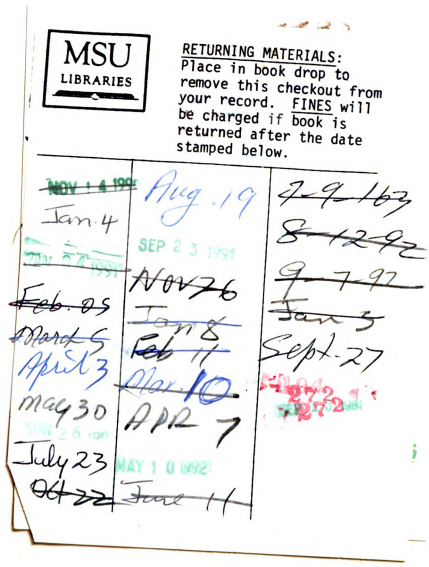

ABSTRACT

ADULT LEARNERS' PEDAGOGICAL EXPECTATIONS ABOUT
LEVEL OF FORMALITY AND TYPE OF LEARNING EXPERIENCE

By

Rodney Byron McKean

Adult education is a major contributor to development efforts around the world. In essence, development is a process of liberating people from those obstacles that limit them from achieving their full potential as human beings. Current thrusts in adult education focus heavily on self-directed learning in an attempt to be more liberating. However, sometimes adult learners react negatively to attempts to involve them in self-directed learning. Such reactions are evidence of a potential discrepancy between activities of self-directed learning and pedagogical expectations.

Pedagogical expectations are culturally influenced ideas people have about the kinds of activities that provide meaningful learning. The literature on ethnopedagogy suggests that for the most meaningful learning, educators need to provide educational activities that are recognizable to the students as valid learning activities. The purpose of this study was to explore adult learners' pedagogical expectations about level of formality and type of learning experience of an instructional activity. These were selected because of their relatedness to self-directed learning. The study looked into the relationship between these pedagogical expectations and the subjects' amount of formal schooling.

In the spring of 1977, 225 adults from various adult education programs in southern lower Michigan responded to a research instrument

designed to measure degree of expectation of learning for various instructional settings. The subjects responded to photograph and tape recording representations of nine instructional activities by answering the question, "Do you think these people are learning something important?" The question was answered by marking a five-point Likert-type scale ranging from "no" to "yes." Each of the nine pictures in the instrument represented a combination of one of three levels of formality (Low, Medium, High) and one of the three types of learning experiences (Input, Self-Awareness, Sharing). The subjects of the study ranged in age from fifteen to 72 with the mean age being 38, most had at least a high school education, half were from Protestant churches, and most were white.

The results of the analysis of variance of the data showed two major main effects and some significant interactions. It was found that the subjects considered Low and Medium formality settings more valid that High formality settings. It was also found that the subjects considered Sharing and Self-Awareness experiences more valid than Input experiences. An interaction was found between amount of formal schooling and expectations about level of formality. There was an apparent trend away from High formality settings for those who had more schooling. It was also found that the subjects' expectations about type of learning experience was related to their expectations about level of formality. In Low formality settings all three types of learning experiences were considered approximately equally valid. In Medium formality settings, Sharing experiences were considered most valid. In High formality settings, Input was considered least valid.

It is concluded that for adapting instructional procedures to pedagogical expectations, activities should lean away from High formality settings and Input experiences. It is also suggested that when certain levels of formality or types of learning experiences are absolutely necessary, appropriate accompanying levels of formality or types of learning experiences could be identified and used. It is suggested that further research could look more closely at the quality and type of formal schooling experience of adult learners, rather than merely the amount of schooling.

ADULT LEARNERS' PEDAGOGICAL EXPECTATIONS ABOUT LEVEL OF FORMALITY AND TYPE OF LEARNING EXPERIENCE

By

Rodney Byron McKean

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This dissertation is dedicated to two groups of important people:

To my family who continually encouraged and supported me, even when they really didn't understand what I was doing--

Mr. & Mrs. K. R. Peaslee

Mr. & Mrs. Byron McKean

Mr. & Mrs. A. M. Ison

Mr. & Mrs. Robert D. Hulvey

and my faithful wife, Carolyn

And to my special mentors who helped me learn how to make my way on the journey to this milestone--

Alice Naumoff

Len Wallmark

Don Joy

and Ted Ward

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TABLE OF CONTENTS

Chapter		Page
1.	IDENTIFYING THE PROBLEM	1
	Purpose	1
	Importance	2
	Generalizability	15
	Research Questions and Hypotheses	15
	Assumptions	17
	Limitations	18
	Definition of Important Terms	18
	Overview	19
2.	REVIEW OF THE LITERATURE	21
	Characteristics of Participants	22
	Discussion	27
	Cultural Influence on Pedagogical Expectations	27
	Discussion	29
	Other Studies	29
	Summary	31
3.	RESEARCH METHODOLOGY	33
	Description of Methodology	33
	Research Design	33
	Sample	36
	Instrumentation	37
	Validity Concerns	40

Chapter Page

3.

Reliability Concerns 41

Field Procedures and Data Collection 42

Data Analysis 43

Methodological Assumptions 45

Limitations 46

Summary 48

4. FINDINGS 51

Hypothesis Testing 51

Question 1A 52

Question 1B 54

Question 2A 56

Question 2B 58

Question 3 61

Question 4 63

Informal Observations 66

Effects of Age 66

Highest Means 66

Lowest Means 67

Entire Sample 68

Interaction Effects 68

Summary 68

5. SUMMARY AND CONCLUSIONS 70

Summary 70

Discussion of Findings 73

Chapter Page

5.

Conclusions 78

Implications 82

APPENDIX A IDENTIFICATION OF DATA COLLECTION SITES 88

APPENDIX B PICTURES AND TEXT OF TAPE RECORDED TEACHER INSTRUCTIONS USED IN RESEARCH INSTRUMENT 90

APPENDIX C RESEARCH INSTRUMENT RESPONSE SHEET 93

BIBLIOGRAPHY 95

LIST OF TABLES

Table		Page
4.1	Grand Means for Levels of Formality	54
4.2	Grand Means for Types of Learning Experiences	56
4.3	Means for Level of Formality by Amount of Schooling	57
4.4	Means for Type of Learning Experience by Levels of Amount of Schooling	60
4.5	Level of Formality x Type of Learning Experience	63
4.6	Final Analysis of Variance Table	64
4.7	Amount of Schooling x Level of Formality x Type of Learning Experience: Interaction	65

LIST OF FIGURES

Figure		Page
3.1	3x3 Matrix of Factors Represented by Research Instrument . .	39
4.1	Breakdown of Independent Variable	52
4.2	Three-Way 7x3x3 Factorial Analysis of Variance	53
4.3	Amount of Schooling x Level of Formality: Interaction	59
4.4	Level of Formality x Type of Learning Experience	62

Chapter 1

IDENTIFYING THE PROBLEM

Adult education is currently a major thrust in world development. Though various agencies, institutions, and governments focus on development in different ways, in all development efforts there seems to be a common element which consists of helping people grow beyond the various sorts of limitations they have to realizing their full potential. Thus, development is in essence a process of liberation. As a tool for development, adult education must help liberate people.

In adult education there has been an emphasis for the past few decades on a form of instructional practices that builds upon the freedom from dependence which sets adult learners apart from children, and that encourages and leads to more freedom from the dependencies which limit development. However, some of these more "developmental" approaches to adult education have received cool and sometimes negative responses from adult learners who are used to being dependent upon educational authorities. This study will look into the nature of adult learner's expectations about what valid learning experiences are in an attempt to overcome some of the barriers that work to limit the full development of adult learners.

Purpose

Specifically, this study inquires into the relationship between learner characteristics and the expectations adult learners have about

what are valid instructional activities and learning experiences. It tests some hypotheses about the relationship between the amount of formal schooling an adult learner has, and the level of formality he or she expects of valid instructional activities. It also tests some hypotheses about what various adult learners consider to be valid learning experiences in terms of the type of experience and activity the learner is engaged in.

Importance

One needs to be only casually aware of current events in America and the world to know that development is a major concern among social and physical scientists and policy makers worldwide. Adult educators are as concerned and involved as other professional groups. This study is a link in answering some questions that will aid in bringing about more "developmental" adult education.

Though many people are concerned for development, there is not a consensus among those people about what ought to be done. Some people focus on economic policy and transactions, others focus on literacy, some focus on community involvement, and others focus on self-actualization. Two ranges are involved in these foci. One range involves human needs. There are human needs that are material, such as food, clothing, and shelter; and there are human needs that are non-material, such as communication, decision making, and ego-strength. A second range involves the human context. Sometimes programs try to affect change for an entire group of people, whether it be a village, community, or nation. Other programs focus on development needs of individuals. It is possible that a program for development may focus on one kind of need or context, while working against development in another area. An example of this would be

a program where, through policy decisions, a government provided needed material resources for a community, but at the same time reinforced the community's dependency upon the central government to solve its problems. There is a need for approaches to development that can simultaneously promote freedom from the limitations represented by all of the major foci of development. In adult education, some people are promoting ideas that can help meet this need.

Kidd, Knowles, and Houle are among the leaders in adult education who have promoted the ideas that adult education should serve to liberate people from the limitations to their growth, and that adults are active as learners. Adult education should, therefore, involve learners actively in the process of discovering and understanding their own needs, and discovering and applying resources which meet those needs. Kidd, Knowles, and Houle have each insisted that adult education ought not to treat adult learners as children learners are typically treated, but that the greater degree of independence and ability to be self-directed of the adult learner ought to be honored and fostered.

Knowles, who is one of the major proponents of adult self-directed learning, says, "Inherent in the concept of adult education is the process of liberation." He says further that we should

> define our aim as helping individuals to liberate themselves from whatever shackles and deficiencies prevent them from fulfilling themselves . . . This conception of the common aim of adult education as being liberal--in the sense of liberating--provides a meaningful context for all types of learning activities . . . To the extent that any learning activity--whether vocational or humanist--leaves an adult with as much or more dependency upon external direction, to that extent it is failing to contribute to the inherent aim of adult education. (Knowles, 1958, pp.85-86)

Kidd draws a parallel with medicine in talking about learning involving freeing a person from some limitations, and the learner's active role in the process:

> Yet the most profound fact about the living body is that it is health seeking--that its forces reach out toward health and healing. The art of medicine is not so much doing things to the body but inhibiting destructive influences and enabling the body to achieve healing. It seems to be very much the same with learning. Human beings seem to seek after learning; learning seems to be a condition of a healthy organism. (Kidd, 1959, p.16)

Knowles' newest book, Self-Directed Learning, is aimed at helping adult education practitioners identify instructional techniques for involving adults in self-directed learning. Houle's understanding of the self direction of adult learners is reflected in the title of a book of his about adult learners: it is called, The Inquiring Mind.

The ideas of Kidd, Knowles, and Houle are not new. Many people recognize the flavor of John Dewey (1938), Jean Piaget (1970), and Carl Rogers (1951, 1969) in the ideas. Dewey was a great contributor to understanding the learner in an active role in solving his problems. He is widely known for his ideas of learning by doing and the importance of direct, purposeful experience. He suggested that learning was the result of the scientific method in which each learner recognized a problem, suggested a hypothesis, tested the hypothesis through experience, and reformulated the hypothesis based on the consequences of the experience. The reformulation of the hypothesis constituted the new knowledge, or learning. Dewey suggested that the hypothesis testing process of learning was equally true for both children and adults.

Though the ideas of Jean Piaget have been almost exclusively associated with understanding the development of children, he also gives many insights into the human learning process which apply to adult learning. The process as he describes it involves "reconstruction" and "adaptation." Piaget suggests that each person's knowledge is constructed. Through interaction with the surrounding people and environment, knowledge

is constructed through adaptation. Through adaptation, adapting thinking to fit with reality or adapting perceptions of reality to fit with present thinking, a person's existing ideas are either confirmed or reconstructed to result in new knowledge. This process applies to adult learning and is very similar to Dewey's ideas.

Rogers developed his ideas about self-directed learning in the context of a therapist and client. He suggested that the role of the therapist was to facilitate the discovery on the part of the client of limitations and resources for overcoming the limitations. He later translated his ideas into the context of teaching and learning. Those ideas are very similar to the ideas expressed by Kidd, Knowles, and Houle.

Freire also addresses adult education as well as other professions concerned with development. In his book, Pedagogy of the Oppressed, he is concerned about an approach to education that can help liberate people from oppression. For Freire, oppression includes keeping people from learning and developing natural intellectual abilities. Freire describes learning as involving what he calls the "praxis." That is, that people learn about the world through acting upon the world. It is through this active, self-directed process that the person learns about his or her place in the world and develops the intellectual abilities that are necessary for true liberation. In talking about learning and changing, Freire states the role of active learning when he says:

> I cannot think for others or without others, nor can others think for me. Even if the people's thinking is superstitious or naive, it is only as they rethink their assumptions in action that they can change. Producing and acting upon their own ideas--not consuming those of others--must constitute that process. (Freire, 1970, p.100)

People in Western culture and Western education are not accustomed to the ideas of learning mentioned above. In Western culture and Western education learning is usually understood to be the process of acquiring knowledge that exists external to the learner. Western education is built upon a Greek rationalistic model of knowledge and learning, and the Greek institutionalization of education.

The rationalistic nature of Greek ideas about learning and education can be seen in the works of Plato as well as Aristotle. In The Republic much emphasis is placed on the existence of external knowledge and an external, objective "good". The role of the educational system was to promote and maintain a class and hierarchical authority system by training some of the people in "the good" and the knowledge that was necessary to carry out various roles in society.

Though the Socratic method employs "drawing out" knowledge from individuals, the knowledge is still seen as objective, and it is still assumed that knowledge leads directly to action. As time progressed and education became institutionalized, such objective conceptions of knowledge and a conception of "top-down" authority easily led to other-than-Socratic teaching.

Often in the rationalistic approach to schooling the role of the learner is passively to receive knowledge from the teacher who is skilled in transmitting knowledge. The teacher is often seen as one in a position of authority. This involves knowing the right answers, and knowing what is good for the student.

