June 1976

A Study of Needs Assessment Methods Used for Program Development in Adult Education

Richard L. Gilmore
East Tennessee State University

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A STUDY OF NEEDS ASSESSMENT METHODS USED FOR PROGRAM
DEVELOPMENT IN ADULT EDUCATION

A Dissertations
Presented to
the Graduate Faculty of the Department of Education
East Tennessee State University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Richard Lynn Gilmore
June 1976
APPROVAL

This is to certify that the Advanced Graduate Committee of

RICHARD LYNN GILMORE

met on the

13th day of May, 1976

The committee read and examined his dissertation, supervised his
defense of it in an oral examination and decided to recommend that his
study be submitted to the Graduate Council and the Dean of the School
of Graduate Studies in partial fulfillment of the requirements for
the degree Doctor of Education.

[Signatures]

Chairman, Advanced Graduate Committee

Dean, School of Graduate Studies
A STUDY OF NEEDS ASSESSMENT METHODS USED FOR PROGRAM DEVELOPMENT IN ADULT EDUCATION

Problem

The problem of this study was to evaluate methods employed in identifying needs for program development in adult education among selected public community colleges in the United States.

Sub-Problems

To facilitate the solution of the problem, the following sub-problems were stated:

1. To identify methods used by public community colleges in assessing needs for program development in adult education;
2. To evaluate procedures used by public community colleges:
   a. on the basis of their ranking of usefulness of each procedure,
   b. according to how they rate importance of each procedure on a weighted scale, and
   c. according to the value they place on each procedure;
3. To measure the utility of their procedures for identifying needs for program development, by means of a decision-theoretic approach to evaluation research; and
4. To design an appropriate data gathering instrument.

Method

The data for this study were collected through the use of a Respondents' Evaluation Form designed to enable the respondent to rank, rate, and value methods of needs assessment for program planning in adult education. Fourteen commonly used methods for needs assessment were submitted to a jury of four persons directing continuing education programs, representing two Tennessee State Community Colleges and The University of Tennessee. As a result of jury action sixteen methods comprised the final Respondents' Evaluation Form.

Each state-supported community college listed in the 1974 Junior College Directory was assigned a number and a table of random numbers was used to select the one hundred fifty community colleges used in this study.
The formula developed by Ward Edwards was used as the statistical bases for the calculation of the utility of the methods of needs assessment.

Summary of Findings

Of the sixteen methods of needs assessment listed on the Respondents' Evaluation Form the highest in utility were found to be Interviews with key informants, Study of inter-organized relationships, Observation-Director participation, and Survey of special interest groups. The lowest in utility were Mailed questionnaires, Existing data search, and "Gut" feeling of the director.

Conclusions

The findings of this study led to the following conclusions:
1. The four methods with the highest utility were Interviews with key informants, Study of inter-organized relationships, Observation-Director participation, and Survey of special interest groups.
2. Failure of certain methods of needs assessment may be explained by practitioners' use of conventional methods without careful examination of their results, especially as compared to all other possible methods.
3. Close examination of the utilities of the methods used indicated that the methods requiring the greatest complexity of analysis were lowest in utility.
4. Certain methods of needs assessment, such as Study of inter-organized relationships, although perceived as important, may not ultimately be most useful or effective.
5. Perceptions differ depending on the way a method for needs assessment is viewed. Therefore it is important to evaluate the method from several perspectives. The Edwards Utility Formula is useful in synthesizing views.

Dissertation prepared under the guidance of Dr. William L. Evernden, Chairman, Dr. William T. Acuff, Dr. Carl Holland, and Dr. A. Keith Turkett.
ACKNOWLEDGMENTS

The generous help and assistance given from varied sources during the preparation of this study has been greatly appreciated by the writer. I wish to express my deepest appreciation to the members of my doctoral committee--Dr. William L. Evernden, Chairman, Dr. William T. Acuff, Dr. Carl W. Holland, and Dr. A. Keith Turkett. Dr. Elizabeth L. McMahan, Dean, School of Graduate Studies offered valuable comments and suggestions for which I am truly grateful. Also, a special note of appreciation to Dr. C. Harold Measel, a former member of my committee who is no longer with the University. Dr. John Peters of the University of Tennessee gave assistance throughout the study for which I am deeply indebted.

Above all, I am deeply indebted to my wife Mary Lynn for her patience and understanding throughout the doctoral program.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>vii</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIST OF FIGURES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>viii</td>
</tr>
</tbody>
</table>

**Chapter**

1. INTRODUCTION .............................................. 1  
   THE PROBLEM ............................................ 3  
   Statement of the Problem .............................. 3  
   Sub-Problems .......................................... 3  
   Significance of the Study ............................ 3  
   Limitations of the Study ............................. 5  
   THEORETICAL FRAMEWORK ................................. 5  
   Assumptions .......................................... 5  
   Definitions of Terms .................................. 5  
   PROCEDURES ........................................... 7  
   ORGANIZATION OF THE STUDY ............................ 8  

2. REVIEW OF RELATED LITERATURE ............................... 9  
   INTRODUCTION ........................................... 9  
   NEEDS FOR EDUCATIONAL ADJUSTMENT ........................ 9  
   Needs in Terms of Objectives .......................... 12  
   Needs in Terms of Requirements or Necessity .......... 12  
   Needs in Terms of Deficiency .......................... 13  
   Needs and Obligations ................................ 13  
   NEEDS FOR INDIVIDUAL ADJUSTMENT ........................ 14
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical Considerations in Educational Planning</td>
<td>14</td>
</tr>
<tr>
<td>Defining Planning and Educational Planning</td>
<td>15</td>
</tr>
<tr>
<td>NEEDS FOR PROGRAM FLEXIBILITY</td>
<td>16</td>
</tr>
<tr>
<td>The Androgologcal Process of Program Development</td>
<td>17</td>
</tr>
<tr>
<td>The Semantics of Needs</td>
<td>18</td>
</tr>
<tr>
<td>NEEDS FOR PROGRAM DEVELOPMENT</td>
<td>19</td>
</tr>
<tr>
<td>Plan Implementation</td>
<td>19</td>
</tr>
<tr>
<td>Initiation, Approval and Materials Development</td>
<td>20</td>
</tr>
<tr>
<td>Programs for Special Groups</td>
<td>22</td>
</tr>
<tr>
<td>The Diagnostic Process</td>
<td>22</td>
</tr>
<tr>
<td>Adult Education and Employment</td>
<td>23</td>
</tr>
<tr>
<td>Adult Education and the Disadvantaged</td>
<td>24</td>
</tr>
<tr>
<td>Adult Education for Leisure</td>
<td>25</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>25</td>
</tr>
<tr>
<td>3. METHODOLOGY</td>
<td>27</td>
</tr>
<tr>
<td>SELECTION OF COLLEGES</td>
<td>27</td>
</tr>
<tr>
<td>CONSTRUCTION OF THE INSTRUMENT</td>
<td>28</td>
</tr>
<tr>
<td>PROCEDURES FOR COLLECTING DATA</td>
<td>31</td>
</tr>
<tr>
<td>PROCEDURES FOR THE ANALYSIS OF DATA</td>
<td>31</td>
</tr>
<tr>
<td>A Technology for the Application of a Particular Decision-Theoretic Approach to Evaluation Research</td>
<td>32</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>34</td>
</tr>
<tr>
<td>4. PRESENTATION AND ANALYSIS OF DATA</td>
<td>36</td>
</tr>
<tr>
<td>FINDINGS FROM RESPONDENTS' EVALUATION FORM</td>
<td>36</td>
</tr>
<tr>
<td>Number of Respondents Who Used Each Method</td>
<td>36</td>
</tr>
<tr>
<td>Order of Usefulness of Each Method</td>
<td>38</td>
</tr>
<tr>
<td>Order of Importance of Each Method</td>
<td>38</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Order of Helpfulness of Each Method</td>
<td>38</td>
</tr>
<tr>
<td>Comparison of Respondents' Ranks, Ratings, and Values</td>
<td>42</td>
</tr>
<tr>
<td>Utility of Respondents' Procedures for Identifying Needs</td>
<td>42</td>
</tr>
<tr>
<td>ANALYSIS OF NEEDS ASSESSMENT METHODS ACCORDING TO OUTCOME</td>
<td>46</td>
</tr>
<tr>
<td>IDEAL USEFULNESS LEVEL OF EACH METHOD</td>
<td>48</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>48</td>
</tr>
<tr>
<td>5. SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS</td>
<td>51</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>51</td>
</tr>
<tr>
<td>The Problem</td>
<td>51</td>
</tr>
<tr>
<td>Sub-Problems</td>
<td>51</td>
</tr>
<tr>
<td>Procedures</td>
<td>52</td>
</tr>
<tr>
<td>Discussion of Data</td>
<td>52</td>
</tr>
<tr>
<td>FINDINGS</td>
<td>53</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>54</td>
</tr>
<tr>
<td>RECOMMENDATIONS</td>
<td>55</td>
</tr>
<tr>
<td>Recommendations Based on Respondents' Evaluation Form</td>
<td>55</td>
</tr>
<tr>
<td>Recommendations Based on the Findings of the Study</td>
<td>55</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>57</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>61</td>
</tr>
<tr>
<td>Appendix A: Letter and Respondents' Evaluation Form</td>
<td>63</td>
</tr>
<tr>
<td>Appendix B: Instructions to Jury Members, a List of Jury Members, and Rationale for Use of the Jury System</td>
<td>68</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table | Page
---|---
1. Number of Respondents Who Used Each Method | 37
2. Response to Method 16 Others | 39
3. Order of Usefulness of Each Method Used to Assess Needs for Program Planning as Ranked by the Respondents | 40
4. Order of Importance of Each Method Used to Assess Needs for Program Planning as Ranked by the Respondents | 41
5. Order of Helpfulness of Each Method Used to Assess Needs for Program Planning as Valued (10 high) Independently of Other Items by Respondents | 43
6. Comparison of Respondents' Ranks, Ratings, and Values | 44
7. Utility of Respondents' Procedures for Identifying Needs for Program Development | 45
8. Respondents' Perception of Ideal Usefulness Level of Each Method | 49
LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sample Response to Page 2 of the Respondents' Evaluation Form</td>
<td>47</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table                                      Page

1. Number of Respondents Who Used Each Method .... 37

2. Response to Method 16 Others ............................ 39

3. Order of Usefulness of Each Method Used to Assess Needs for Program Planning as Ranked by the Respondents ... 40

4. Order of Importance of Each Method Used to Assess Needs for Program Planning as Ranked by the Respondents ... 41

5. Order of Helpfulness of Each Method Used to Assess Needs for Program Planning as Valued (10 high) Independently of Other Items by Respondents .................... 43

6. Comparison of Respondents' Ranks, Ratings, and Values ... 44

7. Utility of Respondents' Procedures for Identifying Needs for Program Development ........................ 45

8. Respondents' Perception of Ideal Usefulness Level of Each Method ......................................................... 49
Chapter 1

INTRODUCTION

Adult educators characteristically stressed meeting the needs of their constituency as a cardinal principle of adult education. In spite of that effort, demands for program relevance are directed to adult educators as frequently and persistently as to educators at other levels.

