must:

1. Understand the nature and mission of ABE;

2. Be aware of and sensitive to the characteristics, problems, interests and need of students;

3. Apply behavioral science principles to create optimum conditions for adult learning;

4. Acquire skill in designing a functional and relevant ABE curriculum;

5. Select appropriate learning materials and apply adult education methods; and,

6. Be a continuous learner.

Mocker (1974) conducted a study to identify, classify, and rank competencies needed by ABE teachers. His study was divided into four phases. Phase I consisted of the compilation of numerous items representing knowledge, attitudes, and behaviors deemed important in ABE. This compilation resulted in a list of 605 statements derived from 61 different documents. Phase II consisted of reducing the list to fewer statements, using a jury of experts to validate the results. Phase III entailed the creation of an inventory with each statement classified into one of four categories (Scope and Goal of Adult Education; Curriculum; ABE Learner; and Instructional Process). Phase IV consisted of mailing the inventory of 291 competency statements to a national sample of ABE personnel. Two hundred and thirty-four individuals responded. Their ratings resulted in a division of competencies into high priority items and low priority items within each of the four categories.

Krietlow (1974) and a group of 25 ABE teachers identified 38 exemplary ABE teacher competencies. The competencies

were grouped in the following five broad categories:

1. Teaching Techniques
2. Use of Materials
3. Use of Community Resources and Facilities
4. Student-Teacher Relationships
5. Assessment of Academic Outcomes.

Staff Development Projects

One other source of information related to teacher competencies comes from U. S. Office of Education regional staff development projects. Although their reports are not research efforts, the information available is pertinent to any study of ABE teacher competencies.

Ulin (1972) reported on the results of the establishment of a competency-oriented model for staff development in Region III of the U.S.O.E.[1] This process-based model, developed to enhance the effectiveness of adult education training programs, provides a system for the creation of a program based on the specification of roles, functions and competencies for staff personnel. The second part of the model emphasizes the design of training experiences for attainment of the specified competencies.

Each of the states in Region II has taken a slightly different approach to competency identification. Department

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[1]The states included in Region III are Pennsylvania, Virginia, West Virginia, Maryland, Delaware, and District of Columbia.

of Education personnel in Puerto Rico have approached it through task analyses and job restructuring in which the educators identify a systematic way of determining what functions and tasks are included in a given job or position. A Virgin Island project concentrated on identifying competencies to be used as the basis of inservice training sessions and graduate adult education courses.

A New York State project (1973) followed five steps in designing a competency-based staff development program. The steps were:

1. Determine the tasks involved in meeting the adult and continuing education responsibility;

2. Ascertain the behavior necessary to perform each task;

3. Assign performance standards;

4. Design a method to assess strengths and weaknesses in relation to each needed competence; and

5. Identify and categorize learning opportunities according to the resultant behavior or knowledge intended.

The New Jersey Project (Falcone, 1974) concentrated on competencies related to certification. Task forces identified four lists of competencies that should be developed by teachers of adults. These lists related to the areas of adult basic education, English as a second language, high school equivalency, and counselors of adults. Minimum competencies necessary in each of the areas have been identified.

Ultimately, the goal of the project is to develop a means of acquiring and developing these competencies.

Project ACT (Adult Competency Training) is a Region VIII Staff Development effort (1975), the goal of which is to improve the performance of ABE teachers. The initial stages of this project dealt with the identification of competency needs expressed by local educators. One result of Project ACT was a study by Chambers (1975) which compared competency needs as identified by project participants with competencies identified in adult education literature. His results indicated that participants "could identify competency needs consistent with generally defined competencies of adult educators" (p. iv).

IV. UTILITY

Allen (1936, p. 184) defines utility as "a quantity possessing the property of assuming greater or less values according to the degree of preference for the combination expressed by the individual considered." Morell (1969, p. 20) says that utility means "the capacity to satisfy wants." Vickrey (1973, pp. 286-87) defines utility as:

> a technical term which economists have settled on to designate the degree to which individuals attain the goals they are presumably pursuing when they choose among alternative courses of action . . . (the) idea is that for an individual faced with choices involving uncertain outcomes it would be rational to maximize moral expectation. . . .

For the purposes of this study, utility is defined as that attribute of an entity or concept which makes it useful or beneficial to the individual or system involved.

The application of the concept of utility to non-economic areas has been fostered by Edwards (1971) and Guttentag (1973). Edwards initially proposed the adoption of a "social utility formula" for the evaluation of military programs; however, it is now being applied in a wide range of activities including Alcohol Safety Action programs, multi-mode transportation system designs, indices of water and air pollution, intelligence system information sources, weapons system evaluation, military exercise evaluation and the selection of graduate students (1971). Guttentag (1973) advocates the use of social utility as an alternative to the classical experimental research paradigm in social intervention programs.

Edwards' utility formula can be employed for at least two general purposes. If action is to be taken in the future, the application of his formula provides data on alternatives for decision-making purposes. Moreover, if the action has already occurred, it can be used as an evaluative device. To provide decision-makers with assistance in identifying alternatives and establishing some order or priority, Edwards' formula allows for direct comparison across all alternatives.

Edwards' formula for the Measurement of Utility follows these ten steps:

1. Identify the organization to be evaluated and its relevant goals;

2. Identify issue, or issues, to which the utilities needed are relevant;

3. Identify the entities to be evaluated;

4. Identify the relevant dimensions of value;

5. Rank the dimensions in order of importance;

6. Rate dimensions in importance, preserving ratios. The least important item is a score of 10. The next least important dimension is identified and a determination is made of how much more important it is than the least important dimension. The user then proceeds in the same manner through all items.

7. Sum the importance weights, divide each by the sum, and multiply by 100.

8. Measure the location of the entity being evaluated on each dimension on a 0 to 100 scale where 0 is defined as the minimum plausible value on that dimension and 100 is defined as the maximum plausible value.

9. Calculate utilities for entities. The equation is $U_i = \Sigma_j w_j u_{ij}$ $(\Sigma_j w_j = 100)$, where U_i is the aggregate utility for the ith entity; w_j is the normalized weight of the jth dimension, and u_{ij} is the position of the ith entity on the jth dimension.

10. Decide. If a single act is to be chosen, the rule is simple: maximize U.

An example of the application of Edwards' formula is presented in Chapter III.

V. CONCLUSIONS

The literature reviewed in this chapter illustrates the embryonic stage of development in CBE, especially as it relates to research on the topic. The development of CBE in the ABE arena is especially new, although widespread efforts are being made to incorporate the concept into staff development programs. The literature also points out the need for further research in the area of CBE, and the concept of "utility" as developed by Edwards offers a particularly promising avenue for assessing the value of competencies for developers of teacher training programs.

CHAPTER III

METHODOLOGY AND PROCEDURES

This chapter details the procedures for collecting data relevant to the purposes of the study outlined in Chapter I. Included are: (1) a description of the population and sample; (2) the data collection instrument; (3) the methodology; and (4) the procedures selected for analyzing the data.

Sample

The population from which the sample was drawn consisted of ABE teachers, administrators and professors of adult education within the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee. These states comprise Region IV of the U.S. Office of Education. This region was chosen for study because of its history of involvement in ABE staff development programs and because of its familiarity to the researcher. The total population was estimated to number 16,800 personnel. Table 1 contains a summary of the population of the three groups studied and the states involved.

The total population of professors was included in the overall sample, as were the State Department of Education personnel who made up part of the administrator group. A two-stage, stratified random sampling procedure was used to identify the ABE teachers and local supervisory personnel

TABLE 1

REGION IV ABE PERSONNEL*

	AL	FA	GA	KY	MI	NC	SC	TN	Total
Instructional Staff									
Full-time	15	336	20	86	14	106	260	25	862
Part-time	753	6,414	157	503	596	2,110	1,695	800	13,628
Specialists	24	265	64	142	45	19	232	31	822
Total	792	7,015	841	731	655	2,235	2,187	856	15,312
Local Supervisors									
Full-time	5	152	13	45	6	143	25	35	424
Part-time	80	113	73	178	45	183	272	80	1,024
TOTAL	85	265	86	223	51	326	297	115	1,448
State Department Staff	10	11	4	6	5	4	10	4	54
Professors	10	10	6	4	6	12	3	4	55

*Numbers taken from the 1975 Almanac, NAPCAE.

(administrators). The first stage of sampling involved local ABE programs as sampling units, their number being determined by the size of each state's ABE program. The names of ABE supervisors associated with each of the local programs were obtained from State Directors of Adult Education and a sample of these names was selected using a table of random numbers. Each of the supervisors included in the sample was asked to supply the researcher with a listing of the ABE teachers in his or her local program.[1] The names thus obtained represented the stage two sampling units from which individual teacher's names were randomly selected, using a table of random numbers. The number of names selected was proportional to the size of each local program in relation to the number reported for each state.

The final sample included 332 teachers, administrators and professors. Table 2 contains a summary of the sample numbers, by type of respondent and state. It should be noted that the table identifies four categories of respondents; however, for purposes of data analysis the categories of local program supervisors and state department of education personnel were combined to form the group entitled "administrators."

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[1]All such requests were legitimized by approval by State Directors of Adult Basic Education. See Appendix A for sample of correspondence.

TABLE 2

SAMPLE SIZE BY STATE AND GROUP

State	Position	N	Total
Alabama:	Teachers	8	
	Administrators	12	
	Professors	10	
			30
Florida:	Teachers	70	
	Administrators	23	
	Professors	10	
			103
Georgia:	Teachers	9	
	Administrators	9	
	Professors	6	
			24
Kentucky:	Teachers	7	
	Administrators	13	
	Professors	4	
			24
Mississippi:	Teachers	7	
	Administrators	10	
	Professors	6	
			23
North Carolina:	Teachers	22	
	Administrators	23	
	Professors	12	
			57
South Carolina:	Teachers	23	
	Administrators	25	
	Professors	3	
			51
Tennessee:	Teachers	9	
	Administrators	9	
	Professors	2	
			20
Totals:	Teachers	155	
	Administrators	124	
	Professors	53	
Sample Size:			332

I. INSTRUMENTATION

The data collection instrument used in this study was a three-page questionnaire administered by mail. The questionnaire contained the following components:

1. Page one asked for demographic information and provided instructions for completing the response sheet.
2. Page two contained a listing of the twelve competency statements and response blanks for each of three response categories. Respondents were asked to (A) rank order the statements; (B) assign an importance value to each statement; and (C) estimate how well most ABE teachers have achieved the ability to perform each competency.
3. Page three consisted of sample statements of behavior relating to the twelve broad competency statements as examples of how the latter statements were operationally defined.

A first draft of the questionnaire was developed following the final selections of the competency clusters. The questionnaire was reviewed by several graduate students for clarity of instructions and format. A revised questionnaire was tested by administering it to 21 teachers attending a teacher training institute on the University of Tennessee

campus. After further revision, the instrument was mailed to the previously selected sample. However, the instrument was not tested for reliability. See Appendix B for a sample questionnaire.

II. METHODOLOGY

The study was conducted in two phases. The first phase involved the use of a panel of experts to validate the clustering of Mocker's 291 competency statements. The second phase entailed the collection of data through the use of the mail questionnaire.

Phase One

The researcher made the initial grouping of Mocker's inventory of competencies into clusters of like statements, and devised a descriptive statement to identify each cluster. The result was twelve clusters and corresponding statements of behaviors which operationally defined the competencies.

A panel of experts was asked to evaluate the competency clusters and the wording of the broader statements. Five professors, representing five different institutions and four states, were asked to react to the list of competency statements. These professors were chosen for their expertise and backgrounds as related to this study, by their willingness to participate, and by their institutional and geographical locations. (See Appendix C for the names of the panel members.)

The panel members were asked to follow a series of steps in validating the previously categorized statements. These steps are reproduced in Appendix C. Three of the Mocker statements were deliberately misplaced by the researcher as a check on the panel's attention to detail. The panelists did not know that these items had been misplaced. All of the panelists identified at least two of the misplaced statements; therefore their responses were considered to be based on sufficient attention to the list of competency items.

