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Michigan State University PH.D. 1983

AN EXPLORATION OF LEARNING CHARACTERISTICS OF RURAL ADULTS IN A SELF-HELP HOUSING PROGRAM

By

Maura Theresa Pierson

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Administration and Curriculum

1983

ABSTRACT

AN EXPLORATION OF LEARNING CHARACTERISTICS OF
RURAL ADULTS IN A SELF-HELP HOUSING PROGRAM

By

Maura Theresa Pierson

The research is a case study in learning participation; of learning not only by the use of traditional methods but of learning by doing and by experiencing. The purpose of the study is to explore and describe aspects of the learners that include the learning scope, deliberate learning practices, and the learning environment of 45 low-income rural adults. The sample represents three intact groups in different stages of construction in a self-help housing program in Coldwater, Michigan.

Five broad areas of inquiry guided the research. They included: demographic identification and investigation of psychosocial profile, an inquiry into areas of learning interests and processes, an inspection of methods used to organize learning activities, and the use of resources and an examination of the housing program as a learning experience.

The survey instrument was a one-hour interview structured by a questionnaire in which data were collected by both closed and open-ended questions. A qualitative methodology was used in the study. The data were presented in two parts. First, participant responses

were organized and presented as frequencies. Second, representative statements by the participants were organized into the major areas of inquiry and were presented.

Conclusions drawn from the data indicated that the rural adults in the study were highly motivated by the desire to house themselves and their families. As self-directed learners, they were problem-centered in a wide variety of interest areas that pragmatically centered around their homes. Their approach to learning activities was initially accomplished by reading, studying, listening, or viewing. Once the learning projects were initiated, they continued to learn by doing. Concerns about working with and communicating with other adults in small groups were voiced as sources of anxiety at the beginning of the program.

Conclusions drawn from the data indicated evidence of a transfer of knowledge from the program to other areas in the participants' lives. The majority of the rural adults in the study (95%) had the capacity to recognize and to relate the ways in which the key areas of focus of the housing program--business/finance, construction materials and practices, and communication and group process--were being transferred to their own lives.

To Sel

Every answer is influenced by the kinds
of questions that are asked.
But, will an answer be found unless the
questions are raised?

ACKNOWLEDGMENTS

My sincere thanks and appreciation are extended to my advisor and committee chairman, S. Joseph Levine, and to committee members Margaret Bubolz, Howard Hickey, Jane Oyer, and Ted Ward. As mentors and friends they have been an inspiration because their daily lives bear witness to the fact that they live what they profess.

My sincere appreciation to John Carmichael and his staff at Better Branch County Living in Coldwater, Michigan, who supported and encouraged the sampling of a rural population. Many thanks, as well, to Farmers Home Administration's county supervisor, Bill Zurakowski, for his interest and encouragement.

I am also grateful to Sue Welke for the hours and the dedication in interviewing the rural adults about whom this exploration was made.

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PREFACE

Rapid technological and social changes have created the need to renew existing abilities or acquire new proficiencies. Areas of expertise continually need reassessing in view of the obsolescence that has been seen to encompass not only technical processes and materials but the areas of communication and group-process skills as well. Today's adult appears caught between the human inclination to resist change and pervasive societal pressures that are insisting on constant updating. Having made the assessment that to change is not an option but a necessity, adults in ever-increasing numbers are approaching all manner of learning experiences in their attempts to seek information that will assist them to keep pace with changing technologies.

With the influx of adult learners in the past 25 years, adult educators have seen the need to understand more fully the complex dynamic of adult growth and development and its relationship to how adults learn. A body of adult education theory is being developed that is based on the ways in which adults differ from children in their approach to learning.

Malcolm Knowles has developed the term "andragogy" to describe the key characteristics of learning adults. Adults typically approach learning experiences determined to control the process in their search of new information that will lend itself to the solution of existing

problems. Unlike children, adults with their wealth of living experiences, are likely to seek information that will assist them to seek practical solutions to problems that frequently relate to their own process of development in the life cycle.

