

DOCUMENT RESUME

ED 123 394

CE 007 131

AUTHOR Bunning, Richard L.
 TITLE Skills and Knowledges for the Adult Educator: A Delphi Study.
 PUB DATE 76
 NOTE 17p.

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.
 DESCRIPTORS *Adult Education; *Adult Educators; Adult Learning; Educational Environment; Educational Programs; Futures (of Society); Job Skills; Learning Processes; *Questionnaires; Surveys; *Teaching Skills

IDENTIFIERS/ Delphi Technique

ABSTRACT

The study determined (1) the common skills and knowledges which adult educators of the future would need to perform their jobs adequately and (2) the learning experiences most appropriate in obtaining the more important skills and knowledges. The study employed the Delphi Technique, a method of collecting and organizing data in which a convergence of group consensus is accomplished through a series of four questionnaires. From two lists of adult education professors in North America, a sample of 197 was selected; 141 agreed to participate. From open ended responses regarding knowledges and skills on Questionnaire 1, Questionnaire 2 listed 48 knowledges and 53 skills statements for respondents to rank. On Questionnaire 3 respondents were asked to join the consensus on the priority rankings of the statements from Questionnaire 2 or to explain their disagreement. These questionnaires helped to identify six general categories of skills and knowledges: adult educators themselves, the field of adult education, the adult learner, the adult education environment, adult education programing, and the adult learning process. Questionnaire 4, which examined appropriate learning experiences for each skill or knowledge, indicated that the most appropriate learning experiences were practical on-the-job situations integrated with university based experiences, such as classes and seminars. (JR)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

ED123394

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

SKILLS AND KNOWLEDGES FOR
THE ADULT EDUCATOR:
A DELPHI STUDY

By

Richard L. Bunning
Samaritan Health Service
Phoenix, Arizona

THIS STUDY CONDUCTED IN CONJUNCTION WITH
THE DELPHI PROJECT
DR. MARK H. ROSSMAN, DIRECTOR
ASSOCIATE PROFESSOR
THE CENTER FOR HIGHER AND ADULT EDUCATION
ARIZONA STATE UNIVERSITY
TEMPE, ARIZONA

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY

Richard L. Bunning

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER.

Copyright, 1976

SKILLS AND KNOWLEDGES FOR ADULT EDUCATORS: A DELPHI STUDY

By

Richard L. Bunning

Introduction

With the advent of the industrial revolution and our technological society, education has been forced to play an ever-increasing role in answering needs and demands. Scientific and technological progress requires continual updating of skills. Our society's institutions, families, schools, and churches are in a constant state of flux. Adult-continuing education has become a necessity for the adult members of our society.

Alvin Toffler stated in Future Shock, "... education's prime objective must be to increase the individual's copeability - the speed and economy with which he can adapt to continual change. And the faster the rate of change, the more attention must be devoted to discerning the pattern of future events." (17:403)

It is obvious then, that the adult educator must play a variety of roles and possess many skills and knowledges to effectively meet the ever changing needs of his adult constituency. The university has traditionally offered training for professionals in most fields and currently does so for adult educators, those who are preparing to enter the field, as well as for those who are currently employed. However, with a quickly changing world, it follows that training for the adult educator may also have to change.

The field of adult education as an area of study has emerged only in this century. The American Association of Adult Education founded in 1926 (13:23), issued its first periodical, The Journal of Adult Education in 1929. Only one year later, in January of 1930, the publication carried an article describing an early experiment in California which dealt with the preparation of adult educators through a summer school program. The author described the instructional staff as employing "independent methods," and the curriculum consisted of topics such as problems of human adjustment, parental education, esthetics in everyday life, economics as the determining factor in social institutions, and public opinion and adult education. The article was concluded with the added thought that perhaps what was an experiment, "... may have been but the beginning of what will eventually become an indispensable part of the training of teachers of adults." (19:67-74) It was noted that adult educators were interested in their own training and development almost as soon as the area itself emerged as a cohesive field of study.