Though many modern educators would say that the representation of the Greek model, above, does not reflect their own ideas, the model does maintain a subtle influence on much that is done in modern education. Some educators do not want to see the teacher in a position of authority

or possession of the truth, but they still see the goals of learning as rationalistic understanding. For example, the assumption that when people can clarify and better understand their own values, they will in turn act in more rational and consistent ways, reflects the Greek thinking which eventually leads to the statement, "To know is to do." Western educators often seem to think that if a person can understand something, then the person can do something. Bradford shows how the rationalistic Greek model has influenced his and other people's thinking about a philosophy for adult education. He says, "Man needs to understand and, so far as possible, to control [the] dynamic forces in his individual and social world in a process of orderly balancing and rebalancing . . . Adult education should help the individual to understand and control . . ." (Bradford, 1958, p.41) (emphasis added) He seems to imply that if one can gain understanding, one can gain control.

The very structure of European and American formal schooling, and thus formal schooling around the world (which is often modeled on European and American schooling), is built upon the rationalistic Greek model of epistemology and schooling. It is thus understandable that adults, whose previous educational experience has been with a teacher-directed, rationalistic model of learning and schooling, may think that the self-directed approach to adult education, as suggested by Knowles and others, is inappropriate for real learning. Knowles and Houle both notice the kinds of responses often given to self-directed learning. Knowles says:

> . . . when adult students are first exposed to a learning environment in which they . . . are involved in mutual inquiry with the teacher, and are given responsibility for their own learning, the initial reaction is usually one of shock and disorganization. Adults typically are not prepared for self-directed learning; they

> need to go through a process of reorientation to learning as adults--to learn new ways of learning. (Knowles, 1970, p.40)

Houle speaks to the same issue while discussing a learning experience within a church. He says:

> The churchmen may feel frustrated if they seek instruction from their pastor but find that he constantly throws them back on their own resources. Learning is hampered until the difference in viewpoint has been resolved. (Houle, 1972, p.46)

Burger has been attempting to understand how cultural viewpoints and backgrounds influence the kinds of educational experiences that are meaningful to learners. His work has been primarily with American Indian and Mexican-American children in the Southwest. He has developed the concept of "ethnopedagogy" to talk about teaching techniques for accomodating cultural differences between learners, or between the learners and teacher.

Ward and his associates built upon the concept of ethnopedagogy as developed by Burger and have suggested the importance of "pedagogical expectations."[1] (Ward, Herzog, et.al., 1974; Ward, 1973) One of the ethnopedagogical issues Ward identified is the learners' "acceptance and expectations of instructional procedures." (1973) He explains this by saying:

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[1]It is currently not in fashion with some people to use the word "pedagogy" and its derivatives when discussing adult education. Malcolm Knowles has promoted the use of the word "andragogy" for referring to helping adults learn. Knowles' argument rests upon the Greek words from which the word "pedagogy" is based. It is claimed that the word in the Greek refers to the instruction of children. However, as an English word, "pedagogy" has not had such an exclusive meaning. Thus, it has been used widely in the field of education to refer to the instructional context and issues related to that context. It is with the intention of using the word "pedagogy" in its generalized meaning that Burger used the word in "ethnopedagogy," and it is with the same intention that it is used here to refer to expectations adults have about the instructional context.

> The most concrete evidence of the imposition of culture on the learning potentialities of people is their expectations of what constitutes a valid learning experience. What is accepted as a valid learning experience in one culture may be rejected in another. The wisdom of the elders, transmitted as legends and proverbs, may be profoundly respected as a learning experience or totally rejected as having no place in an educational system. A person may be culturally conditioned to accept the pedantic ways of the lecturing teacher in a formal classroom as a valid learning experience, tending to make him suspicious of discussion groups or instructional motion pictures. (Ward, 1973, pp.2-3)

The purpose of the ethnopedagogy studies of Burger, and of Ward and his associates, was to discover how to tune instructional activities to cultural expectations and practice. The emphasis has been primarily on adapting instructional activities to pedagogical expectations. Ward (1974) says that for effective learning, education should utilize instructional procedures that are recognizable to the learners as being learning experiences.

In informal conversation it has been suggested that it is not necessary to adapt instructional activities to learner pedagogical expectations, but that learners could possibly learn something meaningful in an activity in which they did not expect to learn something. Probably the strength of a person's expectations would have a bearing upon this situation. If an instructional activity were not in line with a strongly held expectation, in other words, if a person were absolutely sure that he or she would not learn something meaningful, then it is unlikely that meaningful learning would take place. If an activity were not in line with a lightly held expectation, the consequences may not be negative.

With pedagogical expectations, the degree of congruency is a more important consideration than absolute congruence between expectations and instructional activities. It would probably be

impossible to have absolute congruence between every element of an instructional activity and all of a learner's expectations. The important point is that the higher the degree of congruency, the more meaningful the learning experience is likely to be for the learner.

It also has been suggested that often meaningful learning occurs when there is some dissonance present. Both Dewey and Piaget suggest that meaningful learning occurs when there is disequilibrium, or when "something is the matter." Thus, it may not be harmful, in fact it may be helpful, to have some dissonance caused by a mis-match between instructional activities and learner pedagogical expectations. However, the type of disequilibrium Dewey and Piaget talk about concerns the content, or the subject matter of a learning experience and not necessarily the medium of that experience. Thus it would not necessarily mean that there ought to be a mis-match between instructional activities and pedagogical expectations.

As was noted, the purpose of considering pedagogical expectations is to make instructional activities more in line with cultural expectations of the learners. It has also been stated that the important point of consideration is the degree of congruence between expectations and instructional activities. Another way to talk about the lack of congruency is to talk about the degree of discrepancy. It would be helpful to know of the kinds and degree of discrepancies that exist in adult education.

There is a potential discrepancy in the earlier quotation from Houle. There was evidence of pedagogical expectations on the part of the churchmen which were not consistent with the experiences that were provided. As mentioned earlier, adults in America and other places have

a rationalistic, formal schooling cultural background in education. Most of their formal educational experiences were when they were children. Thus, when they move into an educational setting they go back in their thinking and pedagogical expectations to child-like, formal teacher-directed schooling. Knowles has identified this situation:

> In the case of some adults the remembrance of the classroom as a place where one is treated with disrespect is so strong that it serves as a serious barrier to their becoming involved in adult-education activities at all. But even adults who overcome this barrier typically enter an educational activity expecting to be treated like children, and this expectation is frequently so strong that adult students often put pressure on their teachers to behave toward them in this way. (Knowles, 1970, p.40) (Emphasis added)

There is a potential discrepancy between the kind of educational experiences deemed desirable by adult educators for adult learners, and the pedagogical expectations of some adult learners. Thus, it is important for adult education and development efforts around the world that the nature of adult learners' expectations be explored and that suggestions be made for working with pedagogical expectations.

Two courses of action can be taken in working to increase the degree of congruency between learner pedagogical expectations and instructional activities. The most obvious would be to adapt instructional practices to the expectations of the learners. There may be situations, though, in which the learners' expectations limit them from profitting from a potentially meaningful learning experience. In such a circumstance it could be said that the learners' expectations actually limit their development. It would seem desirable then that the learners' expectations be different.

When the teacher perceives the student's expectations to be

limiting, the teacher can provide experiences through which the student can enlarge his expectations. The word "enlarge" is used rather than "change" for a very specific reason. Enlarging expectations involves increasing the number of alternative expectations, not exchanging one type of expectation for another. Given that pedagogical expectations are a student's ideas about the kinds of instructional activities that provide meaningful learning, the teacher's intentions in influencing a student's expectations should not be to get the student to cease considering a particular kind of activity as valid, but to begin to see additional kinds of activities as also valid. Thus the student's expectations are increased or enlarged.

Modifying the discrepancy between instructional activities and pedagogical expectations by suggesting activities that may enlarge pedagogical expectations is necessarily the second step in a two-step process. The first step is identifying and describing the discrepancy. It was already noted from the literature on adult education that there is a potential discrepancy between adult learners' cultural background and the activities of self-directed learning. Identifying and describing the discrepancy would also involve knowing for whom it is most severe and what the factors are which contribute to and maintain the discrepancy. Once potential discrepancies are better understood, hypotheses can be tested concerning potentially beneficial instructional activities to be employed by adult educators. Thus, the two-step process is: 1) Identify and describe the discrepancy; and 2) Modify the discrepancy.

This study is important because it focuses on the first step of the process. It attempts to begin building a basis for suggesting ways to modify discrepancies between self-directed learning and adult

learners' pedagogical expectations. It will do this by inquiring into the relationship between certain adult learner characteristics and pedagogical expectations.

Several studies (which will be examined in the next chapter) have looked at the characteristics of participants in adult education and have revealed that people's amount of formal schooling has the most influence on when and how they participate in adult education. This study investigates the relationship between amount of formal schooling and adult learner pedagogical expectations.

Ward has suggested a model for effective learning that is based on the same commitments about learning that many adult education theorists have. (Ward, 1974b) Ward suggests that learners need to be involved in three types of experience to insure effective learning. The three types of experience are: input, receiving or coming into contact with new information or ways of seeing things; self-awareness, reflecting upon and getting a clearer picture of one's current situation including current knowledge, feelings, abilities, needs, and limitations; and sharing, putting a new idea into one's own words, or acting upon new ideas to test them. This study looks at pedagogical expectations about these three types of learning experiences.

The level of formality of an instructional activity is often easily changed. Many of the newer ideas about adult learning and adult education suggest that by changing the level of formality of an instructional activity, it will be easier to involve the learners in more self-directed learning. This study looks at adult learners' pedagogical expectations about the level of formality of instructional activities.

Thus, this study explores adult learners' pedagogical expectations

by looking at the relationship between adult learners' amount of formal schooling and their pedagogical expectations about the level of formality of learning activities and the types of learning experiences provided by the activities.

This study is important because of its place in the two-step process mentioned above. It is also important because of its filling a gap in needed research in adult education.

Kreitlow concluded that the research needs in adult education fit into three categories of application: (a) the adult as an individual and a learner; (b) the adult's response to sociocultural phenomena; and (c) the adult education enterprise. He says further, "Of prime concern is the contribution of the sociologist and anthropologist to knowledge of the adult's response to sociocultural phenomena." (Kreitlow, 1965, p.240) This study is looking at the adult's response to sociocultural phenomena as that response relates to educational programs.

After studying the effectiveness of culturally attuned instructional procedures in Brazil, McKinney suggested that more studies need to be done of the effects of "extent of schooling." She suggested that there is a need to better understand the effects of schooling on learners' expectations. (McKinney, 1973) This study also begins to fill the need that McKinney mentions.

In summary, this study is important because of the step it takes in helping to make adult education programs more effective for the goal of liberating people from the limitations to reaching their full potential. Its importance also lies in its response to some of the current gaps and needs in adult education research.

Generalizability

The subjects in this study are learners in selected adult education programs. Thus the findings of this study cannot be generalized to the general adult population, nor even to all adult education programs. The programs selected allow for a sample with a wide range of amount of formal schooling which should be representative of the range within the general population. The findings of this study are suggestive of what may be found in similar samples.

The research approach and methodology has the most generalizability. If this approach does help identify some pedagogical expectations of different adult learners, then it can be used with larger and more general populations.

Research Questions and Hypotheses

The purpose of this study is to inquire into the relationship between the amount of formal schooling an adult learner has, and the adult learner's pedagogical expectations about the level of formality of an instructional activity and the type of learning experience provided. Since the study is looking into the relationship between a person's amount of formal schooling and certain pedagogical expectations, the pedagogical expectations will need to be identified first, and then their relationships to amount of formal schooling can be identified. Answering the following sets of research questions will accomplish the desired identifications. The study attempts to answer the following sets of research questions.

First, the pedagogical expectations of the entire sample toward level of formality and type of learning experience will be identified.

1A. Do adult learners expect any one level of formality to provide more important learning than the other levels?

1B. Do adult learners expect any one type of learning experience to provide more important learning than the other types of learning experiences?

Second, the relationship between amount of formal schooling and the expectations identified by questions 1A and 1B will be identified.

2A., Is an adult learner's amount of formal schooling related to his or her expectations about the level of formality of an instructional activity?

2B. Is an adult learner's amount of formal schooling related to his or her expectations about the type of learning experience provided by an instructional activity?

Third, an attempt will be made to identify how the entire sample's expectations about level of formality and type of learning experience are related to each other. That is, whether or not one type of learning experience is considered more valid for a given level of formality than other types of experience. For example, it might be that input experiences are considered more valid in high formality settings than in low formality settings.

3. Is an adult learner's expectations about the level of formality of an instructional activity related to his or her expectations about the type of learning experience provided by that activity?

Fourth, an attempt will be made to identify whether or not a person's amount of formal schooling is related to the relationship between expectations as identified in question 3.

4. Is there a relationship among an adult learner's amount of

formal schooling, expectations about the level of formality of an instructional activity, and expectations about the type of learning experience provided by that activity?

Answers for most of the research questions are sought by testing null hypotheses. However, the following two research hypotheses are suggested.

1. Adult learners with more formal schooling will expect higher levels of formality in instructional activities than those learners with less formal schooling.
2. Learners who expect higher levels of formality will expect more input experiences than the other two types of experiences.

Assumptions

There are two main assumptions which guide this study. The first is that it is important to identify and understand pedagogical expectations in designing and implementing adult education programs. It is assumed that a discrepancy between adult learners' pedagogical expectations and the activities provided by an adult education program will limit the effectiveness of the program in contributing to the growth and development of adults.

A second assumption is that the current literature on adult learning correctly suggests that the adult should be an active contributor in identifying his or her own needs and judging the effectiveness of various ideas and/or skills in meeting those needs. It is assumed that for their own maximum growth, adult learners ought to be involved in self-directed learning. Similarly it is assumed that the three types of learning experiences suggested by the Ward model of effective learning are necessary for meaningful adult learning.

Limitations

There are several limitations of the study. The limitations are a result of and reason for the exploratory nature of the study. First, as was mentioned earlier, the sample is limited, thus the findings are not necessarily widely generalizable.

Second, the study does not attempt to identify absolute cause and effect relationships. This is an exploratory study. The theoretical base suggests a cause and previous research suggests a relationship. But more experimental-type studies will need to be undertaken to positively establish cause and effect relationships. In essence, this study will only compare different groups of learners and expectations.

Third, the study uses a new instrument designed specifically for the study. As the instrument continues to be used it will be refined and one can have more confidence in its findings. At this point it can be relied upon only to explore trends and possible relationships.

Fourth, this study is not able to prove what should be done about pedagogical expectations in educational planning and design. A two-step process has been identified earlier. This study focuses on the first step and is able only to suggest studies that can focus on the second step. Studies which do focus on the second step should have direct implications for planning and design of adult education programs.

Definition of Important Terms

The brief definitions which follow should help further explain some of the terms and phrases used in this study.