In his efforts to expand the definition of adult learning practices, Allen Tough began his examination by studying adults in learning situations. His concern about the acquisition of fairly specific skills or knowledge in highly deliberate efforts to learn led him to ask the adults themselves about their reasons for learning, the nature of their learning projects, the location of the sites at which they chose to learn, and the type of assistance the adult most frequently sought.

Tough's adults were found to be amazingly involved in major learning projects that occupied them an average of 700 hours a year. To gain information was the primary motivation of the adults who set out to attain fairly specific knowledge or skills in a wide range of learning areas. Tough (1971) found his adults to be largely deliberate self-learners who chose to learn by themselves, seeking help from a variety of human and nonhuman sources. The array of learning projects were found to be as heterogeneous as the learners themselves. "Many learning projects are initiated for highly practical reasons: to make a good decision, build something, or carry out some task related to one's job, home, family, sport or hobby" (p. 1).

Johnstone and Rivera's prediction in 1965 that the 1980s would see an explosion of adult learners is being fulfilled. Penland's 1977 survey substantiates on a national scale that today's adult no

longer feels the compunction to apologize for the need to know. Indeed, the times are demanding the continuing updating of large numbers of adults to meet changing needs.

We are becoming a society of learning adults. The attempt to bring adults and resources together in an atmosphere of respect and mutual learning brings with it the challenge to expand existing learning theory. Adult educators are being called upon to find different and more promising ways of linking together unique learners and nontraditional resources so that adult enthusiasm to expand, to search, to develop, and to grow will be reinforced as adults continue to learn in the process of knowing that ultimately must enhance not only adult learners but the society as well.

CHAPTER I

BACKGROUND OF THE STUDY

Purpose of the Study

The present research is a case study in learning participation. As such, it is a study of learning not only seen as being traditional in its use of methods such as studying, viewing, or reading, but it is also a study of learning-by-doing and of learning-by-experiencing. The purpose of the study is to explore and to describe the learning aspects of 45 low-income, rural adults examining their learning scope, deliberate learning practices, and their learning environments. The learners represented three intact groups in three different stages of construction in a mutual self-help housing program in Coldwater, Michigan.

In an attempt to define the exploration, five broad areas of inquiry served to guide the present study. They are as follows:

1. Who are these rural adult learners and what is their psychosocial profile?

2. What are their areas of learning interest and by what processes do they learn?

3. How do they organize their learning activities?

4. How do they use their resources for learning?

5. How and in what ways was the housing program a learning experience?

In an attempt to discover the patterns of the learning process both inside and outside of the housing program, a cross-sectional survey has been designed in the form of an interview that was structured by a questionnaire that sought information from the participants themselves on the topics of motivation, future aspirations, current learning activities, and the extent of knowledge transfer from the program to other areas in the participants' lives as well as specific learning characteristics of these rural adult learners.

Housing: Its Place in the Fulfillment of Needs

Important to the present study is an overview of the biological, psychological, and sociological aspects of housing. This can be seen to facilitate an understanding of the motivation of the 45 participants in the study whose goals, beyond all else, have been to build a house. It was while the housing needs were in the process of being satisfied that the interviews for the study of the adults, who are learning-by-doing and learning-by-experiencing, took place.

Whereas Maslow (1954, p. 43) spoke of the needs of food and shelter as basic to human survival, Etzioni (1968, pp. 870-84) referred to those needs that arise or are culturally induced because, as humans, we do not live in a vacuum, but together with others we interact socially in group life. Housing, then, reflects both physical and social needs.

Homeownership aspirations are a value that has become deeply embedded in our culture. Beyond the fact that housing provides shelter, it also provides both the protection and the milieu in which the biological and psychological processes of family life are sustained.