Phase Two

Following the above activities, a questionnaire was developed and mailed to the selected sample. Phase two consisted of three separate mailings of the questionnaire. During the first mailing, a personalized letter explaining the study and a stamped, preaddressed envelope were included with the questionnaire in an attempt to encourage individual response. (See Appendix D for samples of correspondence.) About three weeks later a second questionnaire was sent to those who had not returned the first one. Again, a brief letter and a stamped, preaddressed envelope were included. Three weeks later a third questionnaire was mailed to those individuals who had failed to return a questionnaire. A brief letter and a stamped, preaddressed envelope also accompanied this questionnaire. Although the overall usable response rate at this point was only 58 percent, the

decision was made to discontinue any further mailings. It was felt by the researcher that, due to the complexity of the questionnaire and the nature of ABE as a largely part-time occupation, another mailing would yield a very small percent return.

III. ANALYSIS OF DATA

The information obtained from each questionnaire was keypunched on computer cards. The importance value and the perceived attainment scores were recorded for each of the twelve competency statements. The computer was programmed to add the twelve importance points for each individual and to calculate a weighted importance score for each competency. The perceived attainment score was subtracted from ten to calculate the attainment value. This information was then placed into the following formula developed by Edwards:

$$U_j = \left[\frac{I_j}{\Sigma I} \times 100 \right] \times G_j$$

where U_j is the utility of one of the competency statements; I_j is the importance points for that statement; ΣI represents the sum of importance points for the twelve statements; the value of $\frac{I_j}{\Sigma I}$ represents a standardized importance value to correct for individual differences. This value is multiplied by 100 allowing for easier interpretation of the resulting values. G_j represents the difference between the ideal attainment and the estimated attainment of a competency.

Utility, then, is a function of the perceived importance value and the attainment value.

A hypothetical example of the calculation of utility values can serve to clarify Edwards' formula. Suppose an ABE educator identifies three competencies which he thinks are necessary for ABE teachers to develop as the result of participation in a staff development program. However, he does not have enough time to address all three. Which of these areas should he choose?

A. The ability to design appropriate instructional experiences for the ABE student.

B. The ability to establish effective interpersonal relationships with students.

C. The ability to perform administrative tasks associated with ABE programs.

The educator would need to complete the following three steps:

Step 1. Rank order the three statements (A through C) - #1 being most important, #3 being least important.

Step. 2. Assign the statement that was ranked lowest a score of ten. Then consider how much more important the next lowest ranked statement is than ten. Assign a score to that statement. If it is considerably more important than the lowest-ranked statement it might be assigned a score of 45. Score the remaining statement in relation to the other statements below it.

Step 3. On a scale of 1 to 10, estimate how well most ABE teachers have achieved the ability to perform each of these competencies (1 - no attainment, 10 = total attainment).

At this point, the example might appear as:

Rank	Competency	Importance Points	Attainment Estimate
2	A	45	6
1	B	50	8
3	C	10	4

Calculate the utility values for each area by following four steps:

1. Add the total importance points (in this case, the sum is 105).
2. Place the importance points for each item over the total points and multiply by 100.

Competency					Importance Value
A	45/105	x	100	=	42.86
B	50/105	x	100	=	47.62
C	10/105	x	100	=	9.52

The resulting numbers are the weighted importance values.

3. Subtract each attainment estimate from 10 to arrive at the attainment value.
4. Multiply each importance value by each attainment value to obtain individual utility values.

Competency	Importance Value		Attainment Value	Utility Value
A	42.86	x	4	171.44
B	47.62	x	2	95.24
C	9.52	x	6	57.12

The higher the utility value of a competency the greater the usefulness, or benefit, that accrues from addressing that competency. In this case, "The ability design appropriate instructional experiences for the ABE student" has the highest utility value.

Means and standard deviations were computed for each of the twelve competency statements for utility, importance, and attainment values. The same statistics were also computed for the three groups and for the eight states.

One-way analysis of variance (ANOVA) was chosen as the method to determine whether significant differences existed between the group means. However, since the sample sizes were not equal (Teacher n = 78, Administrator n = 79, and Professor n = 36), it was necessary to test for homogeneity of variance. Hartley's F-max was used as a means of testing the assumption of homogeneity of variance. For the values that did not meet the assumptions of the one-way analysis of variance, the data was analyzed by a nonparametric equivalence of the one-way ANOVA, the Kurskal-Wallis one-way analysis of variance. A confidence level of .05 was chosen by the researcher for utilization with all of these, and subsequent, statistical tests.

Since significant differences did exist for some of the ANOVA's, the Newman-Keuls multiple comparison procedure was utilized to determine differences between means. The Mann-Whitney U test was utilized to identify where the significant differences occurred with the Kruskal-Wallis test.

One additional procedure was used to test an underlying assumption that no significant differences existed among the eight states included in the sample. One-way analysis of variance was conducted on the responses by state.

CHAPTER IV

PRESENTATION OF FINDINGS

The twelve competencies selected for study were examined in terms of their utility as perceived by teachers, administrators and professors. Utility values are the product of perceived importance values and the degree of attainment of the competencies (attainment values) as perceived by the three respondent groups. This chapter is organized according to the utility, importance, and attainment values as they explain the reaction of the respondent groups to the competency statements.

The data are presented with minimal discussion of their characteristics. Chapter V contains a summary of the data, by competencies, and a discussion of the data that appear in this chapter, whereas this chapter is organized according to the three types of values associated with the total group of competencies, the discussion contained in Chapter V is directed to individual competency statements as they are explained by their accompanying importance, attainment, and utility values. The following sections describe (1) the questionnaire responses; (2) the clustering of competencies; (3) utility values; (4) importance values; and (5) the attainment values as they relate to the competency clusters.

Questionnaire Response

Sixty-four percent of the sample of 332 returned questionnaires; however, 19 questionnaires were not usable, leaving a net return of 58 percent or 193 usable responses. The teacher group had the lowest response rate, with 78 out of 155 (50 percent) returning usable questionnaires. Sixty-four percent of the administrators, or 79 out of 124, returned questionnaires, while 68 percent of the professors, or 36 out of 53, returned usable instruments. (See Appendix E.)

Clustering of Competencies

As explained in the procedures chapter, the researcher made the initial selection of competency clusters. However, the panel of experts participated in the refinement and validation of the competencies by examining the suggested competency statements and the classification of specific competency items drawn from Mocker's (1974) study.

The panelists supported the initial selection of broad competency statements, with only minor adjustments in wording. They recommended shifting several of Mocker's statements from one category to another, and also recommended deleting certain items from his list. Appendix F contains the results of the panel's response. Figure 1 contains a list of the resulting competency statements, representing the twelve clusters of competencies described in Appendix F. The

AN ABE TEACHER SHOULD HAVE:

A. The ability to develop a curriculum in ABE.

B. The ability to provide guidance to, or counsel, ABE students.

C. The ability to evaluate students in teaching-learning or counseling situations.

D. The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.

E. The ability to design appropriate instructional experiences for the ABE student.

F. The ability to apply an understanding of learning theories and learner characteristics in teaching-learning, or counseling, situations.

G. The ability to perform administrative tasks associated with ABE programs.

H. The ability to establish effective interpersonal relationships with students.

I. Developed a personal philosophy of adult education.

J. The ability to continue developing professionally.

K. The ability to manage learning activities.

L. A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).

Figure 1. Master list of competencies and key to tables.

competency items contained in Figure 1 will also serve as the "key" to subsequent tables and the narrative in this chapter.

Utility Values

Utility values for each of the twelve competency statements were calculated using Edwards' Utility Formula. Table 3 summarizes the means and standard deviations of the utility values for the combined groups of respondents. The competencies are arranged in the order of their utility values.

The values in Table 3 range from a high of 47.95 to a low of 14.08. Competency E had the highest utility value, while Competency G had the lowest utility value.

The mean utility values for each of the three groups are reported in Table 4. Utility values for the teachers range from a low of 13.00 for Competency G to a high of 39.32 for Competency E. The values assigned by the administrators range from 15.09 for Competency G to 47.80 for Competency E. The utility values for professors range from 14.18 for Competency G to 67.98 for Competency F.

Table 5 summarizes the rank order of utility values by respondent group. (It should be noted that these ranks reflect the order of magnitude of the utility values, and not a ranking made by the respondents.) The table indicates that Competency E was assigned the highest utility value by

TABLE 3

MEANS AND STANDARD DEVIATIONS OF UTILITY VALUES IN RANK ORDER FOR COMBINED GROUPS

	Competency	Mean	Standard Deviation
E.	The ability to design appropriate instructional experiences for the ABE student.	47.95	33.46
F.	The ability to apply an understanding of learning theories and learner characteristics in teaching-learning, or counseling situations.	42.09	28.16
H.	The ability to establish effective interpersonal relationships with students.	41.55	31.96
B.	The ability to provide guidance to, or counsel, ABE students.	38.94	25.44
C.	The ability to evaluate students in teaching-learning or counseling situations.	36.83	23.81
K.	The ability to manage learning activities.	32.14	24.27
A.	The ability to develop a curriculum in ABE.	31.60	21.33
D.	The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.	30.38	23.28
I.	Developed a personal philosophy of adult education.	27.00	25.33
L.	A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).	23.77	21.69
J.	The ability to continue developing professionally.	21.74	19.20
G.	The ability to perform administrative tasks associated with ABE programs.	14.08	12.39

TABLE 4

MEAN UTILITY VALUES ASSIGNED TO COMPETENCY STATEMENTS BY RESPONDENT GROUPS

Competency	Teachers	Administrators	Professors
A. The ability to develop a curriculum in ABE.	25.46	33.35	41.10
B. The ability to provide guidance to, or counsel, ABE students.	32.31	37.25	56.98
C. The ability to evaluate students in teaching-learning or counseling situations.	31.01	37.02	49.02
D. The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.	23.46	32.12	41.55
E. The ability to design appropriate instructional experiences for the ABE student.	39.32	47.80	66.98
F. The ability to apply an understanding of learning theories and learner characteristics in teaching-learning, or counseling situations.	30.79	41.71	67.39
G. The ability to perform administrative tasks associated with ABE programs.	13.00	15.09	14.18
H. The ability to establish effective interpersonal relationships with students.	34.78	38.05	63.91
I. Developed a personal philosophy of adult education.	19.82	26.55	43.57

TABLE 4 (Continued)

Competency	Teachers	Administrators	Professors
J. The ability to continue developing professionally.	17.11	19.20	37.32
K. The ability to manage learning activities.	25.59	29.28	52.60
L. A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).	20.57	21.47	35.73

TABLE 5

RANK ORDER OF UTILITY VALUES BY RESPONDENT GROUP

Competency	Teachers	Administrators	Professors
E	1	1	2
F	5	2	1
H	2	3	3
B	3	4	4
C	4	5	6
K	6	8	5
A	7	6	9
D	8	7	8
I	10	9	7
L	9	10	11
J	11	11	10
G	12	12	12

teachers and administrators, but that the competency was assigned the second highest value by professors. Competency F received the highest value from the professors, but for administrators it was the fifth highest and was second in utility value as seen by ABE teachers. Similar differences are evident for most of the competencies. However, the three groups were unanimous in their perception of Competency G as having the lowest utility value of the twelve competencies.

In order to determine if significant differences existed between the group means, it was necessary to test two underlying assumptions related to the data. In the first place, the sample size for each group was not equal, necessitating a test for homogeneity of variance. Hartley's F-max, calculated for the twelve utility values, resulted in six significant F-max values ($p < .05$) and six nonsignificant values ($p > .05$).[1] It was therefore appropriate to use a one-way ANOVA for the six competency statements which had nonsignificant F-max values. The Kruskal-Wallis Test, the nonparametric equivalent of the one-way ANOVA, was used for the remaining six utility values.

The second assumption that needed to be tested dealt with the selection of the sample. It was assumed that there would be no significant differences among the responses of

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[1]Details of these results are presented in Appendix G.

each of the eight states. One-way analysis of variance by state was conducted on those values where it was appropriate. These included the six utility values, all of the importance values, and all of the attainment values which are discussed in the next two sections of this chapter. Results revealed that no significant differences existed for any of the one-way analyses. These results supported the assumption that there were no significant differences by state, and no adjustments to the data were necessary.