Ethnopedagogy is a concept that combines an anthropological concern for cultural differences with a concern for educational practice. It refers to the need to adapt teaching activities to the cultural

viewpoints and experiences of the learners.

Pedagogical expectations are what a learner expects to be the sociology (roles of teacher and learners), content, and procedures of an educational activity. The idea is based on the work in ethnopedagogy. It is believed that pedagogical expectations are cultural phenomena.

Self-directed learning is a term used to describe educational procedures in which the learner is the major identifier of learning needs, desirable objectives, and beneficial applications. In self-directed learning, teachers and learners are involved in co-exploring the solutions to needs.

Level of formality refers to how formal, structured, or ritualized an instructional setting is perceived to be. Instruments in this study will use pictures of instructional activities that represent three broad levels of formality. One level will be very informal, one will be very formal, the other will be in between the extremes. For sake of clarity, they will be labelled Low, Medium, and High levels of formality.

Amounts of formal schooling will refer to the number of years of formal schooling of the subjects of the study.

Types of learning experiences refers to experiences the learner is engaged in. Based on Ward's model, three types of learning experiences will be represented in the instrumentation: input; self-awareness; and sharing. It is believed that all three types of experiences are necessary for effective learning.

Overview

In this chapter a research problem was stated, and a rationale for engaging in the study was presented. The basic research design and guiding questions were also identified.

Literature reporting studies that are relevant to this study will be reviewed in Chapter 2. These studies focus on characteristics of participants and cultural influences on learning styles and participation. These studies help give some background into research that has focused on the major variables of this study.

Chapter 3 contains a description of the research methodology. The sample of subjects and the research instrument are discussed in detail. Also included are the steps in the development and validation of the research instrument. Field procedures and data collection procedures are discussed, concluding with a description of the kinds of statistical procedures used to analyze the data. The rationale for the use of the selected statistical procedures is also presented.

In Chapter 4 the findings of the study are presented. The research hypotheses are re-stated along with the statistical hypotheses. Results of the tests of the hypotheses are reported along with their statistical significance. Some descriptive statistics are reported which indicate some trends that were not discovered through the hypothesis testing.

Conclusions and implications are the major focus of Chapter 5. The findings are interpreted and suggestions are made for practice in adult education as well as for further research.

Over all the study looks at adult learner characteristics as they relate to certain types of pedagogical expectations. It is therefore important to understand what is known about participants in adult education, and about how socio-cultural phenomena influence learning styles and pedagogical expectations. These issues are examined in the following chapter as a foundation is set for the study.

Chapter 2

REVIEW OF THE LITERATURE

The purpose of the present study is to look into the nature of adult learner expectations about various types of instructional activities and learning experiences. A limited attempt will also be made to identify background characteristics that account for expectations of different adult learners. The most closely related research literature focuses on background characteristics of participants in adult education. Such studies have been referred to by Knox (1965) as "Clientele Analysis." The main thrust of such studies is to identify differences between participants and nonparticipants, and to identify differences between participants of different adult education programs. Research on participation will be reviewed in this section because of the inference that can be made that when adult learners participate in a particular kind of program, it is probably because there is something about that program that meets with their approval, thus it is at least partially consistent with their pedagogical expectations.

The independent variable for the present study, amount of formal schooling, was selected because of the belief in cultural influence on pedagogical expectations, and the fact that the cultural background of most adult learners' intentional educational experiences consists almost exclusively of formal schooling experiences. Few studies have looked at pedagogical expectations, but studies have looked at cultural influences on the style of learning. Some of these studies will be

briefly reviewed because they emerge from some of the same ethno-pedagogical issues as the present study.

A few studies which do not fit either of the above two categories will be reviewed because they are related to miscellaneous elements of the present study.

Characteristics of Participants

The strongest finding of studies looking at participant characteristics is that there is a very high relationship between amount of formal schooling and amount of adult education participation. (Brunner, 1959; Verner, 1959; Johnstone and Rivera, 1965; Knox, 1965; Carp, Peterson, and Roelfs, 1972, 1974; Okes, 1974)

The Johnstone and Rivera study (1965) is the landmark study on participant characteristics. It consisted of "a national survey of the educational activities of the adult population, based on a survey of the activities of members of some 12,000 American households." (p.xxviii) They comment on the strong relationship between amount of formal schooling and participation. "By far the most persistent finding in our investigation was that formal educational attainment plays a highly crucial role in determining whether or not one enters the ranks of adult students." (p.21) They found that whereas only six percent of people with only a grade school education participated in adult education activities, twenty percent of those with a high school and 38 percent of those with a college education participated. (p.97)

Knox (1965) summarizes the findings of three studies, including the Johnstone and Rivera study, showing their similarities. The percentages in the following table represent the percent of the sample of that educational level who were participants in adult education.

Education	Johnstone and Rivera	London, Wenkert, and Hagstrom	Knox and Videback
8 years or less	6	5	6
9-11 years	15	8	8
12 years	24	10	11
13-15 years	36	21	17
16 years	39	23	30
17 or more years	47	--	35

(Knox, 1965, p.234)

Knox reported that there was a positive relationship between adult education participation and level of occupation, income, and education in all three studies, but that the highest degree of association was with the level of formal education. (p.233)

Carp, Peterson, and Roelfs also surveyed a random sample of the general U.S. adult population. They reported that in the year immediately preceding their survey, 31 percent of the population was engaged in some form of adult learning, and another 46 percent expressed a desire to do so. Their study showed that only five percent of the adult education participants had only a grade school education while 21 percent of the participants were college graduates. However, the highest percentage of the participants were high school graduates with no college education, they were 38 percent of the participants.

Douglah and Moss summarize the major findings of research on participation with the following description of the differences between those who participate and those who do not. (Douglah and Moss, 1968)

> The familiar portrait of the typical participant describes him or her as being young, well-educated, a full-time worker in a white-collar occupation, above average in income, married with children and an urban resident. Conversely the non-participant is described as being older, having less than a high school education, of low socio-economic status, and a rural resident. (p.247)

Some of the studies on characteristics of participants looked closer at the amount of formal schooling to see what it might be related to. Reviews of such studies follow.

Brunner (1959), in a major review of adult education research, reported that the "highest grade reached" correlated significantly at about .70 with the Army General Classification Test in World War II. (pp.19-20) He also reported that the educational status of adults is the best single index of what is measured as intelligence by conventional tests.

In terms of the relationship between amount of schooling and use of certain kinds of instructional approaches, Brunner reports some research by Crile in which she found that the percentage of persons listing meetings as "the most helpful method of adult education" increased with the educational level of the participants. Brunner also states, in summarizing various other studies, that the lower the educational status of the participants in a program, the greater their desire for demonstrations or case materials in teaching, regardless of the topic. (p.146)

In looking at how participants varied by the method of study they chose, Johnstone and Rivera (1965) show little variation in the educational level of persons using different methods of study. (p.84) But when asking people's preference of method for learning something new (a foreign language) some differences were found. Adults in

higher socio-economic positions were more likely to mention both formal and informal methods of learning. Persons in the middle socio-economic category were the most likely to prefer the formal classroom, while persons in low socio-economic status were least likely to prefer formal methods. (p.208-212)

The study looked at the preferences for formal methods again, but without mentioning any specific subject matter. Again, socio-economic position made a difference, along with age. Johnstone and Rivera found that "Older adults and adults of lower socio-economic status are considerably less likely to prefer the classroom for learning." (p.214)

Carp, Peterson, and Roelfs (1972) attempted to identify the relationship between amount of schooling and methods of learning preferred or used. They found that use of classes and lectures increased with educational level, with twenty percent of Learners with only elementary school using lectures and classes but 41 percent of the college graduates doing so. College graduates rated on-the-job training less than most of the sample, and those with only elementary schooling rated discussion groups lower than most of the sample. Preference for lecture and classes by Would-be Learners followed a similar distribution as the Learners. (pp.70-72)

In looking at location of learning, Carp, et.al., found that for both Would-be Learners and Learners, the use of the school system increased with educational level. (pp.79-81) They also found that the lower the level of schooling, the more people who weren't involved in adult education felt that "low grades in the past" and "don't enjoy studying" were barriers to their participation.

Cross and Valley noted in the Carp study that only a fourth of the people who say they would like to learn prefer lectures, and they are the better educated people in the upper socio-economic levels. (Cross and Valley, 1974)

In a nationwide study of the general adult population, Okes (1974) identified the sponsors and/or administrators of all adult education programs. She also identified the amount of formal schooling of all adult education participants. She found that one's amount of formal schooling was not related to one's choice of participation among formal schooling, community organization or informal types of adult education programs. She found that the level of participation in each type of program followed the normal distribution of the population as a whole in terms of amount of formal schooling.

Dickinson and Verner (1967) found in a British Columbia study that "years of schooling completed" did not differentiate between dropouts and persistent attenders, unless the length of the course was considered. They found that people with less schooling were more likely to drop out of the longer courses.

Douglah and Moss (1968) wanted to understand the difference between education levels in terms of participation. They did a survey of a general population in Wisconsin and controlled for education. They found that such things as age, employment status, income, and family status accounted for some differentiation within levels of formal schooling. They concluded that amount of schooling was not an exclusive determinant of amount of participation.

Discussion

The studies reviewed above were selected for review because they dealt with the relationship between amount of formal schooling and participation in certain kinds of adult educational experiences, which is a major interest of the present study. The studies looked at both actual participants and people who do not participate, and seemed to show a general relationship between amount of formal schooling and participation in formal educational activities.

It was also indicated that those with less schooling shy away from participation because of their lack of success and confidence in formal schooling situations. Johnstone and Rivera comment on this situation. (Johnstone and Rivera, 1965, p.209)

> There is probably good reason to think that persons low in socio-economic status are more favorably oriented than those of high socio-economic status to the more informal methods of learning. Since persons of low socio-economic status have for the most part had very abbreviated experiences in the school system we might expect them to be considerably more wary about engaging in formal learning activities.

Cultural Influence on Pedagogical Expectations

The studies one could list here would be too numerous to review. Nearly every study in anthropology that has touched on the subject of education could be included. However, a few selected studies will be reviewed because they deal with the variable of amount of formal schooling and ability in, or preference for, formal educational experiences.

Cohen's work was with children, but will be reviewed here because Cawley, Miller, and Milligan used it as a foundation for studies with adults. Cohen (1969) was interested in conceptual styles.

She identified "analytic" and "relational" conceptual styles and social environments. She found that children with a majority of experience in relational social environments developed relational conceptual styles. She said that what some people call "cultural deprivation" or "cultural differences" may be a "cultural conflict." She gives an example from the findings of her study.

> The school was defined as a highly analytic environment in all its salient characteristics and requirements. Many children, however, demonstrate a relational approach to reality organization. One approach to reality organization could affect its carrier's ability to participate effectively in the alternate kind of group process or to deal directly with its cognitive requirements. Children socialized in shared-function environments could not participate effectively in any aspect of the formal school environment.

Cawley, Miller, and Milligan (1976) built upon the ideas and research of Cohen. They investigated relational and analytic cognitive styles among adult learners. Their definitions of "relational" and "analytic" were compatable with Witkin's "global" and "articulate," and they used some of the Witkin instruments. A global cognitive style is one in which a person perceives and attempts to understand an entire setting or problem with all of the elements related. In an articulate cognitive style, a person attempts to understand something by separating all of the elements and analyzing each of them.

Cawley, Miller, and Milligan found that adults with a more relational cognitive style preferred a more informal learning environment, and adults with a more analytic cognitive style preferred a more formal learning environment. Their study had a limited sample and they could not differentiate backgrounds to show what background factors might relate to cognitive style.

Both Ward (1973) and Hovey (1971) looked at cognitive style

of adult learners in Africa, as it related to Witkin's descriptions of "global" and "articulate." Hovey identified characteristics of fourteen African cultures that seemed to be concominant with cognitive style.

McKinney (1974) built upon the work of Burger in ethnopedagogy. Burger's work was with children trying to find out how to make instruction culturally meaningful. McKinney attempted to make some instructional programs more "culturally attuned" for adult learners in Brazil by changing the formality of the experiences. She found that adaptation in the direction of group and discovery methods rather than individualized or expository methods were relatively more productive for traditional learners than for modern learners.

Discussion

The above studies seem to indicate that cultural experience can influence a person's success in, and preference for, educational experiences with a given amount of formality. It appears that one of the contributors to ability in high formality is a large amount of cultural experience in learning environments of high formality.

Other Studies

There is much written in social psychological literature about "expectations" (Berger, 1974) But most of it in relation to education deals with expectations about achievement. There are two sides to this issue. Some studies look at expectations the teachers have about student achievement, other studies look at student expectations about their own achievement. Most of the studies reveal a relationship between expectations and achievement that is a "self-fulfilling prophecy" kind

of relationship. Kennedy has one of the few studies in this area that relates to adult learners. (Kennedy, 1975) He found that adult students who expected higher grades, rated their professors higher and actually earned higher grades than those who expected lower grades. There have been no studies with adults that investigated what kinds of expectations they had about what they would find in an educational experience. However, some findings of Davis lean in the direction of expectations.

Davis (1966) was looking at why people dropped-out of adult education activities. He wondered if something happened in the first class that those who eventually dropped out might have reacted to. He found that two events occured more frequently in classes having low drop-out rates than classes having high drop-out rates. Those two events were: 1) the participants had an opportunity to introduce themselves; and 2) the instructor talked to the participants as equals. Apparently, these two events were linked to something the participants thought about how the class should be.

Humphrey (1974) looked at adult learners' preferences for control of in-class learning activities. He found that there were different preferences. But, he did not compare the adult learners with different preferences by level of education.

Most of the research investigating various instructional methods in adult education have looked at effectiveness of the methods, and have dealt with instructional methods on a different scale than the present study. The studies reviewed by Brunner (1959) and Verner (1959) all deal with gross methods such as lectures, films, discussions, case studies, and demonstrations. Their effectiveness has been

measured by amount of adoption of some desired behavior. No research has investigated expectations for the learning experiences of input, self-awareness, and sharing.

Summary

In this chapter previous research was reviewed concerning characteristics of participants in adult education, cultural influence on pedagogical expectations, and other studies which looked at expectations, adult drop-outs, and preferences. The studies concerning characteristics of participants showed that people with higher amounts of formal schooling tend to be more involved in adult education programs. However, some of the studies show that amount of formal schooling has only a partial influence on participation.