Symbolizing the status of the family both to the community and to the family itself, housing represents a visible statement of family identity. "The motivation that prompts housing behavior is not simply the desire for shelter but the desire for the right kind of shelter (Morris, 1978, p. 5).

The power of the home to mold character has become firmly established. The home has been said to educate, to inspire love, to build moral character, to encourage thrifty habits and foster domestic tranquility, as well as to be the foundation for good citizenship (Morris, 1978).

While the U.S. government has openly encouraged the type of independence that has resulted in homeownership, it remained in the realm of private enterprise until the housing crisis that became apparent after World War II and the Great Depression. While patterns of construction and financing have changed over the years, the family home as a cultural norm remains strong.

> The family that owned its own private home represented the societal nucleus and social microcosm. Furthermore, the acquisition of such a house indicated, as it had for generations, the serious, sober, hardworking life of the family--money had to be earned and to be saved. And, finally, the fact of proprietorship itself was supposed to be the single most efficient conservatizing influence in the American experience. (Cohn, 1979, p. 154)

Definition of Terms

The terms that are applicable to self-help housing are those in current use by the United States Department of Agriculture, FmHA, 1981.

The Federal Housing Administration (FHA) is an agency of the Department of Housing and Urban Development (HUD). HUD is charged with implementing a broad range of housing programs. The Department of Agriculture, acting through FmHA, is entrusted to carry out programs relating to low-income families.

FmHA is used to designate Farmers Home Administration rather than Federal Housing Administration. The legislation for the FmHA rural housing programs comes from the Title V amendment, August 1, 1968, of the Housing Act of 1949, Public Law 90-488. The rural area designation includes adjacent densely settled areas that are not a part of or associated with an urban area and that has a population of less than 10,000 if it is rural in character. It must additionally have shown a serious lack of mortgage credit as determined by the Secretary of Agriculture and the Secretary of Housing and Urban Development.

Better Branch County Living, Inc. (BBCL) is one of the 61 private and public nonprofit organizations throughout the country that sponsor the organized mutual self-help housing programs funded by FmHA. With administrative expenses funded by Section 523 Technical Assistance (TA) grants, BBCL provides construction training and technical supervision while the houses are being constructed. BBCL works with participant families throughout all the phases of homeownership, from original application to final home inspection. It makes arrangements for the applicants to receive USDA FmHA 502 Rural Housing loans.

Interest Credit is the amount of financial assistance that Farmers Home Administration may give the participant in a self-help

housing program toward making the loan payment. It is a method by which the interest rate is reduced from its present market rate to a level the borrower can afford. This can be as low as 1% of the loan. Most families participating in self-help housing programs receive some level of interest credit.

Self-help housing is a term that is used to mean housing that is constructed by low-income families under the auspices of BBCL and under the direct supervision of construction supervisors.

In the study, an adult is considered to be any man or woman over 18 years of age who is no longer engaged in full-time formal schooling.

A learning project is taken to mean a highly deliberate effort to acquire certain knowledge or skill.

Knowledge and skill includes

> any positive or decided changes or improvement in a person's knowledge, understanding, awareness, comprehension, beliefs, ability to apply, ability to analyze and synthesize, ability to evaluate, judgement, perceptual attitudes, emotional reactions, recall, awareness, sensitivity, insight, confidence, patience and self-control, and/or some other personality characteristic, inner behavior, or overt behavior. It is a much broader definition than the bare dictionary definition of these two nouns. These changes result from experience--from what a person sees, hears, feels, thinks and does. (Tough, 1971, p. 8)

Time-span is used to mean the duration of a learning project. It refers to a minimum of eight hours in the past 12 months that has been spent on deliberate learning activities that have been considered by the participants to have been their most important areas of interest.

Self-planned learning is a term that is used to refer to the manner in which the learners have approached a learning project.

Having decided to have acted as their own teacher, they must also have assumed more than 51% of the responsibility for planning, initiating, and conducting their own learning.