Most early authors used the term "adult educator" synonymously with "teacher of adults." In 1931, MacKaye noted that a mass of literature had been devoted to the justification of adult education but that little had been devoted to how to teach adults. He added that adult education was "essentially an act of war" and that the

adult education instructor had to have the skills and knowledges or "tactical training" which would prepare him for the "trenches." (14:290-4)

In 1938 a colloquy of 15 adult education experts addressed themselves to a number of questions concerning their profession. One of the questions was, "Who are our leaders and how are they trained?" Of the 15 panel members, only two felt that much could be done to improve instructional methodology. A spokesman for the majority said, ". . . the leader who is full of his subject will find that method takes care of itself." (3:59-64) An opposing view came four years later, however, when Hill said that the most urgent need of adult educators was for teaching methods. (11:106-8)

One of the first particularly comprehensive writings concerning the preparation of adult educators was published by Hallenbeck in 1948. He proposed an eclectic training program that included not only a knowledge of the specific subject matter to be presented, but also instructional methodology and materials, adult psychology, sociology of the adult, the history and philosophy of adult education, the functions and administration of adult education, community organization, programs and agencies, and, finally, the emotional requisites for adult educators. (10:4-10)

Professional training opportunities expanded quickly and by 1956, twelve universities had full-time faculty members in the field of adult education. That same year, Cyril Houle of the University of Chicago suggested to his fellow adult education professors that they try to help their students achieve the following "general objectives":

1. A sound philosophical conception of Adult Education based on a consideration of its major aims and issues and embodying convictions concerning the basic values which it should seek to achieve.
2. An understanding of the psychological and sociological foundation on which all of education (and particularly Adult Education) rests.
3. An understanding of the development, scope, and complexity of the specific agency or program in which he works and the broad field of adult education of which it is a part.
4. An ability to undertake and direct the basic processes of education: the refinement of objectives; the selection and use of methods and content; the training of leaders; the provision of guidance and counseling; the promotion of programs; the coordination and supervision of activities; and the evaluation of results.
5. Personal effectiveness and leadership in working with other individuals, with groups, and with the general public.
6. A constant concern with the continuance of his own education throughout life. (12:137-9)

In addition, Houle listed a variety of learning experiences, methods, and techniques which would be of value to the adult educator in his development. This listing included traditional college classes, continuing seminars, special tutorial work, the writing of a major report, written or oral comprehension exams, assisting faculty members with selected projects, informal discussions and work with colleagues, individual conferences with faculty members, the visitation of adult education programs, participation in adult education conferences, and supervised work in adult education agencies. Houle ended his article with a look into the future: he stated that much was to be discovered about the field of adult education and that the universities should take a large responsibility in educating the emerging leaders. (12:140-1).

Chamberlain conducted a rather intensive study of the competencies (knowledges, skills, and attitudes) which adult educators should have to be considered professionally competent. Forty-five statements were submitted to 90 study participants, including adult education professors, students enrolled in or recently enrolled in graduate adult education programs, and institutional administrators who would typically employ the graduates of adult education programs. The top rated 15 statements according to mean scores were found to be:

1. Believes that there is potentiality for growth in most people.
2. Is imaginative in program development.
3. Can communicate effectively - speaks and writes well..
4. Has an understanding of the conditions under which adults are most likely to learn.
5. Is himself learning.
6. Is an effective group leader.
7. Knows himself - his values, his strengths, and weaknesses.
8. Has an open mind - is willing to accept others' ideas.
9. Has an understanding of what motivates adults to participate in programs.
10. Has a strong commitment to adult education.
11. Can organize and direct complex administrative activities.
12. Has developed a system of values about adult education.
13. Has an understanding of the structure of the community, its organization, and groupings.
14. Believes that innovation and experiment are necessary to develop the field.
15. Believes in freedom of thought and expression. (6:78-82)

The 60's showed a number of authors addressing themselves to the same topic including Robinson (16:243-5), Aker (1:12-3, and Butcher and LeTarte (4:81-2). However, as late as 1971, Fuller was concerned not with how adult educators would be prepared but more fundamentally if they were obtaining preparation. As the result of a search of the literature he concluded, ". . . in over 100 years of adult education, an adult educator had never thought of providing an in-service education program for adult education faculty. And if it had ever been thought of before, it had not been implemented. And if it had been implemented, it had not been recorded for posterity." (8:20)

Correspondence by the investigator with representatives of departments of adult education in various states revealed that several had undertaken staff development needs assessment projects. However, the projects were oriented primarily toward the specialty area of adult basic education.

A summary of the literature then, revealed that, 1) many authors had suggested various skills, knowledges, attitudes, and attributes which were desirable for adult educators to possess in order to enhance their effectiveness, 2) a few studies had been conducted to assess current needs or recommendations for adult education staff development, and 3) no study addressed itself specifically to the needs of the future adult educator.