Inconsistency between theory and practice, between accomplishment and intention, has often been pronounced. However, the achievements of adult education should not be interpreted solely in terms of its theoretical framework. The concept of education to meet current needs is sound; the implementation of the theory sometimes leaves much to be desired.

A major reason for inconsistency between achievement and intention has been the failure to identify needs accurately; a failure which stems in large measure from too little attention to the actual methods of determining needs. Sloan R. Wayland and associates commented, "To build a program of adult education on the needs of adults requires the information which indicates what those needs are."¹

Homer Kempfer, after making a survey of more than 500 adult school directors, observed, "How to identify these needs and interests

is the perennial problem faced by all directors of adult education."²

Historically, the focus of adult education was on the individual and his needs. However, the importance of community needs is now recognized by adult educators. As Harry L. Miller pointed out, in an analysis of participation in adult education, "... personal needs do not operate in a vacuum; they are shaped, conditioned, and channeled by the social structures and forces of the human society in which each individual is born."³

To the person who defines need only in terms of basic survival, there are few needs to be met. To the person who believes that self-fulfillment may be as important as physical survival, there are many needs to be met. If the adult educator will accept A. H. Maslow's hierarchy of values as a scale of motivation for the satisfaction of the individual, need and desire become almost synonymous—in the sense of wish-fulfillment—as one moves from level to level; from the satisfaction of physiological needs to safety, love, esteem and self-actualization.⁴

Much of the tension in the relationships between the educational establishment and the community results from disagreement over who determines need. Adult education is no exception.


³Harry L. Miller, Participation of Adults in Education: A Force-Field Analysis (Boston: Center for the Study of Liberal Education for Adults, 1967), p. 3.

THE PROBLEM

Statement of the Problem

The problem of this study was to evaluate methods employed in identifying needs for program development in adult education among selected public community colleges in the United States.

Sub-Problems

To facilitate the solution of the problem, the following sub­problems were stated:

1. To identify methods used by public community colleges in assessing needs for program development in adult education;
2. To evaluate procedures used by public community colleges
   a. on the basis of their ranking of usefulness of each procedure,
   b. according to how they rate importance of each pro­cedure on a weighted scale, and
   c. according to the value they place on each procedure;
3. To measure the utility of their procedures for identifying needs for program development, by means of a decision-theoretic approach to evaluation research; and
4. To design an appropriate data gathering instrument.

Significance of the Study

When adult educators talk about meeting needs, they mean many things. Within the limits and context of the individual adult educator's own philosophy of education, of the objectives and capabilities of his institution or sponsor, of the interests and motivation of his clients,
of the availability of governmental or other outside support, each adult educator will respond in his own way to each specific situation, and standard definitions will not provide the necessary clarification.

Bernard W. James and Harold W. Montross pointed out the danger of confusing "need" with "want." Their research indicated "how easily an adult educational program can misinterpret 'needs' if it takes surface phenomena of group behavior at face value—if, for instance, a program is designed merely on the basis of 'want' statements."  

Homer Kempfer's study showed that local directors of adult education rated themselves first in terms of competency to identify educational needs of adults. Subject matter advisory committees were second and temporary advisory committees for specific problems or courses were third. On what basis are educational needs of adults really identified?

The very nature of community college work requires knowledge about socio-economic patterns, power structures, manpower patterns and needs, cultural and recreational programs, neighborhood patterns, demographic data, interorganizational patterns, needs of specific ethnic groups, the community economic base, and the existing public services. Hence, the significance of an evaluation of needs assessment techniques employed in public community colleges in the United States seemed obvious.

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6Kempfer, op. cit., p. 34.
Limitations of the Study

The limitations of this study are identified below.

1. The population was limited to 150 randomly selected public community colleges in the United States.

2. Quantifiable data gathered were subject to the recognized limitations of a mailed respondent's evaluation form.

THEORETICAL FRAMEWORK

Assumptions

The following assumptions were considered pertinent to this study:

1. Most information of possible use in program planning arises from the social and cultural settings in which the program will operate.

2. Needs assessment findings suggest, but do not dictate, possible educational decisions.

3. Practitioners are the most reliable source of information about current practice and the best available judges of the potential effectiveness of planned change in current practice.

4. Program planning for adult teaching requires a logical system somewhere between the broad concerns of adults and the rigorous safeguards required in academic pursuits.

Definitions of Terms

The following definitions contributed to the interpretation of this study.
Adult education. Adult education refers to those activities in which adults have and use opportunities to learn systematically.\footnote{Ralph C. Dobbs, Adult Education in America: An Anthological Approach (Chicago: Lithographic Printers, 1970), p. 15.}

Community college. The community college refers to public two-year institutions of higher education which offer transfer, occupational career, remedial and continuing education programs.

Continuing education. Continuing education consists of educational activities outside the traditional and sequential educational systems consisting of elementary, secondary, and college-degree programs. The meaning of the term is independent of whether credit is assigned to the activity.

Community services. Community services refers to those efforts of the community college, often undertaken in cooperation with other community groups or agencies, which are directed toward serving personal and community needs not met by formal collegiate degrees or certificate programs. This definition includes such activities as community use of college facilities, short courses, conferences, cultural programs, consulting work with community groups, and other non-credit programs.

Educational need. An educational need is the discrepancy between what an individual wants to be and what he is educationally; the distance between an aspiration and a reality.

Junior college. The general term junior college is used to identify an institution of higher education offering the first two years of college
study. This term includes two-year public colleges, community colleges, community junior colleges, and two-year private colleges.

Utility. R. G. Allen defined 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."^8

For the purposes of this study, utility was defined as that characteristic of an object that tends to produce benefit, advantage, or good to the party or system whose interest is considered.

PROCEDURES

Several studies and related literature were reviewed as examples of the techniques of securing data for a study of this nature. It was concluded that a respondent's evaluation form supplemented by personal correspondence and conferences could be used effectively to secure the needed data. Each state-supported community college listed in the 1974 Junior College Directory^9 was assigned a number and a table of random numbers was used to select the one hundred fifty community colleges used in this study. A complete explanation of procedures is presented in Chapter 3 of this report.

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ORGANIZATION OF THE STUDY

Chapter 1 includes an introduction to the study, the problem, statement of the problem, sub-problems, the significance of the study, limitations of the study, theoretical framework, assumptions, definitions of terms, procedures, and the organization of the study.

In Chapter 2, a review of related literature is presented.

Chapter 3 contains a complete description and discussion of the procedure (methodology) used in collecting the data, and the statistical method employed in analyzing the data.

Chapter 4 includes presentation and analysis of the data.

Chapter 5 contains a summary of the study, the conclusions, recommendations based on the respondents' evaluation form, and recommendations based on the findings of the study.
Chapter 2

REVIEW OF RELATED LITERATURE

INTRODUCTION

An exhaustive search (ERIC, DATRIX, and several manual searches) indicated there have been few studies made dealing with needs analysis for program development in adult education. The field of adult education is not a new one; however, many of the concepts are relatively new. During the past fifteen years extensive research has been reported on program development; however, a very limited amount of research has been done on needs analysis for program planning. The literature reviewed in this chapter focused on the following needs: (1) needs for educational adjustment; (2) needs for individual adjustment; (3) needs for program flexibility; and (4) needs for program development.