Table 6 presents the one-way analysis of variance summaries for the utility values that met the assumption of homogeneity of variance. Competencies A, C, E, H, and I had highly significant F values. Competency G was the only item that had a nonsignificant F value.

The differences in the means was tested by using the Newman-Keuls Procedure. The data in Table 7 indicate that the differences in utility values for Competencies C, E, H, and I are all significant at the .05 level of confidence, when comparisons are made between teachers versus professors and administrators versus professors. For Competency A, a significant difference was observed between teachers and professors, but not between professors versus administrators. No significant differences occurred between teachers and administrators.

TABLE 6

ANALYSIS OF VARIANCE SUMMARIES FOR UTILITY VALUES

Source	D.F.	S.S.	MS	F
Competency A				
Between Groups	2	6433.00	3216.50	7.550*
Within Groups	190	80927.37	425.93	
Total	192	87360.37		
Competency C				
Between Groups	2	7996.87	3998.43	7.531*
Within Groups	190	100870.31	530.89	
Total	192	108867.18		
Competency E				
Between Groups	2	18847.25	9423.62	9.130*
Within Groups	190	196106.06	1032.13	
Total	192	214953.31		
Competency G				
Between Groups	2	173.38	86.69	0.562
Within Groups	190	29319.83	154.31	
Total	192	29493.21		
Competency H				
Between Groups	2	22543.62	11271.81	12.339*
Within Groups	190	173560.62	913.47	
Total	192	196104.25		
Competency I				
Between Groups	2	13925.12	6962.56	12.113*
Within Groups	190	109215.00	574.81	
Total	192	123140.12		

*Significant at the .05 level.

TABLE 7

RESULTS OF APPLICATION OF NEWMAN-KEULS PROCEDURE TO UTILITY VALUES ANOVAS

		Teachers[a]	Administrators[a]	Professors[a]	r[b]	Critical Values
Competency A						
Teachers	(25.46)	--	7.89	15.64*	3	11.39
Administrators	(33.35)		--	7.75	2	9.53
Professors	(41.10)			--		
Competency C						
Teachers	(31.01)	--	6.01	18.01*	3	12.71
Administrators	(37.02)		--	12.00*	2	10.64
Professors	(49.02)			--		
Competency E						
Teachers	(39.32)	--	8.48	27.66*	3	17.72
Administrators	(47.80)		--	19.18*	2	14.83
Professors	(66.98)			--		
Competency H						
Teachers	(34.78)	--	3.27	29.13*	3	16.68
Administrators	(38.05)		--	25.86*	2	12.85
Professors	(63.91)			--		

TABLE 7 (Continued)

		Teachers[a]	Administrators[a]	Professors[a]	r[b]	Critical Values
Competency I						
Teachers	(19.82)	--	6.73	23.75*	3	13.23
Administrators	(26.55)		--	17.02*	2	11.07
Professors	(43.57)					

[a]Numbers in table represent differences between pairs of means.

[b]r = number of means spanned by a comparison.

*Significant at the .05 level.

Table 8 summarizes the results of the Kruskal-Wallis test for the six remaining utility values. Each of the competencies had highly significant X^2 values across respondent groups. The Mann-Whitney U test was utilized to examine differences between respondent groups, the results of which are contained in Table 9. Significant differences existed between teachers and professors, and between administrators and professors for each of the competencies. Significant differences also occurred between the teachers and administrators for Competencies D and F.

Importance Values

The importance value represents a weighted score which corrects for individual differences in assigning points. This standardized value was multiplied by 100 to obtain numbers that are easier to interpret.

Table 10 contains the means and standard deviations of the importance values for the combined groups with the competencies arranged in the order of the importance values. The values range from a low of 3.04 for Competency G to a high of 12.32 for Competency H.

Mean importance values for the three respondent groups are presented in Table 11. Importance values for the teachers ranged from a low of 2.98 for Competency G to a high of 11.94 for Competency H. The values assigned by the administrators ranged from 3.18 for Competency G to

TABLE 8

RESULTS OF KRUSKAL-WALLIS TEST ON REMAINING UTILITY VALUES

Competency	χ^2
B. The ability to provide guidance to, or counsel, ABE students.	17.65*
D. The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.	14.68*
F. The ability to apply an understanding of learning theories and learner characteristics in teaching-learning, or counseling situations.	34.78*
J. The ability to continue developing professionally.	23.63*
K. The ability to manage learning activities.	28.66*
L. A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).	10.38*

*Value required for significance at the .05 level, df = 2, is 5.99.

TABLE 9

RESULTS OF MANN-WHITNEY U TEST AS FOLLOW-UP TO KRUSKAL-WALLIS TEST

Competency	Teachers - Administrators	Professors - Administrators	Teacher - Professors
B	1.33	3.39*	3.99*
D	2.37*	3.09*	2.50*
F	2.56*	4.03*	5.55*
J	0.22	4.34*	4.59*
K	0.74	4.55*	5.25*
L	0.74	2.82*	3.05*

*A z of 1.96 is needed for significance at .05 level.

TABLE 10

MEANS AND STANDARD DEVIATIONS OF IMPORTANCE VALUES IN RANK ORDER FOR COMBINED GROUPS

	Competency	Mean	Standard Deviation
H.	The ability to establish effective interpersonal relationships with students.	12.32	4.06
E.	The ability to design appropriate instructional experiences for the ABE student.	11.72	3.44
L.	A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).	9.73	4.06
B.	The ability to provide guidance to, or counsel, ABE students.	9.57	3.58
F.	The ability to apply an understanding of learning theories and learner characteristics in teaching-learning or counseling situations.	9.23	3.60
K.	The ability to manage learning activities.	9.18	3.48
C.	The ability to evaluate students in teaching-learning or counseling situations.	8.95	3.60
I.	Developed a personal philosophy of adult education.	7.11	4.48
D.	The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.	7.02	3.66
A.	The ability to develop a curriculum in ABE.	6.79	3.73
J.	The ability to continue developing professionally.	5.33	2.98
G.	The ability to perform administrative tasks associated with ABE programs.	3.04	2.11

TABLE 11

MEAN IMPORTANCE VALUES ASSIGNED TO COMPETENCY STATEMENTS BY RESPONDENT GROUPS

	Competency	Teachers	Administrators	Professors
A.	The ability to develop a curriculum in ABE.	6.59	6.93	6.90
B.	The ability to provide guidance to, or counsel, ABE students.	9.44	9.53	9.94
C.	The ability to evaluate students in teaching-learn learning or counseling situations.	9.00	9.41	7.82
D.	The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.	6.86	7.31	6.75
E.	The ability to design appropriate instructional experiences for the ABE student.	11.46	12.11	11.44
F.	The ability to apply an understanding of learning theories and learner characteristics in teaching-learning, or counseling situations.	8.43	9.61	10.13
G.	The ability to perform administrative tasks associated with ABE programs.	2.98	3.18	2.89
H.	The ability to establish effective interpersonal relationships with students	11.94	12.40	12.96
I.	Developed a personal philosophy of adult education.	7.43	6.68	7.37

TABLE 11 (Continued)

Competency	Teachers	Administrators	Professors
J. The ability to continue developing professionally.	5.69	4.73	5.90
K. The ability to manage learning activities.	9.21	8.89	9.74
L. A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).	10.96	9.24	8.17

12.40 for Competency H. The importance values for the professors ranged from 2.89 for Competency G to 12.96 for Competency H. The values appear much closer together than the utility values reported in Table 4 (page 42), as there is no clear tendency for one group to rate all the competencies higher than the other two groups (Table 12). Rather, all three groups rated Competencies H, E, and B first, second and fourth, respectively and Competencies A, J and G in the last three positions.

All of the importance values met the homogeneity of variance assumption.[2] Since none of the values were significant, the use of one-way analysis of variance was considered an appropriate test of mean differences. Table 13 contains the one-way ANOVA results for the importance values. Only the means associated with Competencies F and L were significantly different ($p < .05$).

Table 14 shows the results of the application of the Newman-Keuls procedure to Competencies F and L. Although the ANOVA's for Competency F showed that a significant difference existed, the Newman-Keuls procedure failed to identify any significant differences between the individual groups. The results for Competency L, however, showed that a significant difference existed between the mean values assigned by teachers and professors. Although the calculated value

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[2]See Appendix G for F-max values.

TABLE 12

RANK ORDER OF IMPORTANCE VALUES BY RESPONDENT GROUP

	Competency	Teachers	Administrators	Professors
H.	The ability to establish effective interpersonal relationships with students.	1	1	1
E.	The ability to design appropriate instructional experiences for the ABE student.	2	2	2
L.	A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).	3	6	6
B.	The ability to provide guidance to, or counsel, ABE students.	4	4	4
F.	The ability to apply an understanding of learning theories and learner characteristics in teaching-learning, or counseling situations.	7	3	3
K.	The ability to manage learning activities.	5	7	5
C.	The ability to evaluate students in teaching-learning or counseling situations.	6	5	7
I.	Developed a personal philosophy of adult education.	8	10	8
D.	The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.	10	8	10
A.	The ability to develop a curriculum in ABE.	9	9	9

TABLE 12 (Continued)

	Competency	Teachers	Administrators	Professors
J.	The ability to continue developing professionally.	11	11	11
G.	The ability to perform administrative tasks associated with ABE programs.	12	12	12

TABLE 13

ANALYSIS OF VARIANCE SUMMARIES FOR IMPORTANCE VALUES

Source	D.F.	S.S.	M.S.	F
Competency A				
Between Groups	2	5.13	2.56	0.183
Within Groups	190	2664.89	14.02	
Total	192	2670.02		
Competency B				
Between Groups	2	6.28	3.14	0.244
Within Groups	190	2448.54	12.88	
Total	192	2454.82		
Competency C				
Between Groups	2	62.25	31.12	2.444
Within Groups	190	2419.37	12.73	
Total	192	2481.62		
Competency D				
Between Groups	2	11.33	5.66	0.420
Within Groups	190	2564.11	13.49	
Total	192	2575.45		
Competency E				
Between Groups	2	19.78	9.89	0.835
Within Groups	190	2250.88	11.84	
Total	192	2270.67		
Competency F				
Between Groups	2	89.80	44.90	3.553*
Within Groups	190	2041.14	12.63	
Total	192	2490.95		
Competency G				
Between Groups	2	2.56	1.28	0.285
Within Groups	190	852.87	4.48	
Total	192	855.43		

TABLE 13 (Continued)

Source	D.F.	S.S.	M.S.	F
Competency H				
Between Groups	2	26.43	13.21	0.800
Within Groups	190	3138.80	16.52	
Total	192	3165.23		
Competency I				
Between Groups	2	25.48	12.74	0.631
Within Groups	190	3835.01	20.18	
Total	192	3860.49		
Competency J				
Between Groups	2	50.43	25.21	2.898
Within Groups	190	1653.36	8.70	
Total	192	1703.80		
Competency K				
Between Groups	2	17.99	8.99	0.742
Within Groups	190	2302.74	12.11	
Total	192	2320.73		
Competency L				
Between Groups	2	225.41	112.70	7.302*
Within Groups	190	2932.48	15.43	
Total	192	3157.89		

*Significant at the .05 level.

TABLE 14

RESULTS OF APPLICATION OF NEWMAN-KEULS PROCEDURE TO IMPORTANCE VALUES ANOVA

		Teachers[a]	Administrators[a]	Professors[a]	r[b]	Critical Values
Competency F						
Teachers	(8.43)	--	1.18	1.70	3	1.99
Administrators	(9.61)		--	0.50	2	1.66
Professors	(10.13)			--		
Competency L						
Teachers	(10.96)	--	1.72	2.79*	3	2.13
Administrators	(9.24)		--	1.07	2	1.79
Professors	(8.17)			--		

[a]Numbers in table represent differences between pairs of means.

[b]r = number of means spanned by a comparison.

*Significant at the .05 level.

between the administrators and the professors was not significant, it did have a probability value of .058.