Purpose

In view of the above summary, the purposes of this study were 1) to determine the common skills and knowledges which adult educators of the future would need in order to perform their jobs adequately, and 2) to determine the learning experiences most appropriate in obtaining the more important skills and knowledges.

Method

The Delphi Technique was chosen as an appropriate instrument for this type of "futuristic" study. Developed by Olaf Helmer and several of his associates at the RAND Corporation in the early 1950's, the Delphi Technique was designed to obtain group opinions about urgent National defense problems. (9:41) Named "Delphi" in honor of the oracle of Apollo, ". . . the method provides for an impersonal anonymous setting in which opinions can be voiced without bringing the 'experts' together in any kind of face-to-face confrontation." (15:155) The technique is basically a method of collecting and organizing data comprised of expert opinion. An effort to produce a convergence of group consensus is accomplished through a series of three or four questionnaires dealing with future oriented questions. A setting is provided in which ideas can be modified on the basis of reason rather than the bandwagon effect of majority opinion. Contact is usually made with the respondents through a set of mailed questionnaires with feedback from each round of questions being used to produce more carefully considered opinions in succeeding rounds. The exact procedure may vary depending on the type of study and the anticipated results.

The present study utilized a series of four questionnaires: 1) the first solicited open ended responses to the questions, "What knowledges (and what skills) will be needed by the adult educator of the coming decade?"; 2) the second asked respondents

to prioritize the statements generated by Questionnaire I on a five point rating scale, 3) the third fed back the modal consensus of respondents in Questionnaire II and asked respondents to either join consensus or to defend their lack of consensus for individual statements, and 4) the final questionnaire asked respondents to choose learning experiences which would be most appropriate for the adult educator to learn the knowledges and skills which were rated as "highest priority" on Questionnaire III.

Any study which attempted to deal with future events would tend to raise concerns over the credibility of the technique. The Delphi is no different. The Delphi did, however, have unique merits built into its special techniques and various modifications:

1. It avoids specious persuasion, leadership influences, hidden agendas, personality conflicts, and other problems encountered in group decision making.
2. It allows a variety of individuals, perhaps widely separated geographically, to participate equally.
3. Several studies showed the Delphi to have remarkable accuracy. (5,9:21, 18:111)
4. It provided documentation of a precise nature including minority opinions.

The Delphi has a number of disadvantages, however. The first one dealt with any attempt at predicting the future through this type of methodology:

The only thing certain in dealing with the future is that forecasts will seldom prove entirely correct or complete. Inevitably, there will be discoveries and events which cannot be anticipated: new scientific understanding for which no paradigm exists, political traumas, natural catastrophies... (9:5)

Another disadvantage was in the selection of a panel of experts as the respondents for a Delphi study:

It is very tempting to include in this group all who are influenced substantially or who can make a significant and/or unique contribution to the resolution of the problem. (2:8)

A final major disadvantage of the technique was thought to be the heavy expenditure of time in completing the series of questionnaires.

The Study Population

The population for this study consisted of professors of adult education in college and university graduate programs throughout the United States and Canada. In selecting the participants to be involved in the study, two reference sources were utilized: 1) a list of members of the Commission of Professors of Adult Education of the Adult Education Association of the United State of America, and 2) a list of

chairmen of graduate programs in adult education throughout the United States and Canada as listed in The National Association of Public Continuing Adult Education 1974 Almanac. Letters of solicitation were sent to 197 persons compiled from these two sources. Of the contact population, 141 professors agreed to participate in the study.

RESULTS

Summary of Returns

Table I displays for each round of questioning the number of questionnaires sent, the number of questionnaires returned, the percent of mailed questionnaires returned, and the percentage of questionnaires returned as compared with the original 141 volunteers. The number of questionnaires mailed diminished with each round of questioning but the overall percentage of returns when computed by comparing total questionnaires sent with the total questionnaires returned resulted in a rate of 93.4%. The percentage of responses when compared with the initial contact population of 197 adult education professors ranged from 67% for Questionnaire I to 54.3% for Questionnaire IV.

This percentage of questionnaires was good when consideration was given to the following:

1. Mailed questionnaires normally have received a 67 percent of returns.
2. Four separate mailings were administered to the participants over a five month period of time (September 1975 through January 1976).
3. A majority of the Delphi studies showed a sizeable drop in returns after the second or third round of questioning.
4. The questionnaires, particularly Questionnaire III, were very time consuming.