NEEDS FOR EDUCATIONAL ADJUSTMENT

Herbert S. Parnes made it clear that the concept "need" has no meaning except in relation to goals or objectives, and this is as true of education as of any other category of needs. Neither for an individual nor for a society is it possible to specify what amounts and kinds of education are desirable or necessary until the relevant individual or social objectives are identified. Once the goals--with respect to which education is relevant--are specified, it becomes meaningful to inquire to what extent they can be achieved through
education. Assuming that the goals can be precisely set forth, they cannot be translated into unambiguous educational requirements, because the relation between means and ends is often not clear.¹

Since both the individual and social goals to which education may contribute are diverse, it follows that no single set of criteria for determining educational needs is adequate. If an individual wishes to become a physician, the amount and the kinds of education he must acquire are, in most countries, relatively clear. If he should also wish to be a successful spouse and parent, a knowledgeable and responsible citizen, and a psychologically self-sufficient person who has developed his human faculties to the fullest potential, his educational needs are both greater than and different from those that are dictated solely by his vocational aspirations.²

The relationship between interests and needs in education, stressed by John Dewey early in the twentieth century, represented a reaction to traditional practices in curriculum planning. Dewey advocated that the subject-centered approach, with its disregard for the learner's interests and needs, be replaced by a learner-centered approach. In what came to be called progressive education, the learner was seen as an active participant, rather than a pliably passive recipient in the learning process. The concept of need received considerable emphasis in educational theory and practice, including that of adult education. Most educators, at the time of writing, subscribed to the

²Ibid., p. 48.
needs approach, at least in theory. They objected to adult educational offerings based primarily upon subject matter or the preference of persons in administrative positions. They also objected to mass programs designed for general use, and attempts to infuse information into adults without regard to the learners as individuals; their lives, their interests, or their needs.\(^3\) As Paul A. Bergevin pointed out, "an effective program of adult education should consider the needs and related interests of the adult learner and attempt to discover and meet his real needs as well as the needs of his social order."\(^4\)

In this approach, needs were identified before the nature and content of the learning experience were determined. This was quite different from prescribing programs on the basis of what was appropriate in another situation, or what was available.\(^5\)

Based on the foregoing rationale, the major purpose of adult educational programs was to meet the real educational needs of individuals, groups, institutions, and communities, and the needs of the society of which each was a part. The identification of such needs was the all-important first step in program development. An analytical procedure had to be employed to identify those needs of adults which could be met through education. Needs were not fixed; they were

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\(^5\)Atwood and Ellis, loc. cit.
constantly changing. For this reason, diagnosing needs was a continuing concern, not a one-shot effort.⁶

As a rule, adults participated voluntarily in educational programs. It thus became extremely important that programs be seen by participants as directly related to their needs. On one hand, if a program was not recognized as helpful in meeting adult's needs, there would be little participation; while addressing the program only to those needs recognized at the moment could make it shallow or superficial.⁷

Needs in Terms of Objectives

Needs implied the serving of objectives. Something was needed for some further state of affairs—a new state, maintenance of an existing state or avoidance of a possible state. Heat, for instance, may be needed for cooking, maintaining a comfortable temperature, or avoiding freezing. Heat in itself was not a need; it was a means to satisfaction of a need.

Needs in Terms of Requirements or Necessity

In addition to being related to the objective, that which was needed must be required for the particular state of affairs. Its relationship was essential, not incidental. Needs for the purpose of analysis for program development in adult education must be determined and the requirements met for the program to make satisfactory progress and development.

⁶Ibid. ⁷Ibid.
Needs in Terms of Deficiency

The word "need" was sometimes used where necessity or requirement would be more appropriate. An auto may be required for a particular job. An understanding of mathematics may be a necessity for work in engineering. But the auto and the understanding constituted needs only if they were lacking or deficient. It was significant that absence alone did not imply need. That which was missing must also be required or necessary for some objective.

Needs and Obligations

The strength or importance of a need depended upon the obligation to achieve the objective. Consider the statement, "You need practice if you are to qualify for the next golf tournament." This implied that practice was required for achievement of the objectives and that it was lacking. Nevertheless, the strength of the need depended upon the degree to which an individual felt obliged to qualify for the tournament.

Consider the statement, "He needs a reading knowledge of French." At least four questions may be asked: (1) What objective is to be served? (2) Is a reading knowledge of French necessary for achieving it? (3) Does he already have that knowledge? (4) To what degree is the objective mandatory or desirable?8

NEEDS FOR INDIVIDUAL ADJUSTMENT

According to Malcolm S. Knowles, the primary and immediate educational mission of every adult educator was to help individuals satisfy their needs and achieve their goals. Usually if one were asked what these were, he would reply in terms of the acquisition of some specific competence such as being able to speak in public or to know mathematics. Or he might go one level higher to such objectives as being able to make more money or being able to get along better with people. These were important incentives to learning.

One problem was that education was not yet thought of as a life-long process. Hence pupils were taught in their youth what they ought to know rather than how to keep finding out. One mission of the adult educator can be stated positively as helping individuals to develop the attitude that learning was a life-long process. A number of factors influence the opportunity for meeting the needs for individual adjustment.

Theoretical Considerations in Educational Planning

There was some agreement in academic and governmental circles that publicly made decisions should be planned, rather than spurious. This consensus extended beyond saying that government should be the principal financial support, and even beyond saying that administration of education should be centralized in one or a few agencies. Public

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decisions regarding education should take into account policies and developments in other sectors of the society.\textsuperscript{10}

There was no equally firm agreement on what planning is or should be. Clarity was not aided by recognition among scholars that no government in the United States has ever really planned comprehensively, with the possible exception of wartime. Concurrently, there was nothing like a theory of planning, and even less was there a theory of educational planning. There were, however, theoretical or analytical correlates of one against another approach to economic and educational planning.

\textbf{Defining Planning and Educational Planning}

What is planning? Everyone concerned with this subject was impelled to add to the hundreds of statements specifying the nature of planning. There were numerous formal definitions. Some writers said that a particular procedure was or was not planning. Two definitions seemed to be most useful.

\textit{The Oxford English Dictionary}, in one of its meanings, contained the statement: "to devise or design; to arrange beforehand."\textsuperscript{12}

Y. Dror's statement was more definite though formulated "for the purposes of administrative sciences:

\begin{flushright}

\textsuperscript{11}Ibid., p. 5.

\textsuperscript{12}\textit{The Oxford English Dictionary} (London: Oxford University Press, 1933), VII, 941-942.
\end{flushright}
"the process of preparing
"a set of decisions
"for action in the future
"directed at achieving goals
"by optimal means."\textsuperscript{13}

There were a number of key elements common to these or other serviceable definitions. (1) They specified orientation to the future. (2) There was a call for action. (3) The definitions implied preparing or designing something, and therefore were to some degree concerned with deliberate endeavors. Prediction, as such, was not planning, and neither was forecasting or foreshadowing.\textsuperscript{14}

NEEDS FOR PROGRAM FLEXIBILITY

The central proposition on which the entire adult-education movement was based was that adults can learn. In 1927 Edward L. Thorndike reported for the first time his findings that the ability to learn declined only very slowly and very slightly after age twenty. Until then adult educators had based their whole work on blind faith. Now their faith had been vindicated; there was scientific proof that adults can learn.\textsuperscript{15}

The central dynamic of the learning process was seen to be the experience of the learner, experience being defined as the interaction between an individual and his environment. The quality and amount of learning was clearly influenced by the quality and amount of interaction between the learner and his environment, and by the educative power of


\textsuperscript{14}Anderson and Bowman, \textit{loc. cit.}

\textsuperscript{15}Knowles, \textit{op. cit.}, p. 50.
the environment. The art of teaching was essentially the management of these two key variables in the learning process—environment and interaction—which together defined the substance of the basic unit of learning, a "learning experience." 

One of the clearest statements about adult learning was made in 1926 by the great American pioneer adult-education theorist, Eduard C. Lindeman:

I am conceiving adult education in terms of a new technique for learning, a technique as essential to the college graduate as to the unlettered manual worker. It represents a process by which the adult learns to become aware of and to evaluate his experience. To do this he cannot begin by studying "subjects" in the hope that some day this information will be useful. On the contrary, he begins by giving attention to situations in which he finds himself, to problems which include obstacles to his self-fulfillment. Facts and information from the different spheres of knowledge are used, not for the purpose of accumulation, but because of need in solving problems. 

The Andragogical Process of Program Development

Knowles' andragogical process involved the following phases:

1. The establishment of a climate conducive to adult learning
2. The creation of an organizational structure for participative planning
3. The diagnosis of needs for learning
4. The formulation of directions of learning
5. The development of a design of activities

16Ibid., p. 51.
6. The operation of the activities

7. The rediagnosis of needs for learning.\(^\text{18}\)

**The Semantics of Needs**

Among the terms which appeared most frequently in educational discussion, particularly with respect to the philosophy of community service which lay behind much adult education, "needs" would rank high. The term had at least three meanings, one of which was its somewhat technical or academic use; a non-observable or inferred bio-psycho-logical state similar to a "drive." This bio-psychological state, or "tension state" causes gratification-seeking behavior to which society attributes a value and indicates an avenue of satisfaction. Another kind of "need," as-saying that a student needs help--mathematics, points to a course of action that is instrumental in achieving a goal beyond the immediate expression of the "need" itself. A third meaning of "needs" in education, as when the guidance teacher tells the student he needs mathematics in order to study engineering, is an example of the educator interpreting prevailing social values instrumental in achievement of a goal. In this case the educator is defining goals for the student rather than the other way around. In semantic content, the term "needs," then, suggests alternative actions by the educator, which may be provision for student satisfaction of "needs" or "wishes," concern for the realization of social values, and interpretation and definition of student goals.\(^\text{19}\)

\(^{18}\)Knowles, op. cit., p. 54.

NEEDS FOR PROGRAM DEVELOPMENT

Relevance has been, in theory, the common threat of adult education from the time of the Hebrew prophets to the present. Adult education was aimed at bringing information or skills or processes to bear upon the needs of its ever-changing student body. More than forty years ago Eduard C. Lindeman said, "In adult education the curriculum is built around the student's needs and interests." To build on needs and interests one must devise a plan implementation process.

Plan Implementation

Needs analysis for educational planning was conceived by some authors as a comprehensive process taking place within and involving the entire governmental structure, at all levels. The original outline followed the lines of illusive abstraction, taking the successive steps of this process as a basis for organizing discussions. Beresford Hayward outlined the process as follows:

- Definition of national political and social goals giving rise to education planning
- Determination of national educational objectives
- Coordination of data contributed from educational agencies
- Formulation of educational plans
- Implementation of these plans in the formulation of programs.

