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Integration of evaluation and instructional methodology

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INTEGRATION OF EVALUATION AND INSTRUCTIONAL METHODOLOGY

Iowa State University

PH.D.

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Integration of evaluation and instructional
methodology

by

Paul Moore Coates

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of the
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1980

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CHAPTER I.

INTRODUCTION

Background of Problem

Evaluation is a popular topic in adult education largely due to increased emphasis on justifying programs. Since justification is often the motivating force for evaluation, it is understandable that most efforts focus on measuring program outputs. The traditional approach to measuring outputs begins with the establishment of program objectives. The objectives provide the structure for the learning situation by identifying the type of information to be presented, as well as guiding the choice of instructional methodology. The evaluation is designed to measure the degree to which the objectives are achieved. Typically, such measures focus on the outputs of the program (London, 1960; Duft, 1969; Knowles, 1970). By emphasizing outputs, evaluation is most often placed at the end of a program, where it is usually aimed at measuring the "products" of the educational experience. Product refers to the specific information presented as outlined by the objectives (Snyder and Ulmer, 1972).

By focusing on measuring objectives, changes needed during the program are often overlooked. Failure to

measure during program operation leaves adult educators in a position of being unable to alter instructional procedures to meet changing needs. Some adult educators, in an effort to overcome the disadvantages of program end measures employ formative evaluation strategies (Bloom, 1971; Anderson, Ball, and Murphy, 1975). Formative evaluation strategies are designed to measure progress toward objectives during program operation. This broadens evaluation beyond a strict end result measure; however, the progress toward achievement is still the basis of the evaluation.

Evaluation in adult education can be more than measurement of products; it can also be utilized as a measure during the implementation phase of the educational experience. Generally known as process evaluation, "it provides feedback on how well the various components of instruction are contributing to the on-going process of learning" (Snyder and Ulmer, 1972, p. 34). By employing evaluation as a measure of the process, evaluation becomes part of the instructional methodology. Failure to utilize process evaluation as part of the instructional methodology is a particularly critical omission in light of the historical emphasis in adult education on the need to create

opportunities for the adult learners to grow and change (Linderman, 1939; Pressey and Robinson, 1944; London, 1960; Knowles, 1975).

In summation, the purpose of traditional output-product evaluation is to justify program efforts. This approach is not without value considering the pressures for justification. However, left as a measure of outputs, evaluation is not being used to provide feedback on the on-going process. By utilizing process evaluation as a part of the instructional methodology, adult educators and learners may have an opportunity to affect the on-going program.

Statement of Problem

The precepts of adult education consistently suggest that an adult education experience is an integrated process. Program development phases are parts of an integrated effort designed to create educational experiences in which learners have opportunities to change and grow. However, evaluation has traditionally been treated as an independent phase designed to judge other phases of the educational process in terms of their contribution to achieving program objectives. Very little emphasis has been given to the evaluation of processes, particularly the processes internal to the implementation phase. This raises the question about

whether evaluation is really interested in changes which affect the growth and development of individual participants.

The problem under investigation in this research project is the impact of evaluation, when integrated with the instructional methodology, on the learners' satisfaction toward the educational program, on their feelings of relevance and meaningfulness of program content, and on the degree to which they feel their premeeting expectations were met by the program. By emphasizing integration of evaluation and instructional methodology, adult educators can gather feedback about changes in learners' needs that may result from the learning experience. The program instructor can utilize the feedback as a basis for changing either the focus or process of the program while it is in progress.

Definitions

Evaluation

"Evaluation can be discussed from at least two perspectives. First, evaluation is the process of determining the value or worth of learning experiences in achieving the specific objectives sought. The product or gains made by the learners are analyzed to determine the 'growth' of learners. This is product evaluation. On the other hand,

process evaluation focuses on the how or why of the instructional program" (Snyder and Ulmer, 1972, p. 32).

It is the second concept of evaluation that is applicable to this research.

Meaningfulness

Meaningfulness refers to the value of a subject to an individual learner.

Objective reassessment

Objective reassessment refers to the process individuals go through in examining their objectives after coming in contact with new information. The result of this process can be a reaffirmation of the original objectives or the adoption of new objectives.

Process

Process is the action or activity which occurs in the learning situation (Metfessel, Michael and Kirsner, 1972; Taylor, 1976).

Relevance

Relevance refers to the utility of a topic area to the individual's function in an elected position.

Transaction

A transaction is an exchange which may involve bargaining and negotiations (Kuhn, 1963). "The word trans-

action has a double implication: (1) that all parts of the situation enter into it as active participants, and (2) that they owe their very existence as encountered in the situation to this fact of active participation and do not appear as already existing entities merely interacting with each other without affecting their identity" (Ittleson and Cantril, 1954; p. 3).

Assumptions, Conjectures, and Hypotheses

Assumptions

This research project is based on two assumptions: (1) the purpose of adult education is to build a learning environment in which learners can grow and change at an individual pace, and (2) learners obtain more benefits from a learning environment in which they are full participants in decisions about the program.

Conjectures

IF, participants at the 1980 Mayor-Council Orientation are provided instructional methods where evaluation is internalized to assist in maintaining an open atmosphere, THEN, they will be more positive in their reactions to the program; they will perceive the content to be more relevant and meaningful; they will undergo more objective reassessment; AND they will perceive greater realization of their premeeting expectations.

Hypotheses

Hypothesis #1A: Unstructured group participants will report significantly ($p \leq .05$) greater satisfaction with the way in which the meeting was conducted than structured group participants.

Hypothesis #1B: Unstructured group participants will report significantly ($p \leq .05$) greater satisfaction with the content of the meeting than structured group participants.

Hypothesis # 1C: Unstructured group participants will report a significantly ($p \leq .05$) greater opportunity for the audience to participate in the program than structured group participants.

Hypothesis #2A: Participants in the unstructured program will rate the content of the meeting as being significantly ($p \leq .05$) more relevant than structured group participants.

Hypothesis #2B: Participants in the unstructured program will rate the content of the meeting as being significantly ($p \leq .05$) more meaningful to them than structured group participants.

Hypothesis #3: Unstructured group participants will experience a significantly ($p \leq .05$) greater degree of individual objective reassessment than structured group participants.

Hypothesis #4: Unstructured group participants will experience a significantly ($p \leq .05$) greater degree of realization of expectations developed prior to and/or during the program than structured group participants.

Rationale for Hypotheses

Like all educators, adult educators are interested in change. What separates the adult educator from other educators is the belief that learners are capable of determining the value of change for themselves. The phrase which best describes this notion in adult education is "self-directed learning". According to Knowles,

self-directed learning describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes (Knowles, 1975, p.18).

Adult educators serve as an aid to learners by helping to locate resources and information, and by creating the kind of environment in which learning can occur (Knowles, 1950).

Educational programs designed for adults should reflect the "self-directed" nature of adult learners. Control by the learners is a common thread that runs through all of the program development phases, including the implementation

phase. Program implementation should be organized to provide learners an environment in which needs can be reassessed and program direction adjusted accordingly (Boyle and Jahns, 1970).

Evaluation which is integrated into the instructional methodology and conducted during the implementation phase should focus on the process to maximize the opportunity for learners to impact the program.

The hypotheses for this research project are concerned with learners' attitudes about two different types of programs. One program is a traditional objective-based evaluation mode and the other a program in which evaluation is a part of the implementation phase. The latter type of evaluation focuses on the on-going processes occurring in the phase.

Theoretical Framework

A number of evaluation models are available to adult educators. They range from highly systematic models based on objectives to more informal models (House, 1978). The model or models chosen depend(s) on the evaluation needs of the program.

The evaluation model that guides this research is the Transactional Evaluation Model. Transactional evaluation is an informal approach that focuses on the process rather

than on the performance of the participants (Rippey, 1973a). The informal, flexible nature of the transactional approach makes it more applicable to educational programs which are too complex and fluid to be totally assessed with preset, analytic techniques. Transactional evaluation techniques focus on the program processes and the transactions which uniquely occur in each program setting (Taylor, 1976).

Transactional evaluation is particularly well-suited to adult education because specific techniques for gathering data are not dictated by the model. The choice of techniques are determined by the needs of the program and can change with circumstances. Taylor expresses the essence of the transactional evaluation model when he states:

The (transactional) model takes little account of formal statements of program objectives and designs. Instead, the evaluator attempts to learn the actual intents and activities through informal observation and interviews. As issues and questions begin to take shape, his observations and measurements become more systematic and focused. If new, more pressing issues arise, he shifts his attention (Taylor, 1976, pp. 357-358).

The flexibility of the model makes it ideal as the umbrella strategy for this research project. It is a viable alternative to more formal models because it focuses on the process rather than being preoccupied with products and outcomes.

Methodology

Subjects

In November of odd numbered years, municipal elections are held throughout Iowa. As a result of these elections, many new mayors and councilmembers are elected in Iowa's 950 cities. Since 1968 an orientation program for the newly elected officials has been conducted each January following municipal elections. The orientation program has traditionally been presented in twelve locations throughout Iowa. The participants vary in age, sex, and size of city represented, but they share the characteristic of being elected and serving in a public policy-making position. The 1980 Mayor-Council Orientation program served as the educational setting for this research project. One change was to expand to thirteen locations for purposes of better coverage of the state.

Design

The thirteen locations were organized into two groups; one group received a program which was based on predetermined program objectives. The other group received a program which involved participants in program design and in which evaluation was integrated into the normal operations. The group which received the predetermined

program will hereafter be known as the structured group, while the other group will be known as the unstructured group.

The structured group program was based on objectives which were predetermined by program instructors. The program instructors were all individuals involved with city government so the objectives were based on needs which originally were expressed by local government officials. The program operated according to a plan which was designed to achieve the preset objectives. Participants did not have an opportunity to alter the plan; however, they were given many opportunities to ask questions. The method of presentation primarily consisted of lecture supplemented by use of visual aids.

The unstructured group program was based on ideas generated by participants at the beginning of the program and during its operation. The participants were initially taken through an exercise where the subjects to be discussed at the meeting were identified and listed on a blackboard or flipchart. These items served as the starting point; however, participants were given opportunities during the meeting to add other subjects or other aspects of a subject. The method of presentation was largely determined by the subjects selected; in fact, it consisted of some

lecture using visual aids, some demonstrations of concepts using blackboard examples and interaction of instructors and participants. The interaction consisted of questions and information supplied by participants.

Throughout the unstructured program, efforts were made to evaluate the participants' needs and desires so that changes could be made as appropriate. The evaluation consisted of noting types of questions asked by participants, consideration of specific inquiries about subjects or issues and instructors' perceptions of audience reaction to information.

Instrumentation

At the conclusion of both the structured and unstructured programs, the participants received a questionnaire designed to gather information on their reaction to the instructional approach used in their program. The questions focused on the attitudes about (1) satisfaction with the conduct and content of the program, (2) the relevance and meaningfulness of the program content, (3) reassessment of their individual objectives, and (4) how well the program met their premeeting expectations.

The instrument consisted of four sections and two different measurement techniques. The first section dealt with background data on participants' sex, age, tendency to

attend educational meetings, experience in office and size of city represented. This information was used to determine if certain factors had more influence than others on the attitudes of participants. The second section consisted of a Semantic Differential scale which had a seven point scale that measured participants' reactions to the content and conduct of the meeting using descriptive adjectives. The third and fourth sections utilized Likert scaling which consisted of a five point scale along which participants could react to specific questions. Section three used a 1 to 5 scale with 1 equalling unsatisfactory and 5 equalling very satisfactory; the points in between then represented movement toward one of those poles. The fourth section used a traditional Likert scale which consisted of 1 to 5 points with each representing a specific reaction.

Data analysis

The results from the research questionnaire were cross tabulated to insure that there were sufficient numbers in each cell for purposes of analysis. As a result of the cross tabulation, the categories of city size and participant age were collapsed from eight and seven cells respectively to five cells for each category. In addition

to the collapsing of the two categories, the data were recorded using the Certainty Method. This method extends the outer limits of a scale to provide a truer reflection of movement to the extreme points of the scale.

After the preparation, the data were analyzed using an analysis of variance to test the significance of relationships. The primary level of analysis focused on the significance of any differences in means between the structured and unstructured groups on the seven variables delineated for examining participant's reactions. The seven variables which were delineated from the research hypotheses were:

1. Satisfaction with the conduct of the meeting
2. Satisfaction with the content of the meeting
3. Opportunities for participant input into the program
4. Relevance of the content to participants' position
5. Meaningfulness of the content to participants
6. Objective reassessment that participants experienced during the meeting
7. Realization of premeeting expectations by the participants

The second level of analysis focused on the difference between the various subgroups created by the factors identified in the background questions on the research instrument. For purposes of analysis these subgroups

were divided by instructional method and the analysis concentrated on differences of subgroups and any interaction with instructional method.

Significance of Study

Process evaluation as an integral part of the instructional methodology allows adult educators to expand beyond justification as the sole rationale for evaluation. During the educational experience learners grow and redefine needs; process evaluation strategies sensitize adult educators to these changes and help them readjust the on-going program to meet the changing needs. Thus, the learners control the educational experience.

Instructional strategies which include evaluation of process are designed to generate feedback for use in decision-making during the program. Product evaluation, particularly output-product evaluation, is oriented toward collecting information to impact future programs. This is a critical shortcoming because it assumes that future learners and future settings will be comparable to the program being evaluated. Such an assumption is risky because it overlooks the unique nature of each educational experience (Wilson, 1977).

This research project is an effort to provide evidence

that an adult educational program where evaluation is internalized as a natural part of the implementation stage is more favorably received by adult learners.

This is significant because it will provide adult educators with evidence which may allow them to better align adult education precepts with evaluation methodology.

CHAPTER II.

REVIEW OF LITERATURE

Introduction

Much of the emphasis in adult education research is directed toward increasing understanding of adult learners. Understanding learners is important for adult educators if they are to provide meaningful educational experiences. Knowledge about educational learning patterns is in a dynamic state; however, there is strong evidence which indicates that adults are highly self-directed (Tough, 1971). The element of self-directedness is important because it forms a central tenet of adult education in terms of the role learners assume in the educational setting.

The purpose of this chapter is to present a review of the literature relevant to this research project. The chapter begins with a discussion of adult education and the relationship of the discipline to the learners. This discussion focuses on the role of learners in the educational setting, and includes discussions of learning theories, the designing of a learning experience, and the value of participation by learners. The section on adult education and the learners also discusses typical approaches to evaluation and program planning.

The second part of the chapter deals with various evaluation models which are applicable to adult education. Each model is critiqued in light of the basic premises of adult education. As a result of the critique, the Transactional Evaluation model was chosen as the theoretical guide for this study; a discussion of the model makes up the last major section of the chapter.

Adult Education

Role of the adult learner

One of the purposes of adult education is to provide society with educational outlets for people no longer involved with traditional educational institutions. Adult educators are primarily concerned with developing techniques which enable them to serve learners in a nontraditional setting. A central issue in developing effective techniques is the perception of the learner's role in the educational process. A determining factor in role identification is the assumption about adults' ability to learn.

Ability of adults to learn The ability of adults to learn has been established as noted by James Birren in his review of numerous studies. Birren concludes that "evidence accumulated on both animal and human learning suggests that age changes in primary ability to learn are

small under most circumstances" with significant differences occurring because of "perceptions, set, attention, motivation, and psychological state" (Birren, 1962, p. 39). Evidence such as Birren's review and Tough's study indicate that adults are capable of learning and, in fact, are actively involved in various forms of learning. Jack Mezirow asserts that adults learn so as to achieve a "meaning perspective, which is the desire to become aware of the cultural and psychological assumptions that influence the way we see ourselves and our relationships and the way we pattern our lives" (Mezirow, 1977, pp. 153-154). The search for "meaning-perspective" serves as the motivator for adults to learn as they mature. "Maturity may be seen as a developmental process of movement through the adult years toward meaning-perspectives that are progressively more inclusive, discriminating, and more integrative of experience" (Mezirow, 1977, p. 159). If ability and motivation to learn are present, the critical question becomes: How do adults really learn?

Learning theories Two broad categories of learning theories can be delineated as guides for adult educators in decisions about adults' capabilities to learn are stimulus-response theories; these theories perceive learners as creatures of habit who are limited to past learning and experience as the basis of new learning.

Learners are treated as passive recipients in the educational process. Second are cognitive theories; these theories maintain that learners are constantly engaged in transforming information in order to reorganize cognitive structure. In the cognitive theories learners are active participants in the educational process due to the constant activity of relating information to needs (Dubin and Okun, 1973).

The adult education discipline is more in tune with cognitive theories due to the emphasis on learners activities. Learning in the adult education context involves a systematic accumulation of information and the evaluation of the information in terms of decisions on problems (Verner, 1962). Implicit in the definition is the view that learners adopt new skills or ideas to fulfill needs (Pressey and Robinson, 1944). Needs are central in adult education because they represent a motivating force for adults to become involved in the educational setting. A need can be defined as an "imbalance, a lack of adjustment, or a gap between present situation or state of being and a new or changed set of conditions assumed to be more desirable" (Boyle and Jahns, 1970, p. 61). A need is very similar to the "meaning perspective" defined by Mezirow.

While cognitive theories in general are useful, a more precise delineation offered by Krathwohl, Bloom and Bertram helps to pin down learning. They identify three domains in which learning occurs: the cognitive domain, the affective domain, and the psychomotor domain. The cognitive domain "consists of remembering or reproducing something previously learned", as well as "solving intellectual tasks for which the individual has to determine the essential problem and then reorder given material or combine it with ideas, methods, or procedures previously learned." The affective domain "emphasizes a feeling of tone, an emotion, or a degree of acceptance or rejection" (Krathwohl, Bloom and Bertram, 1964, p. 7).

The word "affective refers to the feeling or emotional aspects of experience or learning, while cognitive refers to the conceptual activity of the mind knowing an object or to intellectual functioning" (Johnson, 1974, p. 100). The psychomotor domain involves the "muscular or motor skills, some manipulation of material and objects, or some acts which require a nerve-muscular coordination" (Krathwohl, Bloom and Bertram, 1964, p. 7).

All three of these domains are important to adult education, but the affective domain is the most integral to this study because feelings and attitudes are central

to process evaluation. Integrating evaluation into instructional method involves the learners' attitudes and the changes which can occur in those attitudes. Kelman indicates that formation of attitudes involves various processes such as compliance, identification, and internalization (Kelman, 1958). Compliance "occurs when an individual accepts influences so as to achieve a favorable reaction from another person or group". Identification "occurs when an individual accepts influences because of a desire to establish or maintain a satisfying relationship to another person or group". Internalization "occurs when an individual accepts influences because the content of the induced behavior -- the ideas and actions of which it is composed -- is intrinsically rewarding" (Kelman, 1958, p. 53). The process of internalization is phased beginning with "incomplete and tentative adoption of only overt manifestations of the desired behavior and later a more complete adoption" (Kratwohl, Bloom and Bertram, 1964, p. 29).

Effect of attitudes on learning Regardless of why individuals adopt certain attitudes it is clear that attitudes play a central function in learning. The implications of attitudes to adult education are enormous because attitudes, while not physically given, can be affected by the activities which occur during the educational experience (Whaples and Ryder, 1975). Adult education as a profession

is built on the premise that adults have the ability to learn and that those adults who devote time and energy to education are seeking to learn (Linderman, 1939). When adult learners commit to the educational setting adult educators must seek to rekindle and maintain their interest by "engaging the learners' participation and evaluative faculty" (Buchanan, 1973, p. 251).

Therefore, adult education is based on the belief that adults can and do learn, that their learning is an active process, and that their attitudes about the learning situation are important. Most adult educators agree that their central concern should be to satisfy the needs of the learners, but there are differences about the best way to achieve satisfactory solutions to needs. While most adult education literature stresses the notion of the learners' involvement in decisions about the educational process, practice often reveals that belief and behavior on the part of adult educators are not always consistent (McCullough, 1979).

Designing the learning experience There are various approaches to organizing the learning situation, ranging from highly structured to those which are unstructured. Programs which are highly structured usually involve the instructor determining objectives for the

learning situation based upon what the instructor believes to be the learners' needs. The objectives usually involve statements about achievement that will be expected of the learners if the program is to be judged successful. Structured approaches are defended on the basis that they offer the best way of justifying adult educational activities. The basis of the argument is that education is primarily designed to serve societal needs and therefore it should be justified in that context (Lawson, 1973).

The highly structured approach is opposed at the other extreme by highly unstructured approaches. Unstructured approaches are based on the idea that the individual is supreme and nothing in the educational process should interfere with individual expression. In an extreme unstructured situation, adult educators play the role of coordinator with little or no involvement in directing the educational experience. The individual is the center of the unstructured approaches rather than the society. Rather than prompting programs designed for all learners collectively, unstructured approaches emphasize developing more individualized instruction (Whittrock, 1970).

The concern of advocates for structured education is societal justification. The problem with that approach is the superficial impression which can be left by demon-

strating justification. Individual learners may not have achieved what they wanted. Rewards in the educational system are to a large degree individual, so purely meritocratic measures of individual achievement provide little guarantee of success. Individualized instruction may result in unequal distribution of rewards, but no matter how equal the distribution is, legitimacy stems from the contentment of the population (Hopper and Osborn, 1975).

Societal requirements are achieved in adult education by meeting the individual needs of learners. Learner satisfaction, not instructor or societal goals, forms the basis of the adult educational experience (Steele and Brack, 1973). The center of the learning experience is formed by the active involvement, both physically and mentally, of learners in the decisions about the learning experience. If changes are made in the educational experience, they are the result of two-way interaction between the instructor and the learners, rather than societal or instructor direction (Krathwohl, Bloom, and Bertram, 1964).

Adult educators need to place emphasis on working with learners and get away from the "syllabus" idea which still dominates much of educational thinking (Huczynski, 1979). In adult education the curriculum is built around the learners' needs and interests. Adult learners are

the least likely of all learners to be inspired by rigid, uncompromising requirements which might be placed on the learning experience and which are so indicative of conventional institutions of learning. More emphasis should be placed on method or approach to the learning experience than on strictly imparting content (Linderman, 1939).

Thus, in adult education there are some basic principles which dictate approaches to education:

1. Learning must be problem centered
2. Learning must be experience oriented
3. Experience must be meaningful to the learner
4. The learner must be free to look at the experience
5. The goals must be set and the search organized by the learner
6. Learners must have feedback about progress toward their goals

(Gibb, 1960, pp. 59-60)

Implicit in these principles is that "learning takes place within the learner and is personal to him as an essential part of his development" (Knowles, 1950, p. 31). This occurs when each learner feels a need and is willing to take the time and effort to meet the need. Wise adult educators are sensitive to the needs of the learners and are committed to helping the learners become aware of their needs (Knowles, 1950).

In seeking to identify and meet felt needs, adult learners exhibit a high degree of self-directed learning (Tough, 1971). "Self-directed learning describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing, and implementing appropriate learning strategies and evaluating learning outcomes" (Knowles, 1975, p. 18). Carl Rogers identifies ten principles for self-directed learning:

1. Human beings have a natural potentiality for learning
2. Significant learning takes place when the subject matter is perceived by the student as having relevance for his own purposes
3. Learning which involves a change in self-organization -- in the perception of one's self -- is threatening and tends to be resisted.
4. Learning which is threatening to the self is more easily perceived and assimilated when external threats are at a minimum
5. When threat to the self is low, experience can be perceived in differentiated fashion and learning can proceed
6. Much significant learning is acquired through doing
7. Learning is facilitated when the student participates responsibly in the learning process
8. Self-initiated learning which involves the whole person of the learner -- feeling as well as intellect -- is the most lasting and pervasive

9. Independence, creativity, and self-reliance are all facilitated when self-criticism and self-evaluation are basic and evaluation by others is of secondary importance
10. The most socially useful learning in the modern world is the learning of the process of learning, a continuing openness to experience, and incorporation into one's self of the process of change

(Rogers, 1969, pp. 157-163)

Knowles elaborates on the concept of self-directedness by noting that self-directed learning assumes:

1. The learner grows in capacity to be self-directed as a function of maturing
2. Learners' experiences become a rich resource for learning
3. Learners are capable of learning what they need to perform their evolving life tasks or cope with life problems
4. Learners are mostly problem centered or task centered
5. Learners can also be motivated by internal incentives

(Knowles, 1975, pp. 19-21)

As previously discussed, it is generally accepted in adult education that adults can and do learn, that their attitudes are key elements in learning, and that learning for adults is an active process. Additionally, the adult education discipline accepts the precept that adult learning is experience based and that adults are largely self-directed in choosing educational experiences. Adult educators must strive to "develop materials and learning experiences which will enable the participating adults to

grow in breadth and depth of their concerns and interests" (London, 1960, p. 67). Failure to offer educational experiences which account for these characteristics will likely doom the educational effort.