Table I
Summary of Questionnaire Returns

Questionnaire	Total Number Sent	Total Number Returned	Percent Returned	Percent Returned of Original Sample
I	141	132	93.6	93.6
II	132	126	95.5	89.4
III	126	113	89.6	80.1
IV	113	107	94.7	75.9

Data Generated by Study Respondents in Questionnaires I, II, and III

Questionnaire I solicited open-ended responses to the questions, "What skills will be needed to fulfill the role of the Adult Educator in the next decade?"; and "What knowledges will be needed to fulfill the role of the Adult Educator of the next decade?"

Many duplications were evident among the statements which were submitted on Questionnaire I. These statements were edited by the investigator to form 48 "knowledges" statements and 53 "skills" statements. It was found that participants pictured the adult educator of the future as needing skills and knowledges in many areas.

Table II shows the statements which were rated as "highest priority," as compiled from Questionnaire II data, and the mean and standard deviation of each statement as compiled from Questionnaire III returns.

A total of 20 statements received "highest priority" ranking. The rating scale showed little discrimination for lower ranked items since only one statement received a rating of "4" and two statements received a rating of "5." The modal consensus was returned to participants in Questionnaire III along with their individual responses to each item. They were then asked to either join consensus or to write minority opinions explaining their lack of consensus.

A major convergence of opinion occurred after the participants were informed of the first consensus reached by the sample. The "average standard deviation" for knowledges statements decreased from .981 in Questionnaire II to .762 in Questionnaire III while a similar decrease occurred in the skills statements, that is from .972 to .712. The overall rate of consensus found for statements on Questionnaire III was 80.4%

Most respondents to Questionnaire III joined consensus on most of their non-consensus responses, writing minority opinions for approximately 20 of the 101 statements. Somewhat of a trend was generally found in writing minority opinions in that an "adjacency" or minority ranking that was immediately next to consensus was changed to a consensus ranking while minority opinions were written most often to rankings which were two or more priority rankings away from modal consensus.

The following portion of this report shows the three "knowledges" and the three "skills" which obtained the largest standard deviations from Questionnaire III ratings. Also included is the consensus rating and a summary of minority opinions written about the individual statement.

Knowledge of right and wrong. S.D. 1.170, Consensus rating -"3."

This statement had the largest standard deviation of all Questionnaire III statements as well as the largest number of non-consensus responses. Twenty-three respondents rated it higher and twenty-one rated it lower than the consensus rating of "3."

TABLE 2

KNOWLEDGE AND SKILL STATEMENTS WITH MODAL CONSENSUS
PRIORITY, MEAN, AND STANDARD DEVIATION

Statement	Priority by Modal Consensus	Mean	S.D.
KNOWLEDGES:			
1. of the ever changing nature of the adult and his needs.	1	1.15	.523
2. of the functions of the adult educator	1	1.32	.796
3. of the psychology of the adult: intellectual development, adjustment, personality theory, the effects of aging, the psychology of dying, etc.	1	1.13	.504
4. of himself.	1	1.20	.919
5. of the process of change.	1	1.22	.677
6. of the principles of adult education.	1	1.41	.884
7. of the broad field of adult education as it relates to the individual, the community, and/or society.	1	1.47	.966
8. of learning theories in practice.	1	1.48	.966
9. of contemporary society: its subgroupings, needs, trends.	1	1.29	.832
SKILLS:			
1. in diagnosing educational needs of the individual.	1	1.17	.721
2. in continuous <u>self</u> -improvement.	1	1.15	.588
3. in designing learning experiences based on need.	1	1.18	.713
4. in initiating the self-actualization process in the adult.	1	1.18	.618
5. in conducting learning experiences based on need.	1	1.21	.829
6. in systematic inquiry, critical assessment; and problem solving.	1	1.17	.683
7. in communicating (including listening skills).	1	1.12	.516
8. as a change agent for himself, individuals, organizations, and/or the community.	1	1.27	.900
9. in encouraging creativity.	1	1.18	.616
10. as a competent instructor.	1	1.31	.780
11. in creating non-traditional learning opportunities.	1	1.30	.778

Those in favor of a higher rating argued that a knowledge of right and wrong are essential to our culture, to adult education as a profession, and to the individual if he is to be effective. "Watergate" was cited as an example of our need for this knowledge while other statements were, "All of adult education is a series of ethical dilemmas," "Dealing with planned change implies an ethical stance," and "Are we only technicians or do we have a value system?"