Some studies were reviewed that look at cultural influences on educational activity. In particular, several studies that looked at cognitive style were reviewed. These reported that one's sociocultural environment and experience had a major influence on cognitive style, and thus on participation and success in formal educational settings. One of the types of cultural experiences that would tend to lead to participation and success in formal education settings would be formal educational experiences.

Other studies reviewed looked at expectations and preferences. Most studies that have focused on expectations have looked at teacher expectations. However, one study reported that adults tend to drop-out more when certain things do or do not happen. Apparently the adult learners consider some activities more appropriate than others and gauge their participation in those activities accordingly. Studies that have looked at adults' preferences for certain instructional activities

were mentioned but found to have limited application to the current study because of their focus on adoption of prescribed behavior rather than learner evaluations of the activities.

Chapter 3

RESEARCH METHODOLOGY

In this chapter the research methodology of the study is outlined. The research design including variables and research hypotheses is looked at. The instrumentation and procedures used in data collection are also outlined as is the statistical analysis employed.

Description of Methodology

This is a causal-comparative study which identified pedagogical expectations of a sample of adult education students concerning level of formality and type of learning experience. The study then compared those expectations with the amount of formal schooling of the adults in the sample. Isaac and Michael (1971) say that the principal characteristic of causal-comparative research is that it is "ex post facto" in nature. That means that data are collected after the important events have occurred. The researcher collects data on some effects (dependent variable) and then looks back in time for possible causes or relationships. (p.22)

Research Design

In design terms, this study is most nearly like a "one-shot case study." The instrument was administered only one time to each subject, then responses to the instrument were analyzed. This study measured, through a questionnaire using pictures and a Likert-type response scale,

adult learners' pedagogical expectations about the level of formality of an instructional activity, and the type of learning experience the activity provides. The questionnaire also collected background demographic information from the subjects. The most important background data for this study was years of formal schooling. Information was also collected on age, sex, marital status, type of schooling background, and type of current adult education activity.

Level of formality of an instructional activity refers to how structured, unflexible, and authority-oriented and controlled a learning activity is. Formality was measured in three levels: Activities that are very formal; activities that are very informal; and activities which have a level of formality in between the two extreme levels. For ease of analysis and reporting, the three levels of formality have been labelled Low (very informal), Medium (in between), and High (very formal).

Type of learning experience provided by an instructional activity refers to the experience the learner is engaged in. Three types of learning experiences have been identified: input--the learner is involved in receiving or coming into contact with some new information; self-awareness--the learner is involved in reflecting upon his or her current situation including abilities, interests, feelings, knowledge, and limitations; and sharing--the learner is involved in "putting into his or her own words" or acting upon some new information or ideas.

Level of formality and type of learning experience are factors of the dependent variable. The dependent variable is the subject's score on the questionnaire instrument. The score is called degree of expectation of learning. The responses were on a Likert-type response scale, and each response was given a value from one to five. The dependent

variable is thus a continuous variable.

The independent variable in the study is amount of formal schooling. Other demographic data could have been used as independent variables. Some were, however, used only in "eyeball" analysis of the data.

The following null hypotheses identify the relationships that were tested for among the independent and dependent variables mentioned above.

1A. There will be no differences for the entire sample in degree of expectation among the three levels of formality.

1B. There will be no differences for the entire sample in degree of expectation among the three types of learning experience.

2A. There will be no interaction between amount of formal schooling and expectations about level of formality.

2B. There will be no interaction between amount of formal schooling and expectations about type of learning experience.

3. There will be no interaction between expectations about level of formality and expectations about type of learning experience.

4. There will be no interaction among amount of formal schooling, expectations about level of formality and expectations about type of learning experience.

Relationships between the independent and dependent variables, and other demographic information were examined but not tested for significance as part of the research design.

Sample

The sample for this study was a convenience sample of adults currently participating in adult education. Several different kinds of programs were selected to participate in the study. The range of programs selected was intended to yield the maximum range on the independent variable of amount of formal schooling. Thus, participants in adult basic education as well as participants and graduates of advanced university graduate programs were selected.

The programs selected for participation in the study were: church groups, college continuing education, university extension, regular university graduate program, and adult basic education and high school completion. The sample was identified and data collected in the Spring of 1977. The sample was located in Southern Lower Michigan in the areas of and near Detroit, Lansing, Battle Creek, and Grand Rapids. (Data collection sites are further identified in Appendix A).

The final sample ranged in amount of formal schooling from four years to twenty years. The average amount of formal schooling was almost 14 years, with almost 60% of the subjects having had some college. Six percent of the participants had eight years or less of formal schooling. Fourteen percent had started high school but had not completed it. The age range of the sample was from fifteen to 72 years. The average age was over 38 years. Two percent of the sample (5 cases) were under eighteen years of age. They were people who had dropped out of school but were re-entering through the adult high school completion program.

Sixty-one percent of the sample were women, thirty-nine percent were men. Seventy-three percent were married. Fifty percent of the sample were from adult church groups. All of the churches were

Protestant churches. By program, 25% were from adult basic education and high school completion programs. Fourteen percent were enrolled in graduate university extension courses, while six percent were in regular university graduate programs. Four percent were enrolled in college continuing education.

The programs selected for participation in the study provided a cross-section of adult learners, except for adults who have graduated from college but not enrolled in any post-graduate work. Only seven percent of the sample fit this category.

Though not documented, it is estimated that nearly 60% of the sample could be classified middle class and 25% classified lower class. The remainder would probably be in between. The sample was overwhelmingly white, at least 95%.

The subjects were contacted through the organizers and leaders of the programs they were participating in. They were not volunteers in the strictest sense of that word. Some groups did decide as a group whether or not to be part of the study. Groups were selected that were known to the researcher and whose leaders expressed some interest in the study. No group was selected on the basis of randomization. Most groups were sought out to provide certain types of adult learners in terms of the independent variable and other demographic characteristics.

Instrumentation

The study used a single instrument which was designed specifically for the study. It is a kind of a questionnaire instrument with a Likert-type response scale. It consists of a set of nine pictures, nine tape recorded picture captions (one for each picture), and the response scale answer sheet. (The pictures and text of the tape recorded teacher

instructions are presented in Appendix B.)

The purpose of the instrument was to measure, along certain factors, what adult learners considered to be valid ways to learn. The pictures and tape recorded captions were each selected and designed to represent teachers and students in various educational activities. The instrument represents teachers and students in instructional activities of three different levels of formality, and three different types of learning experiences within each level of formality.

The pictures represent the activity of the students, their relationship to each other and the teacher, and the instructional setting. But from those clues alone it is difficult to determine what the students are actually doing. Thus it was decided to provide the teacher's instructions for the activity shown in the picture. For example, if a picture showed people sitting at desks, individually writing, one could not tell if they were writing poetry, taking a test, or practicing arithmetic. If one could know that the teacher's instructions for the activity were to write poetry, then one could be more confident about judging the validity of what was happening.

It was decided to use a tape-recording of simulated teacher's instructions in order to prevent a subject's ability to respond to the instrument from depending upon his or her ability to read. This concern was necessary because of the importance of having subjects of low amounts of schooling, and thus probably lower than normal reading abilities. The tape recorded captions were separated by fifteen seconds dead air on the tape, giving subjects time to respond to the picture.

The focus of the pictures and the tape recorded teacher instructions can best be described with a 3x3 matrix with "level of formality"

on one axis, and "type of learning experience" on the other axis. Figure 3.1 shows the nine cells of the 3x3 matrix. Each cell is represented by one picture and set of tape recorded instructions. In the instrument the pictures are presented to the subject in a scrambled order to avoid encouraging a response-set bias on the part of the subject.

Figure 3.1 3x3 Matrix of Factors Represented By Research Instrument

Type of Learning Experience	Level of Formality: Low	Medium	High
Input	L-I	M-I	H-I
Self-Awareness	L-SA	M-SA	H-SA
Sharing	L-S	M-S	H-S

The instrument asked the subject a question for each of the nine pictures. The question was the same for each picture: "Do you think these people are learning something important?" The question was arrived at through consultation with other researchers, professional educators, and some trial uses. The final question was selected because of three main components. First, it specifically focuses on the participants' personal viewpoints. Second, asking if people are learning is believed to be, and has been used in other ethnopedagogy studies, to determine if people consider the activity to be a valid learning activity. Third, the word "important" focuses away from ancillary, or negative learning (such as learning to dislike math) and focuses on intentional goals and objectives.

On a Likert-type response scale, the subject had five possible choices, ranging from "yes" to "no." The choices are: "yes," "probably are," "some are, some aren't," "probably not," and "no." Five choices were finally selected because they gave the greatest variance with the least amount of ambiguity in choices.

The response sheet is shown in Appendix C. On the front side of the sheet is the instrument's question, instructions for marking the sheet, and the response scale for each picture. A packet of the nine pictures was stapled to the front of the sheet. The pictures were on strips of photographic paper so that the left edge of the picture was adjacent to the response scale for that picture. The packet was stapled to the sheet at the right edge of the sheet. After a picture was responded to, the subject folded up and to the right, revealing the picture underneath. Each picture was 1/4" shorter than the one above it, so that its left edge would be adjacent to its response scale. To insure proper matching of picture and response scale, each picture was numbered in the upper left corner. The pictures were then positioned on the response sheet so that the number on the picture was next to the number on the sheet.

On the back side of the response sheet are five questions, recording demographic information. Options for Question #1, Amount of Schooling, were selected because of conventional grade systems and attendance patterns. They would also provide the greatest flexibility in forming groups for statistical analysis after the data had been collected.

Validity concerns. A panel of educational professionals served to establish the validity of the research instrument. The main validity concerns involved whether or not the pictures represented what the

researcher says they represent. This dealt with both the level of formality and the type of learning experience provided. Each person was shown three sets of three pictures used in the instrument and asked to rank them from most formal to least formal. Each person was then given the pictures in the order they were presented on the tape recording. The person then looked at the picture and listened to the recording and made a judgement about which of three types of learning experience the picture represented. The panel of validity judges agreed almost 100% with the researcher's intentions for each picture. Thus, content validity of the instrument is rated "very good."

Construct validity was not a major concern. It may be said that for construct validity the instrument has "face validity." It was not designed to measure a construct, but to measure people's responses to the pictures represented.

Reliability concerns. Typical reliability coefficients could not be computed for this instrument. Most instruments have several questions that test for the same knowledge, attitude, or skill. In this instrument the same question was used about nine different pictures. Thus the instrument was looking for basically different responses. However, an attempt was made to make each picture different from the others only on important characteristics. Thus, the type of dress worn by the adults is about the same across pictures, the ages of adults are about the same, every setting is indoors, and all represent about the same size of a group. This was to prevent people from responding differently to the pictures for reasons other than level of formality and/or type of learning experience.

On the other hand, it could be said that the instrument is actually nine separate one-item tests. In that case, there is some question about

its established reliability. The question can be asked, "How can you be sure that your one item is a reliable measure of the subject's expectations about a particular combination of formality and type of experience?" This issue is partly addressed in the above discussion of construct validity. But it does demand that the claims for the findings of the instrument be tempered in light of this potential reliability problem.

Another type of reliability, also known as "stability," was tested for. This is also known as "test-retest" reliability. It attempts to see if the instrument elicits the same response over time, or if the instrument is vulnerable to changes in learner's mood, situation, or environment. In three separate groups, the instrument was given to thirty-two subjects. A few hours later, in the same setting, but after activities not at all related to the instrument, they were given the instrument again. An analysis was performed comparing individual's scores on the first test with their scores on the second. It was found that the scores, over the 32 subjects, has a correlation of .87. Thus it was concluded that the test was stable, and in that sense, reliable.

Field Procedures and Data Collection

Because this is a one-measurement type of design, the field procedures are minimal. They consist mainly of arranging to administer the instrument, then doing the administering of the instrument. In this way the field procedures and data collection are all one operation.

For this study, arrangements were made with administrators of various adult education programs. The study and data gathering procedures were explained. Usually an appointment was made to show and explain the research instrument and procedures for administering the

instrument. Almost all contacts were made with administrators who in turn contacted the instructors involved. On a few occasions, contact was made directly with the instructor.

In the group, the administering of the instrument took approximately ten minutes. The researcher, or on one occasion, an assistant, briefly explained the intent of the instrument as trying to find out what the subjects considered to be valid ways to learn. The subjects were then told how the pictures, tape recording, and answer sheet worked together. The picture-answer sheet packets were then distributed. The subjects were given approximately one minute to become familiar with them. The subjects were then shown how to fold over the pictures, and where to mark, then they were given an opportunity to ask questions. They were told that the tape would give the number of the next caption, which should correspond to the answer sheet column and picture number. They were also told that there were fifteen seconds between captions on the tape. A final opportunity for asking questions about the instructions was given before the tape began.

After the ninth caption on the tape, the tape recorder was stopped and the subjects were asked to turn their response sheets over and complete the informational questions on the back. After everyone was done, the picture-answer sheet packets were collected. The data collection in the group was finished.

Data Analysis

Two main types of data analysis were employed. One was a multivariate analysis of variance to test for the main effects and interaction effects mentioned in the research hypotheses. Analysis of variance was used because the study is most interested in identifying

any differences between groups with different amounts of formal schooling, rather than attempting to identify all of the factors which will account for all of the variance in subject scores as in a correlation. It is assumed that so many factors are related to formal schooling that such a study would be practically unmanageable. Analysis of variance also provides information about interaction of factors that can be useful in suggesting implications for educational planning and design.

Analysis of variance was also used to look into the effect and interaction of age. Age was not one of the original independent variables. But "eye-balling" the data as it came in suggested that it might have some relationship. Thus additional programs were generated and used to test for various effects of age. No analysis was done of SES. Informal observations indicated that any categorizing on the basis of SES would be nearly identical to the amount of formal schooling groups. Thus, it was assumed that differences based on SES would be very similar to those based on amount of schooling.

The computer program used for this analysis was the Finn Multivariance program. The Finn Multivariance program was required because of the nature of the sample and the research instrument.

When the sample was divided into groups on amount of formal schooling, the result was unequal cell sizes. Basic ANOVA procedures cannot handle unequal cell sizes. Because of the nature of the research instrument and factors of the dependent variable, a program was needed that could handle repeated measures. Each subject was measured on each of three levels of both of the factors of the dependent variable. The Finn Multivariance program can accomodate both unequal cell sizes and

repeated measures.

F-ratios with a statistical significance of alpha= .05 were accepted as significant for this study. For those F-ratios which show statistical significance, the Finn program computed univariate analyses of variance to help isolate the significant differences. Again an alpha level of alpha= .05 was used for judging significance.