Attainment Values

The second component of the utility value is the attainment value. This represents the perceived difference between the ideal and actual ability to perform the specified competency. Competencies having a larger value indicate a greater discrepancy, or the need for more improvement; in reverse, smaller values suggest greater proficiency in performing that competency.

The means and standard deviations for the attainment values are presented in Table 15, with competencies appearing in the magnitude of their attainment values. The attainment values range from a low of 2.63 for Competency L to a high of 5.06 for Competency A.

Mean attainment values for the three groups are reported in Table 16. Attainment values for the teachers ranged from a low of 2.04 for Competency L to a high of 4.55 for Competency A. The values assigned by administrators ranged from 2.56 for Competency L to 5.05 for Competency A. The attainment values for the professors ranged from 4.06 for Competency L to 6.64 for Competency F. For the most part, administrators tended to have larger attainment values than the teachers, and professors had larger attainment values than either of the other groups. All three groups

TABLE 15

MEANS AND STANDARD DEVIATION OF ATTAINMENT VALUES IN RANK ORDER FOR COMBINED GROUPS

	Competency	Mean	Standard Deviation
A.	The ability to develop a curriculum in ABE.	5.06	2.31
G.	The ability to perform administrative tasks associated with ABE programs.	4.66	2.44
F.	The ability to apply an understanding of learning characteristics in teaching-learning, or counseling situations.	4.55	2.20
D.	The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.	4.48	2.30
C.	The ability to evaluate students in teaching-learning or counseling situations.	4.31	2.23
B.	The ability to provide guidance to, or counsel, ABE students.	4.22	2.23
I.	Developed a personal philosophy of adult education.	4.06	2.42
J.	The ability to continue developing professionally.	4.05	2.40
E.	The ability to design appropriate learning experiences for the ABE student.	4.04	2.34
K.	The ability to manage learning activities.	3.55	2.12
H.	The ability to establish effective interpersonal relationships with students.	3.36	2.16
L.	A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).	2.63	2.14

TABLE 16

MEAN ATTAINMENT VALUES ASSIGNED TO COMPETENCY STATEMENTS BY RESPONDENT GROUPS

	Competency	Teachers	Administrators	Professors
A.	The ability to develop a curriculum in ABE.	4.55	5.05	6.19
B.	The ability to provide guidance to, or counsel, ABE students.	3.60	4.13	5.75
C.	The ability to evaluate students in teaching-learning or counseling situations.	3.59	4.09	6.36
D.	The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.	3.68	4.35	6.50
E.	The ability to design appropriate instructional experiences for the ABE student.	3.33	3.92	5.81
F.	The ability to apply in understanding of learning theories and learner characteristics in teaching-learning, or counseling situations.	3.72	4.43	6.64
G.	The ability to perform administrative tasks associated with ABE programs.	4.36	4.81	5.00
H.	The ability to establish effective interpersonal relationships with students.	2.85	3.14	4.94
I.	Developed a personal philosophy of adult education.	3.21	4.00	6.03

TABLE 16 (Continued)

Competency	Teachers	Administrators	Professors
J. The ability to continue developing professionally.	3.26	3.86	6.17
K. The ability to manage learning activities.	2.87	3.35	5.47
L. A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).	2.04	2.56	4.06

assigned the smallest attainment value to Competency L and gave Competency H the next lowest value (Table 17). Five of the competencies were assigned a wide range of values by the three groups. Competency G was rated second by both the teachers and administrators, but professors rated it tenth. Both teachers and administrators assigned the greatest attainment value to Competency A but professors rated it third. Teachers and administrators rated Competency C sixth, while professors rated it third.

Hartley's F-max was applied to the attainment values to test the assumption of homogeneity of variance. No significant values resulted from the test.[3] Table 18 contains the one-way analysis of variance summaries for the attainment values. All of the competencies received highly significant F values except Competency G.

The results of the application of the Newman-Keuls procedure are presented in Table 19. The data indicate that for each competency with a significant F, significant differences also occurred in mean attainment values assigned by teachers versus professors and professors versus administrators. No significant differences existed between teachers and administrators.

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[3]See Appendix G for the calculated F-max values.

TABLE 17

RANK ORDER OF ATTAINMENT VALUES BY RESPONDENT GROUP

Competency	Teachers	Administrators	Professors
A	1	1	4
G	2	2	10
F	3	3	1
D	4	4	2
C	6	6	3
B	5	5	8
I	9	7	6
J	8	9	5
E	7	8	7
K	10	10	9
H	11	11	11
L	12	12	12

TABLE 18

ANALYSIS OF VARIANCE SUMMARIES FOR ATTAINMENT VALUES

Source	D.F.	S.S.	M.S.	F
Competency A				
Between Groups	2	66.52	33.26	6.606*
Within Groups	190	956.73	5.03	
Total	192	1023.25		
Competency B				
Between Groups	2	114.69	57.34	13.000*
Within Groups	190	838.16	4.41	
Total	192	952.86		
Competency C				
Between Groups	2	195.78	97.89	24.488*
Within Groups	190	759.55	3.99	
Total	192	955.34		
Competency D				
Between Groups	2	198.12	99.06	23.064*
Within Groups	190	816.06	4.29	
Total	192	1014.18		
Competency E				
Between Groups	2	152.22	76.11	16.059*
Within Groups	190	900.51	4.73	
Total	192	1052.74		
Competency F				
Between Groups	2	212.21	106.10	28.021*
Within Groups	190	719.46	3.78	
Total	192	931.67		
Competency G				
Between Groups	2	13.00	6.50	1.092
Within Groups	190	1132.10	5.95	
Total	192	1145.10		

TABLE 18 (Continued)

	D.F.	S.S.	M.S.	F
Competency H				
Between Groups	2	114.82	57.41	13.993*
Within Groups	190	779.51	4.10	
Total	192	894.33		
Competency I				
Between Groups	2	196.68	98.34	20.141*
Within Groups	190	927.69	4.88	
Total	192	1124.37		
Competency J				
Between Groups	2	213.23	106.61	22.626*
Within Groups	190	895.34	4.71	
Total	192	1108.58		
Competency K				
Between Groups	2	171.91	85.95	23.541*
Within Groups	190	693.76	3.65	
Total	192	865.67		
Competency L				
Between Groups	2	100.87	50.43	12.282*
Within Groups	190	780.26	4.10	
Total	192	881.14		

*Significant at the .05 level.

TABLE 19

RESULTS OF APPLICATION OF NEWMAN-KEULS PROCEDURE TO ATTAINMENT VALUES

		Teachers[a]	Administrators[a]	Professors[a]	r[b]	Critical Values
Competency A						
Teachers	(4.55)	--	.50	1.64*	3	1.24
Administrators	(5.05)		--	1.14*	2	1.04
Professors	(6.19)			--		
Competency B						
Teachers	(3.60)	--	.53	2.15*	3	1.16
Administrators	(4.13)		--	1.62*	2	.97
Professors	(5.75)			--		
Competency C						
Teachers	(3.59)	--	.50	2.77*	3	1.10
Administrators	(4.09)		--	2.27*	2	.92
Professors	(6.36)			--		
Competency D						
Teachers	(3.68)	--	.68	2.83*	3	1.14
Administrators	(4.35)		--	2.15*	2	.96
Professors	(6.50)			--		
Competency E						
Teachers	(3.33)	--	.59	2.48*	3	1.20
Administrators	(3.92)		--	1.89*	2	1.01
Professors	(5.81)			--		

TABLE 19 (Continued)

		Teachers[a]	Administrators[a]	Professors[a]	r[b]	Critical Values
Competency F						
Teachers	(3.72)	--	.71	2.92*	3	1.07
Administrators	(4.43)		--	2.21*	2	.90
Professors	(6.64)			--		
Competency H						
Teachers	(2.85)	--	.29	2.09*	3	1.11
Administrators	(3.14)		--	1.80*	2	.94
Professors	(4.94)			--		
Competency I						
Teachers	(3.21)	--	.79	2.82*	3	1.20
Administrators	(4.00)		--	2.03*	2	1.02
Professors	(6.03)			--		
Competency J						
Teachers	(3.26)	--	.60	2.91*	3	1.20
Administrators	(3.86)		--	2.31*	2	1.00
Professors	(6.17)			--		
Competency K						
Teachers	(2.87)	--	.48	2.60*	3	1.05
Administrators	(3.35)		--	2.12*	2	.88
Professors	(5.47)			--		

TABLE 19 (Continued)

		Teachers[a]	Administrators[a]	Professors[a]	r[b]	Critical Values
Competency L						
Teachers	(2.04)	--	.50	2.02*	3	1.12
Administrators	(2.56)		--	1.50*	2	.94
Professors	(4.06)			--		

[a]Numbers in table represent differences between pairs of means.

[b]r = number of means spanned by a comparison.

*Significant at the .05 level.

The data appearing in Tables 3 through 19 are discussed in the next chapter. Each competency is considered in relation to the information available from the utility values, the importance values, and the attainment values.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

This chapter concludes the study by offering a summary and discussion of the results in three parts. The first section includes a synthesis and discussion of the data presented in Chapter IV as they relate to each competency. The researcher's conclusions are presented next, and implications for research and practice are discussed in the last section of the chapter.

I. SUMMARY AND DISCUSSION OF COMPETENCIES

The 291 competency statements from Mocker's inventory were collapsed into twelve clusters by the researcher and a panel of experts. The resulting clusters were described as general competency statements. This study focused on these competencies of ABE teachers and the utility of these competencies as perceived by three groups of persons closely associated with the role of the teacher. Utility was determined by combining an estimate of the importance of each competency with perceived attainment estimates. It is therefore useful to view the results of the study from the perspective of the individual competency statements, as they are explained by the components of utility and responses from each of the three groups surveyed. This compilation will also serve to summarize the major results of the study.

Competency A: The Ability to Develop a Curriculum in ABE

Competency A had the largest mean attainment value of the group of competencies, indicating that the combined groups of respondents saw ABE teachers as lacking ability in this area to a greater extent than in any other single competency. However, they also rated the competency as next to last in importance to the role of the ABE teacher. This combination of perceived attainment and importance resulted in a moderate utility value for the competency, placing it seventh in value among a total of twelve competencies.

Teachers and professors differed significantly in the utility values and attainment values associated with Competency A. Teachers saw curriculum development as having much less utility than professors. Significant differences also occurred between teachers and professors and between administrators and professors in the attainment values. Professors assigned the highest attainment value. However, no significant differences existed in the way the three groups perceived the importance of the competency.

The data indicate that teachers and administrators are more likely than professors to view ABE teachers as being able to develop a curriculum in one of the least important of the twelve competencies. As a whole, the groups saw moderate utility in developing the competency. However, with respect to utility, professors were inclined to see even less utility in the competency than were ABE teachers.

Perhaps curriculum development is not considered as vital to teaching as is the design of instruction. Since instruction is the major responsibility in the classroom, teachers may assume that curriculum guides are already in existance and their responsibility for developing curriculum is not major.

Competency B: The Ability to Provide Guidance to, or Counsel, ABE Students

The combined group of respondents viewed teachers as having an average level of ability to perform this competency, but accorded it a relatively high level of importance (fourth in a list of twelve). The overall utility of the competency was also relatively high, placing in the top third of the competencies. However, significant differences occurred between teachers and administrators, and between professors and administrators with respect to utility values, as professors were prone to assign higher values to the competency. No significant differences were apparent in the importance values, but professors again differed significantly from the teachers and administrators in their perception of the ability of ABE teachers to exhibit the competency. Professors were more likely to assign higher attainment values in this area, with teachers and administrators perceiving the ABE teachers as having better than average ability with respect to the total group of competencies.

Competency C: The Ability to Evaluate Students in Teaching-Learning or Counseling Situations

This competency ranked one position lower than Competency B in utility, or slightly better than average among the total list of competencies. The competency ranked eighth among the competencies in importance, and fifth in attainment value. Not surprisingly, however, professors differed significantly from teachers and administrators, perceiving the teachers to have less ability to evaluate students than to perform competencies in two-thirds of the remaining areas. Teachers and administrators gave teachers significantly higher marks in this area. No significant differences were observed in the importance levels assigned by the three groups.