The respondents advocating a lower rating were generally divided into two different areas of thought. The first contention was that a knowledge of right and wrong was important but that it was a "given" or a part of the individual's background, beyond the scope of professional training. The second area of thought was that the whole question of morality was an individual and changing area and outside the scope of adult education. One respondent summarized, "This statement is absurd. Who are we to say?" Another respondent wrote, "The future will be so fluid and changing that there will be no such thing as right and wrong. Such naivety is definitely out-moded."

Knowledge of Philosophy. S.D. 1.070, Consensus - "2"

Ten individuals rated a knowledge of philosophy as higher than consensus. They generally saw philosophy as a value system which is an intrinsic part of the field of adult education, forming the basis for human behavior and for the planning of the future of adult education. A respondent stated, "Without a philosophical base, we lack the basis for consensus of work. I see much evidence that adult educators are too pragmatic. No profession can operate without knowledge of the philosophical base of that profession." Another asked, "How long can we avoid it?"

Twenty-six respondents ranked the statement lower than consensus. Many of the responses described a knowledge of philosophy as being "too general" or "not that important." Several responses were to the effect that adult educators needed to have a philosophy but did not need to study it. Other statements were, "Too close to the non-scientific. It has a record of inadequate and erroneous data about adult behavior," "A.B.E. students don't wish to be philosophical," and "I am more interested in actions than in philosophy."

Knowledge of how to muster courage to make unpopular decisions. S.D. .980, Consensus - "3"

Twenty-one individuals rated this statement higher than consensus while fourteen ranked it lower. Those defending higher ratings centered their arguments primarily around the necessity of courage for effective leadership in adult education. Other statements included, "Handling controversy is a critical future skill," and "Assertiveness is basic in adult education."

Those defending lower ratings stated that this statement was either a "given" personal attribute or was not really a knowledge at all: "Ridiculous. Is there a body of knowledge on how to muster courage?"

Skill in writing behavioral objectives. S.D. .990, Consensus - "3."

The split for non-consensus responses of this statement was fourteen higher and twenty lower. Higher raters emphasized the utility of behavioral objectives in teaching precise skills and in maintaining accountability. Some typical statements were, "If you don't know what you're shooting at, how do you know if you hit it?", "The times demand greater attention to behavioral objectives for 'proof of learning' and accountability," "We can't ignore one of our most important tools," and "If we are to be accountable for programs we must think of evaluation in terms of special performance on behavioral objectives."

Several members of the lower rating group simply stated that behavioral objectives were "Not that important" or were "overrated." Other illuminating statements were, "For precise skills they are O.K. Otherwise they must be used with caution or they become 'group think' (at which communist countries are very good)," "I would change this to a top priority rating if it means helping adults develop and attain their objectives," "This is not our job. Let traditional education do it if it's important," and "It puts the emphasis in the wrong place. The importance should be on discovering what needs to be learned."

Skill in implementing behavioral objectives. S.D. .986, Consensus - "3."

Although the standard deviation of "implementing behavioral objectives" was nearly the same as that of the "writing" statement, the frequency of minority responses was reversed with twenty persons rating it higher and fourteen lower than consensus. Responses were much like the "writing" statement's minority opinions. Some statements supporting a higher rating were, "All instruction is based on the implementation of objectives," "A viable alternative with respect to accountability," "We can't choose to be incompetent in what we basically do," and "Too many adult educators don't know where their students are going."

Statements supporting a lower than consensus rating included, "Behavioral objectives are not critical to the instructional design process," "Good teachers do not always require them," "Learners might not comply," and "Small circles get even smaller when they are implemented."

Skill in cross-sectioning/decompartmentalizing the learning experiences.
S.D. .973, Consensus - "3."

Nine persons favored a higher rating of this statement and twelve a lower rating. The several written responses used varying rhetoric for the same thrust in justifying a higher rating. These responses were, "Synthesis and coordination will be more important than isolation," "Over compartmentalized knowledge is man's greatest problem," "Let's get people out of straitjackets," and "We've got to approach learning from the learner's point of view - the whole person."

Four persons ranking the statement lower were either unsure of the statement's meaning or labeled it "jargon." Others said, "It seems to deny the trend toward emphasizing 'holistic' approaches," "Overdone, this leads to a lack of depth in anything," and, "Why? - unless it is for a defined purpose."