Value of learner participation One element which is critical to understanding what learners need is the active participation of the learners. Participation is a method by which the instructor and learners become a "collective for learning by making use of the framework of experience which the group presents to itself from its shared experience of the outside world" (Champion, 1975, p. 299). Bradford presents three basic conditions of participation which are present in the learning situation:

1. Participation that is not motivated within the individual will usually be inadequate
2. Feedback processes should be developed so that the individual (or group) sees not only the consequences of his action, but also how his actions achieve the consequences
3. Channels of further action must be kept open; it does little good to involve an individual in thinking through a situation or in carrying out part of an action if he is to be prevented from acting on the basis of his thinking or from his action

(Bradford, 1965, p. 57)

The participative activity itself is a source of learning apart from any content. Participative activity can be a vital source of understanding which cannot be

easily gained by advance conceptualization, but which comes naturally from the action of participation (Powell and Benne, 1960).

Various studies have demonstrated that participation by adult learners is an important factor in the educational process. Lewin found that change occurred when participants were given a chance to express their values and give verbal commitments. Little change occurred when information was merely presented to the group (Lewin, 1947). Leadership styles were found by Lippitt and White to affect enthusiasm of a group; the more democratic the leadership, the more positive the participants (Lippitt and White, 1943). In working with conference planning E.J. Welden discovered that conferences planned with participant representation were perceived by learners as being more relevant to their personal motives. In addition, those attending conferences planned by participants expressed a higher degree of satisfaction with all aspects of the conference, including its objectives, leadership, format, and materials (Welden, 1966).

In a study on individual classroom settings, Burgess found that when adults participated in program planning, there was a positive effect on attitude and productivity in the classroom (Burgess, 1971). In a similar study,

McLoughlin found evidence of improved attitude scores when participation was present; however, he did not discover any evidence to suggest better achievement (McLoughlin, 1971). Later, Cole and Glass concluded that "contrary to findings reported in several studies comparing participative versus nonparticipative teaching methods, participation in program planning had a significant effect on student achievement" (Cole and Glass, 1977, p. 86). They did note, however, that there was no evidence that participation increased retention of information. They also found evidence similar to the earlier studies to indicate that attitudes were positively affected by participation (Cole and Glass, 1977).

These studies point to the significant role that learners' participation plays in the educational process. Of particular note is the important effect that participation has on the learners' attitudes. A clear message is being conveyed that more effort needs to be made to facilitate participation by learners in the educational experience. As Carl Rogers states, "a way must be found to develop a climate in the (educational) system in which the focus is not upon teaching, but on the facilitation of self-directed learning" (Rogers, 1969, p. 304). By facilitating self-directed learning, the individual is free to utilize life experiences as a base for learning and changing.

Rogers outlines some guiding principles which adult educators can follow in facilitating learning:

1. The facilitator has much to do with setting the initial mood or climate of the group or class experience
2. The facilitator helps to elicit and clarify the purposes of the group
3. The facilitator relies upon the desire of each student to implement those purposes which have meaning for him, as the motivational force behind significant learning
4. The facilitator endeavors to organize and make easily available the widest possible range of resources for learning
5. The facilitator regards himself as a flexible resource to be utilized by the group
6. In responding to expressions in the classroom group, he accepts both the intellectual content and the emotionalized attitudes, endeavoring to give each aspect the approximate degree of emphasis which it has for the individual or the group
7. As the expectant classroom climate becomes established, the facilitator is able increasingly to become a participant learner, a member of the group, expressing his views as those of one individual only
8. The facilitator takes the initiative in sharing himself with the group, his feelings as well as his thoughts -- in ways which do not demand or impose but represent simply a personal sharing which the students may take or leave
9. Throughout the classroom experience, he remains alert to the expressions indicative of deep or strong feelings
10. In his functioning as a facilitator of learning, the leader endeavors to recognize and accept his own limitations

(Rogers, 1969, pp. 164-166)

Facilitation of learning is the function adult educators serve in the educational process. It also provides a way in which the individual is given a chance to be recognized in the educational process. Adult educators become servants to learners and to the particular learning situation, rather than the dictators. It is a recognition that educators can only gain knowledge about learners after having the actual experience which comes during the educational process. There is no way that educators can know the audience divorced from the educational setting. In the educational setting, educators can help the learners in their efforts to reach an understanding of their needs and of ways to deal with those needs. Perhaps the most profound contribution of adult education to adult learners is to "facilitate the transformation of the 'meaning perspectives' of learners" (Mezirow, 1978, p. 107).

Summary of the role of the learner Adult education as a discipline views adult learners as active participants in learning, endowed with abilities to determine for themselves their needs and the appropriate solutions. The role of adult educators in this system is a support or "facilitation" function designed to aid learners in their search for what Mezirow refers to as their "meaning-perspective". In carrying out the role of facilitator,

many challenges face adult educators in terms of providing mechanisms which support efforts to facilitate. One such mechanism is the development of feedback or evaluation techniques which fit within the adult education precepts about the operation of the educational experience. Evaluation must be supportive to the adult education process, rather than a dictator which subjugates the discipline's precepts to the demands for justification.

The next section of the chapter focuses on the use of evaluation in adult education and how practice and principle relate in the conduct of the adult educational experience.

Evaluation in adult education

Evaluation is a search for meaning so that some sort of worth can be determined for human endeavors (Steele and Brack, 1973; Subkoviak, 1974). It involves some form of evidence gathering from which judgements about value and worth are made (Wilson, 1977). In adult education, evaluation has generally been treated as establishing worth so that programs can be justified. As such, most evaluation in education has been oriented toward measuring the products of an educational experience (Guba, 1969). Laverne Forest identifies six interrelated themes of program evaluation

literature which have created the situation where formalized systems predominate:

1. Increased importance and pressure for accountability
2. Educator control of evaluation
3. More formalized and systematic evaluation
4. Too much reliance on and direct limitations of evaluation models developed for other educational systems
5. Dependence on educational objectives
6. Increased quantification and measurement

(Forest, 1976, p. 168)

The pressure for accountability has been a significant factor in the reliance on formal systematic evaluation models that usually structure the program through preset objectives (Forest, 1976). Under the pressure for accountability, program evaluation is often defined as "determination of the extent to which the desired objectives have been attained or the amount of movement that has been made in the desired direction" (Boyle and Jahns, 1970, p. 70). By adopting the objective approach, most adult educators follow a pattern which begins by setting behavioral objectives, then examining methods to achieve the objective, which is followed by collecting evidence. The evidence can be collected before the program to establish a benchmark, or during the program to determine progress toward achievement of the

program objectives. The procedure concludes with the analysis of the evidence and the use of the findings (Morgan, Holmes, and Bundy, 1976, pp. 222-228).

Forest maintains that this approach to evaluation is "inconsistent" with the real world in which adult educators operate, a world where the clients are subject to high levels of "self-directedness" and tend to engage in the educational setting for very personal reasons (Forest, 1976; Knowles, 1975). In Forest's opinion this creates a "paradox" between evaluation practices and real world experiences, a paradox from which he argues there are only three alternative solutions:

1. The paradox can be ignored and the inconsistency can stand
2. Educators can continue to try to bring actual practice into line with current concepts by professing and prescribing what practice should be and by forcing theory into reality
3. Program evaluation can be redefined to fit existing realities and their value to people

(Forest, 1976, p. 171)

For Forest the third option is the only choice because it offers an opportunity to scrap the objective-based model in favor of exploring more informal methods.

Other adult educators express concerns about the objective-based model although few are as adamant as Forest.

There is however, support for the notion that evaluation should be treated as an integral part of the teaching-learning process and serving a variety of purposes (Harris, 1972). Attainment of objectives is an important element in evaluation; however, "it should not be seen as constituting the whole evaluation" (Steele and Brack, 1973, p. 46). Strict reliance on objectives, particularly those designed for justification purposes often serves to create a false sense of security since the objectives may be vague "for political purposes" (Steele and Brack, 1973). The objective-based model aims at measuring outcomes and is well-suited for determining skill attainment, although "when a program is designed to enable students to benefit from it in unique ways or when it aims at complex understanding not easily measured with available technology, the objective model is less useful" (Taylor, 1976, p. 354). Defined only in the context of objective measurement, evaluation does not sufficiently recognize the reality that program value is an individual thing (Steele, 1970). Each individual learner will "enter the program with their own personal agenda, each person will operate during the program with their own personal learning style, and each person will leave the program with their own personal perceptions of the contributions the program offered for following their agenda and aspirations" (Wilson, 1977, p. 12).

Accountability has not been the only contributing factor in leading adult educators to rely on formalized evaluation approaches; Scriven has identified another problem as the tendency to regard research and evaluation as the same process. The effect is to treat evaluation results as "nonargumentative" because they are based on "valid and reliable instruments, employing sound statistical procedures" (House, 1977, p. 8). Scriven maintains that evaluation involves value judgements which are "sometimes as easy to verify as an observational claim in astronomy and sometimes as hard to establish as a theoretical claim in cosmology" (Scriven, 1974, p. 56). The critical factor for Scriven is that evaluation judgements should not be expanded beyond their context. Evaluation should serve the program at hand and not be used as a tool to make generalized claims (Scriven, 1974; House, 1977).

Steele and Brack further suggest that emphasis on research approaches rob the adult education discipline opportunities to build human judgement skills. They maintain that adult education has not, "as a field been sufficiently counterbalanced with emphasis on building professional judgements" (Steele and Brack, 1973, p. 14). "Judgement is the heart of casual, everyday kinds of evaluation on which many important program decisions are based so it should be a central concern of the discipline to enhance the ability of adult educators in making judgements" (Steele, 1970, p. 12).

Concerns about the emphasis on the objective based model have resulted in efforts to explore alternatives. The prime motivation in the search for alternatives is concern that a single interpretation of results, which is often the purpose of objective-based evaluation, is dangerous because it generalizes outcomes while ignoring the fact that individuals will place varying value on outcomes. Outcomes are most likely to be viewed as useful by individual learners in relation to how well they have met the learners' needs (Forest, 1976; Wilson, 1977).

The search for alternative evaluation approaches has taken many courses. Some advocate that the emphasis should be placed on developing evaluation procedures which aim at insuring that during needs assessment and objective setting processes, efforts are made to evaluate. Under these approaches, evaluation is seen as being both formative and summative, "the former being performed periodically during the planning process; the latter taking place subsequent to the delivery of the activity" (Spikes, 1978, p. 7). Another variation of this is to use evaluation to prioritize needs which are uncovered during needs assessment; these priorities can then determine the curriculum development (Lumsden, 1977). These approaches are not so much

alternatives as they are an attempt to design objectives that reflect the learners' needs.

A more fundamental departure from the objective-based approach is offered by Scriven in his goal free evaluation model. This approach would eliminate the use of goals (objectives) as the basis of the evaluation. Scriven argues that consideration and evaluation of goals is an unnecessary and possibly contaminating step in evaluation. "An alternative is the evaluation of actual effects against a profile of demonstrated needs" (Scriven, 1972, p. 1). This approach will be discussed later in this chapter when various models are presented; however, it is mentioned here because it is an alternative to the objective-based model.

A third direction in evaluation is one "based on the premise that the primary responsibility of an evaluation is that of improving the program being evaluated" (Sjogren, 1973, p. 271). This approach is based on the notion that evaluation which succeeds in being persuasive must be done by working with the audience of learners (Kemmis, 1976). Evaluation in this context is treated as an input to the decisions about a program while it is in process -- a linking of information to decisions (Steele, 1970; Eash, 1973). Process evaluation is the general term used to refer to

evaluation activities which are conducted during the operation of the program (Rossi, Freeman, and Wright, 1979).

Process evaluation is a method of keeping a "running tab" on the instructional situation. If changes are needed, they can be instituted. In process evaluation, the analysis of the process of instruction is designed to go on all through the learning process so that efforts can be made to change when change is most desirable (Snyder and Ulmer, 1972). "Process evaluation looks not only at formal activities and anticipated outcomes, but also investigates informal patterns and unanticipated consequences in the full context of program implementation and development" (Patton, 1978, p. 165-166). The use of process evaluation is not necessarily a substitute for either objective assessment or a goal free approach; it can be used in conjunction with either method since its purpose is different. It serves the function of an alternative to strict reliance on the objective-based approach by broadening the concept of evaluation beyond strictly outcome measures. Process evaluation recognizes that the activities occurring during the educational experience are deserving of evaluation (Talmage, 1973; Udell, 1975). Most process evaluation efforts offer an additional advantage to adult educators by providing

opportunities for the learners to participate in the evaluation. This is important because it makes evaluation a part of the educational experience and provides feedback to those most likely to benefit from evaluation (Matthews, 1973). The major problem with process evaluation is the lack of credibility of many of its methods; little evidence exists in the literature on how to develop accurate direct observation methods which are reliable (Steele and Brack, 1973). Thus, evaluations that are more informal are suspect and decisions based on them are questionable.

It is clear from the literature that evaluation is an important part of adult education. It is also apparent that there are a variety of notions about how to evaluate. The question for adult educators is one of selection of evaluation approach(es) appropriate to the needs of the program. As such, this study focuses on evaluation of the activities occurring during the implementation phase of the educational experience.

However, before discussing various evaluation models, one additional factor which has influenced the selection of evaluation approaches is important to note, namely the program planning model. The next section of this chapter discusses some of the predominate models; in addition, it offers a model which served as the guide to this study.

Program planning models in adult education

Program planning models are integral to adult educational programming because they present the structure that guides an educational experience. A planning model is particularly critical to evaluation because its location in the model often determines the evaluation strategy. For example, if evaluation is placed as the final phase in the process, it is likely to be perceived only as a measure of outcomes of the program.

Planning models in adult education tend to be similar in the basic stages required to develop an educational experience. The basic model involves five stages: (1) assessment of learners' needs, (2) establishment of appropriate objectives to meet the needs, (3) design of a program to meet objectives, (4) implementation of the program design, (5) evaluation of the achievements in terms of the objectives (Boyle and Jahns, 1970; Brereton, 1972). From these five basic stages, other models have been developed, usually in response to a desire to emphasize certain activities. One such development is the emphasis on the involvement of the learners in the early needs-assessment and objective-setting stages. Such models have tended to expand the early stages in an effort to insure that the learners' needs are accurately

expressed and that objectives are designed to meet those needs (London, 1960; Bradfield, 1969; Knowles, 1970; Houle, 1972). The stages outlined by Knowles are exemplary:

1. Establishment of a climate conducive to adult learning
2. Creation of an organizational structure for participative planning
3. Diagnosis of needs for learning
4. Formulation of directions for learning (objectives)
5. Development of a design for activities
6. Operationalization of activities
7. Rediagnosis of needs (evaluation)

(Knowles, 1970, p. 54)

A second group of models that have been developed stresses the importance of the learners' behavior. This group of models arose out of concern that traditional approaches tend to treat learners as passive creatures dependent on the educator to not only design but also implement the educational experience (Lewis, 1972). The central focus of this type of model is the effect of the learning experience on the learners, as such, these models are concerned more with the learning process than planning phases (Brereton, 1972; Lewis, 1972). Lewis' Motivational Model serves as an example of this kind of approach (Figure 1).

Another group of models known as "system models" treats the planning process as a structured, interactive complex.

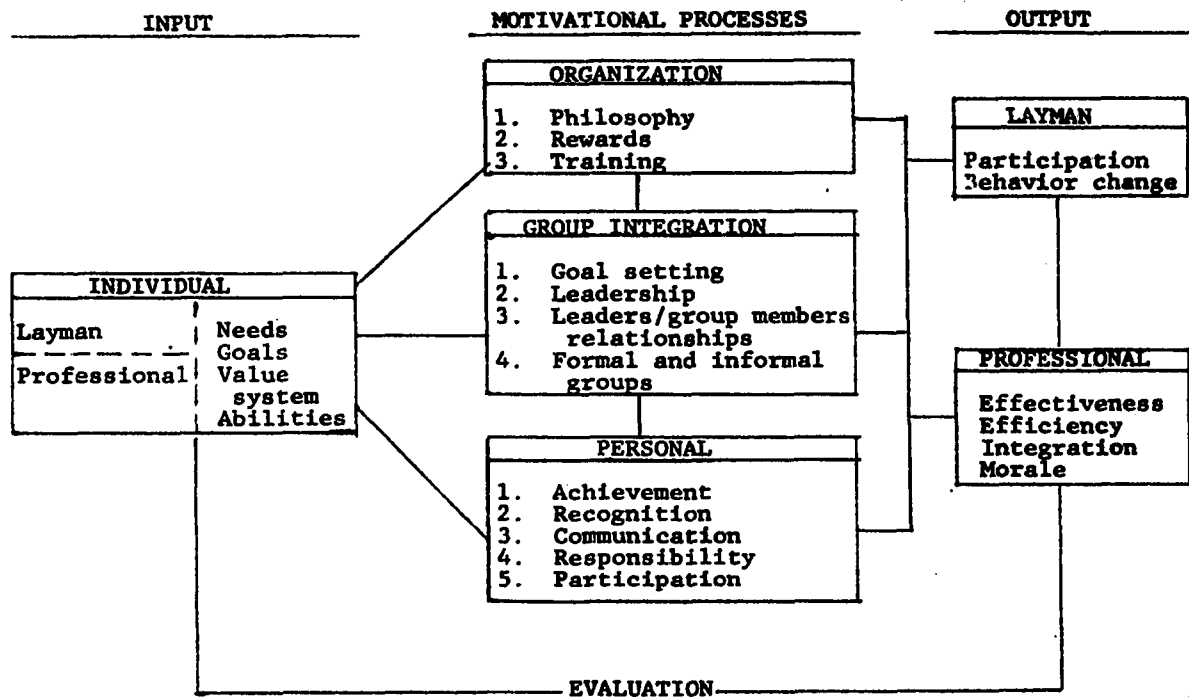


Figure 1. Lewis' Motivational Model (Lewis, 1972, p. 25)

The term "system" denotes a set of interrelated dependent components or variables that function together to accomplish an objective or end goal (Burnham, 1973; Valentine and Larsen, 1974). While the system approach focuses on the entire process, one of its main values is the emphasis it gives to evaluation. Unlike more traditional models, it can involve evaluation in both the formative and summative context. An example of a system model is provided by Duft (Figure 2).

All of the models are useful because they emphasize the importance of the various phases through which plan-

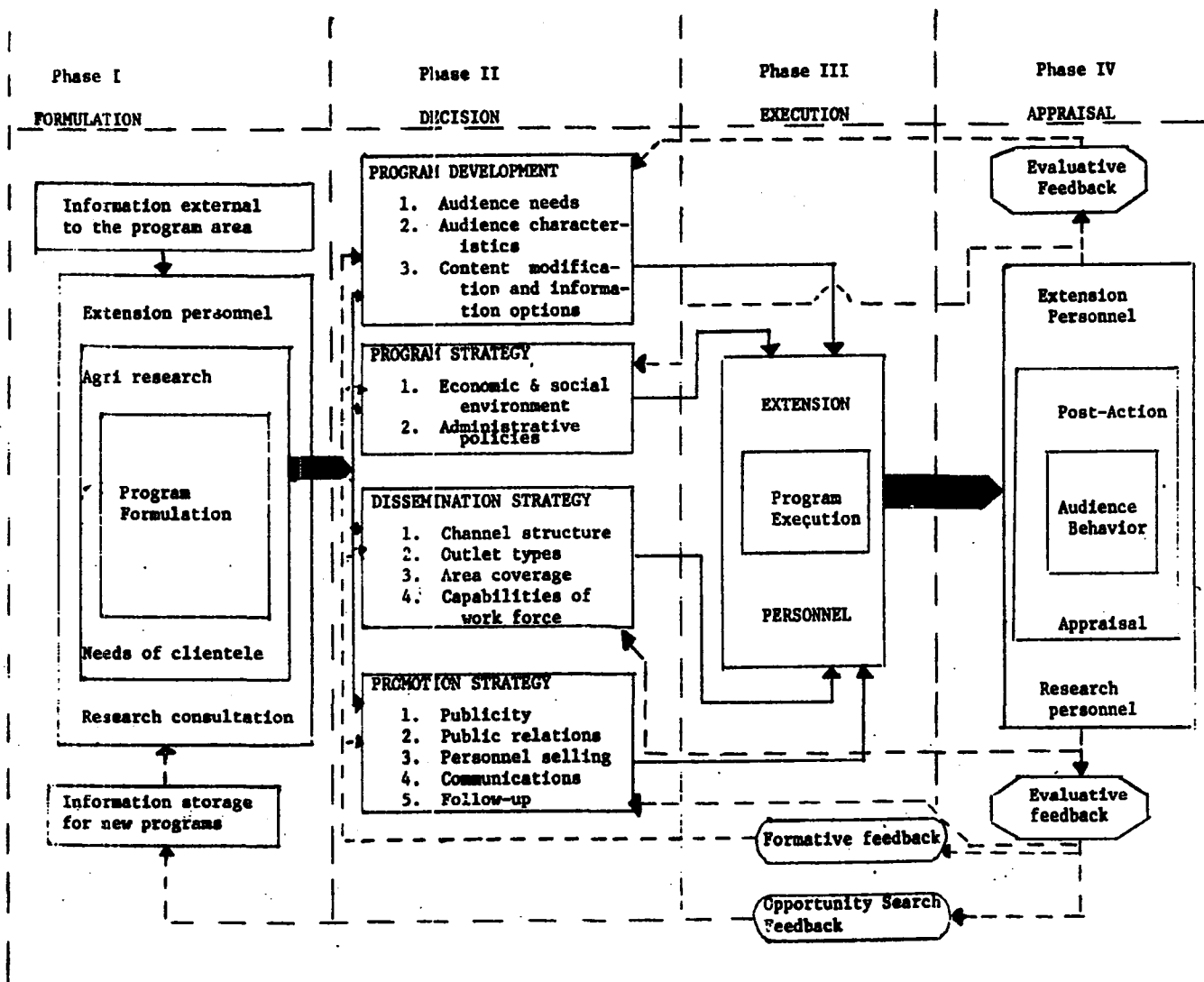


Figure 2. Duft's System Model (Duft, 1969, p. 174)

ning of an educational program must pass. However, evaluation is not central to the first two examples and in the system approach it tends to be a captive of the objectives; thus it does not relate to the process (Burnham, 1973). Another approach to planning which has some promise of treating evaluation as a multi-dimensional process is offered by Hiemstra (Figure 3).

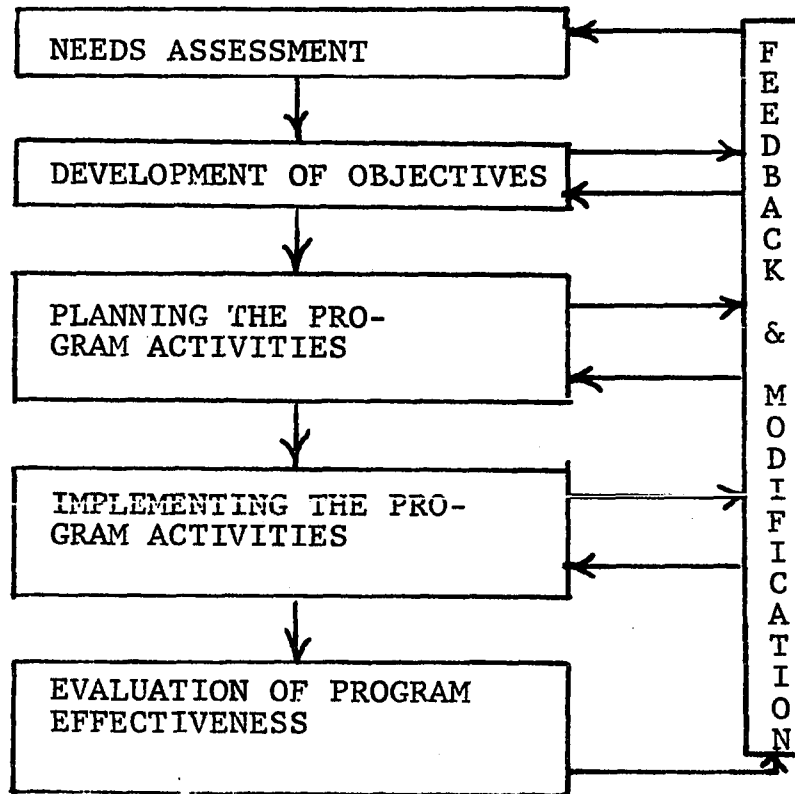


Figure 3. Hiemstra's Model (Hiemstra, 1976, mimeo supplement)

This model shows evaluation as a summative function but it also emphasizes feedback in each phase of the program. This model translates the concept of continuous evaluation into the basic program planning model. The major drawback to this model is conceptual rather than substantive. While it clearly demonstrates evaluation occurring in each program phase, it still gives the appearance of evaluation as a separate function imposed on the other phases. In order to achieve the purpose of integrating evaluation into program planning, a different model is called for -- a model which treats evaluation as an integral part of each planning phase (Figure 4).