A second type of data analysis involved descriptive statistics. These were computed to attempt to identify trends and possible relationships that might not be significant enough to show up in the analysis of variance. This is an exploratory study, and one of its purposes is to identify possible foci for further study and thinking. The descriptive statistics used were computed through the SPSS computer program.

Methodological Assumptions

There are several methodological assumptions which underlie the design and execution of this study. One of the assumptions is that the subject's response to the question on the research instrument indicates the extent to which the subject considers the activity represented by the picture to be a valid way to learn.

It was assumed that certain aspects of the formality of a learning activity can be represented through pictures of people in educational activities. It was also assumed that to some extent students' involvement in input, self-awareness, or sharing experiences could be represented through pictures. It was felt, however, that certain verbal cues were also necessary in order to represent the type of learning experience.

It was assumed that the audio-pictorial nature of the research

instrument would keep a subject's lack of ability to read from preventing him or her from understanding and responding to the instrument.

Limitations

There are some limitations of the study which affect its generalizability. Some of the limitations are related to the sample of subjects. The subjects of the study were not randomly selected from the general adult population, nor were they randomly selected to represent any given subpopulation of adults. For the kinds of analysis used, the sample of 225 is adequate for an exploratory study, but too small for high confidence in findings or widespread generalizations.

In order to obtain a sample that represented the various levels of amount of formal schooling, subjects were selected who vary a great deal from each other in other areas. It may be that differences found by the study are attributable to other psychological or sociological differences other than amount of formal schooling. The mixture of so many types of people, without controlling for demographic differences might obscure some real variance that is due to amount of formal schooling. Because of the convenience nature of the sample, and the exploratory nature of the study, all of the demographic differences could not be controlled for.

Some of the limitations of the study relate to the research instrument. Findings in a study for which a new instrument is designed and used are at best only suggestive. Though the instrument went through several steps of development and validity and reliability testing, it still is a basically unused instrument. The best validity and reliability testing of an instrument is its repeated use over an extended period of time.

The reliability problem, mentioned earlier, of the instrument may turn out to be a limitation. The instrument is essentially nine one-item tests. One-item tests are usually not considered very good measures. They increase the chance of not discovering differences that really do exist. Other than the development and validity testing procedures of the instrument, this weakness is not controlled for.

The five-point scale on the instrument provides for detection of only gross differences. Again, differences may exist that this study may not identify.

Another limitation is that findings concerning level of formality and type of learning experience are limited to how they are represented in the research instrument. There are other elements to an educational activity that contribute to its level of formality and/or type of experience provided. Such elements are planning, grading, design and administration procedures, and the instructor's personality, to name only a few. These elements, of course, could not be represented in the photographs. Efforts were made to find and depict the essential elements of each factor. Thus the findings can be highly suggestive of real expectations and differences. However, wide spread generalizability is not assured.

In sum, this study is exploratory in nature. It is a beginning step in identifying adult learners' pedagogical expectations, and the relationships between various expectations and learner characteristics. Though its findings can not be specifically generalized, the findings can be suggestive of what expectations are like, and what relationships would provide fruitful grounds for further study.

Summary

This chapter has identified the research methodology of the study and discussed some of the issues related to methodology. The chapter began by mentioning that this study is a causal-comparative study. It is an exploratory study, attempting to be a first step in identifying and better understanding adult pedagogical expectations.

The research design was then described as being somewhat like a "one-shot case study" design. It employs a single measure of a dependent variable. Information is collected about the subjects' background. Then relationships between background and the dependent variable are explored.

The dependent variable was identified as the subjects' responses to a research instrument. The dependent variable has two factors; level of formality and type of learning experience. Each factor has three levels, and each subject is measured on all three levels of both factors. The major independent variable is amount of formal schooling. Other demographic characteristics could be used as independent variables, but were not included in the research design as major variables. They were left to be used in informal analysis of the data.

The sample for the study was then briefly described. The sample was not randomly selected from the general adult population or any specific adult subpopulation. It was a convenience sample, selected to provide adequate representation for a wide range of amount of formal schooling. Because of this, the sample lacks a high degree of homogeneity. Thus, some actual variance on the dependent variable due to the independent variable may be overshadowed due to other differences in the subjects.

Several characteristics of the sample were briefly outlined,

showing the distribution of age, sex, amount of formal schooling and type of current adult education activity. The types of adult education programs selected for participation in the study were identified.

The characteristics and development of the research instrument was then described. The instrument was designed specifically for this study. It was based on some ideas used in other ethnopedagogical studies. The instrument consists of a set of nine pictures of adults engaged in educational activities; a tape recorded caption for each picture, simulating the teacher's instructions for the activity represented in the picture; and a five-choice Likert-type response scale consisting of one question per picture. The purpose of the instrument is to measure the extent to which the subjects consider the educational activities represented in the pictures to be valid ways to learn.

With the help of a panel of validity judges, it was determined that the content validity of the instrument is very good. Construct validity is not a mjor issue with this instrument. Through test-retest reliability procedures with 32 subjects it was determined that the "stability" reliability was .87. The limitation of the instrument being essentially nine one-item tests was also discussed.

Procedures for administering the instrument in an adult education group were identified. Particular attention was given to the instructions given to the subjects for completing the instrument. The amount of time needed to administer the instrument was indicated to be about ten minutes. A sequence of events for administering the instrument was briefly outlined.

Data analysis procedures were then discussed. An analysis of variance was selected to look for differences in groups. A

multivariance analysis of variance program was required because of unequal cell sizes and repeated measures. Descriptive statistics were computed for informal analysis of trends that may not show statistical significance.

The methodological assumptions and limitations of the study were then discussed. The assumptions were mostly concerned with the research instrument. The limitations of the study relate to both the instrument and the sample characteristics. Threats to validity were identified for which there may not be adequate control.

Chapter 4

FINDINGS

In this chapter the data collected through the research instrument are reported and analyzed. Statistical hypotheses intended to help answer the research questions have been tested and the results are reported here. Data that is not involved in the statistical testing of the hypotheses, yet which may serve the exploratory nature of the study are also reported. Finally the major findings are summarized.

Hypothesis Testing

Six research hypotheses which guided this study have been identified earlier. To test the hypotheses, an analysis of variance procedure was used. A multivariance analysis was used because of the unequal cell sizes and the repeated measures. The dependent variable was divided into two main factors: level of formality and type of learning experience. Each factor had three levels with each of the three levels of the type of learning experience factor being a subcategory of each level of the level of formality factor. Thus, each subject was measured on the dependent variable nine times. The independent variable in the design was amount of formal schooling. It was divided into seven groups. The seven groups corresponded to conventional divisions of amount of formal schooling. Figure 4.1 shows the breakdown of the independent variable into seven groups.

Figure 4.1 Breakdown of Independent Variable

Group No.	Grades	Number of Subjects in Group
1	0-8	14
2	9-11	33
3	12	48
4	Some College 13+	40
5	College Graduation 16	16
6	Graduate Work 17+	42
7	Advanced Degree 20+	32

The main research questions focused on the differences between levels of formal schooling on expectations about level of formality and type of experience. The analysis of variance was used because it created cells and looked for differences. The final design was a 7 x 3 x 3 Factorial Analysis of Variance. Figure 4.2 graphically represents the design.

Question 1A. The over all effect of the level of formality of the educational activities represented in the instrument was the focus of Question 1A. The null hypothesis that was tested states: There will be no differences for the entire sample in degree of expectation among the three levels of formality. The statistical hypotheses are given below.

Question 1A

H_0: $mB_1 = mB_2 = mB_3$

H_1: $mB_1 \neq mB_2 \neq mB_3$

$a = .05$

To test the null hypothesis, the grand means for all subjects were computed for each of the three levels of formality. The responses

Figure 4.2 Three-Way 7x3x3 Factorial Analysis of Variance

	B_1			B_2			B_3		
	C_1	C_2	C_3	C_1	C_2	C_3	C_1	C_2	C_3
A_1	$A_1B_1C_1$	$A_1B_1C_2$	$A_1B_1C_3$	$A_1B_2C_1$	$A_1B_2C_2$	$A_1B_2C_3$	$A_1B_3C_1$	$A_1B_3C_2$	$A_1B_3C_3$
A_2	$A_2B_1C_1$	$A_2B_1C_2$	$A_2B_1C_3$	$A_2B_2C_1$	$A_2B_2C_2$	$A_2B_2C_3$	$A_2B_3C_1$	$A_2B_3C_2$	$A_2B_3C_3$
A_3	$A_3B_1C_1$	$A_3B_1C_2$	$A_3B_1C_3$	$A_3B_2C_1$	$A_3B_2C_2$	$A_3B_2C_3$	$A_3B_3C_1$	$A_3B_3C_2$	$A_3B_3C_3$
A_4	$A_4B_1C_1$	$A_4B_1C_2$	$A_4B_1C_3$	$A_4B_2C_1$	$A_4B_2C_2$	$A_4B_2C_3$	$A_4B_3C_1$	$A_4B_3C_2$	$A_4B_3C_3$
A_5	$A_5B_1C_1$	$A_5B_1C_2$	$A_5B_1C_3$	$A_5B_2C_1$	$A_5B_2C_2$	$A_5B_2C_3$	$A_5B_3C_1$	$A_5B_3C_2$	$A_5B_3C_3$
A_6	$A_6B_1C_1$	$A_6B_1C_2$	$A_6B_1C_3$	$A_6B_2C_1$	$A_6B_2C_2$	$A_6B_2C_3$	$A_6B_3C_1$	$A_6B_3C_2$	$A_6B_3C_3$
A_7	$A_7B_1C_1$	$A_7B_1C_2$	$A_7B_1C_3$	$A_7B_2C_1$	$A_7B_2C_2$	$A_7B_2C_3$	$A_7B_3C_1$	$A_7B_3C_2$	$A_7B_3C_3$

$A_1 \ldots A_7$ = Amount of formal schooling (A_1 = 0-8 yrs., A_2 = 9-11 yrs., A_3 = 12 yrs., A_4 = Some College, A_5 = College Graduate, A_6 = Graduate School, A_7 = Advanced Degree)

$B_1 \ldots B_3$ = Three levels of formality (B_1 = Low, B_2 = Medium, B_3 = High)

$C_1 \ldots C_3$ = Three types of learning experiences (C_1 = Input, C_2 = Self-Awareness, C_3 = Sharing)

for each picture that represented high formality were averaged; the same procedure was also used for the other two levels of formality. The result was three grand means. The means are displayed in Table 4.1. The null hypothesis states that the three means in Table 4.1 are all the same. The test determined if the means were all the same or significantly different.

Table 4.1 Grand Means for Levels of Formality (Question 1A)

	Level of Formality		
	Low	Medium	High
	B_1	B_2	B_3
Grand Means	3.88	3.91	3.57

The result of the analysis of variance was an F-ratio = 25.8082 with a significance of p=.0001. The null hypothesis was confidently rejected. Thus it was found that over all the subjects did consider one or more levels of formality to be more valid than other levels.

An informal analysis of the means displayed in Table 4.1 showed that the means for the Low and Medium levels of formality are similar, but both are greater than the mean for the High level of formality. Thus, testing of the null hypothesis showed that in general, the subjects of the study considered Low and Medium formality activities to be more valid learning experiences than High formality activities.

Question 1B. Question 1B focused on the over-all main effect of the Type of Learning Experience. It asked, "Do adult learners expect any one type of learning experience to provide more important learning

than the other types of learning experiences?" The null hypothesis that was tested states that there will be no main effect among the different types of learning experiences. The statistical hypotheses are presented below, using the notation from Figure 4.2.

Question 1B

H_0: $mC_1 = mC_2 = mC_3$

H_1: $mC_1 \neq mC_2 \neq mC_3$

a = .05

To test the null hypothesis, the grand means for all subjects were computed for each of the three types of learning experiences. The means are displayed in Table 4.2. The null hypothesis states that the means in Table 4.2 are statistically the same. By analysis of variance the means were compared to determine if they were statistically the same. The F-ratio resulting from the analysis of variance was 12.5087 with a p= .0001 level of significance. The null hypothesis was rejected. Testing hypothesis 1B showed that the adults in the sample do expect one or more types of learning experiences to provide more important learning than other types.

An informal analysis of Table 4.2 shows that the mean for Self-Awareness is greater than the mean for Self-Awareness is greater than the mean for Input. It also shows that the mean for Sharing is greater than either of the other two means. Therefore, it was found that the research subjects considered Sharing type learning experiences to be the most valid type of learning experience represented in the instrument. It was also found that Self-Awareness type learning experiences are considered to be more valid than Input type learning experiences.

Table 4.2 Grand Means for Types of Learning Experiences (Question 1B)

	Type of Learning Experience		
	Input C_1	Self-Awareness C_2	Sharing C_3
Grand Means	3.63	3.77	3.95

Question 2A. The focus of Question 2A was on an interaction between a subject's amount of formal schooling and the subject's expectations about level of formality. The null hypothesis was stated: There will be no interaction between amount of schooling and expectations about level of formality. Using the notation from Figure 4.2 the statistical hypotheses follow.

Question 2A

H_0: $mA_1B_1 = mA_1B_2 = mA_1B_3 = mA_2B_1 = mA_2B_2 = mA_2B_3 = \ldots mA_7B_2 = mA_7B_3$

H_1: $mA_1B_1 \neq mA_1B_2 \neq mA_1B_3 \neq mA_2B_1 \neq mA_2B_2 \neq mA_2B_3 \neq \ldots mA_7B_2 \neq mA_7B_3$

$a = .05$

To test the null hypothesis, means for each level of formality were computed for each level of amount of schooling. The means are displayed in Table 4.3. The analysis of variance compared the means to determine if they were statistically signficantly different from each other. The test procedure yielded and F-ratio = 1.7863. This was significant at the a = .05 level. The null hypothesis was rejected. Thus, testing the hypothesis showed that a subject's amount of formal schooling influences whether or not the subject considered any one of the levels of formality more valid than other levels.