Competency D: The Ability to Apply Knowledge of the General Field of Adult Education in Performing His or Her Role as a Teacher

The three groups significantly differed with each other in the utility assigned to this competency. Although all groups gave the competency relatively low marks, this was one of only two competencies in which significant differences in utility means occurred between professors and administrators, professors and teachers, and administrators and teachers. Moreover, significant differences were recorded with respect to attainment values. Professors rated

teachers' ability in this area lower than did teachers and administrators. Professors assigned their next to lowest attainment value to teachers on this competency, while teachers and administrators assigned it the fourth highest value. The three groups did not differ significantly in the perceived importance of the item, with all assigning it a low level (tenth position) relative to the other competencies.

These results indicate that professors as a group were more skeptical about the ability of teachers to apply knowledge of the general field, although no group accorded the competency a high position in either importance or utility. Perhaps these results are due to a narrow view of ABE as experienced by teachers while administrators have a slightly broader concept of adult education and professors deal continuously with a diversity of areas within the field of adult education.

Competency E: The Ability to Design Instructional Experiences for the ABE Student

Competency E had the highest overall utility value of the twelve competencies. This resulted from a high importance value (second ranked) and a low attainment value, indicating that the combined groups felt that the competency was not only very important, but that teachers were not able to perform this competency as well as the majority of the

other competencies. Again, professors differed with the two other groups with respect to utility and attainment values. Professors were more likely to rate teachers lower with respect to ability, and their resulting utility values were also generally higher than those of teachers and administrators.

Competency F: The Ability to Apply an Understanding of Learning Theories and Learner Characteristics in Teaching-Learning, or Counseling Situations

Competency F had the second highest overall utility value of the group of competencies. However, the three groups differed significantly with respect to utility values and attainment values. The utility of this competency was highest on the list for professors, but was second highest for administrators and fifth highest for teachers. Although the differences were not significant, teachers rated the competency seventh overall in importance, while professors and administrators ranked it third. Professors assigned the highest attainment value to Competency F, indicating they rated the teachers' ability to perform this competency least of all of the competencies. Teachers and administrators rated it third in attainment value, resulting in significant differences between professors and administrators, and between professors and teachers.

Teachers and administrators may have reacted to the idea of "theory" rather than the concrete application of the knowledge of learning theories and learner characteristics.

Competency G: The Ability to Perform Administrative Tasks Associated with ABE Programs

There was near unanimous agreement among the three groups with respect to Competency G. All groups ranked the competency last in importance, and its utility value was the lowest on the list of competencies. The only difference in the groups' perceptions occurred with respect to the attainment values. Teachers and administrators were more likely than professors to see teachers possessing ability in this competency. Overall, the data indicate that the competency is of little importance or utility with respect to the role of the ABE teacher.

Competency H: The Ability to Establish Effective Interpersonal Relationships with Students

All three groups considered Competency H to be the most important of all the competencies, and all groups considered teachers to be well prepared in this competency area. The overall utility value was the second highest on the list of competencies, with the utility value for professors being significantly higher than either of the other two groups.

Competency I: Developed a Personal Philosophy of Adult Education

This competency received little enthusiastic support from the three groups on the utility importance, and attainment dimensions. The competency ranked ninth in utility and in importance, and seventh in attainment value. Not only did the three groups consider the competency as being low in importance and utility, but they apparently considered the average teacher to have developed a philosophy of adult education. This was especially true of the perceptions of the teacher group, and as might be expected, the professors were less likely to perceive teachers as having sufficiently developed such a competency. These differences were statistically significant, as were the mean utility values, which again presented a higher utility value for the professors.

Competency J: The Ability to Continue Developing Professionally

Competency J received the next to lowest utility value of the twelve competencies, and was uniformly low in importance, also being ranked next to last on the list of competencies. In terms of attainment value, Competency J ranked eighth, with some variation being evident in the perceptions of these respondent groups. The professor group's mean attainment value was significantly higher than the other two

groups, indicating that professors were more likely to see room for further development in this competency area. Once again, the narrowness of the view of ABE teachers may have caused the significant differences.

Competency K: The Ability to Manage Learning Activities

This competency ranked average in utility and importance (sixth), but all groups were prone to view the teacher as having relatively high ability in Competency K (tenth overall). Even though professors attached less importance to the competency, the utility value for professors was significantly higher than the other groups, as was their attainment value. This indicates that while professors may not attach as much importance to the competency, they do see more room for improvement in teachers' competencies in this area.

Competency L: A Mastery of the Subject Areas Taught

Although this competency was perceived by the combined groups as being of high importance (third ranked), the overall utility of the competency was very low (tenth ranked). This is probably due to the uniformly low attainment values attached to the competency, as all three groups considered teachers to have the greatest competency in the subject areas being taught. There were significant differences in the importance values as perceived by the teachers and professors, with the latter group attaching less importance to the

competency in relation to all other competencies.

Since teachers are largely drawn from public school systems where they teach similar subject areas, all groups may perceive teachers to be competent in their subject matter before beginning to teach ABE.

Comparison of Competencies

Figure 2 provides an overview of the relationship among the dimensions of utility, importance, and attainment of competencies. It is presented here in the interest of summarizing the above findings.

In terms of importance (Column A, Figure 2), the combined groups rated as most important the competencies related to interpersonal relationships, the design of instructional experiences, mastery of subject matter, and the ability to provide guidance to ABE students. Least important were competencies related to administrative tasks, continuing professional development, curriculum development, and knowledge of the general field.

The listing in Column B shows that the combined groups perceived teachers to have the least competence in curriculum development; administrative teasks, understanding of learning theories and learner characteristics, and the ability to apply knowledge of the general field. Teachers were perceived to have the most competence in the subjects taught, interpersonal relationships, the management of learning activities, and the design of instruction.

Column A Competencies/Importance	Column B Competencies/Attainment	Column C Competencies/Utility
H. The ability to establish effective interpersonal relationships with students.	A. The ability to develop a curriculum in ABE.	E. The ability to design appropriate instructional experiences for the ABE student.
E. The ability to design appropriate instructional experiences for the ABE student.	G. The ability to perform administrative tasks associated with ABE programs.	F. The ability to apply an understanding of learning theories and learner characteristics in teaching-learning, or counseling, situations.
L. A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).	F. The ability to apply an understanding of learning theories and learner characteristics in teaching-learning, or counseling, situations.	H. The ability to establish effective interpersonal relationships with students.
B. The ability to provide guidance to, or counsel, ABE students.	D. The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.	B. The ability to provide guidance to, or counsel, ABE students.
F. The ability to apply an understanding of learning theories and learner characteristics in teaching-learning, or counseling, situations.	C. The ability to evaluate students in teaching-learning, or counseling, situations.	C. The ability to evaluate students in teaching-learning, or counseling, situations.
K. The ability to manage learning activities.	B. The ability to provide guidance to, or counsel, ABE students.	K. The ability to manage learning activities.
C. The ability to evaluate students in teaching-learning or counseling, situations.	I. Developed a personal philosophy of adult education.	A. The ability to develop a curriculum in ABE.
I. Developed a personal philosophy of adult education.	J. The ability to continue developing professionally.	D. The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.
D. The ability to apply knowledge of the general field of adult education in performing his or her role as a teacher.	E. The ability to design appropriate instructional experiences for the ABE student.	I. Developed a personal philosophy of adult education.
A. The ability to develop a curriculum in ABE.	K. The ability to manage learning activities.	L. A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).
J. The ability to continue developing professionally.	H. The ability to establish effective interpersonal relationships with students.	J. The ability to continue developing professionally.
G. The ability to perform administrative tasks associated with ABE programs.	L. A mastery of the subject area(s) taught (e.g., math, coping skills, problem solving).	G. The ability to perform administrative tasks associated with ABE programs.

Figure 2. Competencies arranged according to rank of importance values, attainment values and utility values of combined groups.

The above factors of importance and attainment combine to produce utility values. The competencies with the highest utility values are related to the design of instruction, the understanding and application of learning theories and learner characteristics, interpersonal relationships, and guidance and counseling. Competencies with the least utility are related to administrative tasks, continuing professional development, mastery of subjects taught, and the development of a philosophy of adult education.

There was variation in the perceptions of three respondent groups. For example, professors almost always underrated ABE teachers' existing competencies, compared to the ratings of teachers and administrators. Professors placed significantly more importance on the understanding of learning theories and learner characteristics than did teachers or administrators, and they placed significantly less importance on mastery of subject matter than did teachers.

A related and important characteristic of the findings is that professors consistently differed with teachers and administrators on the attainment and utility dimensions. The teacher group and administrator group rarely differed with one another. Much of the difference in utility values between professors versus administrators and teachers can be traced to the higher attainment values for professors, which again

illustrates that professors perceive ABE teachers to be less competent in the majority of the competency areas than do the other groups.

II. CONCLUSIONS

The conclusions that accrue from the above findings are as follows.

1. The Edwards' utility formula is a potentially effective tool for analyzing teacher competencies. Its primary value is in the provision for combining two dimensions (importance and attainment) heretofore not examined together in other studies of competency-based education.

2. Related to the first conclusion, the results illustrate the importance of viewing such entities as teacher competencies in a multi-dimensional framework. Whereas most studies of teacher competencies ask respondents to rank items in order of importance, the present findings show that importance values alone do not reveal the full implications of such competency lists. When perceived importance is linked with the degree to which teachers have already achieved the competencies, a different order of competencies will likely occur.

3. This study effectively grouped Mocker's (1974) longer list of specific competencies into clusters, and provided an additional interpretation of his original findings. This study also demonstrated that research such as

Mocker's should not be interpreted and used for purposes of CBE program development without thoroughly examining the competencies from several points of view and along more than a single dimension of value.

4. Professors or other academically oriented persons are likely to perceive competencies and their attainment differently from persons more closely identified with "field practice." This difference not only may occur in the identification of competencies needed by ABE teachers, but also can occur in the relative value or order of importance associated with lists of competencies.

III. IMPLICATIONS

The results of this study have implications for research and practice. Some of the more important implications are as follows.

1. Future research on CBE should be conducted in a multi-variate framework, so as to account for the several different factors that seem to determine the nature of competencies and their relevance to program development.

2. The reliability of the instrument used in this study was not assessed. Future studies should include a reliability check on such instruments as they are used for similar purposes.

3. The present study dealt with perceived importance of competencies and their attainment. Future research should concentrate on the actual attainment of these competencies, perhaps by the use of observational techniques.

4. Additional investigations should examine more closely the differences that exist in perceptions of groups that identify with the role of the ABE teacher. The differences in perception exhibited by professors and "practitioners" in this study indicate that such variance should be more thoroughly explored. If similar differences are replicated in other studies, efforts should be made to explain why they exist.

5. Professors and others responsible for designing and operating staff development programs should be especially alert to the problems involved in basing program design on the perception of a single group or person related to the role of the ABE teacher. The results of this study vividly illustrate the differences in perceptions shared by three groups likely to participate in program design, and by inference identify the differences in program development priorities among the groups involved.

6. The Edwards Utility Formula should be used again in other research contexts to further test its applicability to research and development in adult education.

7. The results of this study and other studies should be examined for their use in developing preservice and inservice education programs for ABE teachers. These studies may offer a firmer base on which to make educational program design decisions. For example, the utility value could be considered as one index to use in determining where emphasis should be placed in designing staff development programs.

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APPENDICES

APPENDIX A

LETTERS REQUESTING SUPPORT

June 27, 1975

Mr. Floyd Jaggears
Director
Adult and Veteran Education
State Department of Education
Tallahassee, Florida 32304

Dear Mr. Jaggears:

Ms. Waynne James and I are conducting a study of adult basic education teacher competencies, and we need your assistance.

The study is designed to develop a basis for improving new and existing ABE teacher training programs. We are working with a list of 291 competencies, in an effort to reduce them to a relatively few major competencies that could serve as the focus of graduate programs and in-service education programs.