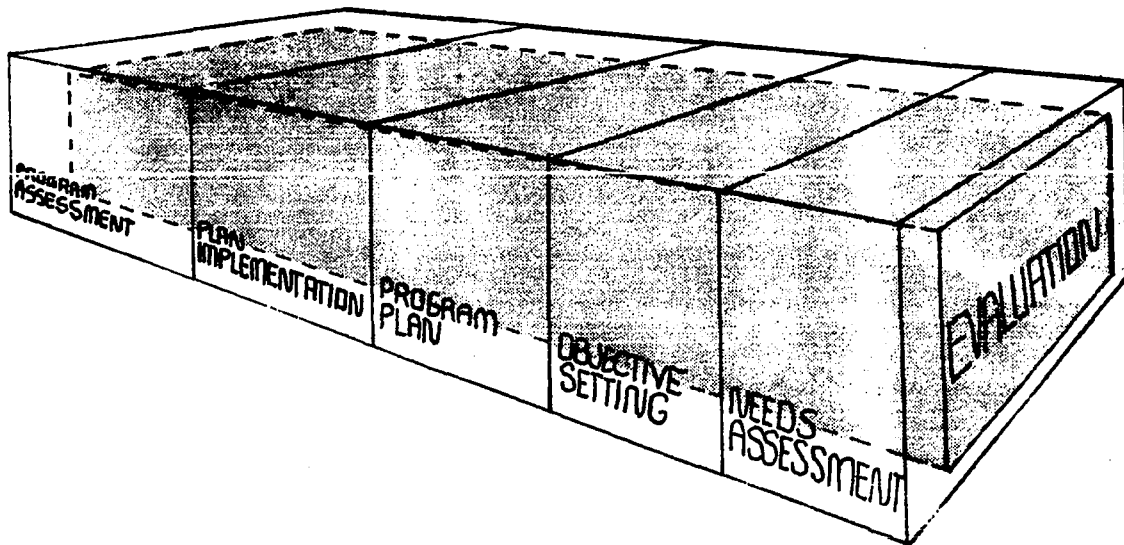


Figure 4. Evaluation Integration Model

By conceptualizing evaluation as being fully integrated into each program phase, it can be defined in a variety of ways to fit the needs of the particular phase. Thus, the implementation phase can be pulled out and examined (Figure 5). For purposes of this study, the evaluation used in the implementation phase will focus on the process occurring during the educational experience. By focusing of the process, the learners can work with the adult educators to form an implementation phase to meet their needs.

The program planning model can help in broadening evaluation beyond outcome product measures and make it a pluralistic concept (Logsdon, 1975). By conceptualizing evaluation as an integral part of each phase, it takes on multiple purposes. Different evaluation techniques can then be chosen, depending upon the need of a particular phase. Once evaluation needs are established, the next concern is to choose the appropriate evaluation strategy; in the case of this study, it was one which fit into the implementation phase and focused on the process. The next section discusses various evaluation strategies which are applicable to educational programs.

Evaluation Models in Education

A number of evaluation approaches are available from which adult educators can choose. One way of understanding

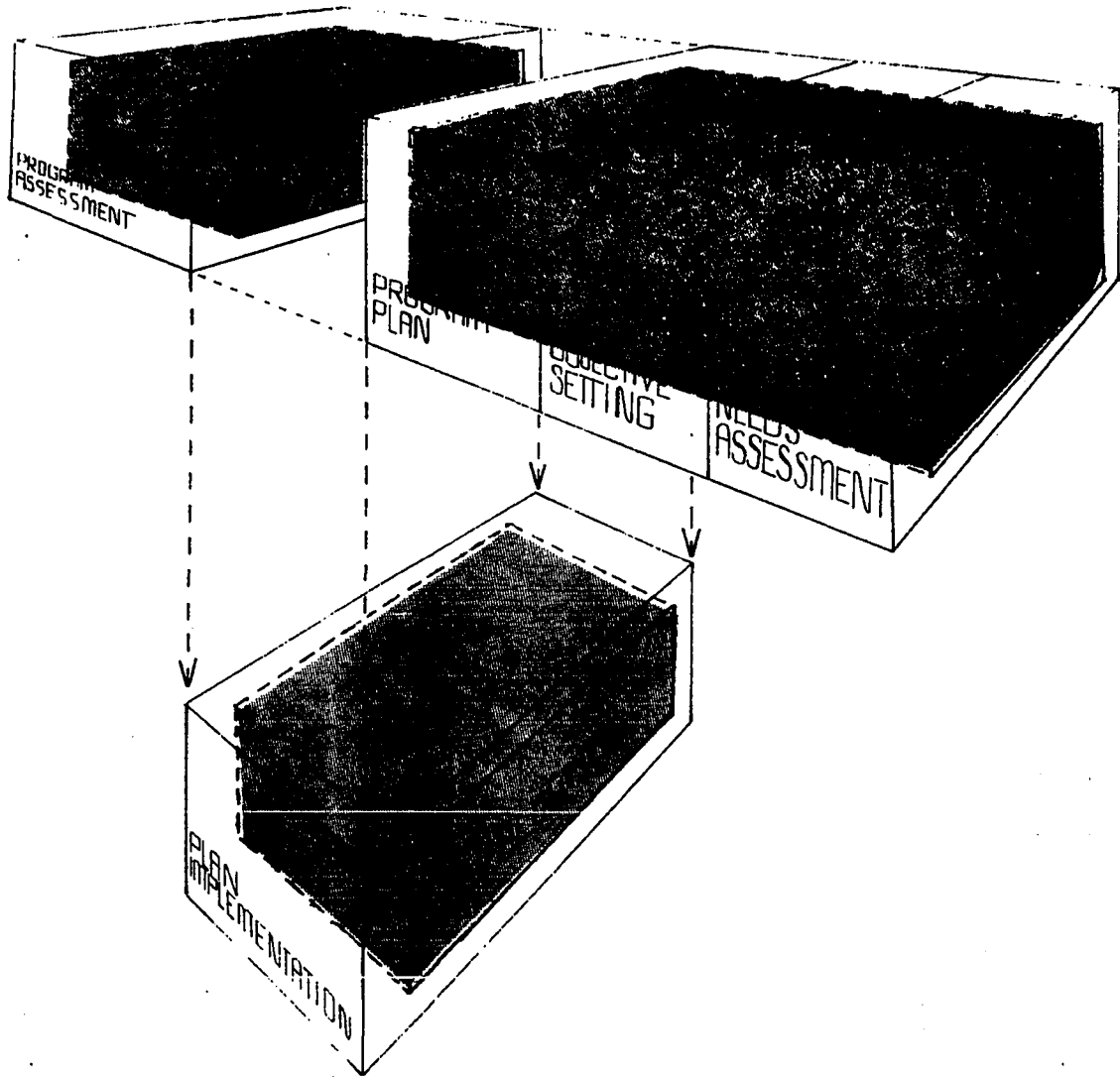


Figure 5. Evaluation Integration Model (focus on plan implementation phase)

the choices is to compare numerous models with one another (House, 1978). Various taxonomies have been offered as a way of categorizing evaluation approaches for purposes of comparison (Alexander, 1965; Frutchey, 1973; Taylor, 1976; Stake, 1976; Gardner, 1977; House, 1978). House's taxonomy of major evaluation models provides an excellent guide to various models (Figure 6).

Review of these models was done with the realization that this study focused on process evaluation in the implementation phase. Therefore, comments about various model applications are made in that context and do not indicate the usefulness of the models in other situations.

House makes a distinction in his taxonomy between the first four models (systems analysis, behavioral objective, decision making, and goal free) and the second grouping (art criticism, accreditation, adversary, and transaction). The first four models fall into what House labels the utilitarian category because they stress the desire to "maximize" the happiness in society. In other words, these models attempt to arrive at a single or at least a small grouping of conclusions which can then be applied as guides for future efforts.

There are, however, differences in the first four models, which are significant in terms of their application to adult educational experiences. The system analysis

Model	Proponents	Major Audiences	Assumes Consensus on
Systems Analysis	Rivlin	Economists, managers	Goals; known cause & effect; quantified variables
Behaviorial Objectives	Tyler, Popham	Managers, psychologists	Prespecified objectives; quantified outcome variables
Decision Making	Stufflebeam, Alkin	Decision-makers, esp. administrators	General goals; criteria
Goal Free	Scriven	Consumers	Consequences; criteria
Art Criticism	Eisner, Kelly	Connoisseurs, consumers	Critics, standards
Accreditation	North Central Association	Teachers, public	Criteria, panel, procedures
Adversary	Owens, Levine, Wolf	Jury	Procedures and judges
Transaction	Stake, Smith MacDonalld, Parlett-Hamilton	Client, Practitioners	Negotiations, activities

Figure 6. House's Taxonomy of Major Evaluation Models
House, 1978, p. 12)

Methodology	Outcome	Typical Questions
PPBS: linear programming; planned variation; cost benefit analysis	Efficiency	Are the expected effects achieved? Can the effects be achieved more economically? What are the most <u>efficient</u> programs?
Behavioral Objectives; achievement test	Productivity; accountability	Are the students achieving the objectives? Is the teacher producing?
Surveys, questionnaires, interviews; natural variation	Effectiveness; quality control	Is the program effective? What parts are effective?
Bias control; logical analysis; modus operandi	Consumer choice; social utility	What are <u>all</u> of the effects?
Critical review	Improved standards	Would a critic approve this program?
Review by panel; self study	Professional acceptance	How would professionals rate this program?
Quasi-legal procedures	Resolution	What are the arguments for and against the program?
Case studies, interviews, observations	Understanding; diversity	What does the program look like to different people?

model "assumes a few quantitative output measures, usually test scores, and tries to relate differences in programs to variations in test scores" (House, 1978, p. 4). Behavioral approaches, on the other hand, spell out performances that can be reduced to specific behaviors and then by tests or other means attempt to measure the accomplishment of the objectives (House, 1978). The behavioral approach is the most predominant in adult education currently; however, as discussed earlier, it does not serve the effort of developing a process evaluation strategy.

The third model is the decision-making approach; it is structured by the decisions which need to be made in a program. The evaluator's function is to "supply information on these particular decisions" (House, 1978, p. 4). The fourth model, which was developed by Scriven, is the goal-free evaluation model. This approach was developed primarily to reduce the effects of bias which can be caused by concentrating on objectives. Besides the purpose of reducing bias, goal-free evaluation is also aimed at uncovering "side effects" of a program (Scriven, 1972). Goal-free evaluation has some appeal from a process perspective because it is not opposed to the "shifting of goals midway through a program" (Scriven, 1972, p. 2). While on the surface goal-free evaluation

is appealing because it releases programs from total reliance on goals, it still lacks application to process evaluation because of the focus on program outcomes. Goal-free evaluation also implies a certain formality in the evaluation, as indicated by the emphasis Scriven places on external evaluation. Goal-free evaluation is a questionable approach for integrating evaluation into the implementation phase.

The overriding problem in applying these four models to process evaluation is the emphasis on arriving at a single judgement of a program. "The simplest approach is the homogenous scaling of the system's analysis approach, which tries to reduce all variables into a quantitative model like a regression analysis...the goal-free approach is the most complex because it involves consideration of various measures which are then brought together into an overall summative judgement" (House, 1978, p. 5). The goal-free approach is as utilitarian as the systems approach in the sense that it is seeking to lead to the best consumer (learner) choice (House, 1978).

The other four models identified by House focus on the individual rather than striving for a concept of single social utility. The critical concern of these models is to determine what is right for the individual.

The art criticism model is based on the premise that the evaluator is "attuned" by experience and training to judge important facts of the educational program. The evaluator focuses on one single item such as an educational program for which the evaluator is trained to judge.

Accreditation is an approach which emphasizes an outside professional evaluator who comes to evaluate a local program according to established criteria. This differs with the art criticism model because the evaluator has criteria which guide the evaluation rather than relying solely on individual judgement. The adversary approach is a quasi-legal procedure which relies on a panel to argue to pros and cons as determined by the individuals serving on the panel.

The final model delineated by House is the transactional approach. This approach concentrates on the educational process -- "it focuses on events occurring in and around the actual program context" (House, 1978, p. 9). In the transactional model, the evaluator "takes little account of formal statement of program objectives and designs; instead, the evaluator attempts to learn the actual intents and activities through informal observations and interviews" (Taylor, 1976, p. 357).

The proliferation of evaluation models may seem to represent a groping effort, but actually it indicates that many kinds of evaluation are pertinent to education

(Steele, 1975). What confronts adult educators is the choice of a model which is consistent with adult educational precepts and at the same time fits the various demands made on evaluation. In conforming with a program, the evaluation model must also be capable of fitting into the various phases of the program. The decision on model selection is therefore a decision for each educator.

Transactional Evaluation

The model chosen for this study must meet certain criteria: (1) it must be capable of operating during the implementation phase, (2) it must be highly flexible in terms of techniques so that it fits into the natural progression of the implementation phase activities, and (3) finally, it must allow for quick feedback so that changes can be made to the on-going program. Of the eight models identified by House, the transactional model offers the best option because it places emphasis on evaluation of process rather than product. Transactional evaluation also does not require predetermination of techniques but rather allows the techniques to be determined according to their ability to fit into the program. Finally, transactional evaluation can be used during the implementation phase, as well as other phases.

Transactional evaluation is built on the premise that individuals engaged in a group situation, such as an educational experience, must not be perceived independent from the situation (Ittelson and Cantril, 1954). An educational experience is a process which involves a dynamic interrelationship between instructor and learner, as well as between the learners (Bradford, 1958; Stake, 1967). These dynamic interrelationships form the basis for the transactional evaluation because of its focus on the system undergoing change rather than outcomes of the system (Rippey, 1973a). In actual operation, transactional evaluation involves a two-way relationship between the client and the evaluator, with a common reference in which both have an interest and understanding" (House, 1973, p. 263).

A comparison of transactional evaluation with the more traditional summative and formative approaches indicates that the target of the evaluation is different because the subject is the on-going process, not the client performance (Rippey, 1973d). Transactional evaluation sacrifices a certain amount of precision of measurement in an effort to emphasize the particular rather than the general. The approach does not specifically discriminate against the use of objective measures of achievement if it is

determined that they assist in evaluating the process (Taylor, 1976). However, transactional evaluation does not use objective instruments but instead relies on instruments selected from a wide range of options based upon the degree to which they help "discover issues important to learners and to see, subsequently, whether there is any consensus of opinion on the issues from which to develop a platform for action" (Rippey, 1973c). p. 15).

In practice, transactional evaluation is designed during the educational experience based on the evaluator's determination of the best approach to fit a given situation. Evaluators should not be preprogrammed with techniques because this may result in the use of inappropriate techniques for a particular program. Designing a transactional evaluational creates some unique challenges for evaluators. Eash outlines three major issues which must be faced by transactional evaluators:

1. The evaluator must ascertain the appropriate framework for field evaluation as it relates to the particular program
2. The evaluator must establish an evaluation methodology that is comprehensive and recognizes the necessity for several levels of evaluation
3. The evaluator must determine his/her own role in making the relationship between broad areas of accountability and the evaluation more intel-

ligible so that accountability becomes a valuable and generally accepted constituent of every program

(Eash, 1973, p. 100)

The emphasis that Eash places on accountability seems to be an attempt to provide some legitimacy for transactional evaluation. Whether or not that is achieved, it is apparent that the transactional approach can serve as a communicator of what occurred in a program and that can further the justification of a program effort. Eash also mentions the importance of recognizing multiple purposes for evaluation, which is a problem with many other evaluation models which require a program to bend to the needs of the model. Transactional evaluation reverses this and allows the program needs to be the determining factor. It also allows the needs within the various phases of the program to affect evaluation. This characteristic is perhaps the most appealing to adult education, where there is concern that too often the flexibility sought in programs is lost to the needs of evaluation.

Transactional evaluation is a relatively new concept and has not been extensively used. Its major application has been in situations where external evaluators have evaluated programs ranging from experimental schools and professional education to a national study of Head

Start (Talmage, 1973; Rippey, 1973b; Walberg, 1973; Cicirelli, 1973; Doyle, 1973). In many of these applications, transactional evaluation was used because there was resistance to evaluation and the transactional approach was deemed to be less threatening to educators, program administrators, and clientele. The results were mixed, with some like Rippey and Cicirelli quite pleased, while Walberg was cautious that too much emphasis on process would exclude consideration of outcomes. One major difficulty which Kelley and Gooler uncovered was the difficulty of knowing exactly what to focus on in evaluating various transactions (Kelley and Gooler, 1973). They did determine that language, time, and credibility are significant criteria in evaluating transactions. Language is important because those involved in the educational setting must be able to communicate. Time for accomplishing desires of the students was also a concern because learners have certain expectations and there needs to be emphasis on meeting their needs. Finally, Kelley and Gooler identified credibility of the results of the program as measured by the acceptance of the instruments used and information obtained as being important.

It seems from the brief experiences with transactional evaluation that it needs some further development,

and yet it appears to fill a gap in evaluation, a gap created by the emphasis on formalized, objective-based evaluation models and the violations those models do to adult education precepts and the operation of an educational experience.

With that in mind, transactional evaluation was selected as the umbrella model for this study because it is well-suited to evaluating the implementation phase. It is during the implementation phase where the most intense involvement occurs between learners and the instructor and between individual learners. Because these relationships are perceived in adult education as permissive, the learners must be able to express needs and changes in needs (Coffey and Golden, 1973). Transactional evaluation offers the best option because it allows the evaluation to be dictated by the setting and it emphasizes evaluation of the process so that emphasis can be placed on keeping the operation of the implementation phase open. Transactional evaluation is best applied in the open-ended approach because it tolerates multiple needs and values (Taylor, 1976).

In the situations where transactional evaluation has been used, the evaluators were always outsiders; however, there is nothing which excludes the instructor from being the evaluator in a transactional evaluation. The main argument against the instructor serving as evaluator

is the fear of bias in his interpretation. Sjogren maintains that the objectivity of the outside evaluator is a myth built on the notion that being outside reduces bias. The very fact that outside evaluators are picked because of knowledge of a program area means that they will have viewpoints coming into the evaluation and often these are sympathetic to the intents of the program (Sjogren, 1973).

Since the purpose in selecting transactional evaluation was to reduce the external influences on the implementation phase, this study will utilize the instructors as evaluators. By having the instructors serve as evaluators, the time involved in translating feedback into action was reduced and the learners were allowed to participate more actively in the evaluation through their relationships with the instructors.

Conclusion

Adult education has some basic precepts which guide the relationship between adult educators and learners. These precepts are based on evidence that adults have a capacity to learn and that they demonstrate a strong self-directed drive in obtaining the information and skills they need. Adult education also operates on the belief that the learners, because of their self-directed orientation, are more comfortable and learn more if they are actively involved

in the learning experience. These precepts guide every aspect of the program planning process in adult education from the choice of planning model to the method of evaluation.

One purpose of this chapter has been to provide a literature background which demonstrates the commitment of the adult education discipline to these precepts. In designing programs, adult educators should strive to operate in a fashion which maximizes the learners' ability to control the learning experience.

A second purpose has been to present a capsule of the discussion occurring in the discipline about the role of evaluation in adult educational programs. As indicated in the literature, there are various options available and there are advocates for each option. Nevertheless, a growing number of adult educators are concerned that evaluation has become too formalized and too restrictive to the learning experience. There is a fear that restrictions may be undermining the basic precepts of the discipline, leaving adult education with no other purpose than to offer its clientele a narrow institutional approach.

This study was an attempt to respond to that concern by testing an evaluation approach which was conceived as an integral part of the educational experience. In order

to do that evaluation approaches need to move away from strict emphasis on measuring outcomes and products as determined by predetermined objectives and instead concentrate on the process so that changes can be made in the on-going program. The model of evaluation chosen to serve as the guide for this study was transactional evaluation. This approach was born of a concern about over-emphasis on product outcomes as the sole basis of evaluation. Transactional evaluation is a somewhat vague concept because it is not specifically tied to certain techniques and because it emphasizes the process. This approach to evaluation is highly flexible, allowing evaluators to move in various directions as dictated by developments which occur during the operation of a program. While there are many phases in an educational program and each phase deserves its own emphasis and evaluation, the implementation phase of the program is where learners have a very real opportunity to grow and change. The implementation phase is where learners and instructors have their closest relationships and where learners have a close relationship with each other. Therefore, the implementation phase was the focus of this study.

The challenge for adult educators is to develop evaluation strategies which will fit naturally into the operational activity of the implementation phase, and yet

provide feedback which helps improve decision making in the on-going program. Through this type of effort, evaluation can enhance the educational experience by being sensitive to changing needs of learners and by redirecting an on-going educational experience so it grows with the learners.

By treating evaluation as part of the process rather than strictly an end product measure, the evaluation can become an integral part of the instructional method. The learners will benefit by having a program which changes as they change. The net result will be more positive attitudes by the learners toward the program.

CHAPTER III.

METHODS AND PROCEDURES

Introduction

This study focused on reactions of adults who were confronted with different instructional methods. The methods differed in the manner in which evaluation was conceptualized and employed. One approach involved using a traditional objective-based approach (hereafter referred to as the structured approach), which conceptualized evaluation as an outcome product measure normally employed at the conclusion of a program. Evaluation in the structured program was designed to measure the degree to which the program objectives were achieved. The other approach involved integrating evaluation into the program as part of the instructional process (hereafter referred to as unstructured approach). In the unstructured approach, evaluation was conceptualized as a measure of changes which occurred during the educational experience. The process was the target of evaluation in the unstructured approach; process refers to the interaction between the learners and instructors, among learners, and the reactions of both instructors and learners to the environment of the educational setting. These interactions are unique in each setting and therefore the evaluation must be

flexible, rather than being predesigned. Evaluation during the unstructured approach consisted of instructors using informal observation plus audience reactions to determine changes which required readjustment in the program.

The two instructional approaches were tested in a field setting involving participants at the 1980 Mayor-Council Orientation program sponsored by Iowa State University's Office of Local Government Programs. The Mayor-Council Orientation program was conducted during January and February of 1980 at thirteen sites located around the State of Iowa. The distribution of the thirteen sites between the structured and unstructured sessions was determined by two factors. First, there was an effort to assure that the large cities were present in both programs, so the sites where larger units were likely to attend were divided between the structured and the unstructured methods.

A second factor in the division of sites was the estimate of attendance at each site. The estimate was based on attendance records from previous orientation programs at each site. Thus, in choosing the location of sites for the structured and unstructured programs, care was taken to balance the numbers as closely as possible. The distribution of the thirteen sites is shown in Table 1.

Table 1. Division of sites between instructional methods

Structured program		Unstructured program	
Location of meeting	Date of meeting	Location of meeting	Date of meeting
Davenport	1/21/80	Ottumwa	1/9/80
Burlington	1/22/80	Sioux City	1/10/80
Mason City	1/23/80	Dubuque	1/15/80
Cedar Rapids	1/24/80	Fort Dodge	1/17/80
Des Moines	1/29/80	Red Oak	1/28/80
Spencer ^a	2/12/80	Creston	1/30/80
		Waterloo	1/31/80

^a This meeting was first scheduled for 1/16 but was rescheduled due to inclement weather.

The purpose of this chapter is to present a discussion of the methods and procedures involved in organizing and conducting the research for this study. The chapter includes a description of the two instructional methods, the procedures involved in establishing the research setting, the participants involved in the study, the data collection procedures, and data analysis techniques.