Interests are by their nature highly personal, and therefore vary widely among individuals and even vary within an individual from time to time. Several attempts have been made to develop generalized

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categories of interests that serve as useful guidelines in identifying the specific interests of particular people. Irving Lorge contributed a very practical set of categories of general interests under the heading "Incentives for Adult Learning."

Incentives for Adult Learning

People Want to Gain

1. Health 6. Popularity
2. Comfort 7. Improved Appearance
3. Time 8. Pride of Accomplishment
5. Money 10. Security in Old Age

They Want to Be

1. Good parents 5. Influence over others
2. Social, hospitable 6. Gregarious
3. Up to date 7. Efficient

They Want to Do

1. Express their personalities
2. Resist domination by others
3. Satisfy their curiosity
4. Appreciate beauty
5. Improve themselves generally

They Want to Save

1. Time 5. Worry
3. Work 7. Risks
4. Discomfort 8. Personal embarrassment

Initiation, Approval and Materials Development

Kathryn Horsley conducted a study of Population Education in the Secondary Schools. In this study a variety of practical matters about

initiating and extending effective population education were examined. In the first section, a summary of teachers' experiences and needs were offered. Teachers who had demonstrated an interest in population studies were contacted to determine what they had done in the classroom, how, with what results, and what kinds of materials and assistance they felt were needed. Responses were statistically analyzed and discussed. A survey of school administrators at various levels was discussed in the next section. They were asked if they considered population growth, its causes and consequences, important for young people to understand; if they considered information on population dynamics an important or appropriate element in the curriculum; and whether they would support integration of such units into existing curricula. Over 95 percent of responses were affirmative; however, there were numerous qualifications. Other questions dealt with curriculum change processes, willingness to support materials development, and mechanisms for teacher training. The final section of the document dealt with recommendations for next steps. These fell into three categories: (1) using existing network of interested persons and institutions; (2) the need for special teacher training; and (3) the need to assess available materials so that their best use could be made known. 23

Horsley found that there was a much more distinct division of responsibility with initiation than with final approval. The two

positions closest to the classroom were usually involved in instigating the introduction of new subjects, or changes in old subjects. Teachers and curriculum specialists were indicated as the "initiators," while higher levels of administrators in city, county, or state systems were rarely involved.  

**Programs for Special Groups**

An example of needs for programs for special groups was found in Alan Knox's examination of socio-psychological variables that influence the extent to which people above fifty years of age will be consumers of education. His research indicated that two primary influences were changes in learning abilities and interests. Secondary influences included social factors, such as societal expectations about the role of older people and availability of educational opportunity; and personal factors, including levels of physical and mental health, income, mobility, and preparatory education. The challenge of practitioners working with older people was to diagnose patterns that inhibit educational consumption, and to modify those patterns to enable older persons to use education more effectively in achieving their own objectives.

**The Diagnostic Process**

Carol S. Kramer wrote a masters thesis entitled *The Diagnostic Process in Adult Education*. A review of the literature explained the diagnostic process in adult education as it related to determining

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24Ibid.

educational needs of an individual or group. It was concluded that the diagnostic process had its primary use at the beginning of program planning, that no trends could be identified concerning the uses of the process, and the survey method received most attention.  

Adult Education and Employment  

Kenneth Earl Ripple conducted a survey which offered a comparison of the opinions of adult education leaders and employment service specialists regarding relating adult education programs to employment needs in selected urban communities. By examining the opinions of thirty-five adult educators and thirty-eight employment service specialists, he endeavored to determine how effectively certain adult education programs in Michigan, Illinois, Indiana, and Wisconsin were meeting the educational and job preparation needs of individuals and communities, and to assess the relevance of adult education objectives to participants' needs and interests. Individual interviews were used in which interviewees categorized each of twenty educational activities as either imperative, very desirable, permissible, or undesirable. Some of the findings were: (1) individualized activity was considered imperative by a majority of educator-specialists; (2) educators generally approved of the priority given to assuring adequate opportunity for continuing education to all adults in the community; (3) educators were daring or innovative in planning effective job preparation programs; (4) adult educators did not seek the help of employment service specialists in program planning;  

(5) guidance and counseling services offered to participants in education and training programs were inadequate.  

Adult Education and the Disadvantaged

Sidney Rosenberg and Winthrop Adkins, in A Design for Action Report at Project Try outlined a demonstration-research training program for disadvantaged seventeen through twenty-one year old out-of-school, unemployed or underemployed males from the predominantly Negro Bedford-Stuyvesant area of Brooklyn, New York. Funded jointly by the Office of Education, the Office of Economic Opportunity, and the Department of Labor, the program offered these youths trade training, life skills, educational recreation, and such special services as job placement and general posttraining followup. The ideal social composition of the program was considered to be 70 percent Negro, 15 percent Caucasian, and 15 percent Puerto Rican. Program personnel were drawn largely from the Stuyvesant community. In addition to the actual training of the students, the program endeavored to develop a new curriculum and measure its effectiveness in producing positional changes in trainees' attitudes and behavior. A multifaceted action search design was described in detail, and various operational projects for conducting the research were discussed. A "life skills curriculum model" was presented.  

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Adult Education for Leisure

Margaret Mead wrote that today a series of discrepant ideas exists about the problem of work and leisure. Society in general has expressed the view that the wrong people will have the new leisure; that the professional persons of the country will work hard while those on the technical level will be less and less committed to their jobs. The new leisure will go to the imperfectly educated, unmotivated part of the community, which will misuse it. The idea that each individual buys his way to food, shelter, education, and safety by holding a job was characteristic of the industrial revolution. The idea no longer has any degree of appropriateness. A future problem will be how to devise a system in which every individual has dignity and purpose in society, and the society has a rationale for distributing the results of its high productivity. A way may be devised simultaneously to talk about full employment for the present and to plan for a different kind of society in the future.29

SUMMARY

The literature reviewed in this chapter focused on the following needs:

1. Needs for educational adjustment;
2. Needs for individual adjustment;
3. Needs for program flexibility; and
4. Needs for program development in society.

The foregoing review of literature indicated that a very limited amount of research had been done on needs analysis for program development in adult education.
METHODOLOGY

The major purpose of this study was to examine and evaluate methods for identifying needs for program development in adult education among selected public community colleges in the United States. A description of the procedures employed and methodology used to analyze these relationships is presented in this chapter.

It was necessary to complete the following tasks in order to achieve the objectives of the study:

1. Select colleges and subjects to participate in the study.
2. Construct an instrument useful in identifying methods used in program planning for adult education.
3. Incorporate in the instrument a process for categorizing and evaluating methods used for program planning in adult education.
4. Develop a procedure for collecting and analyzing data.

SELECTION OF COLLEGES

In order to conduct a survey of community colleges it was necessary to select a representative sample. The sample was selected from the 1974 Junior College Directory\(^1\) which lists all accredited

Community Colleges in the United States. Numbers were assigned to
the colleges and one hundred fifty were selected at random. This
number was considered adequate for a fair representation of the
colleges. The Respondents' Evaluation Form, which is shown in Appendix A
of this study, was sent to the deans of continuing education. Of the
one hundred fifty solicited, ninety-six deans responded. This was 64
percent of those contacted, which is considered a representative number
of respondents.

CONSTRUCTION OF THE INSTRUMENT

The most popular or most commonly used method of determining
need appeared to be the survey or poll. Samuel E. Hand advocated
community study. Other analysts suggested the use of advisory
committees, consultation with leaders or with the power structure, or
interviews within the target audience.

Three approaches to community study were identified by Hand.
The first is the social welfare approach which encompasses the analysis
of agencies, institutions and services. The second is a study of the
community as a social unit, the ecological approach which includes the
spatial and temporal relations of people. His third basic approach is
to use the study itself as an educational process leading to social
action.3

As there were no satisfactory instruments to assess methods
used in the program planning for adult education, the decision was made

2Samuel E. Hand, Community Study as a Basis for Program Planning
in Adult Education (Tallahassee: Florida State University, 1960).

3Ibid.
to construct the necessary instrument. The investigator began by listing methods commonly used to develop programs in adult education, based on writings by Gunder A. Myran and Bill Howard, Nathan C. Shaw, and on the personal experience of the investigator.

An initial evaluation of the methods was performed by a jury of four persons directing continuing education programs, representing two Tennessee State Community Colleges and The University of Tennessee, which were not included in the random sample. (See Appendix B for a list of the jury members and a rationale for the use of the jury method). Fourteen methods were submitted to the jury. Their critiques resulted in the addition of two methods, "Gut" feeling of the director, and Others (please list), and a complete reworking of the instructions for completion of the instrument. The methods were placed on a Respondents' Evaluation Form together with rank, rate, and value scales. In order to stress the difference between the rate and value columns, the scales were varied. The value column was assigned a ten-point scale, whereas the rate column was based on a twenty-point scale to allow for the difference between the two dimensions. The normalization process was a stretching process to expand a ten-point scale. Mathematically this is a stretching process wherein the relative position of the responses on the ten-point scale are maintained on the twenty-point scale. This process was accomplished by doubling each response on the ten-point

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4 Gunder A. Myran and Bill Howard, "Some Beginning Steps to Community Development: Community Analysis and Inter-Agency Cooperation" (Michigan: Kellogg Community Services Leadership Program, 1971, pp. 11-30 (Mimeographed.)

scale to yield its value on a twenty-point scale. The difference in number of points was also designed to encourage the respondent to differentiate between the columns. These scales were constructed to be used with the utility formula developed by Ward Edwards (See Appendix A for the Respondents' Evaluation Form.)

The steps to be followed by respondents in completing the rank, rate and value scales were as follows:

Step One: Read and review the entire instrument before you begin.

Step Two: Using the methods presented in Column I, circle the Yes or No in Column II to indicate whether you have actually used this method for program planning.

Step Three: Using only those methods which you have circled Yes in Column II, RANK in Column III the order of their usefulness to you as program planning approaches.