We need to have the direct input of teachers and administrative personnel in Region IV. Accordingly, we wish to send questionnaires to a selected sample of supervisors and teachers in your State, in addition to sending one to you. At this stage, we would like your reaction to our plan to ask 14 supervisors in Florida to identify the names and addresses of 70 ABE teachers, to whom we can send questionnaires later this summer. In total, we would send a questionnaire to you, one to each of 14 supervisors, and one each to the teachers identified by the supervisors.

The questionnaire will ask that each person receiving one rank order a list of about 15 competencies and to attach a value (on a scale) to each competency. It should take about 20-30 minutes to complete.

We will share all of our results with you. Please let us know whether you will approve of our plan to work with supervisors and teachers in Florida. We will attach your letter to the cover letter sent to supervisors and teachers. We would like to hear from you by July 5.

Thank you for your cooperation.

Sincerely,

John M. Peters
Associate Professor

JMP/dw

July 28, 1975

Dear _____:

Ms. Waynne James and I are conducting a study of adult basic education teacher competencies, and we need your assistance.

The study is designed to develop a basis for improving new and existing ABE teacher training programs. We are working with a list of 291 competencies, in an effort to reduce them to a relatively few major competencies that could serve as the focus of graduate programs and in-service education programs.

We need to have the direct input of teachers and administrative personnel in Region IV. Accordingly, we would like to send questionnaires to a selected sample of your teachers, in addition to sending one to you. At this stage we would like to ask you for the names and addresses of the teachers in your system, up to a maximum of 25 names.

We have asked John Williams to approve of our plan to work with supervisors and teachers in Mississippi and he has given his support. We are enclosing a copy of his approval letter.

The questionnaire will ask each person to rank order a list of about 15 competencies and to attach a value (on a scale) to each competency. It should take about 20 - 30 minutes to complete.

We would appreciate having the names of your teachers as quickly as possible.

Thank you for your cooperation.

Sincerely,

John M. Peters
Associate Professor

JMP:maf

Enclosure

APPENDIX B

QUESTIONNAIRE

ABE TEACHER COMPETENCY QUESTIONNAIRE

Please provide the following information:

Name_____

School System (or University)_____ State_____

Position (check one):

____ABE Teacher ____Counselor

____State Department Administrator

____Local Administrator or Supervisor

____Professor of Adult Education

____Learning Center Director

____Other (please specify)_____

☐ Check here if you are interested in a summary of the results of this study.

DIRECTIONS: Please read all instruction carefully.

Listed on page two are twelve statements (A through L) that represent competencies that Adult Basic Education teachers need in order to function effectively in the ABE classroom. Read over the list of statements and then complete the following three steps. For your ease in understanding the directions, it would help you to look over page two, the Statement Sheet, and refer to it when necessary.

Refer to page three for sample behaviors that fall under each statement. Check this sheet whenever necessary for clarification of each of the twelve statements.

Step 1. Turn to page two. Rank order the twelve statements (A through L) - #1 being most important, #12 being least important.

Step 2. This is the most complicated step. Please read the instructions very carefully. Each competency may be perceived as having varying degrees of importance relative to the role of the ABE teacher. Certain numerical values can be assigned to that importance. This is the "importance value." To indicate the importance value that you could ascribe to each statement, follow the directions below:

Assign the statement that you ranked lowest a score of 10. Then consider how much more important the next lowest ranked statement is than 10. Assign a score to that statement. For example, if the statement ranked 11th is only slightly more important than the statement ranked 12th, you might assign it a score of 14. If, however, it is considerably more important than the lowest-ranked statement, you might assign it a score of 20. Continue scoring each statement in relation to every other statement below it, until all twelve statements are scored. No statement is to receive a score higher than 100. Keep this limitation in mind as you score the twelve statements.

Enter the points assigned to each item under column headed STEP 2 on page two. The following is an example of how three items may be scored.

Rank	Statement	Points
#12	A	10
#11	B	14
#10	C	24

When you have finished assigning importance values to each statement, check over your assigned points. Have you considered the relationship of all statements? Do you still agree with your original assignment of points? If not, feel free to revise your values.

Step 3. On a scale of 1-10, estimate how well most ABE teachers have achieved the ability to perform each of these competencies (1 = no attainment, 10 = total attainment).

Thank you for your time and efforts in completing this questionnaire. Please return pages one and two of the questionnaire in the enclosed self-addressed, stamped envelope.

STATEMENT SHEET

STEP 1		STEP 2	STEP 3
RANK ORDER	STATEMENTS	Perceived Importance Lowest rank = 10 points	Ability to perform these competencies? (Circle appropriate slash mark.) 1 = no attainment 10 = total attainment
	AN ABE TEACHER SHOULD HAVE:		
_____	A. THE ABILITY TO DEVELOP A CURRICULUM IN ABE	_____	1 2 3 4 5 6 7 8 9 10
_____	B. THE ABILITY TO PROVIDE GUIDANCE TO, OR COUNSEL, ABE STUDENTS	_____	1 2 3 4 5 6 7 8 9 10
_____	C. THE ABILITY TO EVALUATE STUDENTS IN TEACHING-LEARNING, OR COUNSELING SITUATIONS	_____	1 2 3 4 5 6 7 8 9 10
_____	D. THE ABILITY TO APPLY KNOWLEDGE OF THE GENERAL FIELD OF ADULT EDUCATION IN PERFORMING HIS OR HER ROLE AS A TEACHER	_____	1 2 3 4 5 6 7 8 9 10
_____	E. THE ABILITY TO DESIGN APPROPRIATE INSTRUCTIONAL EXPERIENCES FOR THE ABE STUDENT	_____	1 2 3 4 5 6 7 8 9 10
_____	F. THE ABILITY TO APPLY AN UNDERSTANDING OF LEARNING THEORIES AND LEARNER CHARACTERISTICS IN TEACHING-LEARNING, OR COUNSELING SITUATIONS	_____	1 2 3 4 5 6 7 8 9 10
_____	G. THE ABILITY TO PERFORM ADMINISTRATIVE TASKS ASSOCIATED WITH ABE PROGRAMS	_____	1 2 3 4 5 6 7 8 9 10
_____	H. THE ABILITY TO ESTABLISH EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH STUDENTS	_____	1 2 3 4 5 6 7 8 9 10
_____	I. DEVELOPED A PERSONAL PHILOSOPHY OF ADULT EDUCATION	_____	1 2 3 4 5 6 7 8 9 10
_____	J. THE ABILITY TO CONTINUE DEVELOPING PROFESSIONALLY	_____	1 2 3 4 5 6 7 8 9 10
_____	K. THE ABILITY TO MANAGE LEARNING ACTIVITIES	_____	1 2 3 4 5 6 7 8 9 10
_____	L. A MASTERY OF THE SUBJECT AREA(S) TAUGHT (E.G., MATH, COPING SKILLS, PROBLEM SOLVING)	_____	1 2 3 4 5 6 7 8 9 10

SAMPLE BEHAVIOR SHEET

The following list of statements represent competencies that ABE teachers need in order to function effectively in the ABE classroom. Each statement has several sample behaviors which serve to explain the competency.

An ABE teacher should have:

A. THE ABILITY TO DEVELOP A CURRICULUM IN ABE
Sample Behaviors:
1. Interprets and uses a functional model of the curriculum development process that is appropriate for selection, production and evaluation of instructional programs.
2. Can identify the major topics, characteristics, and concepts of each subject.
3. Identifies curriculum development process and the relationship between the curriculum, learning activities, educational objectives and terminal tasks.
4. Has knowledge of theory and practice of program development.
5. Has knowledge of social structure and characteristics of the community.

B. THE ABILITY TO PROVIDE GUIDANCE TO, OR COUNSEL, ABE STUDENTS
Sample Behaviors:
1. Has a commitment to assist adults to assume new roles in society.
2. Recognizes the importance of dealing with students as a friend and advisor.
3. Aids the student in obtaining employment or on-the-job training.
4. Uses the services of state and local agencies responsible for adult basic education.

C. THE ABILITY TO EVALUATE STUDENT IN TEACHING-LEARNING, OR COUNSELING, SITUATIONS
Sample Behaviors:
1. Has knowledge of the characteristics of testing and evaluating adults.
2. Chooses testing procedures and programs that will yield necessary data on students.
3. Interprets and uses the results of standardized achievement tests.
4. Diagnoses deficiencies in students' basic computational and reading skills.

D. THE ABILITY TO APPLY KNOWLEDGE OF THE GENERAL FIELD OF ADULT EDUCATION IN PERFORMING HIS OR HER ROLE AS A TEACHER
Sample Behaviors:
1. Has knowledge of the historic and contemporary approaches to literacy.
2. Has knowledge of institutional arrangements of adult education.
3. Interprets the foundations of adult education.
4. Lists the various community social, educational and training agencies.
5. Interprets national, state and local objectives of adult basic education.

E. THE ABILITY TO DESIGN APPROPRIATE INSTRUCTIONAL EXPERIENCES FOR THE ABE STUDENT
Sample Behaviors:
1. Has knowledge of the criteria for the selection and evaluation of adult materials.
2. Selects and uses techniques for particular learning tasks.
3. Arranges flexible grouping for learning.
4. Formulates instructional objectives and devises a system for involving students in this process.
5. Plans methodology to develop students' communication skills.
6. Plans instruction for individual students.
7. Plans instructional activities which bring resources of the community to bear on needs of students.
8. Has knowledge of the design of an effective learning situation.

F. THE ABILITY TO APPLY AN UNDERSTANDING OF LEARNING THEORIES AND LEARNER CHARACTERISTICS IN TEACHING-LEARNING, OR COUNSELING SITUATIONS
Sample Behaviors:
1. Applies knowledge of social, psychological and physiological factors which affect adult learning to the teaching-learning situation.
2. Has knowledge of the economically disadvantaged and various ethnic groups.
3. Is aware of the differences in background of experience among her/his students and recognizes their limitations.
4. Has knowledge of the principles of adult learning.
5. Applies basic principles of adult learning to instructional situations.

G. THE ABILITY TO PERFORM ADMINISTRATIVE TASKS ASSOCIATED WITH ABE PROGRAMS
Sample Behaviors:
1. Identifies the problems and principles of administration in adult education.
2. Has knowledge of recruiting the under-educated adults as a learner.
3. Uses the techniques of public relations.
4. Formulates criteria for selecting teachers and lay leaders.
5. Purchases equipment and supplies.
6. Takes responsibilities for leadership in civic community activities.

H. THE ABILITY TO ESTABLISH EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH STUDENTS
Sample Behaviors:
1. Effectively communicates with adults.
2. Develops empathy toward those who live in conditions of poverty.
3. Develops within the adult a sense of her/his progress and abilities.
4. Motivates adults.

I. DEVELOPED A PERSONAL PHILOSOPHY OF ADULT EDUCATION
Sample Behaviors:
1. Believes that adults can learn if motivated and given sufficient time.
2. Believes there is potentiality for growth in most people.
3. Believes in freedom of thought and expression.
4. Has an open mind and is willing to accept ideas of others.

J. THE ABILITY TO CONTINUE DEVELOPING PROFESSIONALLY
Sample Behaviors:
1. Applies the concept of continuing education to increase her/his professional competence.
2. Strives in quest of methods, techniques and materials to help students succeed.
3. Evaluates her/his teaching effectiveness.
4. Locates, interprets and applies research and new developments to improve teaching.
5. Desires to be a responsible leader of her/his profession.

K. THE ABILITY TO MANAGE LEARNING ACTIVITIES
Sample Behaviors:
1. Coordinates and supervises classroom activities.
2. Applies principles of attitude and behavior change.
3. Uses humor in the classroom.
4. Provides practice activities that reinforce classroom instruction.
5. Functions as a group member.

L. A MASTERY OF THE SUBJECT AREA(S) TAUGHT (E.G., MATH, COPING SKILLS, PROBLEM SOLVING)
Sample Behaviors:
1. Has knowledge of methods and materials for teaching arithmetic to adults.
2. Has knowledge of the fundamental skills of communication-reading, writing, spelling, and listening--as well as other elements of effective oral and written expression.
3. Has knowledge about adult home life skills and consumer education.
4. Has knowledge of method and materials for teaching language arts to students.