Description of Instructional Methods

Structured approach

The structured approach was based on objectives which were predetermined by the program instructors according to their perception of learners' needs. The instructors involved in the program were well-qualified to assess needs, since in all cases they were individuals who work full-time with city government. Thus, the needs which served as the foundation for the objectives were based on solid evidence of the issues important to elected city officials taking office in January 1980. Based on the needs, the following objectives were developed and served as the guides for the development of the structured program:

At the conclusion of the Mayor-Council Orientation program, the participants will be able to:

1. Identify at least two sources for assistance when they have a problem pertaining to their official function

2. Identify at least two roles for the mayor and council
3. Specify at least two critical factors in making a decision about hiring a city manager
4. Specify at least two significant factors in building a good working relationship with the administrative staff
5. Identify at least one situation in which they could be held personally liable for their actions
6. Identify the objective-setting function as the major input for the mayor and council in the budget preparation process
7. Identify at least two situations in which a closed meeting is legally acceptable
8. Identify at least one positive effect of using proper parliamentary procedures

The eight objectives provided the overall direction for the structured program by providing a base from which topic areas were identified. The topics in turn determined the types of materials that were pulled together for presentation. The topic areas were assigned to the instructors based on their expertise and also to insure an orderly change in instructors at various intervals. The presentation material and method of presentation were the responsibility of the instructors and in all cases involved a combination of written material for handouts and oral presentation. During the oral presentations questions were taken, although the

number of questions and fullness of response were limited by the time constraints on the instructor. For a more complete outline of the topic areas presented in the structured approach refer to Appendix A.

A normally conducted structured approach would involve an evaluation administered at the conclusion of the program for the purpose of determining the level of objective attainment. This final part of a structured approach was not carried out in this particular research project in order to avoid confusion with the research instrument and possible contamination of the results. It was felt that having the program participants complete a questionnaire which measured objective attainment and then have them complete the research instrument would result in extra time and effort which might influence their attitudes about the research instrument.

Unstructured approach

The unstructured program did not rely on predetermined objectives, but rather on the expressed needs of those in attendance at the programs. This approach sought to expand beyond the instructors' perceptions and allow the participants to determine topic areas for the program. The topics of interest to the participants were uncovered by using a topic identification process at the beginning

of the program. The process involved the use of two sheets of paper attached together; the top sheet had built-in carbon so anything written on it also appeared on the second sheet (Appendix B). There were two questions on the sheets; the first asked participants to indicate the topics they would like discussed during the meeting while the second asked them to note additional items which might occur to them during the program. The process at the first of the meeting involved only the first question.

Participants were asked to take a few minutes to think about topics they would like discussed during the meeting. They were told their topics could be either general areas or specific questions. After allowing participants to answer the first question, they were asked to detach the back (yellow) sheet and hand it to the instructor. The sheets were collected and then two instructors quickly reviewed them and began to list items on a blackboard and/or flipchart. The purpose of listing the items was to provide a topical guide for the program. The process of building the list involved the participants who were asked to clarify items and to help in consolidating items into manageable categories. They were also encouraged to add items if they thought of something else. After the list of topics was completed, the program began with the item which had

drawn the greatest interest. Instructors were determined by the topic selection according to a preplanned process.

In preparation for the unstructured program, the instructors were involved in a series of brainstorming sessions during which a list of possible topics was compiled. This process required the instructors to be prepared on a wide variety of subject areas. The list of possible topics was then divided with instructors being assigned responsibility for topics based on their expertise. This was very similar to the way in which topics were assigned in the structured program. In the unstructured program, topics were only discussed if the participants had identified them during the topic identification process. By having preplanned instructor responsibility, the topic selection by participants also served to determine the appropriate instructor.

While instructors had prepared themselves with both written and oral information, their approach to each topic usually began with further interaction with the participants, rather than starting with a presentation. The interaction usually involved gaining further clarification on the perceived need for information on a topic area and to provide answers to specific questions. If the instructor had some written or oral presentation which fit

in with the needs expressed by the participants it was worked into the discussion. Letting the instructors fit information into the discussion allowed them to have input into the topic but only in conjunction with the participants. In most cases, any written material which was not used in the program was given to participants at the conclusion of the program for them to take home; this was helpful in getting out information that instructors had identified as critical due to legal changes. Further information on topics from the unstructured programs is included in Appendix C.

Before the actual program started, it was explained to the participants that the second question on the topic identification sheet (Appendix B) could be used to add any items which might occur to them during the meeting. After rest breaks the participants were asked if they had additional items or if they wished clarification of items already discussed. Additional items were added to the program list and then the program proceeded. The interactive exercises were designed to involve the participants and to provide them with a sense that the meeting was directed by them. The interaction also played a critical role in the evaluation because decisions about changes in the program were made in accordance with cues from the participants.

By employing evaluation as a part of program operation, it was conducted continuously and resulted in quick decisions about changes which were needed. The specific types of cues that served as the basis of evaluation during the meetings included: (1) questions asked by participants, (2) comments and opinions offered by participants, (3) participants' general attentiveness to the discussion, and (4) results of actual inquiries about additional questions or items.

The questions asked by participants provided an indicator of interest in a topic area plus demonstrating a direction in which the participants wanted to take the discussion. Questions also indicated if there was a misunderstanding of information or if participants were not fully comprehending specific material. The comments and opinions served much the same purpose as the questions with the added dimension of introducing new information which the instructor had failed to cover. The introduction of new material or a new point of view affected the direction of some programs. Participant comments also provided an indicator of a drifting effect. If comments and opinions became redundant, it provided an indication that it was time to move on since the subject had been fairly well exhausted. The attentiveness of participants provided an indication of their commitment to the discussion. If their

attention began to wander it sometimes indicated that a small group was dominating the discussion with their concerns. Attentiveness was used to help gauge timing of breaks as the participants often needed a period to refreshen themselves. The final indicator employed was actual inquiries made to participants about change. The major beneficial effect of this technique was in helping to determine breakpoints from one topic area to another. If the instructor inquired about additional questions or concerns and there was no response, it served as an indicator of a need for a change in topic areas.

The four evaluation indicators were useful in providing feedback for decisions about program changes. While the participants provided the input through the four techniques, the instructors usually made the decisions. These decisions were rarely made by a single instructor, but rather were the results of the instructor consulting with other instructors. This was designed to insure that other instructors viewed a change as appropriate. The use of these indicators fit very well into the operation of the program, and also fit into the basic form of transactional evaluation. This fit occurred because the four evaluation indicators focused on the process and attempted to glean cues from the process on the need for change. This is a basic tenent of transactional analysis.

Establishment of the Research Setting

The decision to use the Mayor-Council Orientation program as the setting for this reserach project involved a number of stages. The initial decision was made during the preplanning process conducted by the various organizations involved in the orientation program. This stage involved fundamental decisions about the direction of the program and the utilization of structured and unstructured methods. The preplanning stage was followed by a recruiting process to inform potential participants of the meetings. The establishment of the research setting also involved decisions about where the meetings would be held throughout the state.

Premeeting planning

Prior to the actual conducting of the Mayor-Council Orientation program, a number of meetings were held in fall 1979 between the Office of Local Government Programs at Iowa State University, the Institute of Public Affairs at the University of Iowa, and the Iowa League of Municipalities, which were the three organizations involved in delivery of the program. The purpose of these meetings was to outline the strategies for delivering the programs and to assign responsiblities for topic areas to the appropriate personnel in the three organizations. At the first of these meetings, representatives of the organizations reviewed and evaluated

previous Mayor-Council programs. Comments on both weak and strong aspects were made. During the review, the director of the Iowa League of Municipalities expressed a concern that educational programs for elected officials too often failed to involve the participants in decisions about topics to be covered. Based on that concern and the review of previous programs, the group decided that an experiment in instructional approach was justified. After further discussion, a general consensus was reached that it would be appropriate to try two different methods -- one based on the traditional objective approach (structured) and a second based on a more open format involving participants at the meeting in decisions about topics (unstructured). The first session concluded with the decision that the representative of the Office of Local Government Programs would develop a strategy outline which would be shared with the other representatives before the second meeting. It was also at this point that the decision was made to use the Mayor-Council Orientation programs as the basis of this research project.

The second meeting of the representatives took place in the middle of October 1979. This meeting focused the previously shared strategy outlines and it was agreed that suggestions made by the representative from the Office of Local Government Programs would be followed.

Objectives for the structured program were developed and decisions were made about the appropriate topics to achieve the objectives. The decisions about objectives and topics were based on past programs and the results of the representatives' contacts with city and state officials who interact with city government. As a result of the second meeting, the structured program was fairly well set and the different organizations agreed on the assignment of topic responsibilities. Finally, topics which might come up at the unstructured sessions were discussed and the decision was made to again have the representative from the Office of Local Government Programs summarize the discussion and share it with the others before the third meeting. It was also agreed that Iowa State University Extension personnel would select the meeting locations. These decisions involved working through the Iowa State University Area Extension Offices located throughout the state. There are twelve of these area offices which serve as administrative and program delivery points for the Extension Service at Iowa State University. In each area office there is a Community Resource Development Specialist who has the responsibility for maintaining contacts with local clientele of Extension, such as city officials. Using the Extension areas for recruiting has been an effective arrangement in meetings such as the Mayor-Council Orientation programs.

The third meeting in early November 1979 began with discussion and agreement on the list of topics which served as a preparation guide for the unstructured sessions and the assignment of the topics to the various instructors. In conjunction with assigning responsibilities, there was a discussion about developing handout materials. It was decided that certain areas were of such a critical nature that handouts would be developed for these topics. Most of these topics were already encompassed in the structured program, but it was agreed that enough copies of materials would be available for the unstructured sessions. The materials were used at the unstructured session only if the topic was identified and if the material fit naturally into the flow of the discussion. If not, the material was given out at the end of the program for participants to take home.

Besides program decisions, the third meeting resulted in an agreement to allow the research instrument (Appendix D) to be used and to allot fifteen minutes at the close of each program for the questionnaire to be completed. Decisions were also made about location of the meetings based on contacts with Area Extension personnel. Finally, the group agreed on the format of the recruiting brochure and the methods of recruiting. The third meeting was the

last formal contact of all organization representatives; however, during the following few weeks information was exchanged and phone consultations took place. The Office of Local Government Programs' representative also prepared and sent to the other representatives final versions of the outlines for the structured and unstructured programs (Appendix A).

The final activity of the preprogram phase was the development of a pretest situation to test the research instrument. This was accomplished in early December 1979 with a series of meetings with elected officials from county government. More discussion of the pretest is presented later in this chapter. A second activity which took place in early December was the recruiting of participants for the programs. The next section outlines the recruiting strategy which was used.

Recruiting process

The recruiting for the 1980 Mayor-Council Orientation program was done much as it had been in previous years. It began with a mass mailing of a brochure to all cities in the state from the Office of Local Government Programs at Iowa State University (Appendix E). Three brochures were mailed to each city accompanied by a letter requesting that

the city clerk inform current council members and newly elected members about the program. This mailing took place in early December so that the potential participants could have sufficient time to make plans to attend one of the sessions. No indication was made in the brochure or letter about the different instructional approaches or the fact that the meeting structure would not be the same at every location.

A second phase of the recruiting involved placing announcements in the November and December issues of Iowa Municipalities magazine. This publication consists of articles and announcements directed at city officials and was sent to all member cities which number in excess of nine hundred. In order to avoid influencing the unstructured sessions, neither the brochure nor the magazine announcement specified topics for discussion. Examples of sample topics and encouragement for participants to bring questions were included to indicate the appropriate audience for the program.

The final recruiting device was to supply additional brochures to the Community Resource Development Specialists in the twelve Area Extension offices. This gave them the opportunity to do follow up recruiting in each area. The recruiting efforts of the area personnel followed traditional

patterns in each area which had been proven effective in the past. The only instructions the area personnel were given was to avoid indicating the type of program to be given in their area.

The recruiting efforts resulted in a good attendance although the total for the 1980 program was less than in previous years. There are numerous explanations, such as the energy problem, weather concerns, and a lower than normal turnover in elected personnel. Some or all of these were present to a degree but there is no solid evidence that any one is of particular importance.

Program locations

The Mayor-Council Orientation program was presented in thirteen locations throughout the state of Iowa during January and February 1980. The program was presented so that it coincided with assumption of duties by the elected officials. The choice of meeting locations was determined on the basis of past program patterns within the Iowa State University Area Extension configuration.

Each of the twelve extension areas received one program and in most cases they were held in locations centrally situated in the area. The single exception to one meeting per area was the Davenport area. That area stretches

from Clinton County in the north to Lee County in the south; due to the distances involved and the fact that there is no central location, two meetings were held in the Davenport area.

Participants in the Study

The participants involved in the programs shared a common involvement in Iowa city government. Some attendees were mayors, some councilmembers, and some administrative personnel, but all were involved in the operation of city government. A total of 488 individuals attended the orientation program; this represents about 8 percent of the total elected city officials in Iowa and about 32 percent of those elected for the first time at the November 1979 municipal elections. The attendees were fairly well divided between the structured and unstructured programs, with 219 at the structured sessions and 269 at the unstructured sessions.

About 57 percent of those who attended the sessions were elected for the first time, while another 26 percent were reelected. Another 8 percent were not up for election, with the remainder of attendees being administrative personnel. The largest percentage of those attending were from smaller cities, as indicated in Table 2. This is not unexpected, since about 90 percent of Iowa's 950 cities

Table 2. Participants by city size

Population Category	Absolute Frequency of Attendees	Percentage of Total Attendees	^a Percentage of Cities in Iowa
Below 499	116	26.5	54.9
500-999	114	26.1	20.7
1,000-2,499	110	25.2	13.8
2,500-4,999	34	7.8	4.8
5,000-9,999	39	9.0	3.2
10,000-24,999	9	2.1	1.1
25,000-49,000	9	2.1	.7
Above 50,000	3	.7	.7

^a Supplied by the Iowa League of Municipalities.

fall into the three smallest city categories which were delineated for this study. The age distribution of the participants varied from below twenty-five to above seventy-five, with the largest group being in their twenties, thirties, and forties, as indicated in Table 3. Finally, most of the attendees (77 percent) were male, although the female representation (22 percent) was significant when compared with the number of females elected to city office in Iowa. The League of Municipalities estimated that the females who attended the Orientation sessions represented a very high percentage of female elected city officials. The heavy distribution of males was, therefore, no surprise because they make up the vast majority of city elected officials.

Table 3. Participants by age category

Age Category	Absolute Frequency for Those Attending	Percentage of Those Attending
18-24	9	2.1
25-34	93	21.3
35-44	113	25.9
45-54	87	19.9
55-64	82	18.8
65-74	51	11.7
Above 75	2	.5

Data Collection Procedures

At the conclusion of both the structured and the unstructured sessions, participants were asked to complete a questionnaire (Appendix D), which dealt with their attitudes toward the session they attended. The questionnaire was handed out after the completion of discussion on the topics. This occurred about fifteen minutes before the time for ending the meeting as advertised in announcements about the sessions. Thus, participants had at least fifteen minutes to complete the questionnaire and still be able to leave at the prescribed time. The participants were asked to leave the completed questionnaire at their seats before leaving. In no cases were participants allowed to take the questionnaire home and mail it in later. This did occur in some situations, but those questionnaires were eliminated.

The questionnaire was four pages in length and consisted of four sections. The first section obtained background information about the participants, while the other three sections dealt with participant attitudes toward the program. Because the questionnaire was completed at the meeting, there was a high return rate in both the structured and the unstructured session. In the structured session 198 useable questionnaires were returned out of 219 registered participants for a return rate of 90.4 percent. The unstruc-

tured session was comparable with 239 useable questionnaires returned out of 269 registered participants for a rate of 88.8 percent. Two primary reasons for not having a 100 percent return were: (1) some participants chose not to complete the questionnaire and (2) some who did return it only completed the background questions. Those questionnaires were eliminated because they served no useful purpose in indicating attitudes about the meetings.

Instrumentation

The research instrument (Appendix D) consisted of four parts, each designed for a specific purpose. The first part included a series of background questions which allowed for a division of participants into subgroups for purposes of analysis. The remaining three parts involved the use of two techniques designed to measure the attitudes of participants toward their respective sessions.

The two techniques used in forming the measures of attitude were a Semantic Differential and two variations of a Likert scale. The Semantic Differential made up part two of the instrument and dealt primarily with satisfaction of participants on the content and conduct of their programs. The semantic differential technique is a combination of controlled associations and scaling procedures wherein the participants were provided a concept to be differentiated

and a set of bipolar adjectives with which to differentiate the concept (Osgood, Suci, and Tannenbaum, 1957). The participants were to differentiate the concept between the bipolar adjectives along a seven step scale. The semantic differential technique is based on the premise that ordinary language can be used to not only communicate meaning but also to differentiate between concepts and to measure meaning (Fisbein and Ajzen, 1975). In developing the semantic differential approach, Osgood identified three factors which explain the vast majority of the space involved in meaning. The three factors are evaluation, potency, and activity. Of the three, evaluation accounts for over three quarters of the explanation; it is also the major attitudinal factor because it measures the individual's reaction to concepts from a favorable-unfavorable standpoint (Osgood, Suci, and Tannenbaum, 1957; Lemon, 1973). The Semantic Differential has, in a number of studies, demonstrated itself as a reliable and valid measure of attitudes. However, it is susceptible to contamination, particularly from a patterning effect on responses (Lemon, 1973). To overcome this possible contamination it is "useful to alternate poles of the adjectives" (Lemon, 1973, p. 109). Such alternating was done in the research instrument used in this study. While the Semantic Differential is an adequate

measure by itself, some have indicated that it is even better in combination with other instruments (Lemon, 1973).

To supplement the Semantic Differential, parts three and four of the instrument consisted of two applications of the Likert scale. A Likert scale consists of a continuum from one to five in which respondents indicate a level of agreement or disagreement with a concept. The Likert scale was developed as a simple way of measuring attitudes and has been demonstrated to be as reliable as more complex scales (Likert, 1932). A Likert scale is uniformly scored so that the response categories are assumed to be of the same intensity (Babbie, 1973). Because of the versatility of the Likert scale, it was used in two forms in the research instrument.

Part 3 of the instrument consisted of a 5 point scale with the end points identified as 1 equalling unsatisfactory and 5 equalling very satisfactory for each question. The fourth part of the questionnaire was a traditional Likert scale. The traditional Likert consists of 5 points with each point given a specific description. For the research instrument, the 5 points were designated as:

1. Strongly agree
2. Agree

3. Neither agree nor disagree
4. Disagree
5. Strongly disagree

Both the Semantic Differential and the Likert scales have been demonstrated to be valid and reliable as measures of attitude; however, it was necessary to check the specific questions in the research instrument to be sure they were achieving the desired results. To accomplish this and to help indicate needed improvements, a pretest was conducted with a similar population.

Pretest

The pretest was conducted in early December 1979 during a series of workshops on County Home Rule conducted by the staff of the Office of Local Government Programs. The workshops involved county elected officials and were conducted in six locations around the state. Due to time constraints, only three of the six locations were involved in the pretest sample. The participants in the pretest were selected because they were local government elected officials, a major characteristic they shared with the research population. The program that was delivered to the county officials was similar to the structured program but that had no bearing on the purpose for which the pretest was conducted.

The purpose of the pretest was to establish three things: (1) fifteen minutes was sufficient time for participants to complete the questionnaire, (2) the questions were clear and they measured attitudes about the program, and (3) the results were reliable according to the groupings of questions designed to deal with the seven variables as outlined in Chapter 1.

The first purpose of time to complete the questionnaire was determined by observing the time it took participants to fill out the questionnaire. Based on the results, it was clear that fifteen minutes was sufficient time for the vast majority of participants. There were so few that could not complete the questionnaire in that period of time that the decision was made to stay with the fifteen minutes and not rob additional time from the program.

The second purpose of the pretest was to check on the clarity and validity of the questions. This was accomplished by asking participants at the pretest to provide oral or written reactions to the instrument. There were very few specific questions or comments on individual items, but there were a number of requests for explanation about the proper way to fill out the Semantic Differential scale. This problem was also

detected in the fact that over 10 percent of the participants filled out the Semantic Differential scale in an incorrect fashion. As a result of the comments and the substantial number of incorrect returns, the instructions for the Semantic Differential scale were revised and the instructions for the other sections were reviewed and in some cases changed to clarify what was expected.

The comments of the participants were also helpful in determining if the questions seemed to be measuring attitudes about the program. The only question which seemed to be a problem was on the first Likert series, which asked about the relevance of topics. Apparently, the word 'relevance' caused some misunderstanding. This problem was also detected in the reliability results, which indicated a low relationship for that particular question when compared to questions measuring the same variable. As a result, the question was reworded and the word 'relevance' was replaced by the word 'useful'. The result was a substantial increase from .39 to .58 on the reliability results between the pretest and the final instrument. Coupled with the earlier acceptance of the instrument by the committee overseeing the research, the participants' reactions indicated that the instrument had content validity.

The third purpose of the pretest was to determine if the questions which had been determined to be measuring the same variable were in fact accomplishing that end. To check for the relationship between questions, a reliability procedure was applied to the results of the pretest. The reliability chosen for the study was the Cronbach coefficient alpha measure. The Cronbach alpha (as designated by α) has a number of properties which make it useful in providing a conservative measure of reliability. Among these properties are the following:

1. α is the mean of all possible split-half coefficients
2. α is the value expected when two random samples of items from a pool like those in a given test are correlated
3. α is a lower bound for the coefficient of precision
4. α is also lower bound for coefficients of equivalence obtained by simultaneous administration of two tests having matched items
5. α estimates and is a lower bound to the proportion of test variance attributable to common factors among items; that is, it is an index of common factor concentration -- this index serves the purposes claimed for indices of homogeneity

(Cronbach, 1951, p. 331)

The primary attraction of the Cronbach alpha is that it reflects a lower boundary to the true reliability because it is the average of all split-halves; thus, it includes both good and bad relationships. Because it includes both

good and bad, it is likely to be less than a measure of all good split-halves (Cronbach, 1951).

The results of the reliability procedure (Table 4) indicated that in most cases, the combination of questions making up certain variable were being answered in a similar manner, indicating that they were compatible. The one exception was the variable dealing with objective reassessment, which registered a .19. The problem that caused the low alpha score was due to the limited observation (2) which makes it difficult to get an accurate alpha score.

As a result of the reliability test and the earlier opinions of participants, some reshuffling of questions was done and some questions were used in more than one variable grouping. Such was the case with questions Q5 (Q11 on the final instrument) and Q6 (Q12 on the final instrument). On the final instrument Q18 (Q12 on the preliminary instrument) was removed from the variable on satisfaction of content and included in the objective reassessment where it more logically belonged.

As a result of the changes, the reliabilities of all but two variables improved. In the two exceptions, one stayed the same and one decreased by .01, which is not significant. The final reliabilities, which were also derived using the Cronbach alpha procedure, were within the acceptable range, as indicated in Table 5.

Table 4. Pretest reliability scores

Variables	Questions ^a	Alpha scores
Satisfaction with conduct of the meeting	Q5, Q19, Q22, Q26, Q28	a = .68
Satisfaction with meeting content	Q7, Q8, Q9, Q10, Q18, Q19, Q29,	a = .79
Opportunity for participant input	Q6, Q12, Q13, Q15, Q17	a = .76
Relevance of the meeting content	Q1, Q2, Q16, Q20	a = .57
Meaningfulness of the meeting content	Q3, Q4, Q11, Q23	a = .64
Objective reassessment	Q21, Q27	a = .19
Realization of premeeting expectations	Q14, Q24, Q25	a = .67

^a The question numbers will be different on the final reliability because the background section was placed first on the final instrument.

Table 5. Final reliability scores

Variables	Questions ^a	Alpha scores
Satisfaction with conduct of the meeting	Q11, Q19, Q25, Q28, Q32, Q35	a = .83
Satisfaction with meeting content	Q11, Q12, Q13, Q14, Q15, Q16, Q18, Q24, Q25	a = .69
Opportunity for participant input	Q12, Q18, Q19, Q21, Q23	a = .75
Relevance of the meeting content	Q7, Q8, Q22, Q26	a = .67
Meaningfulness of the meeting content	Q9, Q10, Q12, Q29	a = .74
Objective reassessment	Q27, Q33, Q34	a = .51
Realization of premeeting expectations	Q20, Q30, Q31	a = .67

^a Note that question numbers are different from pretest due to the movement of the background section from the back to the front of the instrument.

Final instrument As a result of the pretest, changes were made which improved the instrument, as indicated by the reliability scores. The changes resulted in the development of the final instrument (Appendix D), which was used to gather data for the research project. The final instrument was handed out at the conclusion of each session and an oral statement was read to participants indicating the purpose of the questionnaire and assuring the complete protection of the responses. It was also explained to the participants that they were completely free to choose not to complete the instrument. The result, including both groups, was a response rate of 90 percent.

Data Analysis

The data gathered through the instrument were treated as interval measures for purposes of analysis. This allowed an analysis of variance procedure to be used in determining the magnitude of differences in attitudes of participants at the structured sessions in comparison to those at the unstructured sessions. The analysis of variance approach was also used to measure the impact of various background variables such as tendency to attend educational meetings, experience in office, city population, age of participant, and sex of participant. Before the analysis of variance procedure was executed, the data had to be organized in the proper form.