Step Four: Using again the methods which you circled Yes in Column II, RATE on the scale of 20 (most important) to 1 (least important) your rating of the importance of this method in program planning.

Step Five: Again using the methods which you have circled Yes in Column II, value on the scale 10 (excellent) to 1 (poor) the helpfulness of each method you have used in program planning. VALUE each item on its own merit independently of all other items.

Step Six: For each METHOD circled Yes in Column II, please supply the information (on page 2 of the instrument) on its outcome

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for your institution. Example: Under Scope of Assessment Column, list groups and numbers of people contacted.

Step Seven: (On page 3 of the instrument) RANK each of the methods in order of importance 1 (high) through 15 on the basis of your perception of its usefulness, whether you have used it or not.

PROCEDURES FOR COLLECTING DATA

Each state-supported community college listed in the 1974 Junior College Directory was assigned a number, and a table of random numbers was used to select the one hundred fifty community colleges used in this study. The name and address of the Dean or Director of Continuing Education of each of the sample colleges were obtained from the 1974-1975 Higher Education Directory. A copy of the Respondents' Evaluation Form accompanied by a personalized letter was sent to each Dean or Director in early June, 1975. By August 1, 1975 ninety-six usable responses were received.

PROCEDURES FOR THE ANALYSIS OF DATA

Facilities of the Walters State Community College Computer Center were employed in the analysis and tabulation of the responses. When the Respondents' Evaluation Forms were received, a cursory review of the returns was performed in order to verify that the forms were completed correctly. The information from the scales (pages 1 and 3) was key-punched onto computer cards. The data were then edited

7 The Junior College Directory, loc. cit.

and analyzed by means of a computer program designed in FORTRAN style to generate Edwards' Utility Formula. The mean responses under the rank, rate, and value columns were calculated by the same computer program. The output generated data for each variable which indicated the mean order. Tabular representation of these data reflected the respondents' judgments in rank, rate, and value for each method listed to assess needs for program planning in adult education.

The utility formula was then calculated by the computer, using the responses from the rank, rate, and value columns of the Respondents' Evaluation Forms. An explanation of the formula for the calculation of utility follows.

A Technology for the Application of a Particular Decision-Theoretic Approach to Evaluation Research

According to Marcia Guttentag, all decision approaches can be based on the decision-makers' subjective answers to two questions: what was at stake, and what were the odds. The answer to the first question required the measurement of values and utilities. The second required either direct estimation of probabilities or the kind of information processing for which Bayes' theorem was the optimal mathematical model. In Bayesian statistics, the subjective hypotheses were compared with one another rather than with null hypotheses. 9

For this study a decision theoretical approach to evaluation research was used to meet the goals of evaluation. The technique

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for the measurement of social utility was adapted from the method developed by Edwards.  

Step One: Identify the organization whose utilities are to be maximized. The organization must be identified and its relevant goals specified. The organization can be represented by appropriate individuals.

Step Two: Identify the issue or issues to which the utilities needed are relevant. There may be many different, though related, purposes for which utilities are needed. To show that these utilities are different, though they may be utilities of the same objects for the same organization, one need only consider dimensions of value relevant to one purpose but not another. In general, utility is a triadic relation, a function of the evaluator, of the entity being evaluated, and of the purpose for which the evaluation is being made. Most formulations tend to ignore the third argument of the utility function.

Step Three: Identify the entities to be evaluated. In some contexts, the entities to be evaluated will depend on the nature of the actions being considered. Very often the entities will be simply those actions themselves. If not, they will be related to those actions in some fairly straightforward way.

Step Four: Identify the relevant dimensions of value. The first three steps are more or less philosophical. The first answers the question: Utility for what purpose? The second: Whose utility? The third: Utility of what entities? With step four we come to the first technical task: discover what dimensions of value are important to the evaluation of the entities we are interested in.

Step Five: Rank the dimensions in order of importance. Units of measurement are to be ignored at this step. Interpersonal disagreements are very likely at this step.

Step Six: Rate dimensions in importance, preserving ratios. Once again, individual differences are likely to arise.

Step Seven: Sum the importance weights, divide each by the sum, and multiply by 20. This is a computational step which converts importance weights into numbers that mathematically are rather like probabilities.

Step Eight: Measure the location of entity being evaluated on each dimension. The word measure is used rather loosely here. There are three classes of dimensions: purely subjective, partly subjective, and purely objective.

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10Edwards, loc. cit.
Step Nine: Calculate utilities for entities. The equation is:
\[ U_i = \sum W_j U_{ij} \]

\( U_i \) is equal to the calculated utilities of each of the fifteen methods. This was accomplished by adding all of the products of the weights of the method (\( W_j \)) with individual utilities (\( U_{ij} \)).

\( W_j \) represented the weight of the assigned rank normalized to a scale of twenty. This was accomplished by adding all assigned ranks for one Respondents' Evaluation Form, and dividing it into the associated ranks multiplied by twenty.

\( U_{ij} \) represented the utility assigned to the given method and to a given Respondents' Evaluation Form. This was accomplished by averaging the Evaluation Form's rate and value column normalized to a scale of twenty.

Step Ten: Individual data were combined for each method and the arithmetic means were used to develop orders of rank, rate, and value. The utility was generated for each method.

Complete analysis of data is presented in Chapter 4.

**SUMMARY**

Chapter 3 includes the methodology used in this study. A sample of 150 directors of continuing education representing 150 community colleges in the United States served as the population for the study.

The sampling method selected was that of a simple random sampling. An instrument was developed based on an evaluation of methods used to assess needs for program planning in adult education. The initial evaluation of the methods was performed by a jury of four persons, directing continuing education programs, representing two Tennessee State Community Colleges and The University of Tennessee, which were not included in the random sample.

Facilities of the Walters State Community College Computer Center were employed in the analysis and tabulation of the responses. The
utility formula developed by Ward Edwards was used to measure the utility of the methods used to assess needs for program planning in adult education.
Chapter 4

PRESENTATION AND ANALYSIS OF DATA

The purpose of this chapter is to present an analysis of data obtained through the Respondents' Evaluation Form. The form was sent to 150 randomly selected Directors of Continuing Education throughout the nation. From the 150 Respondents' Evaluation Forms mailed, ninety-six responses were received. The information obtained from each form was key-punched onto computer cards. The computer was programmed using the utility formula developed by Ward Edwards.

FINDINGS FROM RESPONDENTS' EVALUATION FORM

**Number of Respondents Who Used Each Method**

Table 1, page 37, presents the number of respondents who used each method. The question as it appeared in the respondent evaluation form asked, "Utilizing the methods presented in Column I please circle the yes or no in Column II to indicate whether you have actually used this method for program planning."

The results show that 100 percent of the respondents used Existing data search, Survey of special interest groups, Manpower studies, Review of prior program offerings, and "Gut" feeling of the director. The frequency of use was lowest with methods Observation and organization mapping. This frequency of use was 92, or 90 percent, in both cases. Method 16 Others drew a total of twenty-two responses among which seven methods were included. While there appeared to be some duplication
<table>
<thead>
<tr>
<th>Method Number</th>
<th>Method</th>
<th>Number Respondents Who Used Each Method</th>
<th>Percentage Using Each Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Existing data search</td>
<td>96</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Survey of special interest groups</td>
<td>96</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Interviews with members of target population</td>
<td>94</td>
<td>98</td>
</tr>
<tr>
<td>4</td>
<td>Study of community power structure</td>
<td>94</td>
<td>98</td>
</tr>
<tr>
<td>5</td>
<td>Observation - Director participation</td>
<td>94</td>
<td>98</td>
</tr>
<tr>
<td>6</td>
<td>Observation</td>
<td>92</td>
<td>95</td>
</tr>
<tr>
<td>7</td>
<td>Manpower studies</td>
<td>96</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
<td>Mailed questionnaires</td>
<td>96</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>Organization mapping</td>
<td>92</td>
<td>95</td>
</tr>
<tr>
<td>10</td>
<td>Study of inter-organized relationships</td>
<td>94</td>
<td>98</td>
</tr>
<tr>
<td>11</td>
<td>Interviews with key informants</td>
<td>94</td>
<td>98</td>
</tr>
<tr>
<td>12</td>
<td>Charrette</td>
<td>93</td>
<td>96</td>
</tr>
<tr>
<td>13</td>
<td>Survey of continuing education services in the area</td>
<td>94</td>
<td>98</td>
</tr>
<tr>
<td>14</td>
<td>Review of prior program offerings</td>
<td>96</td>
<td>100</td>
</tr>
<tr>
<td>15</td>
<td>&quot;Cut&quot; feeling of the director</td>
<td>96</td>
<td>100</td>
</tr>
<tr>
<td>16</td>
<td>Others</td>
<td>22</td>
<td>23</td>
</tr>
</tbody>
</table>
between these seven methods and the fifteen methods spelled out on page 1 of the instrument, respondents apparently considered them to be different. The number of responses to each of the seven methods is included in Table 2, page 39, for the information of the reader. Method 16 Others was not included in the calculations resulting in Tables 3 through 6 because of the small number and the variety of the responses.

Order of Usefulness of Each Method

The respondents were asked to rank (1 high) all methods used, in the order of their usefulness, as program planning approaches. The data in Table 3, page 40, show the order of usefulness of each method as ranked by the respondents. The most useful method used, as ranked by the respondents, was the Study of inter-organized relationships. The lowest in usefulness was Observation.

Order of Importance of Each Method

In Column II of the Respondents' Evaluation Form, the respondents were asked to rate on a scale 20 (most important) to 1 (least important) the importance of each method they had used in program planning. Data presented in Table 4, page 41, show the order of importance of each method used as rated by the respondents. Ninety-six, or 100 percent, rated "Gut" feeling of the director as the most important method used in program planning approaches. Method 10 Study of inter-organized Relationships was rated least important by the respondents.