APPENDIX C

INSTRUCTIONS TO PANEL OF EXPERTS

Dear

Thank you for agreeing to assist us with our adult basic education teacher competency study.

This study is designed to develop a basis for improving new and existing ABE teacher training programs. We are working with Don Mocker's list of 291 competencies in an effort to reduce them to a relatively few major competencies that could serve as the focus of graduate programs and in-service education programs.

At this point, we need a panel of experts to verify and/or improve our grouping of 289 of Mocker's items. The directions and competency statements are enclosed.

Thank you for your assistance.

Sincerely,

John M. Peters
Associate Professor

JMP:maf

Enclosure

Below are some competency statements for Adult Basic Education teachers. For each statement there are representative items which are descriptive of that statement though they are not intended to be all-inclusive.

Please do the following:

1. Examine each statement for clarity and completeness. Indicate any suggested changes.

2. Look at the group of items under each statement.

   a. Does each item belong under that statement?

   b. If not, does it belong in any other category? (Specify by indicating the statement letter under which you think it belongs.)

   c. If it does not belong in any other group, please suggest another statement to cover it, or recommend deleting it.

3. In your opinion, should any statements be deleted or combined? Please explain.

PANEL OF EXPERTS

Dr. Barry Lumsden
Associate Professor of Adult Education
University of Florida

Dr. Leo McGee
Assistant Professor of Adult Education
Tennessee State University

Dr. Carroll Londoner
Assistant Professor of Adult Education
Virginia Commonwealth University

Dr. Russell French
Associate Professor, Curriculum and Instruction
University of Tennessee

Dr. Donnie Dutton
Professor of Adult Education
University of Arkansas

APPENDIX D

LETTERS TO PARTICIPANTS

August 13, 1975

Dear _____:

We are conducting a study of adult basic education teacher competencies, and we need your assistance. We know you are busy, but if you want to have some influence on the results of this study and possibly the nature of ABE teacher training, please take a few minutes to fill out the enclosed questionnaire.

Our study is designed to develop a basis for improving ABE teacher training programs. We need to have the direct input of teachers, professors, and administrative personnel in the Southeastern United States. We have asked your state director for support and have received approval.

We guarantee anonymity of responses. Your answers will be grouped with others, so that no personal identification will be retained. We are asking for your name only for follow-up purposes.

For your convenience we have enclosed a self-addressed, stamped envelope so that you may return your questionnaire to us no later than August 22.

Thank you so much for your help.

Sincerely,

John M. Peters
Associate Professor

Waynne B. James
Visiting Lecturer/
Research Associate
Texas A & M University

JMP:pas

Enclosures: 2

P.S. If you would be interested in a summary of the results of this study, check the box on page one of the questionnaire.

August 29, 1975

TO: Persons Involved in ABE Teacher Competency Study

FROM: John M. Peters and Waynne B. James

REGARDING: Questionnaire

A short time ago we sent you a questionnaire dealing with competencies of ABE teachers. We have not yet received your reply. Since your input is vital to our study, we are sending you another questionnaire in case your initial one has been misplaced.

If you have recently returned your questionnaire, please disregard this letter. If not, please return the enclosed instrument to us no later than September 10.

Thank you for your cooperation.

SECOND FOLLOW-UP LETTER

September 17, 1975

TO: Persons Involved in ABE Teacher Competency Study

FROM: John M. Peters and Waynne B. James

REGARDING: Questionnaire

You must be tired of hearing from us regarding the questionnaire we recently mailed to you. However, we will try this last time to elicit a response from the small number of people who have not returned a completed questionnaire to us.

Your input is very important; therefore, would you please take a few minutes and complete the enclosed questionnaire and return it to us by September 24?

Thanks so much for being patient and lending your assistance in this project.

APPENDIX E

USABLE QUESTIONNAIRE RETURN BY STATE AND GROUP

TABLE 20

USABLE QUESTIONNAIRE RETURN BY STATE AND GROUP

State	Position	N	Total	Percent	Mean Percent
Alabama:	Teachers	6		75	
	Administrators	8		67	
	Professors	8		80	
			22		73
Florida:	Teachers	27		39	
	Administrators	12		52	
	Professors	6		60	
			45		44
Georgia:	Teachers	7		78	
	Administrators	7		78	
	Professors	2		33	
			16		67
Kentucky:	Teachers	5		71	
	Administrators	9		69	
	Professors	4		100	
			18		75
Mississippi:	Teachers	4		57	
	Administrators	7		70	
	Professors	3		50	
			14		
North Carolina:	Teachers	14		61	
	Administrators	16		70	
	Professors	10		83	
			40		70
South Carolina:	Teachers	7		30	
	Administrators	13		52	
	Professors	1		33	
			21		41
Tennessee:	Teachers	8		89	
	Administrators	7		78	
	Professors	2		100	
			16		80
Totals:	Teachers	78		50	
	Administrators	79		64	
	Professors	36		68	
Total Return			193		58

APPENDIX F

CLUSTERED COMPETENCIES

The following statements are expected competencies of ABE teachers:

A. THE ABILITY TO DEVELOP A CURRICULUM IN ABE.

An ABE teacher:

1. Interprets and uses a functional model of the curriculum development process that is appropriate for selection, production and evaluation of instructional programs.

2. Organizes and uses the services of local adult basic education advisory committees.

3. Can recognize what components of the subject are essential to the adult student.

4. Is aware of the content in relation to the learner's objectives.

5. Breaks subject matter down into its component parts.

6. Coordinates a specific curriculum program with the total program of which it is a part.

7. Can identify the major topics, characteristics, and concepts of each subject.

8. Identifies curriculum development process and the relationship between the curriculum, learning activities, educational objectives and terminal tasks.

9. Has knowledge of the areas of applicability of the skills she/he is teaching.

10. States the primary reasons for integrating reading into the total adult basic education program.

11. Has knowledge of the community development approach to adult education.

12. Has knowledge of theory and practice of program development.

13. Has knowledge of social structure and characteristics of the community.

14. Describes the social structure of the local community as it relates to ABE students.

15. Interprets the structure of the community.

16. Explains the processes involved in group or community change.

B. THE ABILITY TO PROVIDE GUIDANCE TO, OR COUNSEL, ABE STUDENTS.

1. Identifies what is the basis of mutual respect between teacher and student.

2. Helps students control and adjust to change.

3. Has a commitment to assist adults to assume new roles in society.

4. Finds and develops potential talents.

5. Raises students' self-concepts.

6. Performs as a professional consultant and counselor.

7. Recognizes the importance of dealing with students as a friend and advisor.

8. Guides and counsels adult students.

9. Aids the student in obtaining employment or on-the-job training.

10. Finds reasons for low self-concepts of individual students.

11. Uses the services of state and local agencies responsible for adult basic education.

12. Has knowledge of the effect(s) of discrimination upon the self-concept of the ABE student.

13. Has knowledge of agencies found within the community that can assist the students.

C. THE ABILITY TO EVALUATE STUDENTS IN TEACHING-LEARNING, OR COUNSELING, SITUATIONS.

An ABE teacher:

1. Has knowledge of the characteristics of testing and evaluating adults.

2. Identifies the student's level of aspiration and despair.

3. Identifies and analyzes terminal behaviors.

4. Administers, selects, and interprets results of tests that will yield necessary data on needs of students.

5. Uses criterion-referenced evaluation instruments.

6. Uses pre-tests and post-tests.

7. Administers and interprets standardized tests.

8. Chooses standardized achievement tests.

9. Locates standardized tests.

10. Interprets and uses the results of standardized achievement tests.

11. Constructs informal tests and measurement techniques to evaluate student achievement.

12. Diagnoses deficiencies in students' basic computational and reading skills.

13. Evaluates and reports on student progress.

14. Chooses testing procedures and programs that will yield necessary data on students.

15. Determines the difficulty, validity and reliability of teacher-made tests.

16. Determines modes and rates of learning, through diagnosis.

17. Interprets the results of vocational interest inventories.

18. Explains the problems related to testing the undereducated adult.

19. Conceptualizes and performs processes to evaluate the student, teacher and total program.

20. Evaluates student progress and provides continuous feedback.

21. Identifies the needs of individual learners.

22. Views program evaluation in terms of the changing needs of students.

D. THE ABILITY TO APPLY KNOWLEDGE OF THE GENERAL FIELD OF ADULT EDUCATION IN PERFORMING HIS OR HER ROLE AS A TEACHER.

An ABE teacher:

1. Identifies the current issues in adult education.

2. Explains the goals of general education.

3. Interprets the foundations of adult education.

4. Has knowledge of the nature of the literacy problem in the U.S.

5. Has knowledge of new developments and recent recommendations in adult education.

6. Interprets national, state and local objectives of adult basic education.

7. Has knowledge of the nature of adult basic education legislation.

8. Lists the various community social, educational and training agencies which serve adults and can state the major functions of each.

9. Explains how liberal adult education can be applied to adult basic education.

10. Has knowledge of the historical structure and background of adult education.

11. Has knowledge of the historic and contemporary approaches to literacy.

12. Explains the similarities and differences between general and vocational education.

13. Has knowledge of institutional arrangements of adult education.

14. Identifies the philosophic base of adult education and interprets its various aspects in American society.

15. Has knowledge of the philosophical bases and issues of adult education.

16. Identifies similarities and differences between two or more educational philosophies.

17. Has knowledge of the emergence of adult education as a marginal institution.

18. Has knowledge of the theory and practice of teaching in adult education.

E. THE ABILITY TO DESIGN APPROPRIATE INSTRUCTIONAL EXPERIENCES FOR THE ABE STUDENT.

An ABE teacher:

1. Has knowledge of the more widely used and usable ABE materials.

2. Has knowledge of the criteria for the selection and evaluation of adult materials.

3. Has knowledge of the materials and methods for each type of reading deficiency.

4. Has knowledge of the logical principles upon which instructional materials are developed, selected and utilized.

5. Constructs audio-visual materials.

6. Writes and uses instructional materials.

7. Evaluates published adult instructional materials.

8. Uses programmed and self-directed materials.

9. Selects and develops instructional materials.

10. Integrates knowledge of reading skills, particular dialects, and reading problems, with instructional materials.

11. Selects and uses techniques for particular learning tasks.

12. Uses mass media as an educational means.

13. Selects instructional approaches to remedy deficiencies in computation.

14. Makes arrangements for and conducts field trips.

15. Selects audio-visual materials.

16. Arranges flexible grouping for learning.

17. Functions in a team teaching situation.

18. Uses the language experience approach to teach reading.

19. Summarizes and reviews the main points of a lesson or demonstration.

20, Applies generalizations to specific situations.

21. Assists students in making immediate application of what they have learned.

22. Develops generalizations supported by facts.

23. Relates classroom instruction to the job experiences of students.

24. Relates subject matter to the student.

25. Modifies her/his teaching to accommodate individual and group learner characteristics.

26. Prescribes instructional materials which will meet the abilities of the student.

27. Guides students' learning through their personal experiences and observations.

28. Humanizes the learning process.

29. Explains what is individually prescribed instruction.

30. Has knowledge of the basic principles and techniques of group process.

31. Has knowledge of group dynamics and leadership techniques.

32. Helps the adult student determine personal learning objectives and become a self-directed learner.

33. Develops a system whereby teacher and students can jointly design learning experiences.

34. Formulates instructional objectives and devises a system for involving students in this process.

35. Believes that determination of instructional goals and objectives is the responsibility of both teacher and learner.

36. Helps students identify needs and goals.

37. Has knowledge of the means of evaluating general and specific objectives.

38. Has knowledge of the cognitive, psychomotor, and affective domains of educational objectives.

39. Has knowledge of the technique of stating objectives in behavioral terms.

40. Recognizes action words appropriate to a given behavior.

41. States objectives in behavioral terms.

42. Recognizes behaviorally stated objectives.

43. Differentiates between goals and objectives.

44. Applies psychological principles to the selection of instructional objectives.

45. Constructs profiles which reflect pupil attainment, potential, and expectations in reading.

46. Plans methodology to develop students' communication skills.

47. Makes daily lesson plans.

48. Devises techniques to facilitate recall.

49. Plans instruction for individual students.

50. Plans instructional activities which bring resources of the community to bear on needs of students.

51. Conducts community surveys for purposes of improving instruction.

52. Adapts curriculum to the needs of the adult student.

53. Plans independent study effectively with students.

54. Plans instruction to begin at the student's learning level.

55. Appreciates the need to adjust the rate of instruction to the student's rate of learning.

56. Designs a study plan for students based on results of diagnostic tests.

57. Enjoys a challenge and is willing to try novel or unique strategies in broadening horizons of students.

58. Has knowledge of the design of an effective learning situation.

59. Has knowledge of the instructional cycle.

60. Has knowledge of students' backgrounds.

61. Organizes topics in logical sequence.

62. Selects instructional approaches to remedy deficiencies in reading.

63. Plans learning experiences for students which will improve word recognition and comprehension skills.

64. Is imaginative.

65. Teaches students to form generalizations.

66. Teaches the student to use the scientific method.

67. Teaches students to interpret data.

68. Organizes a plan of skill instruction that demonstrates appropriate sequence, continuity, and integration.

69. Demonstrates and gives examples of concepts and principles.

70. Helps students learn and use the methods and tools of problem-solving.

F. THE ABILITY TO APPLY AN UNDERSTANDING OF LEARNING THEORIES AND LEARNER CHARACTERISTICS IN TEACHING-LEARNING, OR COUNSELING SITUATIONS.