Categorization of Higher Rated Statements

In order to elucidate higher rated statements, a categorization process was adopted and statements falling within each category were described and analyzed. "Knowledges" and "skills" which were accorded a consensus rating of highest or second highest ranking were included in this process. Similar statements were grouped together and a six category system was created. Through this process, it was found that all of the selected statements fit in at least one category while several statements fit into more than one category.

The six general categorization areas and a brief definition of each follow:

1. The Adult Educator Himself

Statements included in this category were those which related to the adult educator's personal development, his attitudes, and, ultimately, his effectiveness as a person.

2. The Field of Adult Education

This category included statements which were directed toward knowledges and skills which would be of value to the field of adult education itself, including an understanding of and influence on its scope, goals, functions, trends.

3. The Adult Learner

Skills and knowledges placed in this category were those dealing with an understanding of the adult learner including making and maintaining contact with him and the providing of guidance and leadership.

4. The Adult Education Environment

Categorized here were statements which were aimed at providing the adult educator with the skills and knowledges necessary to deal effectively with groups, forces, and other environmental factors that interact with the process of adult education.

5. Adult Education Programming

Skills and knowledges included in this category dealt with the planning, designing, and implementation of educational experiences. Also included were certain aspects of programming such as staffing, resource development, and administrative functions.

6. The Adult Education Process

Statements of skills and knowledges listed in this category were those that dealt with the process of adult education as it directly interacts with the learner. These included effective use of methods, techniques, and devices, how adults learn and change, and of process evaluation.

These six categories, then, represented various aspects of the future adult educator's functions: his personal attributes, his knowledge of the field, and his skills in doing his job.

An Analysis of Questionnaire IV

Questionnaire IV consisted of the twenty statements (nine "knowledges" and eleven "skills") which were rated "highest priority" by participants on previous questionnaires. The questionnaire's purpose was to identify appropriate learning experiences which the adult educator of the future could undertake to learn each skill or knowledge. A list of seventeen learning experiences was attached to the questionnaire and respondents were requested to choose two experiences which they felt were most appropriate for learning the particular skill or knowledge. Table 3 shows the learning experiences and the percentage of responses accrued to each particular experience for all twenty statements.

Table 3

LEARNING EXPERIENCES AND PERCENTAGE OF RESPONSES FROM QUESTIONNAIRE IV

Learning Experience	Percentage of Responses
1. Internship (on the job work experience).	15.9
2. Traditional class (lecture, tests, written assignments, discussion, etc.).	11.3
3. Seminar	10.8
4. Sensitivity, human relations, or similar group training.	8.3
5. Practicum (on the job research experience).	7.9
6. Simulated materials and/or experiences.	6.7
7. Independent study.	5.9
8. Informal discussions with students, professors, and practitioners.	5.9
9. Participation in professional groups/organizations.	4.1
10. Independent research project.	4.1
11. Non-credit conferences (i.e., continuing education workshops).	3.4
12. Student teaching.	3.1
13. Observation	3.0
14. Completing a thesis, dissertation, or similar work.	2.6
15. Self contained instructional modules.	2.5
16. Modular course offerings.	2.0
17. Correspondence courses.	.3
18. Other	2.2

The general theme of responses to Questionnaire IV was that the most appropriate learning experiences were practical "on-the-job" situations integrated with university based experiences, such as classes and seminars. Sensitivity type training was also highly rated, particularly in relationship to personal development statements such as "knowledge of oneself" and "skill in communicating."

Two additional questions on Questionnaire IV revealed that respondents had an average of 11.6 years of experience as practitioners before becoming adult education professors.

and that they also had an average of 9.8 years of experience as adult education professors.

DISCUSSION

This study was concerned with the skills and knowledges which would be needed by the adult educator of the coming decade. Utilization of the Delphi Technique with adult education professors as the sample for the study seemed to be an efficient method of generating a large amount of data, arriving at consensus, and gathering minority opinions.

The adult educator of the coming decade will be found in an increasing variety of roles and subspecialties. Accompanying skills and knowledges, necessary to the fulfillment of these roles, will likewise be varied, but tend to fall into six general categories. These categories are, the adult educator himself, the field of adult education, the adult learner, the adult education environment, adult education programming, and the adult education learning process.