Preparation of data

Three adjustments were made in the data in order to prepare for the analysis. First, the participants were divided into subgroups. The division into subgroups was accomplished by using the background questions on the research instrument. Five subgroups were utilized; these were:

1. Tendency to attend educational meetings
2. Experience in elected office
3. City population
4. Participant age
5. Participant sex

These subgroups were used to determine if factors other than the instructional method had a significant effect on differences between participants at the structured and unstructured sessions. The particular subgroups were delineated because they were believed to have an impact on how participants responded to instructional methods. Subgroup one, which concerned tendency to attend meetings, was believed to be important because it was thought that adults with limited experience in educational settings might be more favorable toward a formalized program like the structured session. This was based on the belief that the participants with little formal adult educational experience might respond to a model similar to their formal education.

The second subgroup, experience in office, was included because it was thought that newly elected participants who lacked experience might feel more comfortable with a structured setting. This was based on a belief that these participants who lacked experience might feel more comfortable with a structured setting. This was based on a belief that these participants might lack a clear idea of their educational needs due to their lack of experience.

The third subgroup created was city population. Population was included because it was thought that smaller city units might respond more favorably to a structured program in which small city problems could be built into the program. This assumption was based on feedback from numerous educational programs conducted over the years in which smaller city representatives complained that larger cities dominated the meetings with their concerns.

The fourth subgroup delineated was participant age. The age subgroup was included because it was thought that some difference between age categories might result from the length of time a participant had been away from a formal educational setting. Implicit in this subgroup is that older participants might have had more opportunities to participate in adult educational experiences.

The final subgroup was participant sex. This subgroup was identified because it is generally believed by those who work with government that female elected officials are

more inclined to seek out all sources of information and to be more inquisitive. Thus, it was thought that they might be more responsive to the unstructured sessions where they could explore a variety of subjects.

The second major adjustment to the data was to reduce the number of cells included in the background questions. This was necessary with respect to population of city and participant age. Population of city had been divided into eight categories on the research instrument to insure that some logical divisions were possible. However, once the data were collected, the numbers in the cells were too small when the population was divided by instructional methodology. As such, the eight original categories were reduced to five for purposes of analysis. Age of participant was also found to be deficient in certain cells so the seven original cells were reduced to five for the analysis.

The third adjustment to the data involved applying the Certainty Method to the one Semantic Differential scale and the two Likert scales. The Certainty Method is designed to improve the usefulness of social science measures by reflecting that the distances between points on a scale are wider at the ends of the scale than toward the center (Warren, Klonglan, and Sabri, 1969). To reflect the differences in distance, the end points of a scale are moved out so the interval increases from that reflected toward the center of the scale. For example, if a scale

contains 5 points from 1 to 5, the distance from 3 (the center) to either 2 or 4 is thought to be easier for respondents to move than for them to move to the end points of either 1 or 5. Thus, the distance between 3 and 2 or 3 and 4 is not the same as the distance between 2 and 1 or 4 and 5. By spreading the distance of the endpoints, the Certainty Method attempts to provide a truer picture of the movement to these endpoints. Therefore, the 5 point scale can be redesigned for analysis purposes to appear as a seven point scale: 1, 3, 4, 5, 7.

The original research on the Certainty Method did not deal with the 7 point Semantic Differential or the 5 point Likert, but a later study by Yarbrough, Klonglan, Padgitt, and Lutz applied the method to 5 point scales (Yarbrough, Klonglan, Padgitt, and Lutz, 1971). This study spread the endpoints by two so that it moved from a scale of 1, 2, 3, 4, 5 to one of 1, 3, 4, 5, 7. This procedure was applied to the two Likert scales in this study. The Semantic Differential is a 7 point scale, but since this is so close to the 5 point scale, the same spread was applied whereby the endpoints were moved out 2 places. Thus, the Semantic Differential scales were moved from 1, 2, 3, 4, 5, 6, 7 to 1, 3, 4, 5, 6, 7, 9.

By utilizing the Certainty Method, the data moved closer to a true interval measure. This was necessary because there is a continuing debate as to whether an attitude measure such as a Likert scale is really interval. The Certainty Method is an aid in moving these scales to an interval level.

Analysis procedure Once adjustments were made in the data, the analysis of variance procedure was applied. Analysis of variance is a statistical procedure which measures the difference between group means and indicates the significance level of that difference. To conduct an analysis of variance, means were calculated for the structured and unstructured groups in total and also for the five subgroups by structured and unstructured. Once the means were calculated, the analysis of variance procedure indicated the level of significance of the mean differences.

The final analysis procedure utilized in this study was to cross tabulate frequencies by subgroups in instructional method. This procedure provided further elaboration of why significant differences in group means occurred.

Summary and Conclusion

This chapter has presented the methods and procedures followed in carrying out the research project and in collecting and analyzing the data. The operation of the project

proceeded smoothly, with both the structured and unstructured sessions being completed much as they were designed. The one major difficulty which occurred in both structured and unstructured sessions was the lack of time to complete the discussion of the topics. In the case of the structured session, this was due to overly optimistic planning by the instructors, while in the unstructured session it was due to the number of topics identified by the participants and the difficulty of determining points of transition from topic to topic. Based on the feedback from instructors, the unstructured programs were perceived to be more effective primarily because the participants were involved from the start of the program.

Attendance at the 1980 Mayor-Council Orientation programs was down from previous years, but the 488 attendees provided a representative sample of mayors and council members from Iowa cities. The only problem in the representativeness of the participants was underrepresentation from the larger cities and in certain age categories. This necessitated combining the larger cities into a single category and combining age categories for analysis purposes. The attendees were sufficiently distributed between the structured and unstructured groups so that analysis of participant reaction to the different instructional programs was meaningful.

Data collection was very satisfactory because ninety percent of the instruments were returned and the reliability scores for each variable were within acceptable ranges. All but a very few of the instruments returned were useable; the fact that the directions were altered appears to have reduced the number of participants who incorrectly filled out the Semantic Differential scale. The one Semantic Differential scale and the two versions of the Likert scales were used and proved to be uncomplicated from the standpoint of the participants understanding what was expected.

The data analysis involved the use of an analysis of variance procedure which indicated the level of significant difference between group means. This procedure helped in indicating the effect of instructional method and/or the background variables had on the attitudes expressed by the participants the 1980 Mayor Council Orientation programs.

CHAPTER IV.

DATA ANALYSIS

Introduction

The purpose of this chapter is to present the results of the statistical analysis done on the data collected through the research instrument. The method of analysis involved the use of an analysis of variance to determine the level of significant difference between the unstructured and structured group means. The analysis of variance was also applied to the five subgroups to indicate their possible impact on the attitudes of the participants at the Mayor-Council Orientation program. The five subgroups which were identified in the research were:

1. Tendency to attend educational meetings
2. Experience in city elected office
3. Population of city
4. Participant age
5. Participant sex

One additional subgroup based on the length of attendance at the Mayor-Council Orientation program was identified in the research instrument. However, the subgroup was dropped due to insufficient cell size when the data were prepared for analysis. This situation occurred because almost all participants in both the structured and unstructured groups attended the entire meeting.

This chapter is organized according to the order of the hypotheses; therefore, the initial presentation under each hypothesis heading will focus on the analysis of differences between the structured and unstructured groups. Following the discussion of the impact of instructional methodology on participants' attitudes, the results of the analysis of the subgroups is presented. The purpose of this discussion is to present any subgroups which were found to be significant in explaining the attitudes of the participants. Finally, any significant interactions between instructional methodology and the subgroups are presented. These data will assist in indicating whether specific categories within within subgroups differed in their preferences for a particular instructional method.

Because the analysis of variance procedure is a measure of differences in group means, the mean scores for both structured and unstructured groups were calculated. This indicated which group had the most favorable reaction to each of the seven variables of the meeting (content of the meeting, opportunity for participant input, relevance of content, meaningfulness of content, extent of objective reassessment, and realization of premeeting expectations). In all cases, the lower the mean score, the more favorable the reaction of the group or subgroup. The mean scores were

then analyzed, using the analysis of variance to determine if the differences in means were significant at the .05 or lower level.

Hypothesis #1A

This hypothesis asserted that the unstructured group participants would report significantly ($p \leq .05$) greater satisfaction with the manner in which their meetings were conducted than would structured group participants. The mean scores computed for the structured and unstructured groups by subgroup (Table 6) indicated that the unstructured group had lower mean scores. However, the results of the analysis of variance yielded no significant F values, indicating a lack of significant difference in the mean scores; therefore, the hypothesis was not supported.

The results showed that unstructured group participants were not significantly more satisfied with the content of their meeting than were structured group participants. Thus, the instructional method was not a major factor in the attitudes of the participants toward the conduct of their meeting.

Further analysis demonstrated that two of the subgroups (tendency to attend educational meetings and experience in city elected office) were not significant in indicating differences in attitudes about the conduct

Table 6. Mean scores and F values for conduct variable

Subcategories	Structured	Unstructured	F Value	Significance
Tendency to attend educational meetings	2.74	2.71	.252	.616
Experience in city elected office	2.74	2.71	.303	.582
Population of city	2.73	2.70	.067	.796
Participant age	2.73	2.70	.325	.569
Participant sex	2.73	2.70	.648	.421

of the meeting. The remaining three subgroups (population of city, participant age, and participant sex) were significant factors in explaining participants' attitudes.

Population of city achieved a significance level of .032, as shown in Table 7. This demonstrates that a significant difference exists in some or all of the five categories of city population in the attitudes toward the conduct of the meeting. However, since there was no significant interaction it appeared that preference for the method of instruction did not vary by the population size of the cities represented. The comparison of mean scores shown in Table 8 indicated that the participants from smaller cities preferred the conduct of their meetings, whether structured or unstructured more than participants from the larger cities. It should be noted that the largest category appears to be reversing the upward trend. It is, however, difficult to know at what exact population size this occurred, because the large city category was a result of collapsing for purposes of establishing adequate cell sizes.

The second significant subgroup was participant age, which registered a significance level of .008, as shown in Table 9. The difference in mean scores between the age categories was very significant in explaining attitudes of participants about the conduct of the meeting they

Table 7. Analysis of variance for conduct by IDM^a and population of city

Sources of Variation	Sums of Squares	DF	Mean Squares	F Value	Significance Level
IDM (structured vs. unstructured)	.012	1	.012	.067	.796
Q4 (population)	1.899	4	.475	2.662	.032*
Interaction (IDM x Q4)	.786	4	.197	1.103	.355
Residual	70.783	397	.178		
Total	73.575	406	.181		

^a IDM was the identifier assigned to Instructional Method.

* Indicates a significance level of .05 or better.

Table 8. Mean scores for subgroup of population of city

Population Category	Mean Score
Below 500	2.64
500-999	2.68
1,000-2,499	2.74
2,500-4,999	2.85
Above 5,000	2.82

Table 9. Analysis of variance for conduct by IDM and participant age

Sources of Variation	Sums of Squares	DF	Mean Squares	F Value	Significance Level
IDM (structured vs. unstructured)	.057	1	.057	.325	.569
Q5 (participant age)	2.450	4	.613	3.486	.008**
Interaction (IDM x Q5)	.981	4	.245	1.396	.235
Residual	70.285	400	.176		
Total	73.816	409	.180		

** Indicates a significance level of .01 or better.

attended. Because no significant interaction occurred, it appeared that preferences for method of instruction did not vary by participant age. The mean scores for the five age categories indicated, as shown in Table 10, that the older the participant, the more they preferred the meeting they attended regardless of the instructional methodology.

Table 10. Mean scores for subgroup of participant age

Age Category	Mean Score
18-34	2.81
35-44	2.76
45-54	2.70
55-64	2.64
Above 65	2.58

The third subgroup to yield a significant difference in mean scores was participant sex. As shown in Table 11, the results of the analysis of variance yielded an F value of 10.743, which was significant at the .001 level. This indicated that the difference in mean scores between male (2.75) and female (2.59) was very significant, with female participants preferring the conduct of their meetings more than their male counterparts. Since

Table 11. Analysis for variance for conduct by IDM and participant sex

Sources of Variation	Sums of Squares	DF	Mean Squares	F Value	Significance Level
IDM (structured vs. unstructured)	.115	1	.115	.648	.421
Q6 (participant sex)	1.904	1	1.904	10.743	.001**
Interaction (IDM x Q6)	.024	1	.024	.133	.716
Residual	71.787	405	.177		
Total	73.814	408	.181		

** Indicates a significance level of .01 or better.

no significant interaction was present. It appears there was no difference in preference for method of instruction according to participants' sex.

In summary, the hypothesis stating the attitude of the unstructured participants would be more positive toward the conduct of their meeting was not supported. However, city population, participant age, and participant sex were found to be significant factors in indicating participants' attitudes toward the meetings they attended. Because no significant interaction occurred, it was not possible to indicate if categories within these three subgroupings were more or less positive toward a particular instructional method.

Hypothesis #1B

This hypothesis asserted that the unstructured group participants would report significantly ($p \leq .05$) greater satisfaction with the content of their meetings than would structured group participants. As the mean scores and significance level in Table 12 indicate, the exact opposite effect occurred. The results showed that the structured group preferred the content of their meetings by a very significant margin over the participants in the unstructured group; therefore, the hypothesis was not supported. The results indicated that instructional

Table 12. Mean scores and F values for content variable

Subcategories	Structured	Unstructured	F Value	Significance
Tendency to attend educational meetings	3.22	3.38	13.322	.000**
Experience in city elected office	3.21	3.38	16.216	.000**
Population of city	3.22	3.38	17.773	.000**
Participant age	3.22	3.39	17.374	.000**
Participant sex	3.22	3.39	17.539	.000**

** Indicates a significance level of .01 or better.

method was an influencing factor in the difference of participants' attitudes about the content of the meetings.

A further analysis using a cross tabulation of each question pertinent to the content variable indicated that a pattern of more positive responses was consistently registered by structured group participants. This eliminated the possibility that a few extreme responses in either group were responsible for the difference in means scores.

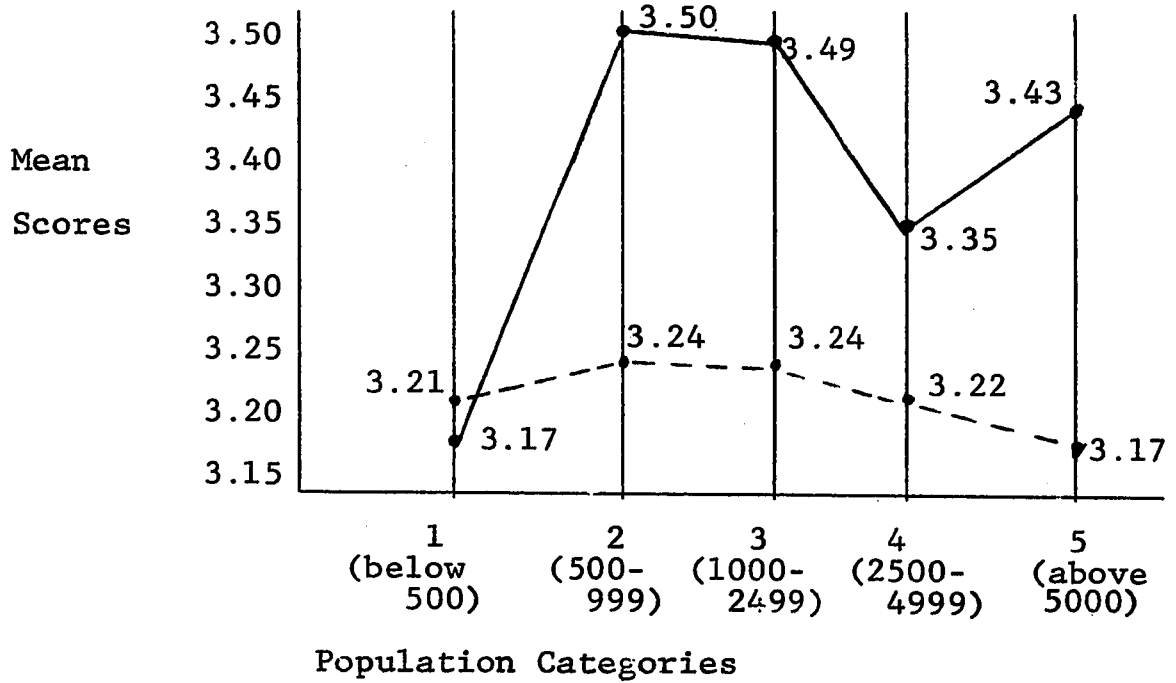
Analysis of the subgroups produced no significant differences for the following subgroups: tendency to attend educational meetings, experience in elected city office, participant age, and participant sex. Population of the city was the only subgroup which demonstrated a significant influence on participants' attitudes, as shown in Table 13. The results indicated that population of city was an influencing factor in the attitudes participants had toward the content of their meetings. Because the interaction between instructional method and city population yielded a significant F value, it was possible to demonstrate which population categories preferred which instructional method (Figure 7). As shown, the smallest population category (below 500) preferred the unstructured program, while all the other population categories preferred the structured approach, although by varying degrees. The biggest gaps in attitudes about content,

Table 13. Analysis of variance for content by IDM and population of city

Sources of Variation	Sums of Squares	DF	Mean Squares	F Value	Significance Level
IDM (structured vs. unstructured)	2.805	1	2.805	17.773	.000**
Q6 (participant sex)	3.083	4	.771	4.884	.001**
Interaction (IDM x Q6)	1.527	4	.382	2.419	.048*
Residual	62.646	397	.158		
Total	69.865	406	.172		

* Indicates a significance level of .05 or better.

** Indicates a significance level of .01 or better.



————— Unstructured
----- Structured

Figure 7. Interaction of instructional method and population of city on the content variable

and therefore the most likely explanation for the interaction, occurred in the 500-999 group and the above 5,000 group. In these categories, it is clear that the structured group participants felt that the instructional approach they received had better content than did their counterparts in the unstructured approach.

A second significant interaction on the content variable occurred between participant sex and instructional methodology, as shown in Table 14. This indicated that while participant sex alone was not a significant factor in attitudes, it was, nevertheless, significant in terms of attitudes about content between the two different instructional methods. As shown in Figure 8, female participants who attended the unstructured sessions preferred the content more than their male counterparts. Moreover, by a slim margin, females preferred the content at the unstructured meetings, although it should be noted that this difference was negligible. Clearly, male participants at the structured sessions preferred the content of their program much more than their counterparts in the unstructured programs.

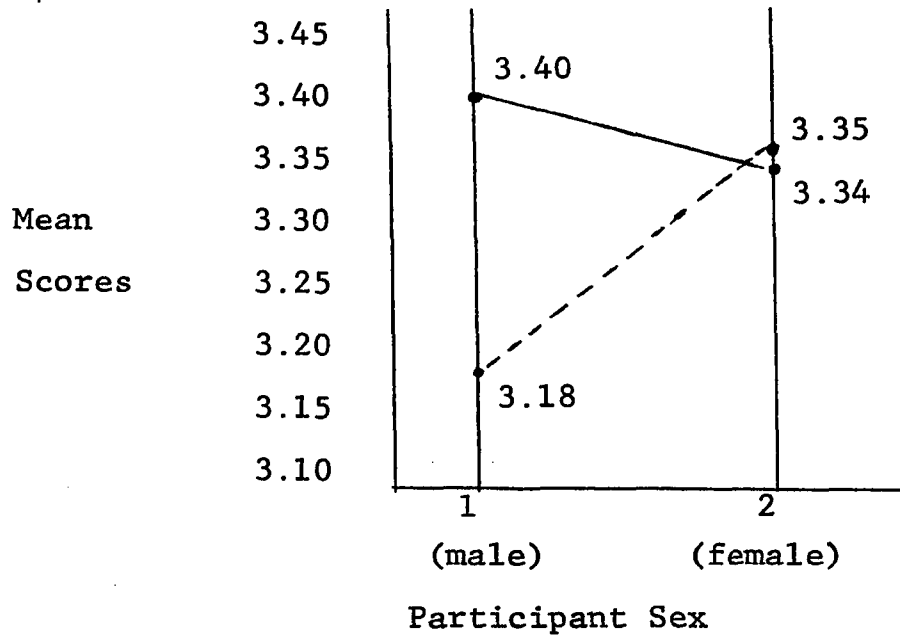
In conclusion, the hypothesis that unstructured group participants would prefer the content of their meeting more than participants at the structured sessions was not supported. In fact, those who attended the structured

Table 14. Analysis of variance for content by IDM and participant sex

Sources of Variation	Sums of Squares	DF	Mean Squares	F Value	Significance Level
IDM (structured vs. unstructured)	2.852	1	2.852	17.539	.000**
Q6 (participant sex)	.141	1	.141	.868	.352
Interaction (IDM x Q6)	.985	1	.985	6.059	.014*
Residual	65.864	405	.163		
Total	69.820	408	.171		

* Indicates significance level of .05 or better.

** Indicates significance level of .01 or better.



_____ Unstructured
----- Structured

Figure 8. Interaction of instructional method and participant sex on content variable

programs were significantly more favorable in their satisfaction toward the content of their meetings. The interaction of population of city and instructional method indicated that the cities below 500 preferred the content of the unstructured sessions while all other categories preferred the content of the structured programs. A second significant interaction demonstrated that male participants preferred the content at the structured programs much more than their counterparts at the unstructured programs, while female participants were about equally satisfied with both types of instruction.

Hypothesis #1C

This hypothesis asserted that unstructured group participants would report a significantly ($p \leq .05$) greater opportunity for the audience to participate in the program than structured group participants. The mean scores, as shown in Table 15, indicated that the attendees at the structured sessions were more satisfied with their opportunities to participate than their counterparts at the unstructured programs. The results of the analysis showed that the difference in mean scores was very significant, indicating that participants at the structured sessions perceived more opportunities to participate, so the hypothesis was not supported.

Table 15. Mean scores and F values for opportunity to participate variable

Subcategories	Structured	Unstructured	F Value	Significance
Tendency to attend educational meetings	3.53	3.90	39.446	.000**
Experience in city elected office	3.53	3.91	43.158	.000**
Population of city	3.53	3.90	42.923	.000**
Participant age	3.53	3.90	43.598	.000**
Participant sex	3.53	3.90	44.821	.000**

** Indicates a significance level of .01 or better.

The results did indicate that instructional method was a significant factor in the attitudes participants had about their opportunities to participate in the program.

The results of an analysis of the cross tabulation on the questions pertinent to this variable indicated a consistent pattern of more favorable responses by structured group participants. Therefore, the significant difference in mean scores was not attributable to extremes in either direction for either group.

The subgroup analysis revealed that four of the five subgroups were not significant in terms of attitudes about opportunities to participate in the program. The one exception was population of city which yielded a significant difference of .016 as shown in Table 16. Population of city was a significant factor in the attitudes participants had about their opportunities to participate. The mean scores shown in Table 17 indicated that the population categories were mixed with the 500-999 category the least favorable and the 2,500-4,999 category the most favorable. Because no significant interaction occurred between the population of city and the instructional method, it appeared that preference for method of instruction did not vary by population size.

Table 16. Analysis of variance for opportunity to participate by IDM and population of city

Sources of Variation	Sums of Squares	DF	Mean Squares	F Value	Significance Level
IDM (structured vs. unstructured)	13.283	1	13.283	42.923	.000**
Q4 (population of city)	3.819	4	.955	3.085	.016*
Interaction (IDM x Q4)	2.483	4	.621	2.006	.093
Residual	122.851	397	.309		
Total	142.853	406	.352		

* Indicates a significance level of .05 or better.

** Indicates a significance level of .01 or better.

Table 17. Mean scores of subgroup of population of city

Population Category	Mean Score
Below 500	3.63
500-999	3.84
1,000-2,499	3.79
2,500-4,999	3.52
Above 5,000	3.72

One significant interaction appeared between the instructional method and participant sex with reference to attitudes about opportunities to participate. As shown in Figure 9, the interaction indicated that in the structured program male participants perceived more opportunities to participate than did female participants, while the reverse was true in the unstructured programs. It should be noted though, that both males and females perceived their opportunities to participate as greater in the structured sessions.

In summation, the hypothesis that participants in the unstructured sessions would be more satisfied with their opportunities to participate than would participants at the structured sessions was not supported. It was not supported because the structured group participants were significantly more positive about their opportunities to participate. Population of city was found to be a significant factor in the attitudes of participants on their opportunities to participate. However, since no interaction occurred, it appears that preference for instructional method did not vary by the population size on participants' perceptions of participation opportunities. The one significant interaction which did occur was between the instructional method and participant sex.