Order of Helpfulness of Each Method

The respondents were asked to value on a scale 10 (excellent) to 1 (poor) the helpfulness of each method used, in program planning,
Table 2
Responses to Method 16 Others

<table>
<thead>
<tr>
<th>Method</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisory Council</td>
<td>6</td>
</tr>
<tr>
<td>Individual Request</td>
<td>5</td>
</tr>
<tr>
<td>Group Request</td>
<td>4</td>
</tr>
<tr>
<td>Recommendations by Specific Agencies</td>
<td>2</td>
</tr>
<tr>
<td>Recommendations by Staff and College Personnel</td>
<td>2</td>
</tr>
<tr>
<td>Ideas from Other Institutions</td>
<td>2</td>
</tr>
<tr>
<td>Personal Visitations</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 3

Order of Usefulness of Each Method Used to Assess Needs for Program Planning
As Ranked by the Respondents

<table>
<thead>
<tr>
<th>Method Number</th>
<th>Method</th>
<th>Number Respondents</th>
<th>Mean</th>
<th>Mean Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Study of inter-organized relationships</td>
<td>94</td>
<td>2.77</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Organization mapping</td>
<td>92</td>
<td>3.34</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Interviews with key informants</td>
<td>94</td>
<td>3.38</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Interviews with members of target population</td>
<td>94</td>
<td>3.76</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>Charrette</td>
<td>93</td>
<td>3.89</td>
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<td>2</td>
<td>Survey of special interest groups</td>
<td>96</td>
<td>4.08</td>
<td>6</td>
</tr>
<tr>
<td>14</td>
<td>Review of prior program offerings</td>
<td>96</td>
<td>4.14</td>
<td>7</td>
</tr>
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<td>5</td>
<td>Observation - Director participation</td>
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<td>4.14</td>
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<td>8</td>
<td>Mailed questionnaires</td>
<td>96</td>
<td>4.35</td>
<td>9</td>
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<td>4</td>
<td>Study of community power structure</td>
<td>94</td>
<td>4.79</td>
<td>10</td>
</tr>
<tr>
<td>13</td>
<td>Survey of continuing education services in the area</td>
<td>94</td>
<td>5.16</td>
<td>11</td>
</tr>
<tr>
<td>7</td>
<td>Manpower studies</td>
<td>96</td>
<td>5.17</td>
<td>12</td>
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<tr>
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<td>&quot;Gut&quot; feeling of the director</td>
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<td>&quot;Gut&quot; feeling of the director</td>
<td>96</td>
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<tr>
<td>14</td>
<td>Review of prior program offerings</td>
<td>96</td>
<td>15.14</td>
<td>2</td>
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<td>5</td>
<td>Observation - Director participation</td>
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<td>Interviews with members of target population</td>
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<td>Survey of special interest groups</td>
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</tr>
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<td>11</td>
<td>Interviews with key informants</td>
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<td>10.31</td>
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<td>Survey of continuing education services in the area</td>
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<td>8</td>
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<tr>
<td>9</td>
<td>Organization mapping</td>
<td>92</td>
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<td>14</td>
</tr>
<tr>
<td>10</td>
<td>Study of inter-organized relationships</td>
<td>94</td>
<td>4.69</td>
<td>15</td>
</tr>
</tbody>
</table>
on its own merit. In Table 5, page 43, the order of helpfulness of each method used as valued independently of other items by respondents is presented. The respondents valued the Study of inter-organized relationships and Charrette as the most helpful methods used for program planning approaches. Existing data search was least helpful.

Comparison of Respondents' Ranks, Ratings, and Values

In Table 6, page 44, the degree of consistency of respondents' ranks, ratings, and values is illustrated. The function of the utility formula, however, is to reduce the effects of any discrepancies among ranks, ratings and values.

Utility of Respondents' Procedures for Identifying Needs

Sub-problem 3, as stated in Chapter 1, was to measure the utility of the respondents' procedures for identifying needs for program development by means of a decision-theoretic approach to evaluation research. In Chapter 3, page 34, the formula for calculating utilities of entities is expressed, with complete explanations, as

\[ U_i = \sum W_j U_{ij} \]

The utilities of the fifteen methods used to develop programs in adult education are shown in Table 7, page 45. Three of the four methods with the highest utility, Interviews with key informants, Observation - Director participation, and Survey of special interest groups, would be expected to rank high. It would seem that study of community power structure (rank: 12) and Mailed questionnaires (rank: 15) would rank near the top in many communities. "Gut" feeling of the director would be expected to be high in utility
Table 5
Order of Helpfulness of Each Method Used to Assess Needs for Program Planning
As Valued (10 high) Independently of Other Items by Respondents

<table>
<thead>
<tr>
<th>Method Number</th>
<th>Method</th>
<th>Number Respondents</th>
<th>Mean</th>
<th>Mean Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Study of inter-organized relationships</td>
<td>94</td>
<td>8.43</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Charrette</td>
<td>93</td>
<td>8.31</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Interview with members of target population</td>
<td>94</td>
<td>8.10</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Interviews with key informants</td>
<td>94</td>
<td>8.06</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>Review of prior program offerings</td>
<td>96</td>
<td>7.99</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Survey of special interest groups</td>
<td>96</td>
<td>7.99</td>
<td>6</td>
</tr>
<tr>
<td>15</td>
<td>&quot;Gut&quot; feeling of the director</td>
<td>96</td>
<td>7.78</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>Observation - Director participation</td>
<td>94</td>
<td>7.74</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>Organization mapping</td>
<td>92</td>
<td>7.40</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>Observation</td>
<td>92</td>
<td>7.24</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Mailed questionnaires</td>
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<td>7.13</td>
<td>11</td>
</tr>
<tr>
<td>13</td>
<td>Survey of continuing education services in the area</td>
<td>94</td>
<td>7.10</td>
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<tr>
<td>7</td>
<td>Manpower studies</td>
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<tr>
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<tr>
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<td>Number Respondents</td>
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<td>Rate Mean Order</td>
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<td>5.43 14</td>
<td>10.31 9</td>
</tr>
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<td>96</td>
<td>4.08 6</td>
<td>11.43 5</td>
</tr>
<tr>
<td>3</td>
<td>Interviews with members of target population</td>
<td>94</td>
<td>3.76 4</td>
<td>11.74 4</td>
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<td>10.83 7</td>
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<td>4.14 8</td>
<td>13.53 3</td>
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<td>Observation</td>
<td>92</td>
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<td>10.98 6</td>
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<td>5.17 12</td>
<td>10.78 8</td>
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<td>4.35 9</td>
<td>8.04 12</td>
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<td>92</td>
<td>3.34 2</td>
<td>6.30 14</td>
</tr>
<tr>
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<td>Study of inter-organized relationships</td>
<td>94</td>
<td>2.77 1</td>
<td>4.69 15</td>
</tr>
<tr>
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<td>Interviews with key informants</td>
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<td>3.38 3</td>
<td>10.31 10</td>
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<td>10.02 11</td>
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<td>15.14 2</td>
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<td>-------------</td>
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<td></td>
</tr>
<tr>
<td>11</td>
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<td>227.721</td>
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<td>Observation</td>
<td>233.328</td>
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</tr>
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<td>Organization mapping</td>
<td>239.105</td>
<td>9</td>
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<tr>
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<td>Interviews with members of target population</td>
<td>243.118</td>
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<td>8</td>
<td>Mailed questionnaires</td>
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<td>15</td>
<td></td>
</tr>
</tbody>
</table>
but its low ranking could result from it being associated in the minds of the respondent with Observation - Director participation.

ANALYSIS OF NEEDS ASSESSMENT METHODS ACCORDING TO OUTCOME

Of the ninety-six responses, nineteen contained entries. Returns varied from a sentence or two to a few attempts to respond completely. The general thrust of responses is indicated by the following quotations:

We have not isolated the impacts or costs for any specific method for any specific type of function. A general review of all applications is made on a routine basis as each activity or term is being planned.

How do you determine costs per individual, time, facilities, etc., without pro-rating?

Would need to be aware of items in advance, to place proper cost factors--success or failure on whose part?

Some outcome is immediate - other long-range.

Each method contributed to our total assessment.

All methods used contributed to establishment of courses, seminars and workshops serving . . . groups . . . varying in numbers from 7 to 200 or more.

Obstacles encountered tended to fall in a few categories, such as "time limitations," "time consuming," "resistance by professional groups," "local officials uncooperative," and "used too much staff and facilities' time."

Costs were generally stated as "staff time contributed," "facilities used," "postage and telephone," "several methods involved in the same project."