Minority opinions generated by the study participants were relatively insignificant when compared with an overall consensus rate of more than 80%, thus showing major agreement among adult education professors as to the future adult educator's skill and knowledge needs. Dissent exists, however, among study respondents in their opinions regarding the teaching of morality, the extent to which philosophy should be studied, the utility of behavioral objectives, and of the importance of scientific versus non-scientific methods of defining knowledge.

Adult educators and those involved in their education should begin preparing for a rapidly changing future requiring an increasing number of multi-faceted roles and subspecialties. The skills and knowledges generated by this study may serve to form the basis for individual growth and competency requirements. Professional training will continue to be centered in a university setting with an increasing emphasis on practical experience integrated with classroom and seminar experiences. The functionality of a dissertation or thesis for the practitioner may come under increasing scrutiny.

Future adult educators may also fall increasingly into one of two categories: 1) those who are professional educators who control, direct, evaluate, provide leadership, and enhance the adult education process, and 2) those who are facilitators of the process because of expertise in a given area.

Additional research, related to this study, may be done in several areas: 1) a correlation of professional competency of practitioners with their mastery of the knowledges and skills rated as most important by respondents in this study, 2) a comparison of the baseline data of the present study with a similar Delphi Study with adult education practitioners as the study sample, and 3) a study conducted in the future to examine the validity of the predictions of the respondents to the present study. A validation of the study in the year 1986 may be revealing and provocative. Will the professors of adult education have upheld the tradition of the Oracle at Delphi?

BIBLIOGRAPHY

1. Aker, George F. "Criteria for Evaluating Graduate Programs in Adult Education," Findings of a Study Conducted for the Commission of Professors of Adult Education, The University of Chicago, Center for Continued Education, Chicago, March 11, 1963, pp. 12, 13.
2. Anderson, Donald P. "Exploring the Potential of the Delphi Technique by Analyzing the Applications," An AERA Symposium, Ohio State University, March, 1970.
3. Beals, Ralph A., and Morse A. Cartwright, editors. "Partial Inventory," Journal of Adult Education, 10:259-64, June 1938.
4. Butcher, Donald G., and Clyde LeTarte. "Teacher Training for Adult Basic Education: Perceptions of a State Director of Adult Education." Adult Leadership, Vol. 17, June, 1968, pp. 81-2.
5. Campbell, Robert M. "A Methodological Study of the Utilization of Experts in Business Forecasting," (doctoral dissertation, University of California at Los Angeles), Ann Arbor: University Microfilm, 1966.
6. Chamberlain, Martin N. "The Competencies of Adult Educators." Adult Education, Vol. XI, #2, Winter 1961, pp. 78-82.
7. Dalkey, Norman C., and Olaf Helmer. "An Experimental Application of the Delphi Method to the Use of Experts." Management Science, April, 1963.
8. Fuller, Jack W. "An In-Service Program for Adult Education Faculty." Adult Leadership, Vol. 20, pp. 205-6, December 1971.
9. Gordon, Theodore J., and Robert H. Ament. Forecasts of Some Technological and Scientific Developments and Their Societal Consequences. Institute for the Future, September, 1969.
10. Hallenbeck, Wilbur C. "Training Adult Educators," Adult Education Journal, 7:4-10, January, 1948.
11. Hill, F. E. "Training Volunteers for Adult Education," Adult Education Journal, 1:106-8, July, 1942.
12. Houle, C. O. "Professional Education for Educators of Adults." Adult Education, Vol. VI, No. 3, Spring, 1956, pp. 137-9.
13. Knowles, Malcolm S., Editor. 1960 Handbook of Adult Education. Adult Education Association of the United States of America: Washington, D.C., 1960, p. 23.
14. Mackaye, David L. "Tactical Training for Teachers of Adults," Journal of Adult Education, 3:290-4, June, 1931.

Bibliography

15. Pfeiffer, John. New Look at Education. Princeton, New Jersey: Western Publishing Company, Inc., 1968.
16. Robinson, C. O. "Criteria for the Education of Adult Educators," Adult Education. Vol. XII, No. 14, pp. 243-5, Summer, 1962.
17. Toffler, Alvin. Future Shock. New York: Random House, Inc., 1971.
18. Uhl, Norman. "Encouraging Convergence of Opinions Through the Use of the Delphi Technique in the Process of Identifying an Institution's Goals." Princeton: Educational Testing Service, 1971, p. 111.
19. Wilkinson, Bonaro. "Teaching Teachers in a New Way," Journal of Adult Education. 2:67-74, January, 1930.