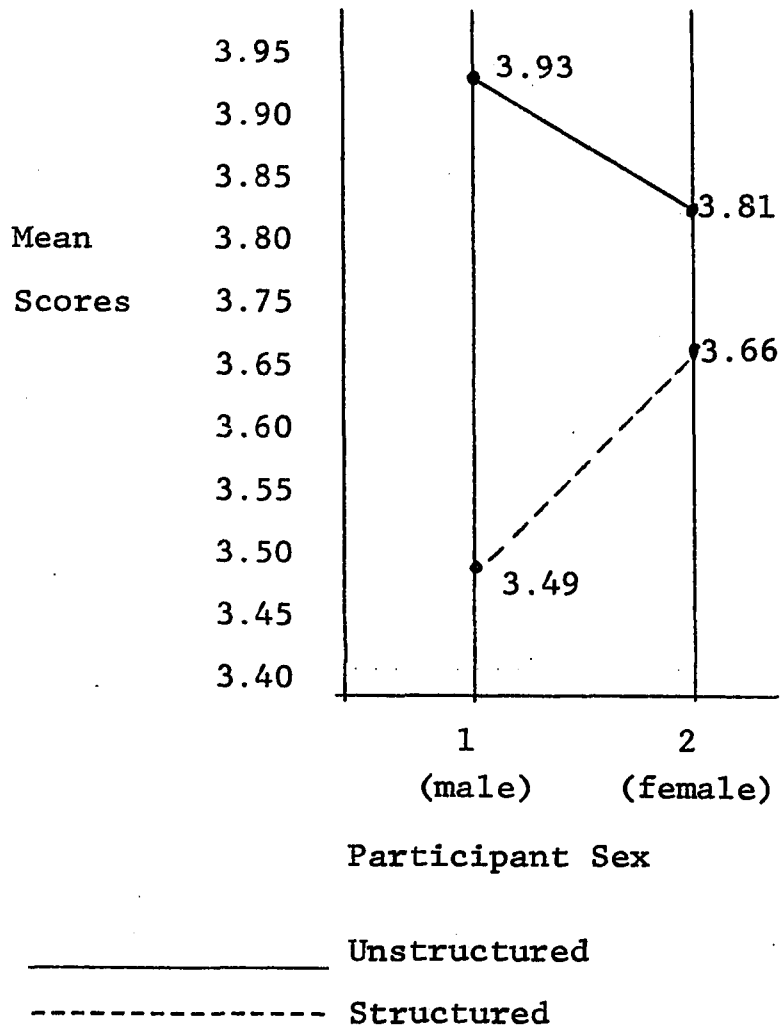


Figure 9. Interaction of instructional method and participant sex on the opportunity to participate variable

This interaction indicated that female participants were more favorable about their opportunities to participate in the unstructured sessions than their male counterparts, although the females in the structured sessions were still more positive toward their opportunities than those in the unstructured sessions.

Hypothesis #2A

This hypothesis asserted that participants in the unstructured programs would rate the content of their meeting as being significantly ($p \leq .05$) more relevant than participants in the structured sessions. The mean scores computed for the structured and unstructured groups (Table 18) indicated that the unstructured participants were more positive about the relevance of content in their session. However, the results of the analysis of variance yielded no significant difference between the group means, so the hypothesis was not supported. The results indicated that instructional method was not a significant factor in determining participants' attitudes about the relevance of the content.

Analysis of the subgroups yielded no significant differences in mean scores on four of the five subgroups. The only subgroup to demonstrate significance was partici-

Table 18. Mean scores and F values for relevance variable

Subcategories	Structured	Unstructured	F Value	Significance
Tendency to attend educational meetings	2.55	2.49	1.740	.188
Experience in city elected office	2.54	2.51	.597	.440
Population of city	2.55	2.49	2.413	.121
Participant age	2.55	2.49	1.596	.207
Participant sex	2.55	2.49	.1894	.169

pant sex, as shown in Table 19. The results indicated that participant sex was a factor in attitudes about the relevance of the content. The mean scores of 2.54 for males and 2.43 for females indicated that females generally felt that the content of the meetings they attended was relevant, regardless of instructional method. Since no significant interaction occurred, it appeared that preference for method of instruction did not vary by participant sex.

There was one significant interaction which occurred in reference to the relevance of content variable; that occurred between population of city and instructional method. A significance level of .005 indicated that two population categories preferred the structured and two the unstructured (Figure 10). The smallest size category (below 500) appeared to have substantially preferred the unstructured sessions, as did the fourth size category (2,500-4,900). These two groups appeared to explain the majority of the interaction because the gap in mean scores was considerable. The second size category (500-999) and the fifth size category (above 5,000) preferred the structured approach, although by a smaller margin. In the remaining category (1,000-2,499), the content was found to be equally relevant by both groups.

Table 19. Analysis of variance for relevance of content by IDM and participant sex

Sources of Variation	Sums of Squares	DF	Mean Squares	F Value	Significance Level
IDM (structured vs. unstructured)	.337	1	.337	1.894	.169
Q6 (participant sex)	.854	1	.854	4.807	.029*
Interaction (IDM x Q6)	.256	1	.256	1.439	.231
Residual	71.978	405	.178		
Total	73.405	408	.180		

* Indicates significance level of .05 or better.

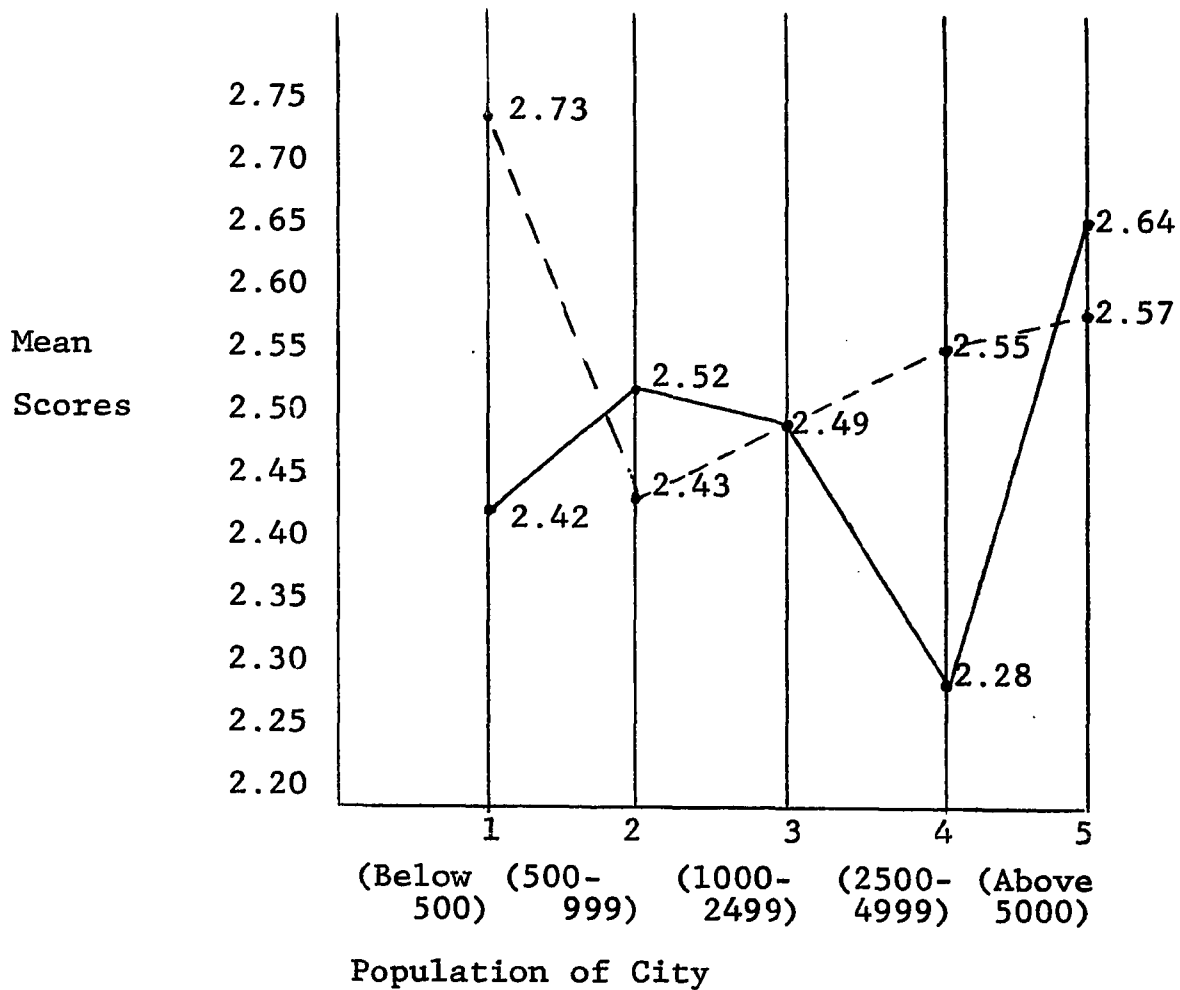


Figure 10. Interaction of instructional method and population of city on the relevance of content variable

In summary, the hypothesis that unstructured group participants would be significantly more positive in their attitudes about the relevance of the content than structured group participants was not supported. It was not supported because there was no significant difference in the two groups' mean scores. The subgroup of participant sex was, however, a factor in influencing attitudes about the relevance of the content. Since no significant interaction occurred, it was not possible to determine if there were differences in attitudes between the sexes on the instructional method. The one significant interaction which did occur indicated that participants from the cities with populations of below 500 and 2,500-4,999 perceived the unstructured program as being more relevant in content while the 500-999 and the above 5,000 groups found the structured sessions more relevant.

Hypothesis #2B

This hypothesis asserted that participants at the unstructured sessions would rate the content of the meetings as being significantly ($p \leq .05$) more meaningful to them than participants in the structured sessions. As shown in Table 20, the mean scores indicated that the unstructured groups found their content more meaningful than the structured group. However, the F values yielded no significant difference, which indicated

Table 20. Mean scores and F value for meaningfulness variable

Subcategories	Structured	Unstructured	F Value	Significance
Tendency to attend educational meetings	2.43	2.34	3.392	.066
Experience in city elected office	2.41	2.37	1.302	.255
Population of city	2.42	2.35	2.752	.098
Participant age	2.42	2.35	2.624	.106
Participant sex	2.42	2.35	3.507	.062

that instructional methodology was not a significant factor in the differences in attitudes of participants about the meaningfulness of their meeting's content.

The analysis of the subgroups revealed that four of the five were not significantly different in their attitudes toward meaningfulness of content. The one exception was participant sex, which, as shown in Table 21, registered a significance level of .022, indicating that male and female participants had significant differences in attitudes about the meaningfulness of the content. The mean scores indicated that female participants were more positive (2.29) about the meaningfulness of their sessions regardless of whether it was structured or unstructured than their male counterparts (2.41). Since no interaction occurred, it appears that preference for the method of instruction was not varied by participant sex.

In summation, the hypothesis that unstructured participants would rate their session content as significantly more meaningful than structured group participants was not supported. While the mean scores for the unstructured participants were lower, they were not significantly different from those of the structured group. The only significant influence on the attitudes toward meaningfulness

Table 21. Analysis of variance for meaningfulness of content by IDM and participant sex

Sources of Variation	Sums of Squares	DF	Mean Squares	F Value	Significance Level
IDM (structured vs. unstructured)	.626	1	.626	3.507	.062
Q6 (participant sex)	.940	1	.940	5.269	.022*
Interaction (IDM x Q6)	.532	1	.532	2.981	.085
Residual	69.071	387	.178		
Total	71.125	390	.182		

* Indicates a significance level of .05 or better.

of the content was participant sex. The analysis indicated that female participants were significantly more positive about the meaningfulness of the content of their meetings, regardless of instructional method, than were male participants.

Hypothesis #3

This hypothesis asserted that unstructured group participants would experience a significantly ($p \leq .05$) greater degree of individual objective reassessment than structured group participants. The mean scores indicated that the unstructured groups underwent more objective reassessment (Table 22). However, the mean scores were so similar that no significant difference occurred between the groups so the hypothesis was not supported. The results indicated that the instructional method was not a significant factor affecting the objective reassessment which took place among participants at either structured or unstructured sessions.

The analysis of the subgroups showed that three of the five were not significant. The two which were significant were population of city and participant age. The population of city was very significant, indicating that size of the city affected the degree of objective

Table 22. Mean scores and F values for objective reassessment variable

Subcategories	Structured	Unstructured	F Value	Significance
Tendency to attend educational meetings	2.02	1.98	.638	.425
Experience in city elected office	2.00	1.97	.557	.456
Population of city	2.01	1.97	.068	.794
Participant age	2.01	1.97	.555	.457
Participant sex	2.01	1.97	.500	.480

reassessment which occurred among all program participants (Table 23). The mean scores as shown in Table 24 indicated that the first three categories were fairly similar in their perceptions of objective reassessment. The main difference in the degree of objective reassessment occurred between the 2,500-4,999 category and the above 5,000 category. The mean scores indicated that the 2,500-4,999 category perceived the greatest degree of objective reassessment to have occurred while the above 5,000 category perceived the least. It appeared that the differences in these two categories accounted for the significance of the population subgroup, although it cannot be stated conclusively with the analysis used in this research project. Since no interaction occurred, it seemed to indicate that preference for method of instruction was not affected by population size of the cities represented.

The second subgroup to yield a significant difference in group means was participant age. As shown in Table 25, the differences in the five age categories were significant in terms of the degree of objective reassessment which was perceived to have occurred. The mean scores shown in Table 26 indicate that the 45-54 category appeared to be significantly different from the two oldest

Table 23. Analysis of variance for objective reassessment by IDM and population of city

Sources of Variation	Sums of Squares	DF	Mean Squares	F Value	Significance Level
IDM (structured vs. unstructured)	.017	1	.017	.068	.794
Q4 (population of city)	4.204	4	1.051	4.216	.002**
Interaction (IDM x Q4)	1.859	4	.465	1.864	.116
Residual	94.993	381	.249		
Total	101.216	390	.260		

** Indicates a significance level of .01 or better.

Table 24. Mean scores for subgroup of population of city

Population Categories	Mean Score
Below 500	1.94
500-999	1.90
1,000-2,499	1.97
2,500-4,999	2.22
Above 5,000	2.16

Table 25. Analysis of variance for objective reassessment by IDM and participant age

Sources of Variation	Sums of Squares	DF	Mean Squares	F Value	Significance Level
IDM (structured vs. unstructured)	.139	1	.139	.555	.457
Q5 (participant age)	4.773	4	1.193	4.773	.001**
Interaction (IDM x Q5)	.779	4	.195	.779	.539
Residual	95.505	382	.250		
Total	101.216	391	.259		

** Indicates a significance level of .01 or better.

Table 26. Mean scores for subgroup of participant age

Age Category	Mean Score
18-34	1.99
35-44	2.03
45-54	2.15
55-64	1.87
Above 65	1.80

age groups. These scores indicated that the 45-54 category perceived the least degree of objective reassessment, while the 55-64 and the over 65 age groups perceived the greatest amount of objective reassessment. The difference between these categories appeared to explain the significance of the age subgroup on participant objective reassessment. Since no significant interaction occurred, it appeared that preference for method of instruction did not vary by the differences in age of the participants on their objective reassessment.

In summary, the hypothesis that participants at the unstructured sessions would experience a significantly greater degree of objective reassessment than structured group participants was not supported. No significant difference was found based on instructional method between the mean scores of the two groups, which indicated that method was not a factor in perceptions about objective reassessment. Two of the subgroups, population of city and participant age, did yield significant differences on the degree of objective reassessment. Therefore, these two subgroups were factors in the perceptions of participants about their objective reassessment.

Hypothesis #4

This hypothesis asserted that unstructured group participants would experience a significantly ($p \leq .05$) greater degree of realization of their premeeting expectations than structured group participants. The mean scores indicated, as shown in Table 27, that structured group participants registered more favorable responses about having premeeting expectations met than unstructured group participants.

The analysis of the subgroups showed that four of the five subgroups yielded no significant difference. Population of the city was the only subgroup which showed a significant difference in mean scores, as shown in Table 28. This indicated that the population of the city was a determining factor in the perceptions of participants about how well their premeeting expectations were met. The mean scores shown in Table 29 indicated that the population categories were mixed in their reactions toward achieving premeeting expectations. The below 500 category was most satisfied while the 1,000-2,499 was the least satisfied. The below 500 category was spread the furthest from the other categories and thus appeared to explain the significant difference although the analysis used in this research does not

Table 27. Mean scores and F values for premeeting expectation variable

Subcategories	Structured	Unstructured	F Value	Significance
Tendency to attend educational meetings	3.48	3.51	.197	.657
Experience in city elected office	3.49	3.52	.621	.431
Population of city	3.49	3.52	.848	.358
Participant age	3.49	3.52	.628	.428
Participant sex	3.49	3.52	.668	.414

Table 28. Analysis of variance for premeeting expectations by IDM and population of city

Sources of Variation	Sums of Squares	DF	Mean Squares	F Value	Significance Level
IDM (structured vs. unstructured)	.141	1	.141	.848	.358
Q4 (population of city)	3.384	4	.846	5.082	.001**
Interaction (IDM x Q4)	1.307	4	.327	1.963	.009
Residual	63.412	381	.166		
Total	68.189	390	.175		

** Indicates a significance level of .01 or better.

Table 29. Mean scores for subgroup of population of city

Population Categories	Mean Score
Below 500	3.36
500-999	3.55
1,000-2,499	3.61
2,500-4,999	3.46
Above 5,000	3.52

clearly delineate that result. Since no significant interaction occurred, it appeared that preference for method of instruction did not vary by population size of cities represented at the meetings.

In conclusion, the hypothesis that unstructured group participants would be more satisfied in terms of having premeeting expectations met than structured group participants was not supported. It was not supported because there was no significant difference in the mean scores between the groups. Population of city was the only subgroup which yielded a significant difference in mean scores. Thus, the difference in population categories was a significant factor in influencing attitudes about having had premeeting expectations met. The mean scores indicated that the cities below 500 population were the most satisfied in having premeeting expectations met, while the 1,000-2,499 were the least satisfied.

Summary of Results

None of the hypotheses were supported because the participants at the unstructured sessions were never significantly more positive in their attitudes about the conduct, content, opportunity to participate, relevance, meaningfulness of content, objective reassess-

ment or having premeeting expectations met. In only two cases -- content of meeting and opportunity to participate -- was the instructional method a significant influence on the attitudes of the participants, and in both cases the results were opposite from what had been expected.

Among the subgroups delineated for this research project, the most consistently significant difference occurred in the population of city group. The population of city was an influencing factor in participants' attitudes about the conduct, content, opportunity to participate, objective reassessment, and the realization of premeeting expectations variables. The results indicated that significant differences existed between population categories in the attitudes on these five variables. The population of city also yielded a significant interaction with instructional method on the content variable. With respect to satisfaction of participants with the content of the meeting, the results indicated that the below 500 population category preferred the unstructured program content, while all other population sizes preferred the content in the structured meetings. The most significant difference occurred in the 500-999 and above 5,000 categories. The other significant interaction of population of city and instructional

methodology was on the relevance of content variable. This interaction was mixed, with the below 500 and the 2,500-4,999 categories perceiving the unstructured and the 500-999 and above 5,000 groups perceiving the structured as more relevant in content. The 1,000-2,500 category was equally satisfied with both instructional methods on the relevance of content.

A second subgroup which was significant on two variables was participant age. The age of participants was significant with respect to the conduct of the meetings and the individual objective reassessment that occurred during the meeting. This indicated that the difference in group means of the age subgroup was a significant factor in the attitudes that participants had about the conduct of the meetings and about the degree of objective reassessment that they underwent as individuals. Since no significant interaction occurred, it appeared that preference of method of instruction did not vary by the age of participants represented at the meetings.

The third subgroup which registered significant differences in mean scores was participant sex. This subgroup yielded significant differences on the conduct, relevance of content, and the meaningfulness of content variables. The results indicated that attitudes of participants on these three variables were significantly influenced according to their sex. Participant sex also yielded

two significant interactions with the instructional method. The first occurred on the content of meeting variable where the results indicated that male participants significantly favored the content at the structured sessions while females were about equally satisfied with both instructional methods. The females who attended the unstructured sessions were more favorable than their male counterparts, with the opposite being the case at the structured sessions. The second significant interaction of participant sex and instructional method occurred on the variable of opportunity to participate. As was the case with content, male participants perceived, by a significant difference, more opportunities to participate at the structured sessions. The females also perceived more opportunities to participate at the structured sessions, though they were more positive about their opportunities to participate at the unstructured sessions than were their male counterparts.

Conclusion

It was the purpose of this chapter to present the results of the analysis of the data gathered through the research instrument. The results were surprising in that none of the hypotheses were supported; in fact, on two variables the reverse of the expected results occurred. The subgroups delineated for this study yielded mixed

results, with city population, participant age, and participant sex demonstrating significance on various variables. On three variables -- content of meeting, opportunity to participate, and relevance of the content, there was significant interaction with the instructional method. The subgroups of tendency to attend meetings and experience in city elected office did not show any significant differences; therefore, they had little or no influence on participants' attitudes.

The next chapter concentrates on a discussion of the results and some explanations for the unexpected results. It also discusses the implications of the results and indicates some possible future research in the area of integrating evaluation and instructional methodology.

CHAPTER V.

DISCUSSION, IMPLICATIONS, AND FUTURE

Introduction

The purpose of this chapter is to present a discussion of the results and implications of the research project. The chapter begins with a brief synopsis of the background of the research project and a summary of the analysis of the results. This will be followed by a discussion of some reasons for the lack of support for all of the hypotheses and implications of the lack of support for both the adult education discipline and the effort to integrate evaluation and instructional method. The chapter concludes with a discussion of possible future research which might come from this research project.

Background on the Research Project

This research project was based on the adult education precept that adult learners are self-directed. Because of this self-directedness, adults are more inclined to accept educational programs in which they play an active part. Based on that assertion, this research project focused on the reactions of adult learners to an instructional approach in which evaluation was

integrated with the instructional process. By integrating evaluation and instructional methodology, the evaluation methods used in adult education can be made more compatible with the precept that adults are self-directed. The specific problem under investigation in this research project was to test the impact on the adult learners' satisfaction with the conduct and content of the meeting, with the relevance and meaningfulness of the content, and with the realization of premeeting expectations when evaluation and instructional method were integrated.

The research was carried out at the 1980 Mayor-Council Orientation program, which was conducted by the Office of Local Government Programs at Iowa State University in conjunction with the Institute of Public Affairs at the University of Iowa, and the Iowa League of Municipalities. The Mayor-Council Orientation program was presented during January and February of 1980 in thirteen locations throughout the state. The thirteen locations were divided into two different groups which received different instructional approaches. One set of meetings involving six locations received a structured instructional approach in which direction of the meeting content was determined by the program instructors. The

second set of meetings was offered in seven locations and involved an unstructured instructional approach in which the participants were involved in selection of the content, as well as the operation of the program. In the unstructured instructional approach, evaluation was built in as part of the normal operation rather than being limited to outcomes of the program, as was the case with the structured approach. The evaluation procedures involved using informal indicators instead of measures of objective attainment in an effort to integrate the evaluation into the instructional method. Through this approach, the participants were afforded the opportunity to determine the flow of the program.

The participants in the research project were all involved in Iowa city government; the most prominent group being elected officials. At the end of the program at each location, participants were asked to fill out a four page questionnaire about their reaction to the session. Data gathered through the questionnaires were subjected to an analysis of variance procedure to test the seven hypotheses. The seven hypotheses asserted that the unstructured group participants would be significantly ($p \leq .05$) more satisfied than structured group participants with the conduct of the meetings, content of the meetings,

their opportunities to participate, the relevance and meaningfulness of the content, their individual objective reassessment, and the level to which their premeeting expectations were met.

The summary of the results from the analysis of the data is the subject of the next section. That will be followed by a discussion of the results to be followed by the implications of the results.

Summary of the Results

As a result of the analysis of variance, none of the seven hypotheses was supported; this indicated that the unstructured group was never significantly more satisfied with their instructional approach. In two of the hypotheses -- content of the meeting and opportunity to participate -- the structured group indicated a significantly more positive satisfaction with their instructional method. Therefore, except in the two cases where the structured approach was significantly more acceptable, the results indicated that instructional-method did not play a major role in determining participant attitudes toward the variables of the conduct, content, opportunity to participate, relevance and meaningfulness of content, objective reassessment, or achievement of premeeting expectations.

In addition to the instructional method, five subgroups were determined to be of possible importance in influencing participants' attitudes. Only three of the five subgroups demonstrated any significant impact on participants' attitudes. The three were population of city, participant age, and participant sex.