Overview of the Housing Program

The present study afforded an opportunity to explore the combination of unique learners and nontraditional learning resources. In this case, the unique learners represent the 45 highly motivated adults who reflect the cultural value of homeownership. The nontraditional learning resource has been a federally funded mutual self-help housing program administered by Better Branch County Living in Coldwater, Michigan. A knowledge of the operational procedures encompassed in the program is seen as essential if the potential educational aspects of the program that are available to rural adult learners are to be understood.

Better Branch County Living (BBCL) is a nonprofit corporation that was organized in Coldwater in 1972 for the purpose of assisting low- and moderate-income families to acquire safe, sanitary, and affordable housing. Housing needs assessment studies in Branch County pointed to the fact that a majority of homes for sale were built before 1930. Local finance practices including short-term loans with high interest rates in combination with land costs, labor, and material costs suggested that low- and moderate-income families were often forced to live in houses in which substandard conditions prevailed.

BBCL is committed to housing programs operating within FmHA's District 5. As an organization, their purpose has been to provide

family counseling on loan repayment, insurance, property taxes, and home maintenance as well as to give assistance in obtaining materials and equipment. Families who have met Farmers Home Administration recruitment requirements, with the aid of BBCL, form an informal association and agree to help each other build houses with the technical assistance of construction supervisors. Generally, six to ten families make up a self-help housing group.

The development of the association groups is seen to foster personal enhancement through training in technical and administrative skills that the group members receive. The development of group process through group meetings is seen as promoting a continuation of group spirit and group activities that, in turn, will seek solutions to problems that exist in the larger community. By making homeownership possible through self-help housing, BBCL works with the adults as it tries to instill in the participants the concepts of community stability and responsibility. The benefits of the housing program are intended to be educational, social, psychological, and financial.

Mutual self-help housing is a three-phase program comprising the loan-processing (loan docket) stage, the 13-week preconstruction instructional association meetings, and a six-month construction period. The program in its entirety covers a period of about one year. Additional information on BBCL's goals and purposes may be found in Appendix A.

It is to be noted that, in the present research, an ongoing self-help housing program is explored in relation to its educative dimensions, though the program was not designed specifically as an

"educational" program. It is in terms of the educative aspects of BBCL that the learning characteristics of the rural adult participants have been explored.

Previous Research and Present Needs

The following survey research has added a wealth of information about the diversity of personal characteristics, motivations, and learning habits of adults who have been, for the most part, urban and middle class. Scarcely is mention made of the deliberate, self-directed learner who is low-income and rural.

In 1963, Houle's research described adult learners as having three major learning orientations. Tough's 1971 studies sought to discover the extent of deliberate self-learning engaged in by adults. The survey research of both Houle and Tough was structured around interviews that were designed to elicit information on the learning practices of adults who were both urban and middle-class. In 1975, Hiemstra interviewed adults over age 65 in an attempt to discern their preferences for expressive or instrumental learning. He found that more than 50% of his subjects preferred learning for self-fulfillment (instrumental) while fewer than 9% chose learning topics that contributed to civic competence (expressive). Hiemstra's findings also reflected that his subjects were more highly educated and more urban than could have been expected in comparison with 1970 census data (pp. 49-53). In 1963, London and his associates focused their attention on the relationship between adult education and the conditions of the less-skilled and less-educated groups in American

society with a major emphasis on responses to the adult education courses being offered. Their sample was not only urban dwellers, but it consisted of 4,008 males (pp. 140-148).

Research by Houle and Tough studied the orientation and the learning processes of middle-class urban adults. The purpose of Hiemstra's study was to attempt to discover the learning preferences of both urban and rural adults 65 years of age and older. London sampled male urban dwellers in his study of the relationship between adult education and social class. Generally lacking in the literature of adult education are studies that concern themselves with the self-directed rural adult learner. The present study is directed to assist in fulfilling this need.