Figure 1, page 47, was the most carefully and thoroughly completed return received. The extremely limited number and nebulose
<table>
<thead>
<tr>
<th>Method Number</th>
<th>Scope of Assessment</th>
<th>Purpose of Assessment</th>
<th>Success of Failure</th>
<th>Approximate Cost (per school term)</th>
<th>1 Courses--Seminars--Workshops (Materialized) Type (1-2-3)</th>
<th>No. of Participants</th>
<th>Obstacles Encountered &amp; How Resolved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 studies</td>
<td>locate service area</td>
<td>Success</td>
<td>$25.00</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
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<tr>
<td>2</td>
<td>20 groups</td>
<td>ABC program</td>
<td>Success</td>
<td>$150.00</td>
<td>1</td>
<td>300</td>
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<tr>
<td>3</td>
<td>5 groups</td>
<td>CETA Training</td>
<td>Failure</td>
<td>0-</td>
<td>1</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>5-10 leaders</td>
<td>Occupational Training</td>
<td>Success</td>
<td>$50.00</td>
<td>1 &amp; 3</td>
<td>100 - 200</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1-200 items</td>
<td>Gather program</td>
<td>Very Successful</td>
<td>-0- (admin.)</td>
<td>1-2-3</td>
<td>1000-1200</td>
<td>time limitations</td>
</tr>
<tr>
<td>6</td>
<td>1-200 items</td>
<td>Observe</td>
<td>Success</td>
<td>0- (admin.)</td>
<td>1 &amp; 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>-5 studies</td>
<td>Gather data</td>
<td>Failure</td>
<td>0-</td>
<td>1-2-3</td>
<td></td>
<td>data too general</td>
</tr>
<tr>
<td>8</td>
<td>10-15,000 copies</td>
<td>Class offering</td>
<td>Success</td>
<td>$1000.00</td>
<td>1-3</td>
<td>12-1500</td>
<td>time consuming on data retrieval</td>
</tr>
<tr>
<td>11</td>
<td>1-10 persons</td>
<td>Gather specific info</td>
<td>Success</td>
<td>0-</td>
<td>1-3</td>
<td></td>
<td>committees more helpful</td>
</tr>
<tr>
<td>13</td>
<td>1-25 schools</td>
<td>Comparison of programs</td>
<td>Success</td>
<td>0-</td>
<td>1-3</td>
<td></td>
<td>very helpful</td>
</tr>
<tr>
<td>14</td>
<td>1-100 courses</td>
<td>Review of program</td>
<td>Very Successful</td>
<td>0-</td>
<td>1-2-3</td>
<td>1200</td>
<td>most helpful to give continuous feedback</td>
</tr>
<tr>
<td>15</td>
<td>continuous</td>
<td>Ongoing review</td>
<td>Success</td>
<td>0-</td>
<td>1-2-3</td>
<td></td>
<td>very important to keep informed of total program</td>
</tr>
</tbody>
</table>

Figure 1

Sample Response to Page 2 of the Respondents' Evaluation Form
nature of the returns for page 2 of the instrument rendered further analysis unproductive.

**IDEAL USEFULNESS LEVEL OF EACH METHOD**

On page 3 of the instrument, respondents were asked to rank each of the fifteen methods, 1 (high) through 15, on the basis of their perception of its usefulness, whether or not they had used it for program planning. Table 8, page 49, shows that the respondents considered Review of prior program offerings, "Gut" feeling of the director, Observation - Director participation, and Interviews with members of target population to offer the highest potential for usefulness in program planning. The respondents considered Organization mapping and Study of inter-organized relationships least useful in program planning.

**SUMMARY**

Chapter 4 presented the data and findings of the study. These data consisted of: methods used to develop programs in adult education, the ranking of methods used in order of their usefulness as program planning approaches, rating of methods in order of importance in program planning, and the value based on helpfulness of each method used in program planning. The rank, rate, and value scales were constructed to be used with the utility formula developed by Ward Edwards.

The data further consisted of information on the methods outcome for the respondents' institutions, and the respondents percep-
Table 8
Respondents' Perception of Ideal Usefulness Level of Each Method

<table>
<thead>
<tr>
<th>Method Number</th>
<th>Method</th>
<th>Number of Respondents</th>
<th>Mean</th>
<th>Mean Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Review of prior program offerings</td>
<td>92</td>
<td>4.97</td>
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<td>5</td>
<td>Observation - Director participation</td>
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<td>3</td>
<td>Interviews with members of target population</td>
<td>92</td>
<td>6.50</td>
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</tr>
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<td>Survey of special interest groups</td>
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<td>Interviews with key informants</td>
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<td>Manpower studies</td>
<td>92</td>
<td>8.59</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>Observation</td>
<td>90</td>
<td>8.73</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Study of community power structure</td>
<td>92</td>
<td>8.80</td>
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<td>Organization mapping</td>
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</tr>
<tr>
<td>10</td>
<td>Study of inter-organized relationships</td>
<td>92</td>
<td>11.35</td>
<td>15</td>
</tr>
</tbody>
</table>
tions of the methods used in the assessment of needs for program planning whether they used the methods or not.

The summary, conclusions, and recommendations of this study are presented in Chapter 5.
Chapter 5

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this chapter is (1) to restate the problem, sub-problem, and procedures employed in preparing this study; (2) to discuss the data presented in Chapter 4; (3) to discuss conclusions drawn from the data collected; and (4) to present recommendations based on the findings of the study.

SUMMARY

The Problem

The problem of this study was to evaluate methods employed in identifying needs for program development in adult education among selected public community colleges in the United States.

Sub-Problems

To facilitate the solution of the problem the following sub-problems were stated:

1. To identify methods used by public community colleges in assessing needs for program development in adult education,

2. To evaluate procedures used by public community colleges
   a. On the basis of their ranking of usefulness of each procedure,
   b. According to how they rate importance of each procedure on a weighted scale, and
   c. According to the value they place on each procedure,
3. To measure the utility of their procedures for identifying needs for program development, by means of a decision-theoretic approach to evaluation research.

4. To design an appropriate data gathering instrument.

Procedures

Several studies and related literature were reviewed as examples of the techniques of securing data for a study of this nature. It was concluded that a Respondents' Evaluation Form supplemented by personal correspondence and conferences could be used effectively to secure the needed data. Each state-supported community college listed in the 1974 Junior College Directory was assigned a number and a table of random numbers was used to select the one hundred fifty community colleges used in this study. An explanation of procedures is presented in Chapter 3 of this report.

Discussion of Data

According to Ward Edward's approach to evaluation research, ranking alone does not reveal enough about an entity and its relationships to all other entities. All ranking does is provide a fixed order of items with no value of each item relative to all other items. To ask a person to judge an entity from different perspectives results in different judgments or values, depending on the perspective; that is, if one were asked how he thought an entity should be valued, he might assign an idealized value to it, but when asked what works best for him, he would give an answer based on experience, and rate it lower or higher. The overall utility of an entity, therefore, should reflect a synthesis of these several different perspectives, so that the outcome represents
the best combination of judgments and hence the most thorough evaluation of a given entity.

The data presented in Chapter 4 illustrate the above. The relative order of the items being evaluated is varied, depending on the perspective taken; that is, the question being asked. The final utility score is the best overall evaluation of each item in relation to all other items.

FINDINGS

Specific findings of the study are organized under the following headings.

Rank, rate and value of methods used in needs assessment for program development. "Interviews with key informants" was shown to rank third in usefulness of items used by respondents. From the perspective of order of importance, they rated it tenth. Respondents valued it, independently of other items, in fourth place. When the utility formula was applied, this method of program development was found to have the highest utility. Similarly, "Study of inter-organized relationships," ranked first, rated fifteenth, and valued first, was second highest in utility. Third highest in utility was "Observation-Director participation;" rank 8, rating 3, value 8. By contrast, "Mailed questionnaires," lowest in utility, was ranked ninth, rated twelfth, and valued eleventh.

Outcomes of methods used for respondents' institutions. The second part of the Respondents' Evaluation Form was intended to secure information designed to measure outcomes of the use of needs assessment methods for respondents' institutions. Only nineteen full or partial responses,
varied in content, were forthcoming. Although they did not lend themselves to productive analysis, they did give rise to recommendations 4 and 6, following in this chapter.

Respondents perceived ideal usefulness of methods used in needs assessment for program planning. The data generated by the third part of the Respondents' Evaluation Form demonstrate that there is very little relationship between respondents' perception of ideal usefulness, and their experience of actual usefulness. For example, only "Interviews with members of target population" was in the top five in each table. This comparison between practical usefulness and ideal usefulness demonstrates the necessity for a utility formula which minimizes the subjective nature of the needs assessment process for program planning in adult education.

CONCLUSIONS

The findings of this study led to the following conclusions:

1. The four methods with the highest utility were Interviews with key informants, Study of inter-organized relationships, Observation-Director participation, and Survey of special interest groups.

2. Failure of certain methods of needs assessment may be explained by practitioners' use of conventional methods without careful examination of their results, especially as compared to all other possible methods.

3. Close examination of the utilities of the methods used indicated that the methods requiring the greatest complexity of analysis were lowest in utility.
4. Certain methods of needs assessment, such as Study of inter-organized relationships, although perceived as important, may not ultimately be most useful or effective.

5. Perceptions differ depending on the way a method for needs assessment is viewed. Therefore it is important to evaluate the method from several perspectives. The Edwards Utility Formula is useful in synthesizing views.

RECOMMENDATIONS

Recommendations resulting from this study were of two specific types; those based on experience in using the Respondents' Evaluation Form, and those based on the findings of the study itself.

Recommendations Based on Respondents' Evaluation Form

1. The Respondents' Evaluation Form used in this study should be pretested prior to being used in future studies on needs assessment.

2. Responses identifying methods used to assess needs for program planning in adult education should be limited to those methods used during the two-year period prior to study.

3. Ideal usefulness of needs assessment methods and the actual usefulness of needs assessment methods should be viewed in the same perspective, so that the utility formula can be applied for comparison.

Recommendations Based on the Findings of the Study

4. Directors of adult education should be able to isolate and identify costs for specific methods of needs assessment for program planning in order to assure maximum returns for funds invested. Space utilization and equipment, staff time and other cost factors should be
considered in calculating the per student cost.

5. The utility value should be considered as one index to use in determining where emphasis should be placed in needs assessment for program planning.

6. Further research on needs assessment methods should be conducted specifically to develop means of differentiation between those methods actually used by practitioners and the ideal methods.

7. Directors of continuing education should place increased emphasis on interpretation and implementation of needs assessment data available in their service area.

8. In-service education and workshops in the interpretation and implementation of field data should be provided for directors of continuing education. In large departments of continuing education consideration should be given to employment of a specialist in analysis and interpretation of field data.
1. Books


Hand, Samuel E. Community Study as a Basis for Program Planning in Adult Education. Tallahassee: Florida State University, 1960.