The population of city was included as a subgroup because it was thought that smaller cities might be more inclined to respond positively to the structured approach because their concerns could be built in as part of the program. This assumption was based on feedback from numerous educational programs that have been conducted by the organizations involved in this project in which smaller city representatives complained about the large cities dominating educational meetings. Population of city demonstrated significance on the five variables of conduct of the meeting, content of the meeting, opportunity to participate, objective reassessment, and realization of premeeting expectations. Thus, it can be stated that differences in the population of cities was a major factor in indicating the attitudes of participants on these five variables.

Population of city also registered two significant interactions with the instructional methodology. The

first was on the content of the meeting, where the results indicated that the smallest population category (below 500) preferred the unstructured approach, while all other groups preferred the structured. The second size category (500-999) and the largest size category (above 5,000) registered the least preference for the unstructured approach. In all probability, the gap between the below 500 and the 500-999 categories was the major cause of the significant interaction.

The second variable in which a significant interaction between instructional method and population of city occurred was on the relevance of content variable. The interaction indicated that the cities below 500 and those in the 2,500-4,999 categories were widely separated in their reactions. This gap, in all probability, caused the significant interaction.

The subgroup of participant age was the second subgroup to demonstrate significance. The subgroup was included because it was thought that differences in the age of participants might affect their attitudes toward the instructional method. This assumption was based on the belief that older participants, who were further removed from formal educational settings, and who had probably attended more adult educational programs, would prefer the unstructured approach. Participant age was demonstrated to

be a significant influence on attitudes toward the conduct of the meeting and the objective reassessment of individual participants. However, since no significant interactions occurred, it appeared that preference for method of instruction did not vary by participant age.

The third subgroup that demonstrated significance was participant sex. This subgroup was included because it was thought that female elected officials might perceive their needs differently than male elected officials. This assumption was based on the fact that only recently have women in any great numbers become involved in city elected office, and since they still represent a minority of city elected officials, they may have different needs. It has been observed by the instructors involved in this project that female elected officials often seek more specific information than do males. Thus, it was thought that the females might prefer the unstructured sessions.

This subgroup yielded significant differences in means on the conduct of the meeting, the relevance of content, and the meaningfulness of content variables. As a result, it appeared that participant sex had a major impact on the attitudes toward these three variables. In addition to the significance of the subgroup on the three variables, it also registered a significant interaction on the variables of content of the meeting and opportunity to participate.

The results indicated that male participants preferred the structured approach by a considerable margin because it offered more opportunities for them to participate. Female participants were more mixed -- they were about equally satisfied on the content of the meeting, but they preferred the structured sessions on the opportunity to participate variable, although by a narrower margin than males. In both cases, female participants were more favorable toward the unstructured approach than their male counterparts. Therefore, it was in all probability the significant difference in the male participant group means that explained the significant interaction.

Review of Research Procedures

The results from the analysis of the data failed to support any of the seven hypotheses. This raises some interesting questions, particularly in light of the preponderance of evidence in the literature asserting that adult learners preference for open meetings and the generally favorable feedback from the program instructors.

The previous studies conducted with adult learners were universal in their findings that an open, democratic educational setting was preferred (Lippitt and White, 1943; Lewin, 1947; Welden, 1966; Burgess, 1971; McLoughlin, 1971; Cole and Glass, 1977). Therefore, the results of this study were counter to most previous findings.

The program instructors indicated that they preferred the unstructured sessions when questioned at the end of the series. This information was generated through a questionnaire sent to each instructor at the conclusion of the program series (Appendix F). Based on the information from that questionnaire it was clear that the instructors preferred the unstructured sessions because they felt the sessions were fairly consistent in quality and that the participants were more involved in the program in the early stages.

The instructors did note that there were some difficulties in determining when to move from subject to subject. They also indicated that occasionally too much time was spent on a topic, particularly small individual concerns which were not critical to the entire group. Finally, the instructors felt that in some meetings too many topics were identified and it was difficult to hit each one in any depth.

Reaction to the structured session was less favorable because the instructors indicated that there was too much material for the time frame and because participants showed a reluctance to participate until well into the session. Also, instructors indicated that the structured sessions were erratic in quality, with some being very good, while others were very poor.

From the analysis of the data, it is clear that the participants in the 1980 Mayor-Council Orientation program did not respond in a manner consistent with previous studies, nor with the more positive attitudes of the instructors toward the unstructured sessions. Because the results of the analysis were contrary to what was expected, the first reaction was to check for errors in coding, inadequacies in the questionnaire, or procedural mistakes.

After a complete review of the coding, it was determined that it was done accurately and that the proper questions were combined to measure each variable. The questionnaire was reviewed and while some improvements on questions connected to the opportunity to participate variable could have been made to clarify the purpose of the variable, there was nothing found to indicate any enormous skewing of results. Finally, the procedures involved in carrying out the research project were reviewed; again, nothing was found which could explain the unexpected outcomes. The structured sessions were all conducted in a similar fashion, as were the unstructured sessions. Since none of the items appeared to have contaminated the outcomes, the explanations of the results were confined to the data.

Discussion of Results

The results of this research project indicated that participants at the Mayor-Council Orientation sessions

were in general agreement about the program, regardless of instructional method. The differences in reaction between the two groups were so small on five of the seven variables that no significance could be attached to the differences. The two variables on which the groups differed on the instructional method were the content of the meeting and the opportunity to participate.

The general agreement may have resulted because both groups were satisfied with the conduct of their meetings. The data indicated that the participants felt the content was relevant to their positions and had meaning to them as individuals. The groups perceived about the same level of objective reassessment and also about the same level of having premeeting expectations met. These reactions may be attributed to the opportunity for participants to input their concerns into the program, regardless of instructional approach. Unstructured participants were involved from the beginning through the topic identification process and were offered constant opportunities to input their concerns. While the structured groups were not afforded as many opportunities as unstructured group participants, they were offered opportunities to ask questions during the course of the program. Apparently, these opportunities were sufficient for them to feel that the program met their concerns.

The two exceptions to the general agreement came on the content and opportunity to participate variables. On these two variables, the structured groups were more satisfied than were the unstructured group participants. This was a particularly significant finding because of the extraordinary efforts which were made to involve participants at the unstructured sessions in designing the content and in providing opportunities to participate.

Part of the explanation for the results may lie with the fact that both groups were in relative agreement about the program in all its aspects as noted by the closeness of means on the other five variables. The task with reference to the content variable is to explain the reason for movement from rough equivalency to a situation where the structured group participants favored their meeting content by a significant margin.

Two factors that stand out in analyzing the reasons for the significant difference between the groups were evident in the significant interaction which occurred on the two subgroups of population of city and participant sex. The population of city interaction indicated that the smallest category (below 500) favored, by a slight margin, the unstructured sessions, while all the other population categories favored the structured program by

much wider margins. The two categories of 500-999 and 1,000-2,499 registered a wide gap in mean scores from the below 500 category. This gap had a great impact since together these categories represented about 52 percent of the population subgroup.

The subgroup of participant sex registered a significant interaction with instructional methodology. These data were similar to city population in impact because the male participants who made up 77 percent of the sample overwhelmingly preferred the structured sessions. Females were almost identical in their reactions to the content in both instructional methods, but because females made up a small percentage of the total participants, their attitudes could not offset the attitudes of their male counterparts.

The reasons for the overwhelming preference by most population categories and by male participants were not entirely clear. However, if the feedback from the instructors is analyzed, the importance of one particular comment about the content may be a basis for explaining the differences in the participants' attitudes. The instructors indicated that they felt that often the content in the unstructured sessions was too narrow in focus because it dealt with some very individual concerns of particular elected officials. It could well be that attitudes of participants about the unstructured sessions were affected by the same criticism,

thus causing them to give lower ratings to the content. The participants at the structured sessions appeared to have felt that the content was acceptable. The differences between the population categories could be explained by the factor of topics being too specific for the entire audience, particularly if these topics were aimed at the smaller cities (below 500). Experience in other educational efforts has indicated that small city elected officials tend to focus on specific topics; thus they apparently felt that the unstructured approach met their needs on content better than the structured. The result may have been to reduce the favorable reaction of the other categories toward the unstructured sessions. It also seems apparent that the instructors were not totally successful in building the concerns of small cities into the topics of the structured sessions.

A similar result was evident in the interaction of participant sex and instructional method. The reaction of the males indicated that the unstructured sessions were perhaps too specific and therefore missed the topics that this group preferred. The reaction of the female elected officials was consistent with expectations because they seemed much more favorable toward the unstructured approach than their male counterparts. This result was not surprising,

because female elected officials tend to seek more specific information; therefore, the unstructured session would be expected to be more suited to their needs.

The results on the content variable indicated that some modification of an unstructured session might be in order. Such modification could include having a session which dealt with more general topics supplemented by an individualized session for those who were interested in specific information.

The other variable which went counter to expectation were the opportunities participants perceived they had to participate in the program. This result was very unexpected because of the efforts which were made to involve participants throughout the unstructured program. The only explanation which appears to be possible is that the participants at the structured session were satisfied with their opportunities to ask questions throughout the program. It seems apparent that the structured program participants perceived their ability to ask questions as participation equal to or preferable to the activities that were designed into the unstructured sessions. This would explain a no significance result, but it is not sufficient to explain the significant difference in favor of the structured sessions.

It is possible that the variable on opportunity to participate was dependent on attitudes about the conduct and content of the meeting. As such, the lack of significant difference on conduct and the significant difference in favor of the structured session relative to content may explain the significant difference on the opportunity to participate perceived by participants. Additionally, it should be noted that population of city was significant as an indicator of the opportunity to participate variable. While no significant interaction occurred with instructional methodology, it is still conceivable that the differences in attitudes of the various population categories contributed to the overall significant difference in attitudes about the instructional approaches.

Besides the significance of instructional method on the two variables of content and opportunity to participate, some of the subgroups were found to be major influences on participants' attitudes. Three of the subgroups which were delineated for the research project were significant on the variable of conduct of the meeting. The three were population of city, participant age, and participant sex.

In the population of city subgroup, no significant interaction occurred with instructional methodology, so it was not possible to know if the assumption about smaller

units preferring a structured approach was accurate. The mean scores did indicate that the smaller the city, the more favorable their reaction to the instructional method, regardless of type. This indicated that generally the participants from smaller cities were more satisfied with the conduct of the Mayor-Council Orientation program than those from larger municipalities.

Participant age was another subgroup which was determined to be important in explaining attitudes about the conduct of the meeting. Since no significant interaction occurred, it was not possible to indicate if older participants were more favorable toward the unstructured group as was assumed. The mean scores did indicate that the older the participant, the more favorable the reaction to the program regardless of instructional method.

The third subgroup which was significant on the conduct of the meeting variable was participant sex. The results of the analysis on this variable did not indicate if there was a preference by sex for a particular instructional method; however, the mean scores for females and males indicated that females were generally more favorable toward their program regardless of instructional method. It appears that female elected officials were more inclined to appreciate an educational program no matter how it was conducted.

The content of the meeting and the opportunity to participate variables were discussed earlier in this chapter because of the significance of instructional method on those two variables. That discussion noted that a significant interaction occurred between instructional method and city population, but it was not noted that population was also a significant influence on the opportunity to participate variable. The group means indicated that the cities under 500 and those from 2,500-4,999 perceived the most opportunities to participate, while the 500-999 group perceived the least, regardless of instructional method.

The variables of relevance of content and meaningfulness of content were also mixed. On the relevance variable, one significant interaction occurred between the population of the city and the instructional methods. The interaction indicated that the smallest category (below 500) perceived the content of the unstructured sessions as more relevant. The preference of the smallest category for the unstructured session is consistent with the significant interaction registered on the content of meeting variable. This result falsified the assertion that the smallest cities would prefer the structured sessions. Instead, this group preferred the unstructured sessions where items were dealt with in a narrower, more specific manner. The fact that the fourth size category (2,500-4,999) also perceived the unstructured

sessions as more relevant in content was more surprising, since this group preferred the structured sessions on the content variable. It should, nevertheless, be mentioned that they were the weakest in the preference of the structured sessions of those groups which preferred it on the content variable.

Clearly, the smallest sized cities in the sample liked the content of the unstructured sessions. The emergence of the fourth sized category was puzzling but may be attributed to an effect of different sizes of cities perceiving the relevance of content at educational meetings in a parallel way. In other words, the cities under 500 and those between 2,500-4,999 felt that the structured programs failed to answer specific questions which were unique to their particular sizes; thus, they perceived the unstructured approach as more relevant in content. The other groups may have felt that the structured sessions met their needs adequately, so they had no desire for a more open approach. These results indicate that educational programs with city elected officials may need to be altered to allow for both general discussion of topics and open-ended question periods.

The subgroup of participant sex was also a significant factor in influencing attitudes of participants on the relevance variable. The mean scores for the subgroup were consistent with what was found on other variables -- namely,

that males prefer the structured sessions. However, on this variable, females were of a similar attitude, so no significant interaction with the instructional methodology occurred. Apparently, the females who had preferred the unstructured session for content were not overly enthusiastic about its relevance to their position as a city elected official.

On the meaningfulness of the content, no significant interactions occurred, but the subgroup of participant sex was a significant influence. The mean scores indicated that male participants continued to prefer the structured sessions by a wide margin, while the females were about equal in their reaction. The wide margin of preference registered by males toward the structured sessions explains why participant sex was a significant factor in influencing the attitudes of participants on the meaningfulness of the program.

The final two variables of individual objective reassessment and achievement of premeeting expectation did not have any significant interactions with instructional methodology, but a few of the subgroups were significant. On the objective reassessment variable, two subgroups did demonstrate some influence on the participants' perceptions. Population of the city, which continued to be a major factor throughout the results, was again an influence on objective reassessment. The mean scores indicated that

as the population size increased, the less the participants indicated any objective reassessment. The results do not really coincide with any other variables because the mean scores did not show that participants in any one group, such as the below 500 cities, underwent any greater objective reassessment. It appears as if this was a very individualized variable and therefore was not really affected by other variables.

The second subgroup which appeared significant on objective reassessment was the participant age. Again, as with the population of city, there was no consistent pattern. The curve on a plot of the means showed a peak for the third (45-54) category and then declined at each end. The older age categories (55-64 and above 65) did register lower mean scores, indicating more objective reassessment than the younger groups from age 18-44. This was a bit surprising since it might be generally accepted that the older groups were more set in their beliefs and thus less likely to reassess their needs. However, such an idea does not reflect the fact that because of those beliefs, older elected officials may have had to move further from their previous views on how to be an effective elected official than did younger elected officials.

This variable dealt with a more individualized concern, so some caution should be used in applying the results to

other educational programs. The lesson for other educational programs may be to note the need to explore various objectives with audiences which are older and which are from smaller cities.

On the variable of have premeeting expectations met, the only significant influence was the population of city. The analysis of the means indicated that the participants from the smallest size cities (below 500) were most positive in having their premeeting expectations met. The least satisfied were participants from cities of 1,000-2,499. This was consistent with the findings on other variables, which indicated that the participants from the smallest cities were generally more positive toward the meetings, regardless of instructional approach. Since there was no way to know what the participants actually expected prior to the meetings, it was difficult to determine why the population categories differed significantly on the question of having expectations met.

This variable was difficult to determine because it was very individualized; however, the significance of the population of city provided further evidence of the importance of that subgroup on participants' attitudes. The results for this variable indicated that the participants from the smallest cities continued to be the most favorable toward the unstructured approach, followed closely by the participants

from the 2,500-4,999 category. Apparently, these two groups had some common bond which was met by the unstructured program specifically, and the orientation program in general.

Discussion conclusion

The results of the research were unexpected in that they suggested a general lack of enthusiasm for the unstructured program approach. This was particularly pronounced in certain population categories (500-999 and above 5,000) and among male participants. The preference of the two population sizes and the male participants was particularly important on the content of meeting and opportunity to participate variables. On these two variables, the structured group participants preferred their sessions over the unstructured group. This was particularly unexpected considering the efforts which were made to involve the audience in the designing of the content in the unstructured sessions.

While there is uncertainty in the explanation for the unexpected results, there seems to be one factor that may have had a great influence on the outcome. That factor was the specificity of the content at the unstructured programs. This factor was identified by the instructors as a weakness in the unstructured program because it was felt that too much

time was spent on individual issues to the exclusion of discussion of more general issues. This problem may well have caused the participants from the larger cities to feel that the unstructured program was oriented to the needs of the smallest cities (below 500). It may also have resulted in male participants feeling that too much emphasis was placed on individual items which were raised by female participants. In any case, it would explain why, after the special efforts to involve the audience, that the structured approach was preferred with respect to content. There is no doubt that the program for the structured session was more general in its focus.

The results on the opportunity to participate variable were even more unexpected. However, this variable was tied to an impression of the entire meeting, and since content was an important influence on reaction to a meeting, it may have affected the reaction to opportunity to participate.

Except for the content of the meeting and the opportunity to participate, the instructional method did not demonstrate any real impact on differences in group attitudes. Thus, it was concluded that with a few changes designed to overcome the specificity of the content at unstructured sessions, either a structured or unstructured approach is feasible in educational programs directed at city officials.

The subgroups which were delineated for this research project provided some further clues to the attitudes of participants. The population of the city was particularly important, as it registered significant differences on five of the seven variables. The results for the population subgroup indicated that the participants from cities below 500 were generally more favorable toward their meetings and particularly toward the unstructured, as was shown on the variables of content and relevance of content. The fourth population group (2,500-4,999) registered the next most favorable impression, with the second group (500-999) and the largest group (above 5,000) being the least satisfied. It was odd that the groups which favored the sessions the most were separated in terms of size. Apparently, the meetings hit some responsive chord shared by cities under 500 and those in the 2,500-4,999 categories.

Two other subgroups were also influential on the participant attitudes. One was participant age, which was difficult to understand, because it registered on the conduct of the meeting and the objective reassessment variables. These two variables were not particularly related, so different forces must have caused the shared significance on the participant age subgroup. What was clear was that older participants were generally more

satisfied with their meetings regardless of whether they were structured or unstructured.

The other subgroup which demonstrated significance was participant sex. This subgroup demonstrated fairly clearly that male participants were less likely to be satisfied with the orientation program and particularly unenthusiastic about the unstructured sessions. Females were more positive in their attitudes on all the variables where sex was a significant factor. The results on the content of meeting and opportunity to participate variables where significant interaction took place between participant sex and instructional method clearly showed that female elected officials were more positive toward the unstructured session than their male counterparts.

Implications

It would appear from the fact that none of the hypotheses was supported that there is significant doubt about the adult education precepts on self-directed learners and the effort to create instructional methods which integrate evaluation as a normal operating part of the implementation phase. However, before accepting the results of this research project as a major new discovery, it should be noted that some limitations on the project are present. Two major limitations of this research are: first, the limitation

of application beyond city elected officials in Iowa and, secondly, the lack of information on specific evaluation approaches which are most appropriate for integration with instructional methodology.

The limitation of the research population to Iowa city elected officials is important because this group may be different from other adult learners because of their position as public officials. Because the position they hold demands a wide range of knowledge, the structured program may have been better suited, since it dealt with topics in a general manner. It is possible that the unstructured approach could be altered to reduce the time for individualized topics and thus become more acceptable.

With respect to the limitation of evaluation methods, it was not possible to experiment with various methods without contaminating the similarity between the seven unstructured sessions. Certainly future research efforts could utilize different measures which might help in overcoming the problems of moving from topic to topic encountered in the unstructured sessions.

These two limitations are important to remember when analyzing the data. However, the limitations do not restrict the usefulness of the research as being another step in testing how adult education can better serve its clientele. As such, the next two parts of this discussion

focus on the implications of the research to adult education and to the integration of evaluation and instructional methodology.

Implications for adult education

The results of this study were counter to earlier studies on the attitudes of adults about their educational programs. Other studies generally showed that adults prefer more open types of educational experiences. Most previous results would be comparable to the conduct and content variables in this study; therefore, the results from this research do raise some questions. The primary question is whether all adults prefer to have open educational programs or if, in fact, some particular adult groups prefer a more structured approach. From the results of this study, it appears that there is evidence that other approaches besides open-ended meetings might be preferred by some adults.

This research project differed from earlier studies because it attempted to probe deeper into the attitudes of participants about an educational program. This was accomplished by measuring the perceptions about relevance and meaningfulness, the degree of objective reassessment, and the realization of premeeting expectations. The results from these additional measures provided additional support

to the findings that this particular group of adults did not necessarily prefer a more open, democratic approach.

Indications from the results of all the variables in this study showed that instructional method may not by itself be as important as efforts to define audiences and to match instructional method to the audience. The results of the analysis of subgroups was revealing in that certain groups seemed to prefer a particular instructional approach. This indicated that adults, even within a group such as city elected officials, are very different in their reaction to an adult educational program. Cities of different sizes face different problems and this appears to alter the reaction to the type of instructional method. More likely, it indicates that if an unstructured program is selected, it should not be used unless the group is more homogeneous. For example, cities in a narrow population band should be grouped for an unstructured program. If faced with a mixed situation, some accommodation should be made to get general concepts identified and then have a period to deal with more specific subject matter, perhaps by dividing into a smaller, more homogeneous group.

The implication for adult education may be to raise a concern about assuming that all adult audiences are more satisfied with open sessions. The results also

appear to imply that even when it is possible to lump groups together because of a common characteristic, it is not sufficient to assume similiarity in their response to instructional method.

A more fundamental question raised by the results is whether adults are self-directed or if, in fact, they are dependent on others for direction. The results of this research do not really undermine the concept of self-directedness, because the total attendance at this meeting represented only one-third of the potential audience of city elected officials. Clearly, those who sought information and assistance had to be self-directed enough to attend. The effect of this research was to indicate that in certain circumstances, such as being a newly elected official, adults may have limits to their self-directedness. In other words, they came to the meeting on their own, but once there they were not necessarily in need of more choices. Thus, the structured session was as acceptable as the unstructured, because both generally offered them whatever they were seeking.

In summary, the implication for adult education is to raise a note of caution about assuming that all adults are the same in terms of the instructional approach they prefer. The second question raised by this research project, while pertinent to the adult education discipline,

is more specific. That is the question of integrating evaluation and instructional method.

Implications for Integration of Evaluation and Instructional Methodology

As previously noted, the evaluation indicators used in this research project do not constitute the entire universe of evaluation indicators. Therefore, other educational efforts should be designed with indicators which fit a specific educational plan. The indicators used in this research project consisted of: (1) questions asked by participants, (2) comments and opinions offered by participants, (3) participants' general attentiveness to the discussion, and (4) results of actual inquiries about additional questions or items. These indicators were chosen because they fit naturally into the program and were believed to be less obtrusive than other techniques such as written feedback.

The results of feedback from instructors about the operation of the sessions indicated that the evaluation indicators which were used were unobtrusive but not totally effective. The instructors expressed some reservations about the timing of changes between topics, noting that too much time was spent on certain topics. The over-concentration on certain topics resulted in some discussion degenerating into very specific questions

about individualized concerns. This may have been a contributing factor in the participants' reaction to the unstructured program. Regardless of this drawback, the experience from this research project indicated that it was feasible to integrate evaluation and instructional methodology. The main concerns are the choice of indicators and the application to decisions about program changes.

The implication for integrating evaluation and instructional method is generally good. Certainly this research project indicated that it is feasible, with improvements, to utilize integrated evaluation in some form. It is even possible that evaluation could be integrated into a structured approach if the structured approach is flexible enough to allow some movement depending on audience questions and reactions.

There was no indication from this research report that efforts to integrate evaluation had any detrimental effect on the unstructured program. Obviously, there is room for improvement in execution of the evaluation, but the concept is still sound. The applicability of the whole unstructured approach was brought into question as the preferred route for adult education, but the results did not indicate that efforts to integrate evaluation and instructional method should be abandoned.

Future Research

This study is part of a continuing effort in adult education to discover methods which will help educational programs meet learners' needs. Therefore, the conclusions about future research emanating from this study are numerous.

Perhaps the most fundamental possibility for future research is in the sharpening of research techniques to measure informal evaluation indicators. As indicated by the literature cited in this study, there is a growing concern that alternatives to the formal objective-based measures must be found if evaluation is to be consistent with adult education precepts. These alternatives are needed because the over-emphasis on formal outcome measures threatens to undermine the natural tendencies of adult learners to want control over their educational experiences. This study was an attempt to go beyond the call for action to the actual testing of an alternative evaluation approach. The results raised some interesting questions which clearly demand a replication study. Even more importantly, this study should be only one of many efforts to sharpen the research in adult education on the techniques to measure informal evaluation indicators. Such sharpening will aid in matching adult education theory and evaluation methodology.