A Qualitative Focus

It was purposeful in the study to focus on qualitative exploration since the ability to quantify was questioned because there appeared to be insufficient a priori information about rural adults as learners to identify relevant problems or to formulate hypotheses. Pointing out that reality exists in the world and not in the methods that we choose to measure it, Skager (1978) suggested, "The fact that information is non-quantitative does not mean that it is by definition invalid, nor is information of lesser importance because it was not collected in a controlled experiment" (p. 135).

Qualitative methodology was adopted for use in the present study because it, more than any other methodology, fits the problem in the present research, which is to explore the learning characteristics

of low-income, rural adults. The conclusions drawn from the research are presented as a means of providing a tentative analysis of rural adult learning behaviors, which are then used to generate questions for further study.

Assumptions

Four assumptions are made in the study. The first assumption is that people have a natural ability to learn and that learning is important to them. Because of this assumption, it is believed that the rural participants in the self-help housing program are learning adults and that the continuing process of inquiry constitutes a purposeful part of their lives. The second assumption is that the self-help housing program provides learning opportunities for the participants who are involved in building each other's houses. This is important to the study since it is believed that the one-year involvement in the program afforded an opportunity for the researcher to observe the 45 rural adults participating in numerous activities in which learning did take place. Third, it is assumed that the rural adults in the study are able to perceive that they are learning from the experiences offered to them in the self-help housing program. This is important to the study because the validity of the data collected in the one-hour interviews depends upon the accurate perception of their learning experiences. Finally, it is assumed that learning is frequently undertaken because of pragmatic interests and needs that are associated with life-cycle development. This is considered important in a study of the learning experiences of rural

adults who are involved in satisfying the needs attendant to housing by building houses for themselves and their families.

Limitations and Generalizability

In research that is of an exploratory nature, the major limitation is the representativeness of the sample. The small number of adults in the sample for the study is limited to a convenience sampling of three intact groups of rural adults in different stages of construction in a self-help housing program. As such, they do not represent an unbiased sample of low-income rural adults. An additional limitation can be seen to exist because of a lack of knowledge that contributes to an incomplete framework for interview procedures that are applicable to low-income rural adults. A further limitation was the extent of data that was possible to be collected during a one-hour interview. The study focused on questions about why low-income adults learn, what they learn, and when they learn it as they are involved in a self-help housing program.

Summary of Chapter I

The present study was conducted in an attempt to explore the learning characteristics, scope, and learning practices of rural adults who were at three different stages of construction in a self-help housing program. It was noted that rural adults represent an understudied population. It is believed that the results of the study will add to what is presently known about how adults learn. A qualitative approach to the research was chosen because it was seen to be the most suited to an exploratory inquiry. It was assumed that

adults continue to learn in new and practical ways. The self-help housing program was chosen as the vehicle for that observation.

Organization of the Remainder of the Study

The following chapters are organized to amplify various aspects of the exploratory study.

Chapter II is a literature review that was drawn from three primary sources. The first source was the Literature on Adults as Learners. Literature from this source looks at learning theories and concepts in adult education. The second source from which the literature was drawn was the Literature on Survey Research in Adult Education. It is presented in two parts. The first part is an attempt to acquaint the reader with precedent survey methodology that has used interviews that have been structured by a questionnaire as a research tool. The second part presents findings from key surveys that have used an interview methodology. The third source from which the literature review was drawn was Literature on Self-Help Housing. It is intended to provide the reader with a brief background and history of foreign and domestic self-help housing programs and policies that relate to the housing program in which the rural adults in the study were involved.

Chapter III is an outline of the methodology followed in the study. It includes a description of the sample population, the development of the interview questionnaire, and the methods employed to minimize threats to validity and reliability in the study. The methods used for data collection and analysis are described.