Table 4.3 Means for Level of Formality by Amount of Schooling (Question 2A)

Amount of Schooling	Level of Formality: Low B_1	Medium B_2	High B_3
A_1 (0-8 yrs.)	4.27	4.02	3.90
A_2 (9-11 yrs.)	3.61	4.14	3.64
A_3 (12 yrs.)	3.87	3.83	3.74
A_4 (Some Coll.)	3.94	4.00	3.67
A_5 (Coll. Grad.)	3.96	4.06	3.42
A_6 (Grad.Sch.)	3.82	3.67	3.45
A_7 (Adv. Deg.)	4.00	3.82	3.54

The interaction pattern between amount of schooling and level of formality is illustrated in Figure 4.3. The points on the graph indicate the means in Table 4.3. The lines connecting the points serve only to help identify differences for each level of formality between each level of amount of schooling. The lines are not intended to represent contiuous values between the levels of amount of schooling. They are drawn to help identify the relationship between amount of schooling and degree of expectation of learning for each level of formality. Kerlinger (1973) explains the chart by saying, "The slope

of the lines roughly indicates the extent of the relation . . . . The nearer the line comes to being diagonal, the higher the relation."(P.226)

However, the slope shows only the relationship between amount of schooling and the degree of expectation of learning. Interaction exists when the relationship between amount of schooling (x-axis) and degree of expectation of learning (y-axis) depends upon the level of formality. To the extent that lines in the graph make different angles with each other (are not parallel), to this extent there is interaction present.

It can be seen in Figure 4.3 that there is interaction between amount of formal schooling and level of formality. The interaction involves all three levels of formality.

The findings from testing the hypothesis are that there is an interaction between amount of schooling and expectations about level of formality. That is, one's expectations about level of formality are partially dependent upon one's amount of formal schooling.

Question 2B. Question 2B focused on the interaction between a subject's amount of formal schooling and expectations about type of learning experience. The null hypothesis states that there will be no amount of schooling by type of learning experience interaction effect. Using the notation from Figure 4.2 the statistical hypothesis is stated below.

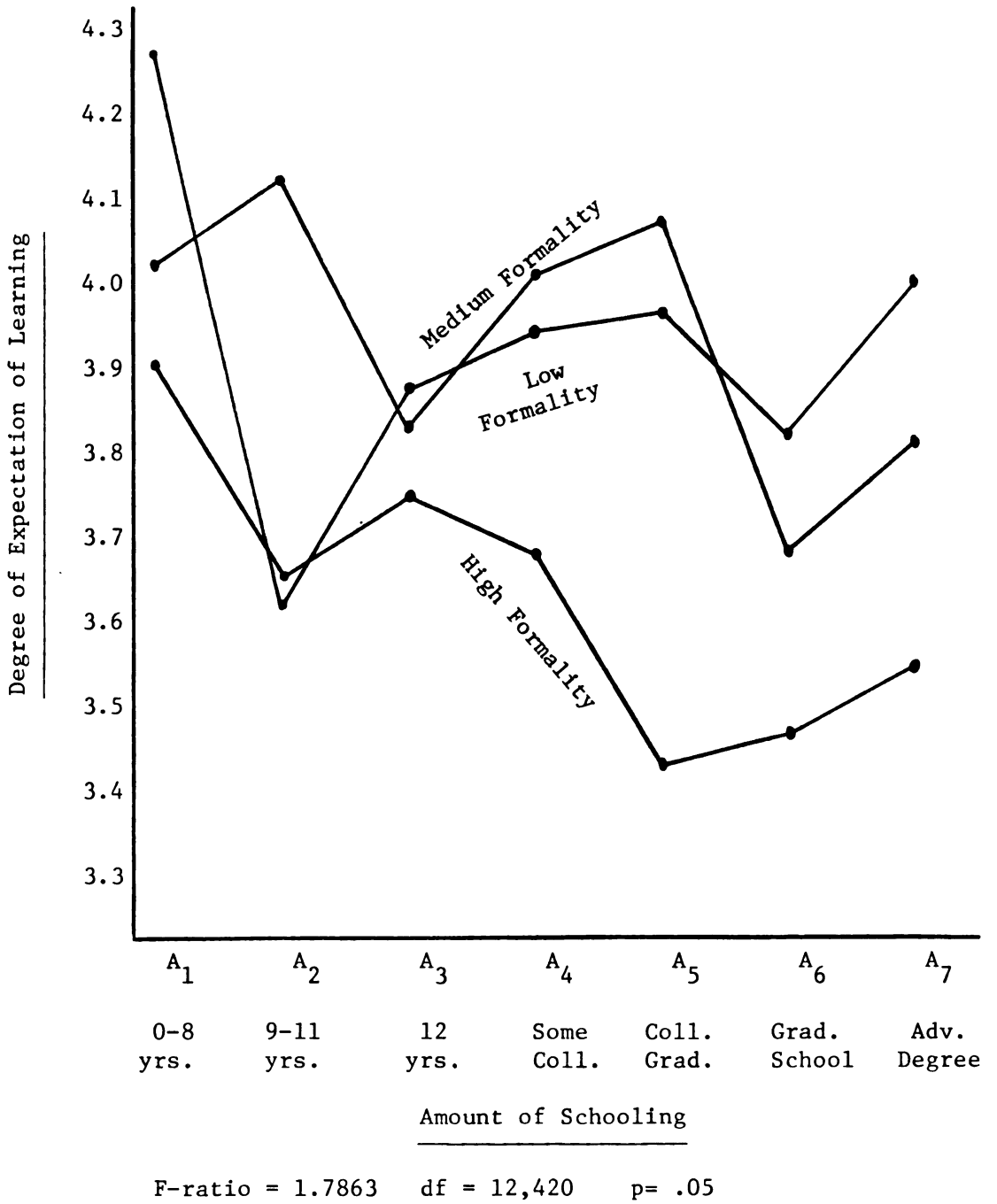
Question 2B

H_0: $mA_1C_1 = mA_1C_2 = mA_1C_3 = mA_2C_1 = mA_2C_2 = mA_2C_3 = \ldots mA_7C_2 = mA_7C_3$

H_1: $mA_1C_1 \neq mA_1C_2 \neq mA_1C_3 \neq mA_2C_1 \neq mA_2C_2 \neq mA_2C_3 \neq \ldots mA_7C_2 \neq mA_7C_3$

$a = .05$

Figure 4.3 Amount of Schooling x Level of Formality: Interaction (Question 2A)



F-ratio = 1.7863 df = 12,420 p= .05

To test the hypothesis, means for each type of learning experience were computed for each level of amount of schooling. The means are displayed in Table 4.4. The analysis of variance compared the means to determine if they were statistically different from each other. The test procedure yielded an F-ratio = .7879 with a p less than .6632. This was not significant at the a = .05 level. Thus, the null hypothesis was not rejected. No interaction was found between one's amount of schooling and expectations about type of learning experience.

Table 4.4 Means for Type of Learning Experience (Question 2B) by Levels of Amount of Schooling

Amount of Schooling	Type of Learning Experience: Input C_1	Self-Awareness C_2	Sharing C_3
A_1 (0-8 yrs.)	3.76	4.12	4.33
A_2 (9-11 yrs.)	3.59	3.93	3.87
A_3 (12 yrs.)	3.56	3.74	3.92
A_4 (Some Coll.)	3.70	3.84	4.07
A_5 (Coll. Grad.)	3.79	3.58	4.07
A_6 (Grad. Sch.)	3.58	3.54	3.82
A_7 (Adv. Deg.)	3.64	3.84	3.89

Question 3. Question 3 focused on the interaction between level of formality and type of learning experience. It was stated, "Is an adult learner's expectations about the level of formality of an instructional activity related to his or her expectations about the type of learning experience provided by that activity?" The null hypothesis states that there will be no level of formality by type of learning experience interaction effect. Using the notation from Figure 4.2 the statistical hypothesis is stated below.

Question 3

H_0: $mB_1C_1 = mB_1C_2 = mB_1C_3 = mB_2C_1 \ldots mB_3C_3$

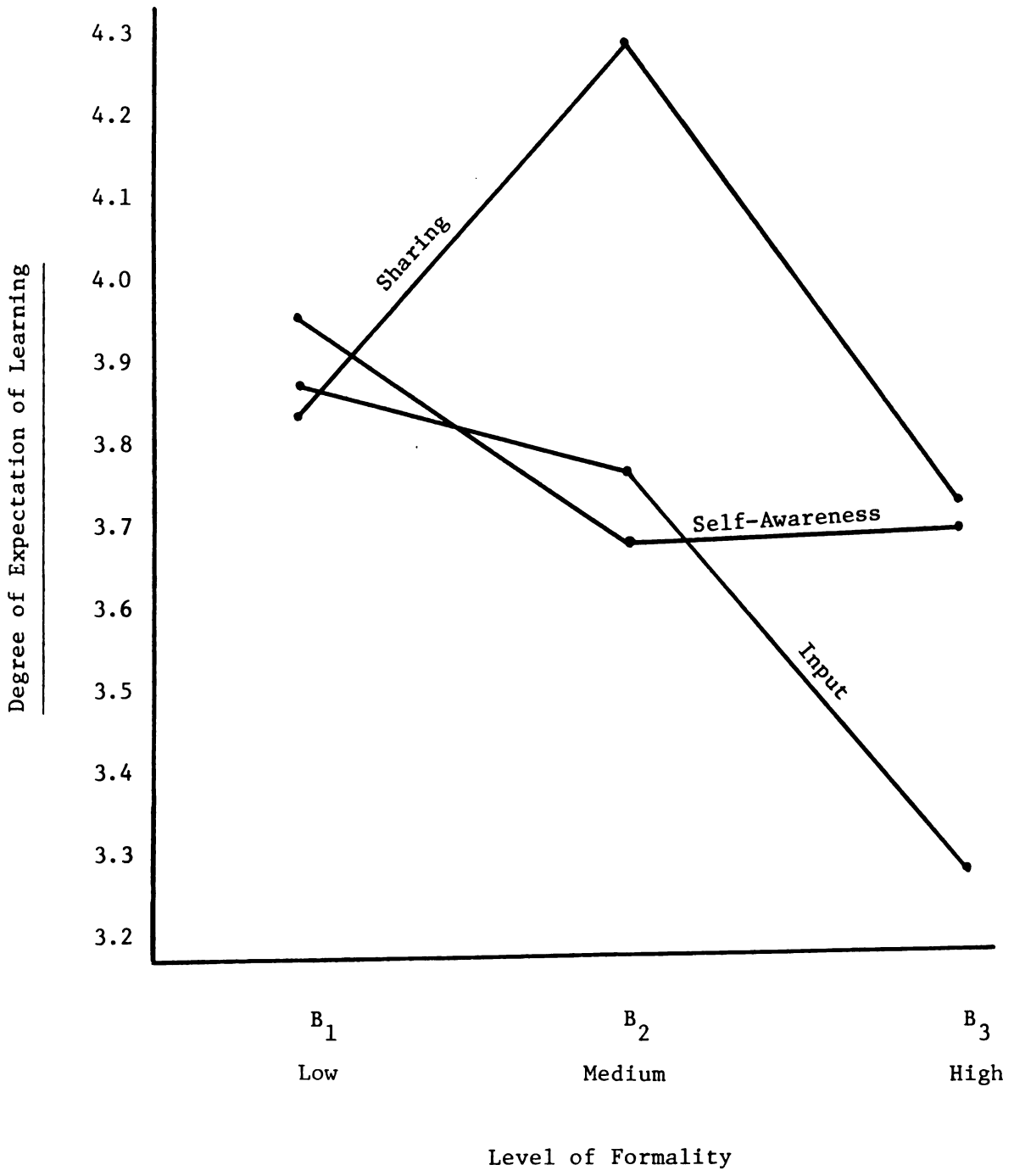
H_1: $mB_1C_1 \neq mB_1C_2 \neq mB_1C_3 \neq mB_2C_1 \ldots mB_3C_3$

$a = .05$

To test the hypothesis, entire-sample grand means were computed for each of the nine items on the instrument. The means are arranged in the 3x3 Level of Formality by Type of Learning Experience matrix as in Figure 3.1. The means are displayed in Table 4.5. The analysis of variance computed the nine means to determine if they were statistically different from each other.

The test of the hypothesis yielded an F-ratio = 11.8949 with a p less than .0001. The null hypothesis was rejected. Thus it was found that there is an interaction between level of formality and type of learning experience. Figure 4.4 graphs the interaction. The explanation of the symbols in the graph are the same as given in the discussion of Question 2B. An examination of Figure 4.4 shows interaction involving all three types of learning experiences.

Figure 4.4 Level of Formality x Type of Learning Experience (Question 3)



F-ratio = 11.8948 df = 4, 208 p = .0001

The finding from testing the hypothesis related to Question 3 was that the subjects' expectations about level of formality were related to their expectations about type of learning experience. For example, one's expectations about High formality partially depended upon his or her expectations about Input learning experiences.

Table 4.5 Level of Formality x Type of Learning Experience (Question 3)

Type of Learning Experience	Level of Formality: Low B_1	Medium B_2	High B_3
Input C_1	3.86	3.76	3.28
Self-Awareness C_2	3.95	3.68	3.69
Sharing C_3	3.84	4.28	3.74

Question 4. Question 4 focused on the three-way interaction among amount of schooling, level of formality, and type of learning experience. It was stated, "Is there a relationship among an adult learner's amount of formal schooling, expectations about the level of formality of an instructional activity, and expectations about the type of learning experience provided by that activity?" The null hypothesis states that there will be no amount of schooling by level of formality by type of learning experience interaction effect. The null statistical hypothesis would place all of the means in Figure 4.2 equal to each other. The alternate hypothesis (H_1) would state that the means are not

all equal to each other. The level of significance is set at a= .05.

To test the null hypothesis the means for each cell of the 3 x 3, Level of Formality by Type of Learning Experience matrix (Figure 3.1) were computed for each of the seven levels of amount of formal schooling. The means are displayed in Table 4.7. The analysis of variance then tested the relationship between the means to see if they are statistically different.

The analysis of variance yielded an F-ratio = 1.4831 with p less than .0645. The null hypothesis was not rejected. The three-way interaction was not found to be significant at the alpha level = .05. No relationship was found among a person's amount of schooling, expectations about level of formality and expectations about type of learning experience. Table 4.6 summarizes the tests through analysis of variance for the six research questions.

Table 4.6 Final Analysis of Variance Table

Question No.	Source	df	F	Significance Level, p=
1A	Main Effect: Level of Formality	2; 210	25.8082	.0001
1B	Main Effect: Type of Learning Experience	2; 210	12.5087	.0001
2A	Interaction: Amount of Schooling x Level of Formality	12; 420	1.7863	.05
2B	Interaction: Amount of Schooling x Type of Learning Experience	12; 420	.7879	n.s.
3	Interaction: Level of Formality x Type of Learning Experience	4; 208	11.8948	.0001
4	Interaction: Amount of Schooling x Level of Formality x Type of Learning Experience	24; 727	1.4831	n.s.