2. Periodicals


3. Dictionary


4. ERIC Documents


5. Government Documents


6. Unpublished Works


7. Other


APPENDIX A
Dr. _______________, Dean
Continuing Education
_______________ Community College
_______________, State

Dear ________________:

I have been Director of Continuing Education at Walters State Community College since the inception of the college in 1970. I am now completing requirements for the Doctor of Education Degree at East Tennessee State University, with a major in Educational Administration and Adult Education.

Enclosed please find a Respondents' Evaluation Form for Needs Assessment Methods in Program Planning for Adult Education. I would appreciate your help in completing this form and sending to me in the stamped, self-addressed envelope.

This information will be used for my dissertation and will not be identified with any particular college. The forms are numbered for the purpose of follow-up only.

Thank you in advance for your cooperation; and if you would like a copy of the results, please note on the form.

Sincerely,

/s/ R. Lynn Gilmore
Director

RLG:1d

Enclosure
RESPONDENTS' EVALUATION OF NEEDS ASSESSMENT METHODS
USED IN PROGRAM PLANNING FOR ADULT EDUCATION

INSTRUCTIONS

Please read and review the entire instrument before you begin. Remove this page of instructions and follow very carefully each step as outlined.

STEP ONE - Read each of the METHODS presented in COLUMN I (1-16)

STEP TWO - Utilizing the METHODS presented in COLUMN I please circle the YES or NO in COLUMN II to indicate whether you have actually used this method for program planning.

STEP THREE - Using ONLY those METHODS which you have circled YES in COLUMN II, please RANK in COLUMN III, (1 high) the order of their usefulness to you in program planning approaches.

STEP FOUR - Using again the METHODS which you have circled YES in COLUMN II, RATE on the scale of 20 (most important) to 1 (least important) your rating of the importance of this method in program planning.

STEP FIVE - Again using the METHODS which you have circled YES in COLUMN II, VALUE on the scale 10 (excellent) to 1 (poor) the helpfulness of each METHOD you have used in program planning. VALUE each item on its own merit independently of all other items.

PAGE TWO OF THE INSTRUMENT

STEP SIX - For each METHOD circled YES in COLUMN II, page 1, please supply the information, for page 2, on its outcome for your institution. Example: Under Scope of Assessment Column, list groups and/or numbers of people contacted.

PAGE THREE OF THE INSTRUMENT

STEP SEVEN - On page 3, please RANK each of the METHODS in order of importance 1 (high) through 15 on the basis of your perception of its usefulness, whether you have used it or not.
<table>
<thead>
<tr>
<th>COLUMN I</th>
<th>COLUMN II</th>
<th>COLUMN III</th>
<th>COLUMN IV</th>
<th>COLUMN V</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHODS used to develop programs in Adult Education</td>
<td>Have You Used This Method (please circle)</td>
<td>RANK Those You Have Used: In order of importance. 1 (high), etc.</td>
<td>RATE Those You Have Used: In order of importance. 20 (high) - 1 (low) (please circle)</td>
<td>VALUE Those You Have Used: 10 (excellent) - 1 (poor) (please circle)</td>
</tr>
<tr>
<td>1. EXISTING DATA SEARCH</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: Use of census data, reports, maps, etc.</td>
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<tr>
<td>2. SURVEY OF SPECIAL INTEREST GROUPS</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: League of Women Voters</td>
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</tr>
<tr>
<td>3. INTERVIEWS WITH MEMBERS OF TARGET POPULATION</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: Persons selected at random</td>
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<tr>
<td>4. STUDY OF COMMUNITY POWER STRUCTURE</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: Identification of leaders and use of their analysis of community needs.</td>
<td></td>
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<tr>
<td>5. OBSERVATION - (DIRECTOR PARTICIPATION)</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: Director participates in events and gathers information</td>
<td></td>
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<tr>
<td>6. OBSERVATION</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: Similar to No. 5 except director is not a participant in events.</td>
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</tr>
<tr>
<td>7. MANPOWER STUDIES</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: Determine from employers future needs for employers</td>
<td></td>
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<tr>
<td>8. MAILED QUESTIONNAIRES</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
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<tr>
<td>Example: Sent to clientele of representative groups</td>
<td></td>
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<tr>
<td>9. ORGANIZATION MAPPING</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: Study of community agencies and institutions for need indicators</td>
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<tr>
<td>10. STUDY OF INTER-ORGANIZED RELATIONSHIPS</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: Determine which organizations work with others and how</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11. INTERVIEWS WITH KEY INFORMANTS</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: Individual perceptions of the community and where it is going</td>
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<tr>
<td>12. CHARRETTE</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: A brainstorming forum with representative members of the community</td>
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<tr>
<td>13. SURVEY OF CONTINUING EDUCATION SERVICES IN THE AREA</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: Offerings of other Agencies</td>
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<tr>
<td>14. REVIEW OF PRIOR PROGRAMS OFFERINGS</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: What has been offered at the college</td>
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<tr>
<td>15. &quot;GUT&quot; FEELING OF THE DIRECTOR</td>
<td>Yes No</td>
<td>20 19 18 17 16 15 14 13 12</td>
<td>11 10 9 8 7 6 5 4 3 2 1</td>
<td>10 9 8 7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Example: Personal feeling of what is needed</td>
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<tr>
<td>16. OTHERS (please list)</td>
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</tr>
</tbody>
</table>
FOR EACH METHOD ANSWERED YES PRECEDING, PLEASE SUPPLY THE FOLLOWING INFORMATION ON ITS OUTCOME FOR YOUR INSTITUTION

<table>
<thead>
<tr>
<th>Method Number</th>
<th>Scope of Assessment</th>
<th>Purpose of Assessment</th>
<th>Success or Failure</th>
<th>Approximate Cost (per school term)</th>
<th>Courses—Seminars—Workshops—Materialized Type (1-2-3)</th>
<th>No. of Participants</th>
<th>Obstacles Encountered &amp; how Resolved</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>
Please RANK each of the following METHODS in order of importance, 1 (high) through 15, on the basis of your perception of its usefulness, whether you have used it nor not.

<table>
<thead>
<tr>
<th>Method</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Existing Data Search</td>
<td></td>
</tr>
<tr>
<td>2. Survey of Special Interest Groups</td>
<td></td>
</tr>
<tr>
<td>3. Interviews with Members of Target Population</td>
<td></td>
</tr>
<tr>
<td>4. Study of Community Power Structure</td>
<td></td>
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<tr>
<td>5. Observation - (Director Participation)</td>
<td></td>
</tr>
<tr>
<td>6. Observation - (Director Does Not Participate)</td>
<td></td>
</tr>
<tr>
<td>7. Manpower Studies</td>
<td></td>
</tr>
<tr>
<td>8. Mailed Questionnaires</td>
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<tr>
<td>9. Organization Mapping</td>
<td></td>
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<tr>
<td>10. Study of Inter-Organized Relationships</td>
<td></td>
</tr>
<tr>
<td>11. Interviews with Key Informants</td>
<td></td>
</tr>
<tr>
<td>12. Charrette</td>
<td></td>
</tr>
<tr>
<td>13. Survey of Continuing Education Services in the Area</td>
<td></td>
</tr>
<tr>
<td>14. Review of Prior Programs Offerings</td>
<td></td>
</tr>
<tr>
<td>15. &quot;Gut&quot; Feeling of the Director</td>
<td></td>
</tr>
</tbody>
</table>
INSTRUCTIONS TO JURY MEMBERS

There are fourteen methods used to assess needs for program planning in adult education listed on the attached sheet. For each method used, the respondent is asked to rank, rate, and value it according to the instructions.

Please do the following:

1. Examine the instructions for clarity and completeness. Make any changes you consider necessary.

2. Examine each method for clarity and completeness.
   (a) Is each example clear for the corresponding method used for needs assessment?
   (b) If not, does it belong with any other method? (Specify by giving method number)
   (c) If the example does not belong with any other method, please suggest another example to cover it.

3. In your opinion, should any method be added or deleted? Please explain.
JURY MEMBERS

Mr. Charles Lee
Director of Adult, Continuing Education, and Community Services
Volunteer State Community College
Gallatin, Tennessee

Mrs. Hilary Marabeti
Coordinator of Special Programs
Volunteer State Community College
Gallatin, Tennessee

Dr. John Peters
Associate Professor of Continuing and Higher Education
The University of Tennessee
Knoxville, Tennessee

Mr. Troy Simpson
Area Director for Continuing Education and Community Services
Shelby State Community College
Memphis, Tennessee
RATIONALE FOR USE OF THE JURY SYSTEM

When no standardized instrument is available for the purpose of measuring the degree to which practices meet criterion objectives, it is necessary to construct one. To approach as nearly as possible a degree of validity, reliability, and objectivity the instrument is submitted for criticism and suggestions to a group of experts who are knowledgeable about both practices and objectives in the field under investigation.

According to George J. Mouly,

Research in the behavioral sciences is often concerned with phenomena's degree of existence which can only be estimated on the basis of subjective judgment. Some can only be assigned to different categories...these categories constitute steps of a continuous category system having a quantifiable relationship to each other, and the investigator's task is to assign ratings to the phenomena in question in terms of these steps identified on...a numerical scale. At a more sophisticated level, the separate ratings of the individual components are combined into an overall index of the individual's status on the phenomenon in question.¹

Max D. Englehart supplemented the rationale for the use of the jury method as follows:

The first draft...should be submitted to competent persons for criticism and be given a preliminary trial by persons typical of the proposed mailing list. Criticism and trial often reveal inadequacies not apparent to the author...Analysis of these questions may show that the terms used are...in need of definition.

The expert may also have suggestions with reference to the item

forms used and the directions given to the persons who will respond . . . on the answer sheet or mark-sense card.²