In Chapter IV the data are presented using two formats. The purpose of the study is the exploration of learning characteristics of rural adults. In Part I of the chapter, the data obtained in the interviews are presented. In Part II of the chapter, the results of the interview questions are further analyzed by an examination of statements made by the respondents during the interviews.

Chapter V is a discussion of the findings in the study. Key findings that relate to the learning characteristics of the 45 rural adults in the sample are discussed. Implications for adult educators are suggested. Conclusions are drawn from the data and suggestions are also made for further research.

CHAPTER II

LITERATURE REVIEW

The purpose of the study is to explore the learning characteristics of 45 rural adults in three different stages in the process of constructing their own houses in a self-help housing program. The review of the literature was drawn from three primary sources. The first source was the Literature on Adults as Learners. Observations of the learning adult by educators, and the study of adults in the process of their life-cycle by developmental psychologists, led to the growth of a body of literature with direct application to adults as learners. The concept of andragogy, based on the differences between adult and child learning, is presented to provide the rationale between the inner direction and the external experience that contributes to the educational process as adults become lifelong, self-directed learners.

The second source from which the literature review was drawn is the Literature on Survey Research on Adults as Learners. This section of the review is presented in two parts. In Part I, a brief review of Literature on Survey Methodology of five key studies is described. In the second part of the literature on survey research, literature on Findings from Surveys Using Interview Methodology is presented. Both parts of this section of the review of literature

are seen to be important. As the present study looks at rural adults as learners, it is essential to review precedent methodology to see that the methodology in the current study is consistent with precedent practices. The findings of key studies are also important as they provide information that has increased our understanding of adults as learners.

The third source from which the review of literature was drawn is Literature on Self-Help Housing. It is presented, first, to acquaint the reader with the background and traditions of self-help housing. Second, it is included to provide a frame of reference to assist the reader in understanding the procedures used by BBCL in operationalizing the housing program in which the participants are involved in the present study.

Literature on Adults as Learners

Andragogy, the art and science of helping adults to learn, is a contemporary learning theory that proposes that learning for adults is a lifelong activity (Knowles, 1970, p. 38). As their self-concepts change with maturity from dependence in childhood, adults tend to display independence and self-direction as they take the responsibility to learn in order to satisfy immediate needs. They can openly display both persistence and responsibility when learning develops from their own interests and desires. The nature of their life experiences shapes their concern for utility and application. Their curiosity and desire to learn can be seen in the interest they exhibit about their

progression through the life cycle and in their inquiry into the meaning of life itself.

The basis for the formation of the assumptions that comprise the theory of andragogy took shape in the early 1900s as educators began to look to the study of the adult learning process. Where previous educational practice viewed education as a function of transferring knowledge, Lindeman (1926) began to understand that learning was instead a process, a process of evaluating experience. He came to see that for adults, experience was a measure of high value. "Experience is the adult learner's textbook. We learn what we do" (p. 9). For Lindeman, the theme of the experiencing adult took the form of a stance that he called his basic law. "You don't change until you do something. You don't change by listening. You don't change by talking. You actually change when something happens to your muscles. When you step or move in a new way, then the change becomes really significant" (in Gessner, 1956, p. 235).

Lindeman (1926), whose views on adult education were influenced by the Danish volkshochschulen (folk-school for adults), proposed that adults tend to be self-directed, their self-direction becoming heterogeneously diversified as they change with age. He perceived that the sense of education, that must initially come from within adults, laid a foundation for a system of education that lasts as long as life itself. Adult education, he believed, "does not only change a person from illiteracy to literacy, it rebuilds the total structure of life's values" (p. xviii).

A contemporary of Lindeman, Dewey (1938) sought to introduce social reform from the platform of a democratic education in common schools. A constant theme in Dewey's writings is the need for a combination of education and personal experience, in the social context, if experience is to be seen as growth producing. Experience, in itself, was not seen by Dewey to be growth producing. Experience, instead, was classified as educative or miseducative along a continuum. Experience was seen as educative to the extent that it enabled continued learning in the social milieu and miseducative to the extent that it stultified, halted, or distorted future growth in interaction with others. To Dewey (1916), learning that is real is learning that includes the elements of the longitudinal and horizontal, the historic and the social, and the orderly as well as the dynamic.