An ABE teacher:

1. Applies knowledge of social, psychological and physiological factors which affect adult learning, to the teaching-learning situation.

2. Has knowledge of the changes in physiological, mental and social development throughout life.

3. Has knowledge of the existence of the developmental tasks of adulthood.

4. Has knowledge of the impact of prior educational experiences and failures upon the undereducated adult.

5. Has knowledge of developmental tasks of adults.

6. Describes and explains the factors (physical, psychological, neurological and environmental) which may cause reading problems.

7. Describes the social, psychological and physiological effects of the aging process on learning.

8. Describes characteristics of the adult learner.

9. Describes the social and emotional characteristics, as well as intellectual and physical abilities of undereducated adults.

10. Has knowledge of the psychological problems of the adult student.

11. Has knowledge of cultural and social forces that influence adult learning.

12. Has knowledge of the sociology of adult education.

13. Has knowledge of what motivates adults to participate in programs.

14. Has knowledge of the economically disadvantaged and various ethnic groups.

15. Has knowledge of the anxieties about learning that are specific to women and other identifiable groups.

16. Has knowledge of the sociological problems of adults.

17. Has knowledge of the reasons why an adult participates in educational programs.

18. Has knowledge of the psychological factors which affect learning.

19. Has knowledge about possible handicaps of nonreaders.

20. Interprets the social characteristics of undereducated adults.

21. Adapts instruction to the background of the adult.

22. Is aware of the differences in background of experience among her/his students and recognizes their limitations.

23. Analyzes the influences that subcultures have on the lives of individual students.

24. Determines signs of physical decline.

25. Assesses individual physical differences.

26. Analyzes ways in which environment has conditioned the learner.

27. Identifies the students' informal social groups.

28. Is sensitive to ethnic differences.

29. Is sensitive to adult needs for new information and understandings.

30. Believes in the effectiveness of group energy and group action and its special relevance for adults.

31. Identifies some of the causes of discrimination.

32. Believes that the physical characteristics of the environment affect the quality of learning by students.

33. Explains the theories which relate to the andragogical model.

34. Has accepted the fact that there are differences between children and adults as learners.

35. Has knowledge of the principles of adult learning.

36. Applies basic principles of adult learning to instructional situations.

37. Describes and makes distinctions among the three modalities by which people learn.

38. Has an accurate perception about the purpose and process of learning.

39. Knows principles of learning as they apply to the adult student.

G. THE ABILITY TO PERFORM ADMINISTRATIVE TASKS ASSOCIATED WITH ABE PROGRAMS.

An ABE teacher:

1. Identifies the problems and principles of administration in adult education.

2. Interprets the intent of enabling legislation of adult basic education.

3. Formulates criteria for selecting teachers and lay leaders.

4. Purchases equipment and supplies.

5. Prepares new teachers for innovative and changing programs.

6. Provides adapted programs for the physically handicapped.

7. Operates a learning laboratory.

8. Differentiates responsibilities and makes plans that incorporate teacher talents.

9. Develops and uses a system to keep records for each student.

10. Has knowledge of the financing of adult basic education.

11. Has knowledge of recruiting the undereducated adults as a learner.

12. Uses the techniques of public relations.

13. Interprets the adult basic education program to other teachers and the community.

14. Takes responsibilities for leadership in civic community activities.

15. Has knowledge of agencies and institutions found in the community.

H. THE ABILITY TO ESTABLISH EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH STUDENTS.

An ABE teacher:

1. Motivates adults.

2. Relates to the differences in people.

3. Motivates students.

4. Has an awareness that there are merits in the learner's way of living.

5. Does not fear students who come from different backgrounds.

6. Does not over-generalize and stereotype.

7. Effectively communicates with adults.

8. Develops a climate that will encourage students to participate.

9. Develops within the adult a sense of her/his progress and abilities.

10. Believes that negative attitudes toward learning can be changed to positive attitudes through reinforcement.

11. Is challenged by the needs of students.

12. Accepts the importance of recognizing individual differences.

13. Develops within the adult a sense of confidence.

14. Develops empathy toward those who live in conditions of poverty.

I. DEVELOPED A PERSONAL PHILOSOPHY OF ADULT EDUCATION.

An ABE teacher:

1. Believes that adults can learn if motivated and given sufficient time.

2. Believes there is potentiality for growth in most people.

3. Believes in freedom of thought and expression.

4. Believes in a responsive and responsible citizenry.

5. Has an open mind and is willing to accept ideas of others.

6. Applies democratic principles to everyday life.

7. Has accepted a system of values about adult education.

8. Has a strong commitment to adult education.

9. Believes that elementary level literacy materials can be successfully taught to adults if made relevant to their life styles.

J. THE ABILITY TO CONTINUE DEVELOPING PROFESSIONALLY.

An ABE teacher:

1. Interprets, evaluates, uses, plans, and conducts pertinent research in adult education.

2. Has a commitment to keep up to date on new developments in content areas.

3. Has confidence in her/his ability as a teacher.

4. Accepts responsibility for personal behaviors that affect the health of others.

5. Strives in quest of methods, techniques and materials to help students succeed.

6. Believes that innovation and experimentation are necessary and desirable for growth of adult education.

7. Believes that experimentation and innovation are vital to successful program development.

8. Applies knowledge of materials and procedures gained from other teachers to improve her/his own teaching.

9. Locates, interprets and applies research and new developments to improve teaching.

10. Evaluates her/his subject matter teaching performance.

11. Evaluates her/his teaching effectiveness.

12. Desires to be a responsible leader of her/his profession.

13. Demonstrates ability to maintain her/his own mental and physical health.

14. Has a commitment for continuous learning.

15. Applies the concept of continuing education to increase her/his professional competence.

16. Uses information from professional journals, organizations and associations.

K. THE ABILITY TO MANAGE LEARNING ACTIVITIES.

An ABE teacher:

1. Coordinates and supervises classroom activities.

2. Maintains discipline in the classroom.

3. Maintains attention in the classroom.

4. Maintains a clean, orderly classroom.

5. Uses humor in the classroom.

6. Uses the problem-solving approach.

7. Applies principles of attitude and behavior change.

8. Uses questions at all levels of comprehension.

9. Interprets and uses progress charts and other records on students.

10. Provides practice activities that reinforce classroom instruction.

11. Operates duplicating equipment and instructional hardware.

12. Functions as a group member.

13. Differentiates between leadership styles.

L. A MASTERY OF THE SUBJECT AREA(S) TAUGHT (E.G., MATH, COPING SKILLS, PROBLEM SOLVING).

An ABE teacher:

1. Has knowledge of the interpersonal skills of effectively relating oneself to family, community and society.

2. Has knowledge that math is developmental; skills build upon others.

3. Has knowledge of the important concepts of both traditional and modern math.

4. Has knowledge of the Language Power frame types.

5. Has knowledge of the primary comprehension skills.

6. Has knowledge of practical arithmetic skills.

7. Has knowledge of the vocabulary skills that should be developed by ABE students.

8. Has knowledge of phonic components.

9. Has knowledge of functional reading word lists.

10. Has knowledge of the principles of penmanship.

11. Has knowledge of the sequence of reading skills.

12. Has knowledge of the content components necessary for teaching reading.

13. Has knowledge of the basic concepts of the arithmetic curriculum from the primary school level through the high school level.

14. Has knowledge of arithmetical and mathematical skills including problem solving.

15. Has knowledge of the fundamental skills of communication-reading, writing, spelling, and listening--as well as other elements of effective oral and written expression.

16. Has knowledge about adult home life skills and consumer education.

17. Has knowledge of method and materials for teaching language arts to adults.

18. Has knowledge of the rationale for the linguistic and sightword approaches to the teaching of reading.

19. Has knowledge of remedial reading techniques.

20. Has knowledge of the language experience approach in teaching reading.

21. Has knowledge of the sequence of teaching word attack skills.

22. Has knowledge of methods and materials for teaching arithmetic to adults.

23. Recognizes and describes the steps involved in planning, decision-making and problem solving.

24. Lists the major causes of reading difficulties in adult students.

25. Recognizes a positive relationship between dialects and standard English; both forms of spoken language are useful in their unique settings.

26. Recognizes the importance of social living skills (consumer education, health, nutrition, practical government and conservation).

27. Recognizes that math instruction should include instruction in reading and vocabulary.

28. Helps the student develop perceptual processes (visual and auditory discrimination, fluency in speaking and writing).

29. Applies knowledge of economic and labor market information to the vocational endeavors of students.

30. Demonstrates handwriting.

31. Gives instruction to students, to improve word attack and reading comprehension skills.

32. Demonstrates personal skill in the process of reading, writing, arithmetic as well as in other basic areas of the ABE curriculum.

33. Explains how the democratic process is applied to everyday life.

34. Classifies oral and silent reading characteristics, including errors, of the adult student.

35. Constructs informal reading inventories.

36. Reproduces phonemes which are found in regional dialects.

37. Administers and interprets an informal reading inventory and math inventories.

38. Demonstrates procedures for determining the instructional reading level of a student.

39. Has commitment for the subject matter.

RECOMMENDATIONS FOR DELETION:

1. Uses prescribed classroom organizational plans.

2. Believes that before "middle class" attitudes and values can be accepted the learner's living conditions must also be changed.

3. Recognizes that the ultimate goal of teaching reading to ABE students is to enable them to read and comprehend on approximately an 8th grade level.

4. Has knowledge of economic and labor market information.

5. Uses sociograms.

APPENDIX G

HOMOGENEITY OF VARIANCE SCORES

TABLE 21

HOMOGENEITY OF VARIANCE SCORES

Competency	Attainment Values	Utility Values	Importance Values
A	1.38	1.73	1.51
B	1.35	1.93*	1.22
C	1.63	1.19	1.53
D	1.59	1.95*	1.56
E	1.21	1.18	1.11
F	1.39	2.10*	1.46
G	1.62	1.27	1.47
H	1.57	1.68	1.73
I	1.71	1.45	1.29
J	1.25	3.05*	1.30
K	1.11	1.97*	1.31
L	1.49	2.24*	1.61

*Significant at the .05 level.

VITA

Waynne Blue James was born in Seattle, Washington, on July 8, 1946. She graduated from Highline High School in June 1964 and entered the University of Washington, Seattle. In 1968, she obtained a Bachelor of Arts in English Education.

Following a brief period of employment as a bank employee, the author moved to Knoxville, Tennessee, and began teaching ABE classes for Knox County Adult Education. She obtained a Master of Science Degree in Adult Education at the University of Tennessee in March 1973, and continued her graduate work towards a doctorate in Educational Psychology and Guidance.

Currently, the author is employed as a Visiting Lecturer/Research Associate at Texas A & M University in the Adult and Extension Education Program.

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