Table 4.7 Amount of Schooling x Level of Formality x Type of Learning Experience: Interaction (Question 4) (Group means for each cell)

		Level of Formality								
		Low B_1			Medium B_2			High B_3		
		Type of Learning Experience			Type of Learning Experience			Type of Learning Experience		
		I C_1*	SA C_2*	S C_3*	I C_1*	SA C_2*	S C_3*	I C_1*	SA C_2*	S C_3*
0-8 yrs.	A_1	4.29	4.14	4.43	3.42	4.07	4.57	3.57	4.14	4.00
9-11 yrs.	A_2	3.55	3.64	3.64	3.88	4.24	4.30	3.33	3.91	3.67
12 yrs.	A_3	3.85	3.94	3.81	3.52	3.73	4.25	3.82	3.56	3.69
Some Coll	A_4	3.88	4.05	3.90	3.88	3.68	4.48	3.35	3.78	3.88
Coll. Grad	A_5	3.50	4.19	4.19	4.31	3.25	4.63	3.56	3.31	3.38
Grad School	A_6	3.95	3.93	3.57	3.81	3.14	4.07	2.98	3.55	3.83
Adv. Deg.	A_7	4.06	4.00	3.94	3.63	3.78	4.06	3.22	3.75	3.66

Informal Observations

The statistical hypotheses were tested with the use of an analysis of variance design. The analysis of variance design basically tests only the significant differences between a number of different means. However, informal observations of descriptive statistics can often reveal trends that, though are not statistically significant, appear to be fairly consistent. If such trends can be identified, they could become points of focus for other studies.

Effects of Age. Though not a part of the primary research design, age was built into the analysis of variance. The sample was divided into seven categories of age, each category representing a 10-year period such as 30-39 years of age. In three different tests age did not show to have a significant effect as an independent variable.

Highest means. In Table 4.6 each row represents the means for one of the levels of amount of formal schooling. For each level, the highest mean of the nine was in the Medium formality-Sharing learning experience cell. This cell was also consistently rated over 4.00.

Under the three broad level of formality columns, the highest mean for the Low level was evenly distributed among the three types of learning experiences. For the Medium formality level, the highest mean was for the Sharing type of learning experience. For the High level of formality, the highest mean was evenly distributed between Self-Awareness and Sharing types of learning experiences, except once Input was rated highest under the High level of formality.

Under the three types of learning experiences, the highest mean for Input experiences was divided between the Low level and Medium

formality level of formality. Four times Low was rated highest, two times Medium formality was rated highest. For Input types of learning experiences, the High formality level was never rated the highest. For Self-Awareness types of learning experiences, the Low level of formality was rated highest five times out of seven. Once the Medium formality level was rated highest, and once there was a tie between the Low level and the High formality level. For Sharing types of learning experiences, the Medium formality level was always rated highest.

For over-all means on level of formality for each level of amount of schooling, the Low level of formality was rated highest four times, the Medium formality was rated highest three times. The High level of formality was never rated highest over-all for any of the seven levels of amount of schooling. For over-all means on type of learning experience for each level of amount of schooling, Sharing types of experiences were rated higher six times. One time Self-Awareness types of experiences were rated higher. Input experiences were never rated highest.

Over-all, Input types of experiences and the High level of formality were never rated highest by the subjects of any one of the seven levels of amount of schooling.

Lowest means. For each of the seven levels of amount of schooling for the nine cells, High formality-Input was rated lowest five times. One time Medium formality-Input was rated lowest. One time Medium formality-Self-Awareness was rated lowest. For six of the seven levels of amount of schooling the High level of formality was rated lowest over-all for Level of formality. Five times Input types of learning experiences were rated lowest over-all for types of learning

experiences.

Entire sample. For the entire sample, the highest-rated individual cell was Medium formality-Self-Awareness. The lowest-rated individual cell for the entire sample was High formality-Input.

Interaction effects. In Figure 4.3 the interaction effect of amount of schooling by level of formality was illustrated. The figure shows the relative position of the High and Medium levels of formality. The Medium level of formality is consistently rated higher than the High level of formality. The figure also shows that though there is a slight reversal in position between the High level of formality and the Low level of formality, the High level is always, except for one of the levels of amount of schooling, rated the lowest of the three levels of formality.

Summary

In this chapter the results of the study were presented and analyzed to test hypotheses related to the research questions. Trends in the data which were not part of the statistical design were also reported.

Analysis of variance was used to test six statistical hypotheses. Two main effects were tested for. A level of formality main effect had an F-ratio = 25.8082 with a level of significance of $p = .0001$. The type of learning experience main effect was also significant at $p = .0001$ with an F-ratio = 12.5087. Two interaction effects were discovered to be significant. The amount of schooling by level of formality interaction effect was significant at $p = .05$. It

had an F-ratio = 1.7863. The level of formality by type of learning experience interaction effect was also significant. It had an F-ratio of 11.8948 with a level of significance p = .0001. The three-way interaction was not significant at the alpha level = .05.

It was shown in this chapter that over-all, Input types of learning experiences and High level of formality educational activities were consistently rated lowest in terms of providing for important learning. When Input was combined with High formality, it was the lowest-rated of all combinations. For some of the levels of amount of schooling, Input might be rated the highest within one of the levels of formality other than the High level.

Sharing types of learning experiences and activities with Low or Medium levels of formality were consistently rated highest in terms of providing for important learning. When Sharing was combined with Medium formality it was always the highest-rated combination.

It was reported that when the subjects were categorized by age into seven different groups, age had no relationship to the degree of expectations.

Chapter 5

SUMMARY AND CONCLUSIONS

In this chapter a summary is given of the research project. Following the summary, the findings are discussed and some conclusions are stated. Based on the findings and conlcusions, suggestions are made about implications for practice in adult education and for further research.

Summary

This study has inquired into the nature of adult learners' pedagogical expectations. Pedagogical expectations are the culturally influenced expectations that people have of what constitutes a valid learning experience. It is important to better understand adult learners' pedagogical expectations as adult education strives to involve adults in more "developmental" approaches to education. It will be helpful to know what kinds of activities are most consistent with adult learners' pedagogical expectations.

Since pedagogical expectations are culturally influenced, and since a major part of American culture's education is in formal schooling, it was deemed important to inquire into the relationship between amount of formal schooling and expectations. Expectations of two sorts were looked at: level of formality and type of learning experience. Level of formality was selected because it was been a major focus of practitioners in adult education, and because it is an element of an educational

program that is often easily changed, even if only slightly. Three types of learning experiences were selected for study because of the belief in their importance in providing "developmental" adult education.

Studies were reviewed which looked at the relationship between amount of formal schooling and various elements of participation in adult education. It was found that the more schooling people had, the more they participated in adult education. It was also found that the more schooling people had, the more they participated in the more formal, or structured, programs. Studies were also reviewed which demonstrated the relationship between cultural experiences and learning styles. Studies that looked at expectations and preferences were also briefly reviewed.

To inquire into the relationship between amount of schooling and pedagogical expectations, and instrument was designed which represented nine different educational activities. Each picture represented one of the three levels of formality and one of the three types of learning experiences. Every combination of the two factors was represented once in the nine pictures. Adults in various adult education programs were asked to respond to each picture and indicate if they thought the people in the picture were learning something important. They responded to a five-point Likert-type scale ranging from "No" to "Yes" with labelled choices in between. Selecting participants from various types of adult education programs was deemed desirable because of the need to have a wide range of amount of schooling adequately represented in the sample. The sample was gathered on a "convenience" basis, trying to get a wide range of amount of schooling. The sample size was 225.

After the data were collected they were analyzed through a multivariance analysis of variance procedure. The analysis of variance procedure tested six null hypotheses. Testing the hypotheses would enable the answering of the initial research questions. An alpha level, a = .05 was selected for determining the significance of the hypothesis tests. The results of the hypothesis tests are stated below.

Question 1A. The subjects of the study considered Low and Medium formality activities to be more valid learning activities than High formality activities.

Question 1B. The research subjects considered Sharing type learning experiences to be the most valid type of learning experience of those represented in the research instrument.

Question 2A. A subject's amount of formal schooling influences whether or not the subject considered any one of the levels of formality more valid than other levels.

Question 2B. No interaction was found between one's amount of schooling and expectations about type of learning experiences.

Question 3. The subjects' expectations about level of formality is related to their expectations about type of learning experience.

Question 4. No relationship was found among a person's amount of formal schooling, expectations about level of formality, and expectations about type of learning experience.

After findings for each hypothesis were presented, some general observations were made about certain trends. The Low formality-Sharing combination was rated highest by every group. The High formality-Input combination was rated lowest in five of the seven groups.

Discussion of Findings

In Chapter 4 of this dissertation findings were presented which related to a number of statistical hypotheses. Each hypothesis was designed to help answer a major research question. In this section an attempt will be made to interpret those findings.

Question 1A. "Do adult learners expect any one level of formality to provide more important learning than the other levels?" The data indicate that the subjects of the study do distinguish between levels of formality in considering educational activities to be valid learning activities. It was found that activities of a Low or Medium level of formality were considered to be more valid than High formality activities.

The rationale for this study suggested that people develop pedagogical expectations largely as a part of cultural experience. In American culture, most adults have had a high degree of formal schooling experience. In the sample for this study nearly 80% of the people had at least 12 years of formal schooling experience. Yet educational activities of a high level of formality, which most of this study's sample probably experienced in school, were consistently rated lowest on the degree to which people expected them to provide important learning.

However, it is often said that some of the most important learnings in a person's life occur outside of school settings. It may be that the subjects of this study were reflecting this latter kind of experience when they rated High formality lowest in providing important learning. A re-examination of the rationale of the study reveals that many formal schooling experiences in America are far less rigid than formal schooling experiences in other cultures. Studies in various

cultures would be helpful in determining the relationship between cultural practices and pedagogical expectations.

Question 1B. "Do adult learners expect any one type of learning experience to provide more important learning than other types of learning experiences?" The answer to this question is that the subjects of this study, over-all and consistently by groups based on amount of schooling, considered Sharing experiences to provide the most important learning. They also considered Input experiences to be the least valid type of learning experience.

With the vast amount of background adult learners have with Input experiences, it would have been understandable to find Input learning experiences high in people's expectations. To find the opposite to be true suggests that though many adults have taken part in, and continue to take part in Input type learning experiences, they consider those experiences not to be providing important learning as well as other types of experiences could.

This is not to suggest that on the whole the subjects considered Input learning experiences to be invalid ways to learn something important. Over-all, Input learning experiences were rated 3.63. Though 3.63 is lower than the grand mean for the entire study (3.8) it is still closer to the "Probably are" response on the instrument than to the "Some are, some aren't." The meaning of the findings is that the other two types of learning experiences represented were considered to be even more valid ways of learning something important.

Question 2A. "Is an adult learner's amount of formal schooling related to his or her expectations about the level of formality of an instructional activity?" There are two ways to answer this question, but they both mean a partial, "Yes." There is an interaction between amount

of schooling and expectations about formality. This means that for the different groups of schooling levels, the order of, and differences between the three levels of formality were not the same.

Thus, those who had finished high school but had not gone on to college considered High formality least valid and Low most valid, but with a range of only 0.13. Whereas college graduates considered High formality least valid and Medium formality most valid with a range of 0.64. The range of 0.64 between scores was the widest range in the entire sample.

The question can be ansered, "Yes," also because the subjects from no two levels of schooling considered any given level of formality to be the same. Each group rated the High level of formality different from the other groups. However, there is no clear pattern of why the ratings or rank orders change. It may be that although there is a significant interaction between amount of schooling and expectations about level of formality, amount of schooling may not account for all of the change: there may be other factors that interact with expectations about level of formality.

The question can be partially answered, "No" because regardless of amount of schooling, Medium formality was always rated higher than High formality.

Question 2B. "Is an adult learner's amount of formal schooling related to his or her expectations about the type of learning experience provided by an instructional activity?" The data fail to indicate that there is such a relationship. Formal schooling tends to provide many Input experiences. Again, the subjects apparently did not make their responses to the instrument on the basis of the amount of their

formal schooling experiences.

Question 3. "Is an adult learner's expectations about the level of formality of an instructional activity related to his or her expectations about the type of learning experience provided by that activity?" The data indicate that such a relationship does exist. The subjects did rate the different types of experiences differently, depending upon level of formality.

The sample considered all three types of learning experiences to be approximately equally valid in Low formality settings. Both Input experiences and Self-Awareness experiences are considered a little less valid in Medium formality settings, while Sharing experiences are considered distinctly more valid.

In the High level of formality, Sharing experiences lose some of the high rating of the Medium level of formality. In the High level of formality, Self-Awareness and Sharing are considered approximately similarly valid, while Input is considered far less valid than the other two types of learning experiences.

It is interesting that the subjects' rating of Input experiences was highest for the Low level of formality while they rated Input lowest for the High level of formality. This again appears to be inconsistent with the background experience of the people. Most of them probably have had the majority of their input experiences in educational activities of a high level of formality.

Question 4. "Is there a relationship among an adult learner's amount of formal schooling, expectations about the level of formality of an instructional activity, and expectations about the type of learning

experience provided by that activity?" The data do not indicate that such a relationship exists. It was already established in the study that there was a relationship between amount of schooling and expectations about level of formality. A relationship was also established between level of formality and type of learning experience. No relationship was discovered between amount of schooling and expectations about type of learning experience. However, when the three-way interaction is tested for, the combination of the other effects hints at a three-way interaction effect, but it was not statistically significant at the alpha = .05 level.

A re-examination of the means shows that the subjects of some levels of amount of formal schooling rate Input highest in Low formality activities while other groups rate Input highest in the Medium level of formality. Again, there is apparently no direct linear or curvilinear relationship.

Research hypotheses. Two research hypotheses were spelled out in Chapter 1. Both were based on the idea that if cultural experiences influenced pedagogical expectations, then people with greater amounts of schooling experiences would have higher expectations about those kinds of experiences.

The first hypothesis was stated. "Adult learners with more formal schooling will expect higher levels of formality in instructional activities than those learners with less formal schooling." The hypothesis was not supported. No direct relationship was found between amount of schooling and expectations about level of formality. In Figure 4.3 the relationship between amount of schooling and level of formality is illustrated. It appears that if a line were drawn down

the middle of a graph, separating the schooling groups into only two groups, the rating scores of High formality for the groups with more schooling would all be lower than for the groups with less schooling.