The first specific research to follow this study should be a replication study. Since the Mayor-Council Orientation program is offered every two years, such an opportunity will present itself in January 1982. The purpose of any replication study would be to check the results of this research project. If the results coincided, it would give a stronger indication, at least for Iowa city elected officials, that unstructured approaches are not necessarily better. If the results were contrary, it would indicate some flaws in the research which are not now apparent. A replication study would also offer opportunities to perfect the research instrument.

Besides a replication study, another spin-off research project could be to test the integration of evaluation and instructional methodology with other adult groups to see whether the population for this research project was unique in its reaction.

Another possible path could include the testing of different evaluation indicators in a search for some which would offer smoother transitions in unstructured programs. This would be designed to correct some of the operational problems which occurred with the indicators used in this research project.

Still another could involve the integration of evaluation with more structured approaches. This would assist in building evaluation into the educational program even if more structure is warranted.

Finally, an area that holds ample room for research is to develop evaluation techniques for all phases of the educational process. This research focused on the implementation phase but the other phases of the educational process are also in need of review in terms of the evaluation methods. Such research could be based on the model which served as the basis of this research project (Figure 4). That model envisions evaluation being integrated into each phase, with the evaluation approach being dictated by the needs of each phase.

Conclusion

This research project was designed to test the effects of different instructional methods on adult learners' attitudes about an educational program in which they are involved. The results provided some surprises because they were counter to what had been discovered in similar research on participants' attitudes. While the results raised some questions about assumptions in adult education, they did not necessarily refute the idea of adults being self-directed. What the results

did show was that for the population involved in this project, the open, democratic approach was not preferred by all participants. Because of the nature of the research population, further study is needed to check the results of this study. The purpose of such research would be to find out if this particular adult audience is different from other adults in terms of the preferences toward instructional approach.

Finally, this study continues a trend in adult education to find ways of better serving adult learners by testing methods of evaluating educational experiences during the operation of the experience. Success in this endeavor will result in improvements in the quality of educational experiences for adult learners.

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APPENDIX A .
STRUCTURED AND UNSTRUCTURED
SESSION OUTLINES

MAYOR-COUNCIL ORIENTATIONUNSTRUCTURED SESSIONS

** Critical items for which handouts will be developed, or a presentation will be made if it has not come up during the meeting

Key:

IPA - Institute of Public Affairs
 LIM - League of Iowa Municipalities
 LGP - Local Government Programs

Items:

Introduction to Public Life

1. Role of Mayor-Council } (IPA)
 - a. Policy-making function }
2. Personal liability } (LIM)
3. Conflicts of interest }
4. Ways of getting citizen input (LGP)
5. Using boards and commissions (IPA)
- **6. Where to get assistance (handout) (IPA)

Operating as a Decision-Making Body

1. Conducting effective meetings } (IPA)
 - a. Role of mayor }
 - b. Use of agenda and minutes } or
 - c. Parliamentary procedure } (LIM)
 - d. Can have "I Move That" for } will be supplied
 - sale (cost 50¢) } by LGP
2. Open Public Meetings }
 - a. Hit critical part for } (LIM)
 - mayors and councils }
 - b. Discuss recent A.G. opinions } and District Court decision }

- **3. Use of Ordinances and Resolutions } (IPA)
 - a. When to use and how to adopt }
 - b. Recodification requirements (Possible hand-out - IPA)

Council and the Administrative Staff

- 1. Role of the council in administration } (LGP)
- 2. Relationships between council and clerk }
 - a. assertiveness training for council }
- 3. Hiring a city manager/administrator (possible administrator as resource person)

Personnel Management

- 1. Procedures for hiring and promoting employees } (LGP)
 - a. Civil rights compliance }
- 2. Developing personnel procedures }
 - a. Job classification }
 - b. Job descriptions }
- 3. Building a good employer }
 - a. Developing training programs }
- 4. Preparing for Collective Bargaining }
 - a. Preparing for negotiations }
- 5. Unemployment } (LIM)
 - a. Actions to take if claims are made }
 - b. Should city be reimburseable or contributory? }

Financial Aspects

- **1. Mayor-Council Role in Budget Preparation } (LGP)
 - a. Utilization of objectives }
 - b. Use of budget calendar (handouts) }
 - c. Legal Opinion on Budget Expenditures (handout) }
- 2. Developing an Investment Program } (LIM)
 - a. Understanding Why to Invest and How (handout by Bob Van Daalen) }

- 3. Using Federal Funds } (IPA)
 - a. Tips on securing funds
 - 4. Capital Improvements Planning and Budgeting } (LGP & LIM)
- Community Development
- **1. Legislation on community development } (IPA)
 - 2. Description of community development programs
 - 3. Developing industrial parks
 - 4. Zoning and subdivision ordinances
 - 5. Inspection } (LIM)
 - a. Recent court decisions
- Miscellaneous Items
- 1. Risk management } (LIM)
 - 2. Elections and filling vacancies
 - **3. 90 day survival kit (handout) } (IPA)

Instructional Method

The unstructured sessions are designed to maximize the opportunity for participants to influence the course of the session. The session will open with an exercise where the participants will identify subject items they would like covered. Hopefully, the promotional material will have helped them think about some concerns. If the initial exercise does not elicit responses, the instructors may need to make some broad suggestions and then have the participants specify the particular course of the discussion, or if that does not work, the audience could be broken into small groups and have these groups identify subjects.

Besides identifying subjects, participants will be asked if they wish to divide for purposes of discussion. (i.e., perhaps size of community would be a determinant or position such as a mayor's groups and council group). The instructors should specify any topics on which they cannot offer material. In such a case, a general discussion with the participants might be useful.

As identified subjects are dealt with, participants should be encouraged to ask questions and define side issues they would like to explore. This aspect may need to be somewhat limited if there is a lot of other items identified for discussion.

Subjects will be assigned to instructors based on their ability to handle the topic. If other instructors or participants have contributions, these should be encouraged.

If the initial list of items are exhausted, the process of identification can be repeated. Before the supper break, participants should be encouraged to think about additional items for inclusion into the discussion. After supper, an opportunity for additional items to be identified should be made. Initial process could be repeated.

Toward the end of the session (about 45 minutes to a half hour before (8:45), the instructors should identify any critical items that have not been discussed. These items should then be dealt with by the appropriate instructors.

Finally, about 8:45, the program should be concluded and the evaluation conducted. Evaluation will consist of a questionnaire which will elicit responses on attitudes about the program content and the instructional methodology.

Locations

January 9 - Ottumwa	January 17 - Ft. Dodge
January 10 - Sioux City	January 28 - Red Oak
January 15 - Dubuque	January 30 - Creston
	January 31 - Waterloo

MAYOR-COUNCIL ORIENTATIONSTRUCTURED SESSIONS

Program Objectives

At the end of the program, participants will be able to:

- * Identify at least two sources for assistance when they have a problem pertaining to their official function
- * Identify at least two roles for the Mayor and Council
- * Specify at least two critical factors in making a decision about hiring a city manager
- * Specify at least two significant factors in building a good working relationship with the administrative staff
- * Identify at least one situation in which they could be held personally liable for their actions
- * Identify the objective setting function as the major input the Mayor and Council have in budget preparation process
- * Identify at least two situations in which a closed meeting is legally acceptable
- * Identify at least one positive effect of using proper parliamentary procedures

Key

IPA - Institute of Public Affairs
LIM - League of Iowa Municipalities
LGP - Local Government Programs

Program Outline

I. Resources for City Officials

3:15-3:45

- A. Brief introduction of the League of Municipalities, Institute of Public Affairs and the ISU Extension Service
 - B. Notation of other sources such as Regional Association of Governments and State Offices
 - C. Invitation for participants to look at technological innovations available to cities
 - D. Brief discussion of the securing and use of federal funding sources
- (IPA)
- (IPA)

II. Roles of the Mayor-Council

3:45-5:00

- A. Begin with noting that the mayor and council have an implied contract with various groups
 - B. First Group -- Taxpayers
 - 1. Establish city policy
 - a. Responsible use of ordinances and resolutions
 - 2. Implementation of Policy
 - a. Necessity of building a working relationship with administrative staff
 - b. Being assertive in providing direction to staff
- (IPA)
- (LGP)

- c. Determining the level of administrative support
 - 1. Should a city manager be hired? (LGP)
- d. Determine degree of delegation to administrative staff

- C. Second Group -- Recipients of Service
 - 1. Provide services that city promises and a sufficient level (LIM)
 - a. Inspections (example)

- D. Third group -- employees
 - 1. Develop and implement a personnel system
 - a. Develop a classification system and job description
 - 2. Work at building good employees (LGP)
 - a. Develop orientation and training sessions
 - 3. Represent a management point of view in collective bargaining
 - a. This provides employees with a clear indication of what to expect

- E. Fourth Group --
Boards and Commissions
 - 1. Clearly indicate their function and power
 - 2. Utilize their input to broaden support for policies
- (IPA)

Dinner -- 5:00-5:45

- 5:45-6:15 III. Personal Side to Being an Elected Official
 - A. Potential conflicts of interest
 - B. Potentials for personal liability
 - IV. Opportunities for Action
 - A. Open Public Meetings
 - 1. Cover recent A.G. opinions and District Court decision
 - 6:15-7:45 B. Program Budgeting
 - 1. Policy making role
 - a. Utilize objectives
 - 2. Use budget calendar
 - C. Investment of Public Funds
 - 1. Why Invest? (handout by Bob Van Daalen)
 - 7:45-8:15 V. Conducting Effective Meetings
 - A. Use of agenda and minutes
- (LIM)
or
(LGP)
(IPA)

		B. Use of parliamentary procedures	}	(IPA)
		1. Role of the mayor		OR (LIM)
8:15-8:30	VI.	90 Day Survival Kit	}	(IPA)
		A. Tips on Getting Through the First Few Weeks (handout)		
8:30-8:45	VII.	Questions and Answers	}	(ALL)
8:45-9:00	VIII.	Evaluation	}	(LGP)

Instructional Method

The structured sessions will follow the program outline in terms of subjects presented; however, there will be opportunities for participants to ask questions during the presentations. Presentation methods will be determined by the instructor who is responsible for various segments. The meetings will begin at 3:15 p.m. and run until 9:00 p.m., with a 45 minute break for dinner.

At the conclusion of the meeting, the participants will be asked to evaluate the session by completing a questionnaire. Participants will be asked to respond to questions which will provide feedback on their attainment of program objectives and to questions about their attitudes toward the subject content and instructional methods.

Locations

January 16 - Spencer

January 21 - Davenport

January 22 - Burlington

January 23 - Mason City

January 24 - Cedar Rapids

January 29 - Des Moines

APPENDIX B.
TOPIC IDENTIFICATION SHEET

1980 Mayor-Council Orientation Program

1. Please list the topics you would like discussed at this meeting.

2. If additional items occur to you during the program, please list them below:

APPENDIX C.
UNSTRUCTURED SESSION TOPICS

TOPICS FROM UNSTRUCTURED SESSIONS

Open Public Meetings

- How to call a special meeting
- When to have a closed session
- Types of records
- What constitutes a meeting
- Communicating with citizens
- Agendas
- Committees
- Decisions on employees

Rural Fire Contracts

- Bookkeeping procedures

Sources of Revenue

- Grants (energy, water/sewer, housing demolition, recreation)
- Bonds
- Borrowing money
- Federal and state shared revenues (limitations on shared revenues)
- Revenue sharing (why do cutbacks occur) (future of revenue sharing)
- Property tax exemptions
- Road use tax
- Property tax valuation
- City sales tax
- Hotel/motel tax
- 8.10 limit
- Private funding sources

General Finances

- Managing finances
- Monthly reports
- Investments
- Debt limit
- Capital expenditures (setting up building fund)
- Contingency fund
- Use of tax dollars (leasing private parking lot) (funding private airport)
- Audits
- Bid letting

Budgeting

- Process involved
- Amendments
- Working balance
- Budget hearing

Powers of Mayor

- What are the duties
- Appointment power
- Relationship with police
- Duties of mayor pro-tem
- Voting power
- Delegation of powers
- Relationship with council
- Relationship with clerk

Duties of the Council

- Dealing with boards and commissions
- General responsibilities
- Working with clerk
- Working with treasurer
- Council internal relationships
- Who appoints deputy clerk
- Working with manager

Parliamentary Procedures

Legal Liabilities of Mayor and Council

- Personal liability
- Errors and Omissions
- Iowa Gift Law

Choosing Consultants

Employee Relationships

- Determining salaries
- Job descriptions
- Workman compensation

Annexation (where to start) (City Dev. Board) (subdivision)

Zoning

Commissions
Ordinances

Governmental Grants

Getting federal monies
List of resources
How to deal with federal agencies
(EPA-DEQ) (CETA) (Iowa Rural Dev.) (handicap)
(Grants for small towns)

Resolutions/Ordinances/Recodification

What are ordinances?
What is a resolution?

Insurance

How to buy

Contract Law Enforcement

City-county law enforcement centers
Law enforcement training centers

Garbage

Pick-up services
Billing

Dogs

Unkept property

City parks

Who controls

Money for Parks and Recreation

Purchases of land

Accident Report Forms

Intergovernmental Agreements

Ambulance services

Regional Government/Home Rule

Dealing with the Media

Getting information to the public

Funding for Public Transit

Industrial Development

How does a small city get industry?

Pollution Control (water)

Police Activities

Civil Service

Water Floridation

Housing Rehabilitation

Youth Drinking Problems

APPENDIX D.
RESEARCH INSTRUMENT

MAYOR-COUNCIL QUESTIONNAIRE

The information from this questionnaire is being used in a research project on instructional methods. The answers you provide will not be identified with you since no attempt is being made to identify individuals. Your voluntary participation in this research effort is appreciated.

PART I.

To assist with the analysis of the information from this evaluation, the following personal data will be useful. Please check (X) the appropriate box for each question.

1. How much of the meeting were you able to attend?
 - All of it
 - Only the afternoon session
 - Only the evening session

2. How often do you seek information by attending educational meetings?
 - Often
 - Occasionally
 - Rarely

3. Please indicate your experience in city government elective office:
 - I was elected for the first time last fall
 - I was re-elected last fall
 - I was not up for election last fall

4. Please indicate your city's population category:

<input type="checkbox"/> Below 499	<input type="checkbox"/> 2,500-4,999	<input type="checkbox"/> 25,000-49,999
<input type="checkbox"/> 500-999	<input type="checkbox"/> 5,000-9,999	<input type="checkbox"/> Above 50,000
<input type="checkbox"/> 1,000-2,499	<input type="checkbox"/> 10,000-24,999	

5. Please indicate your age category: (optional)

<input type="checkbox"/> 18-24	<input type="checkbox"/> 55-64
<input type="checkbox"/> 25-34	<input type="checkbox"/> 65-74
<input type="checkbox"/> 35-44	<input type="checkbox"/> 75-above
<input type="checkbox"/> 45-54	

6. Please indicate your sex: (optional)
 - male
 - female

PART III

For the following statements please indicate your reaction by circling a number from 1 to 5 that best demonstrates your opinion.

In all cases 1 represents the lowest rating and 5 the highest rating.

For all questions in this part the ends of the scales are as follows:

1 - UNSATISFACTORY

5 - VERY SATISFACTORY

The other numbers represent degrees between the two ends.

For example:	
The instructor's knowledge of the topic was:	1 2 ③ 4 5

1. In terms of helping me in my elected position, the information presented during the meeting was:	1 2 3 4 5
2. The presentations made at the meeting were:	1 2 3 4 5
3. Opportunities for the audience to select topics for discussion during the meeting were:	1 2 3 4 5
4. The Mayor-Council orientation program met my expectations:	1 2 3 4 5
5. Instructor attitude toward audience participation was:	1 2 3 4 5
6. The topics discussed at the meeting will be useful in operating city government:	1 2 3 4 5
7. The opportunities for the audience to select the method of presentation were:	1 2 3 4 5
8. The atmosphere of the meeting was:	1 2 3 4 5
9. In comparison to other educational meetings, the Mayor-Council meeting was:	1 2 3 4 5

PART IV.

For the following statements please indicate your level of agreement or disagreement by circling the appropriate response:

Responses:

SA - Strongly Agree

A - Agree

N - Neither Agree or Disagree

D - Disagree

SD - Strongly Disagree

- | | | | | | |
|--|----|---|---|---|----|
| 1. The topics discussed at the meeting will help in solving many of my city's problems: | SA | A | N | D | SD |
| 2. During the meeting, I discovered new ideas that I was previously unaware of or thought unimportant: | SA | A | N | D | SD |
| 3. I was satisfied with the choice of topics discussed at the meeting: | SA | A | N | D | SD |
| 4. The topics covered at the meeting will help me be a better elected official: | SA | A | N | D | SD |
| 5. The expectations I had for the meeting were met: | SA | A | N | D | SD |
| 6. I feel like I wasted my time in attending the meeting because my interests and concerns were not discussed: | SA | A | N | D | SD |
| 7. Topics which are more critical to cities should have been discussed: | SA | A | N | D | SD |
| 8. As a result of attending the Mayor-Council meeting I discovered additional responsibilities that I have as a city elected official. | SA | A | N | D | SD |
| 9. During the meeting additional topics that I wanted to discuss arose. | SA | A | N | D | SD |
| 10. I was <u>not</u> particularly satisfied with the way in which the topics were presented. | SA | A | N | D | SD |

APPENDIX E.
MAYOR-COUNCIL ORIENTATION BROCHURE

BURLINGTON & DAVENPORT MEETINGS
Mark Settle
Davenport Extension
Area Office
2435 E. Kimberly Rd.
Alpine Centre, South
Bettendorf, Ia. 52722
Ph: (319) 359-1644

CEDAR RAPIDS MEETING
David H. Hammond
Cedar Rapids Extension
Area Office
Box 1427
4401 6th St. Rd. SW
Cedar Rapids, Ia. 52406
Ph: (319) 363-9637

CRESTON MEETING
Robert Cole
Creston Extension Area
Office
501 W. Taylor
Creston, Ia. 50801
Ph: (515) 782-7066

DES MOINES MEETING
Worm Higge
Des Moines Extension
Area Office
Rm. 225
7839 Marle Hay Rd.
Des Moines, Ia. 50301
Ph: (515) 276-4597

DYERSVILLE MEETING
Charles Colvin
Dubuque Extension
Area Office
1890 John F. Kennedy Blvd.
Dubuque, Ia. 52001
Ph: (319) 582-3466

FT. DODGE MEETING
Clarence E. Rice
Ft. Dodge Extension
Area Office
5 N. 16th Street
Ft. Dodge, Ia. 50501
Ph: (515) 576-7257

MASON CITY MEETING
Russ Kingsley
Mason City Extension
Area Office
Willowbrook Plaza
1631 4th St. SW
Mason City, Ia. 50401
Ph: (515) 424-5432

OTTUMWA MEETING
William D. Byers
Ottumwa Extension
Area Office
Industrial Airport
Ottumwa, Ia. 52501
Ph: (515) 682-8324

RED OAK MEETING
Wayne C. Kobberdahl
Council Bluffs Extension
Area Office
2 Northcrest Dr.
Council Bluffs, Ia. 52801
Ph: (712) 328-0077

SIOUX CITY MEETING
Tim Borich
Sioux City Extension
Area Office
323 W. 7th
Sioux City, Ia. 51103
Ph: (712) 258-0651

SPENCER MEETING
Louie O. Hansen
Spencer Extension
Area Office
1823 Highway Blvd.
Spencer, Ia. 51301
Ph: (712) 262-4843

WATERLOO MEETING
Clair E. Hein
Waterloo Extension
Area Office
335 Fletcher Ave.
Waterloo, Ia. 50701
Ph: (319) 232-6654

DATES AND LOCATIONS
FOR MEETINGS

Date	Location	Date	Location	Date	Location
Jan. 9	Holiday Inn Off Hwy. 63-34 (south of town) Ottumwa	Jan. 17	Holiday Inn Hwy. 169 South Ft. Dodge	Jan. 28	Gold Crown Inn 211 Oak St. Red Oak
Jan. 10	Biltmore Inn Hwy 20 (East) Sioux City	Jan. 21	Davenport Vocational Center 1002 W. Kimberly Rd. Davenport	Jan. 29	Baker's Colonial Cafeteria Hwy. 69 North of I-80 (Exit at 14th Street) 5030 N.E. 14th Street Des Moines
Jan. 15	Cardinal Lounge Old Hwy. 20 (across from Beckett Motor Co.) Dyersville	Jan. 22	Southeast Iowa Com- munity College West Burlington	Jan. 30	Elks Lodge Club Room 403 W. Montgomery Creston
Jan. 16	Stubs Ranch Kitchen Hwy. 71 Spencer	Jan. 23	North Iowa Area Com- munity College Building A, Rm. 107 Mason City	Jan. 31	Heideman House 2112 Kimbal Waterloo
		Jan. 24	Grant Wood Area Educ. Bldg. 4401 6th St. S.W. (Hwy.218) Cedar Rapids		

mayor-
council
orientation

sponsored by:



Local Government Program
Iowa State University
Extension Service



Institute of Public Affairs
University of Iowa



MAYOR-COUNCIL ORIENTATION

CONGRATULATIONS ON YOUR ELECTION TO CITY GOVERNMENT!

As a newly elected mayor or councilmember you may have many questions about the responsibilities of your new office. If so, this announcement is of critical importance to you.

As a service to city government in Iowa, the Iowa League of Municipalities, the Institute of Public Affairs at the University of Iowa, and the Iowa State University Extension Service would like to invite you to an orientation session for newly elected mayors and councilmembers.

The Mayor-Council Orientation program has been a tradition in Iowa since 1968. This year, the program will be presented in thirteen locations throughout the State to provide an opportunity for you to attend (SEE THE BACK OF THIS BROCHURE FOR THE SCHEDULE). While the program is primarily designed for newly elected members, re-elected mayors and councils as well as carryover office holders are also welcome.


The subjects that will be discussed are those identified as critical to elected city officials. To help make the program responsive to those attending, it will be beneficial if you would write some questions and bring them with you to the orientation session.

Some examples of possible areas in which you might have questions include: the role of the mayor and council; relationships between the council and administrative personnel (including the city clerk); how to conduct effective meetings; Iowa's Open Public Meetings Law; and, of course, the broad range of financial affairs -- such as budgeting, cash flow, and investment. These are only a few possible areas in which you may have questions.

Please help make the orientation a success by bringing your questions and sharing them with other city elected officials. In fact, why not start by using the rest of this page to write some questions?

If you need more information on the meeting, you can contact your area extension office personnel listed in this brochure.

Hope to see you at one of our meetings!

 and justice for all
Programs and activities of Cooperative Extension Service are available to all potential clientele without regard to race, color, sex or national origin. Anyone who feels discriminated against should send a complaint within 180 days to the Secretary of Agriculture, Washington, D.C. 20250.

APPENDIX F.
INSTRUCTOR QUESTIONNAIRE

INSTRUCTOR'S EVALUATION - 1980 MAYOR-COUNCIL ORIENTATION

This questionnaire is designed to help the evaluation of the 1980 Mayor-Council Orientation by providing the instructors a chance for input.

On any question where the space is not sufficient for your response either write on the back or add sheets.

The list of locations and dates should help you recall the meetings.

UNSTRUCTURED

_____ Ottumwa - January 9
 _____ Sioux City - January 10
 _____ Dyersville - January 15
 _____ Fort Dodge - January 17
 _____ Red Oak - January 28
 _____ Creston - January 30
 _____ Waterloo - January 31

STRUCTURED

_____ Davenport - January 21
 _____ Burlington - January 22
 _____ Mason City - January 23
 _____ Cedar Rapids - January 24
 _____ Des Moines - January 29
 _____ Spencer - February 12

1. Using the above list please place a check (✓) by the locations where you participated.

2. Please give your general impressions of the two instructional methods used in the Mayor-Council meetings:

Unstructured:

Structured:

6. Below is a list of the meeting locations in chronological order. Ignoring the methods, please rate the meetings in consecutive order from the best to worst using the number 1 as the best and working down from there. Only rate those meetings in which you participated.

Ottumwa - January 9	_____
Sioux City - January 10	_____
Dyersville - January 15	_____
Fort Dodge - January 17	_____
Davenport - January 21	_____
Burlington - January 22	_____
Mason City - January 23	_____
Cedar Rapids - January 24	_____
Red Oak - January 28	_____
Des Moines - January 29	_____
Creston - January 30	_____
Waterloo - January 31	_____
Spencer - February 12	_____

7. I would appreciate any other comments you might have on the meetings. Thank you for helping with the sessions and in filling out this questionnaire.