This seems to be inconsistent with the basis upon which the research hypothesis was made. It does not mean that pedagogical expectations are not largely influenced by cultural experiences; it may mean that the amount of formal schooling is not as important as other characteristics of those schooling experiences and other learning experiences. It may also mean that some judgement errors were made in formulating the research hypotheses. As was indicated earlier, it may be that though American schooling is very formalized, it does not consist of as much High formality-Input experiences as was thought, or as exists in other cultures.

A second research hypothesis was stated, "Learners who expect higher levels of formality will expect more input experiences than the other two types of experiences." This hypothesis also was not supported. The data seem to indicate nearly the opposite. To the extent that people considered High formality activities to be valid learning activities, they rated Input to be the least valid High formality learning experience. Again, some more careful hypothesis formulation may have been called for. In the sample used, 80% had more schooling than 12 years. It may be that in this more highly educated subpopulation, Input experiences have lost credibility because they have been more associated with meaningless learning.

Conclusions

Based upon the findings of the study and the answers to the research questions, the following conclusions can be drawn.

1. Pedagogical expectations can be identified in terms of level of formality and type of learning experience. Though there are many aspects of level of formality, and Input, Self-Awareness, and Sharing learning experiences that could not be captured in the current research instrument, still the instrument did show differences in expectations. More refined instruments ought to be able to identify even more explicit differences in expectations. Knowing that expectations about level of formality and type of learning experience exist, should lead adult education practitioners to select methods and media not merely as personal preferences, but because those methods and media would be most meaningful for the learners involved.

2. A person's amount of formal schooling is related to his or her expectations about level of formality. Though the data show a relationship, no direct linear relationship is indicated. It was expected that, to a certain degree, people who had more experience in formal schooling would have higher expectations about learning in activities of High formality. This prediction was based on the idea that pedagogical expectations are culturally influenced, and cultural experience would lead adults, especially those with more schooling, to expect High formality. It may still be true that pedagogical expectations are largely influenced by cultural experience, but that in a sample with as much schooling as the research sample, people often associate "irrelevancy," and "busy-work" with High formality educational activities. Thus, it can be suggested that merely because people have had a large amount of experience with a certain kind of educational activity, it does not mean they necessarily consider it to be a valid way to learn.

The prediction of the positive relationship between amount of

schooling and expectations about level of formality was based partly on the research reviewed which focused on characteristics of participants. Those studies showed that the more schooling a person had, the more likely he was to be involved in more formal, structured educational programs. It was assumed at that point that the higher level of participation was at least indicative of a congruency between what the program offered and the person's pedagogical expectations. It may be, however, that formal adult educational programs are the only ones most people are aware of, or were the only kinds of programs upon which information was collected in the studies.

Though there is a significant interaction between amount of formal schooling and expectations about level of formality, and a possible three-way interaction with amount of schooling, the interactions do not follow any kind of predictable pattern. The differences between a series of levels of amount of formal schooling seem to be almost random. Thus, it is concluded that though amount of schooling is related to expectations, there is no indication of any direct linear relationship. It may be that one's experience in formal schooling is an important influence on pedagogical expectations but that the important variable is "quality" or "nature" of those experiences and one's response to one's success in those experiences rather than merely the "amount" of those experiences.

3. Adult learners consider educational activities that have a high level of formality and/or provide input experiences to be less valid than other activities. This was a recurring pattern no matter how the data were analyzed. Many adult education programs are currently shifting away from a focus on High formality and Input experiences. Apparently such shifts are in line with what the adult learners in this

study consider to be valid ways to learn. The literature on adult learning, cited in Chapter 1, suggests that most meangingful learning occurs in activities that are not characterized by high formality and input experiences. The findings of this study appear to be congruent with the literature on adult learning. The adult learners appear to know how they learn best and are able not to confuse it with what they have had a lot of background in.

4. Adult learners consider educational activities that have a Low level of formality and/or provide Sharing experiences to be more valid than other activities. This conclusion was consistently supported by the data, through several different analyses. Activities that combine a Low level of formality and Sharing experiences are considered to be most valid of all. This conclusion too is consistent with the literature on adult learning. As learners, adult have a greater wealth of experiences than children learners do. Adults more often need to, and are, capable of learning from their own experiences. There is a strong pragmatic element in adult learning. Thus, it makes sense that the kinds of activities they consider to provide the most important learning are those activities where they can share with, and learn from, each other.

5. One's expectations about level of formality is related to one's expectations about type of learning experience. Input experiences are found to be considered more valid when they are in Low or Medium formality settings than when they are in High formality settings. Sharing experiences are considered more valid in Medium formality settings than in Low settings. In other words, this conclusion states that no one type of learning experience is considered bad in itself. Each type of learning experience can be used meaningfully by using it in

activity of the appropriate level of formality.

Implications

Based upon the above conclusions, some implications can be suggested for both practice in adult education and further research.

Implications for practice in adult education. As was suggested in Chapter 1, the major purpose for considering pedagogical expectations is to work for a high degree of congruency between provided educational activities and learner pedagogical expectations. The way this has most frequently been focused upon in the field of ethnopedagogy is to adapt instructional practices to learner pedagogical expectations.

In adapting instructional practices to pedagogical expectations, the findings from this study suggest that for learner groups similar to the research sample, activities should have a Low or Medium level of formality more than a High level of formality. Formality was represented in the study by seating structure, focus of attention, and relative position of the teacher. High formality was represented with students in fixed rows, paying attention to the teacher, who was isolated from the students, in front of them and either standing up (while the students were seated), seated behind a desk, or standing behind a desk. Thus, those kinds of settings should be avoided for general activities. There seem to be special situations where such a setting is often deemed desirable, such as when a prominent person comes to speak about a topic of high interest to a particular group, but that kind of condition was not built into the research instrument and study.

The study also suggests that learning activities ought to involve Self-Awareness and Sharing experiences rather than concentrating primarily on Input experiences. In the research instrument, Input

experiences were those in which the teacher was telling something to the students, and for the most part, it was what the teacher thought was important for the students to know. In Self-Awareness and Sharing experiences the focus of attention and activity was with the students, giving attention to what they (the students) considered to be important. Thus, for adult learners of the type in this research sample to recognize an activity as providing potentially meaningful learning, it ought to be an activity that focuses upon what they consider to be important, and that gives to the students some of the activity of learning what is important to them.

The findings concerning the interaction between expectations about type of learning experience also suggest some implications. Over-all, the subject's expectations about type of learning experience varied with the level of formality. It will be recalled that in Low formality settings all three types of learning experiences were considered approximately equally valid. Then, for example, in Medium formality settings Input experiences maintained about the same rating but were then considered far less valid in High formality settings. Thus, if a practitioner deems a particular type of experience to be necessary, such as an Input experience, the practitioner will find it more helpful to provide the experience in an appropriate level of activity, such as a Low or Medium level of formality for Input experiences. This course of action is suggested instead of other actions such as putting on a high-pressure or flashy promotion to get people to come to the input experiences or continuing with the less meaningful activity because "it's important" or "good for them even though they don't know it," or else abandoning a potentially valuable Input experience because it does not fit easily with the learners' expectations.

One of the assumptions stated at the beginning of this study was that all three types of learning experiences mentioned throughout the study are important and necessary. It is not deemed desirable that any one of them should be abandoned. Adult education practitioners need to find ways of engaging people in the different types of learning experiences, and to find ways to modify the level of formality. There have been times when an activity has been considered "good adult education" merely because a slide projector and tape recorder were providing the input rather than a warm, live, human being. What makes adult education "good" is not who or what is doing the input, or how informal an input session can be arranged, but that all three types of learning experiences are provided within settings that accomodate the learners expectations.

No statements can be made on the basis of this study about what any one adult learner's pedagogical expectations are. It can be said that they exist, and that they involve level of formality and type of learning experience. A trend can be suggested away from considering High formality Input experiences as most valid, to considering Low formality sharing experiences as most valid. It is the responsibility of each individual adult educator to become aware of pedagogical expectations of the adults whom he or she serves.

Sometimes it may be correctly concluded that a particular person's pedagogical expectations limit that person from experiences that could result in meaningful growth. The adult practitioner's role in this situation, in line with the earlier suggestions, would be to involve the person in activities that would provide experiences that might enlarge his or her expectations. If some people considered High formality activities and Input experiences most valid, while the practitioner felt

the people would benefit more from informal activities, the practitioner could design some input experiences that were slightly less formal than usual. Pedagogical expectations are shaped by one's perceptions of his or her experiences. If people could be involved in meaningful experiences (in the above case, input) in a slightly different setting, then they would likely begin to accept the new setting as more valid.

This study has shown that the different types of experiences can meaningfully exist at three different levels of formality, so the adult education practitioner has several options open in providing enlarging experiences for the people whom he or she serves.

Implications for further research. As a result of trying to understand the meaning of some of the findings of this study, some potential areas for exploration have been identified.

It was expected that amount of formal schooling would be related to expectations, particularly expectations about level of formality. Though an interaction was discovered, no identifiable relationship was found. Pedagogical expectations are influenced by experience. It may be that most people's formal schooling experience, though widespread in terms of amount of formal schooling, may have been of such a nature or quality that the people have developed pedagogical expectations that lead them to consider High formality and Input experiences to be less valid than other kinds of activities. It would seem useful for research to explore the relationship between the quality or nature of formal schooling rather than the amount of formal schooling. It seems that if a person considered current experiences to be less than meaningful, the more they received, the less valid they would consider them to be.

This study looked into what a selection of adults consider to be valid ways to learn, and then looked for a relationship between their expectations and their amount of formal schooling. People of all different levels of schooling had various different expectations. It may be that learning experiences other than those that occur at school have their influence on pedagogical expectations. One's view of oneself as a learner may have an influence on pedagogical expectations.

It would seem useful to have research that explored the various kinds of learnings that people have been engaged in to see how they relate to current expectations. This study looked only at formalized intentional educational involvement. But it may be that a peron's various daily activities through which he or she makes new discoveries and seeks out new information, may have a greater effect on pedagogical expectations.

One's cultural experience and background also has a major effect on one's personality. Thus, personality and pedagogical expectations may be related. Studies could be undertaken that would explore the relationship between personality and pedagogical expectations.

It may be that one's expectations about learning through input experiences might be related to one's attitude towards authority, or one's level of dogmatism. Expectations about level of formality might be related to introvertness-extrovertness, or feelings of security. Possibly a low expectation of learning through Sharing might be related to poor self-esteem. These relationships would be fertile ground for exploration.

The above suggestions for further research could continue to help bridge gaps between adult education programs and the expectations of adult learners. If adult education programs are going to serve truly

developmental goals, every opportunity possible needs to be explored for providing adults with meaningful experiences for losing the limitations to realizing their full potential as human beings. If an adult does not expect to learn something important form a given experience, he or she probably will not. Adult education as a field needs to better understand pedagogical expectations, and begin to do research into how to accomodate pedagogical expectations, and/or provide people with experiences which can allow them to enlarge their pedagogical expectations. Failure to take these steps will lead to further floundering with promotions and gimmicks in attempts to keep people involved and interested. At that point, adult education ceases to serve development.

APPENDICES

APPENDIX A

IDENTIFICATION OF DATA COLLECTION SITES

The following list identifies the groups from which research subjects were selected. The three-digit numbers are subject numbers used in data compilation. They could be used to isolate subjects by groups for further data analysis.

001-009
Michigan State University Extension course
Ed. 823 Instructional Games & Simulations
Public school elementary and secondary teachers
Battle Creek, Michigan

010-021, 225
Charlotte Free Methodist Church
Charlotte, Michigan
Adult class

022-047
Taylor Free Methodist Church
Taylor, Michigan
Adult class

048-057
John Wesley College Continuing Education Center
Owosso, Michigan
Weekend college

058-070
Michigan State University Extension course
Ed. 882 Values Development Education
Birmingham, Michigan

071-088
East Lansing Trinity Church
East Lansing, Michigan
Adult class

089-098
Michigan State University Extension course
Ed. 882 Values Development Education
Bay City, Michigan

099-148; 219-224
Adult Education Center
Lansing Public Schools
Lansing, Michigan
Adult Basic Education, and High School Completion

149-204
Fifth Reformed Church
Grand Rapids, Michigan
Adult class

205-218
Michigan State University
College of Education
Seminar in Curriculum Evaluation

APPENDIX B

PICTURES AND TEXT OF TAPE RECORDED TEACHER

INSTRUCTIONS USED IN RESEARCH INSTRUMENT

Picture #1

High Formality--
Self-Awareness

Caption:"Class, I would like you to make a list of twenty things that are important to you concerning this topic."

Picture #2

High Formality--
Sharing

Caption:"Pair up with the person across the aisle from you and tell each other your answers for the reading assignment."

Picture #3

Low Formality--
Self-Awareness

Caption:"During our break tonight, look through your notes and see if there are any areas that are still confusing to you.

Picture #4

High Formality--
Input

Caption:"If you will look at page 54 in your book, you can see better what I am talking about."

Picture #5

Low Formality--
Sharing

Caption: "After class tonight, talk with some other people about two helpful things you learned tonight."

Picture #6

Medium Formality--
Sharing

Caption: "Give each person in your group a chance to explain how he or she would answer the question."

Picture #7

Low Formality--
Input

Caption: "Fred, if you get the chance, I would like to meet you for lunch some day this week and I can explain this better."

Picture #8

Medium Formality--
Self-Awareness

Caption: "Make a list of about ten things you feel we should talk about in this class."

Picture #9

Medium Formality--
Input

Caption: "What I am going to say today will be very helpful for your exams, so you should take notes."

D O Y O U T H I N K T H E S E

P E O P L E A R E L E A R N I N G

S O M E T H I N G I M P O R T A N T ?

(Circle the letter for your answer)

Answer	Picture #								
	1	2	3	4	5	6	7	8	9
Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y
Probably Are	PA	PA	PA	PA	PA	PA	PA	PA	PA
Some are, Some aren't	S	S	S	S	S	S	S	S	S
Probably not	PN	PN	PN	PN	PN	PN	PN	PN	PN
No	N	N	N	N	N	N	N	N	N

APPENDIX C (Cont.) RESEARCH INSTRUMENT RESPONSE SHEET (Back)

Please fill in the following information.

1) Number of years of school: (check the correct space)

___ ___ ___ ___ ___ ___ ___ ___
1 2 3 4 5 6 7 8

___ ___ ___ ___
9 10 11 12

____ _____ _____ _____
some college college graduate graduate work advanced degree

If college, what was your major?_____

2) Have you had any vocational training? ___ ___
yes no

number of years _____

what field?_____

3) Sex: ___ ___
F M

4) Married? ___ ___
Y N

5) Age:_____

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