Dewey would agree with Lindeman that the acquisition of knowledge or skill is a mutual experience, not the imposition of knowledge with later evaluation in conformity to it. In 1938, Dewey proposed that the education that is most likely to produce growth is an education that fosters individuality, advocates learning by doing, is predicated upon the satisfaction of immediate needs, and exemplifies learning by active involvement rather than by a static imposition of learning techniques or procedures.

Whereas the Freudians and behavioralists, who proceeded him, looked at psychology analytically, Maslow sought a holistic approach in his investigations of human nature. Maslow's inquiries lend an important understanding of adult behavior that led him to investigate the motivation of individuals to assuage human needs. He

understood motivation to mean not an isolated drive, but an involvement of the whole being, to bring about satisfaction of a specific desire. To Maslow, a satisfied need is not a motivator. Successive studies indicated to him that human nature strives, instead, to attain needs not yet realized. Basic to our existence are our needs for food and shelter, closeness, order, safety, and love. All other human needs were felt to rest in the satisfaction of these survival requirements. The physical and psychological needs for food and shelter are the most preportant of all human needs. There would be little desire, Maslow said, to be creatively productive or to contribute to society in a meaningful way if these needs were not attended.

Maslow (1954) proposed that survival needs being met, other needs arise in the area of safety, stability, dependency, protection, freedom from fear, from anxiety, and chaos. These represent the human need for structure, order, law, and limits. Only then, Maslow suggested, do belongingness and love needs emerge. The human will then "hunger for affectionate relations with people in general, namely for a place in his group or family and he will strive with great intensity to achieve this goal" (p. 43).

Also essential to the human condition is a desire for a stable, firmly based, high evaluation of ourselves in the form of self-respect or self-esteem and the esteem of others. Maslow (1954) proposed that the satisfaction of self-esteem needs "leads to feelings of self-confidence, worth, strength, capability, adequacy, being useful and necessary to the world" (p. 45).

The highest and most rarely attained need is self-actualization. It is only met when all other needs are met. Maslow (1954) described this as

> an inner restlessness of what an individual is fitted for--what we must do to be at peace with ourselves. It is what we must do to be true to our individualized nature. It refers to our desire for self-fulfillment--a tendency to become actualized in what we are potentially--to become everything that we are capable of becoming. (p. 46)

In later years, Maslow (1971) more fully defined self-actualization as "full humanness." He continued over the years of his life to search the depths of human understanding and found from personal experience that "in becoming more fully human, life experiences have been far more important than classes, listening to lectures and memorizing" (p. 163). He believed that educators could best facilitate their assessment of the learner's needs when they themselves experientially understood the social and psychological factors that combine to form the world in which the learner lives. He felt that a learning atmosphere that reflects safety, encouragement, and self-respect is likely to produce a synergistic advantage to both individuals and the society. "With increased personal responsibility for one's personal life and with a rational set of values to guide one's choosing, people would begin to actively change the society in which they lived" (p. 188).

Like Maslow, Carl Rogers felt that interpersonal interaction is most effectively accomplished in an atmosphere that engenders a creative, active, sensitive, empathic, nonjudgmental, and listening stance. These qualities can speak clearly to educators whether the

adult participates in formally structured classes, small informal groups, or touches base with educators infrequently as resources in self-directed learning activities. Malcolm Knowles (1973) observed that

> Both Maslow and Rogers acknowledge their affinity with the work of Gordon Allport (1955, 1960, 1961) in defining growth not as a process of "being shaped" but a process of becoming. The essence of their conception of learning is captured in this brief statement by Rogers: "I should like to point out one final characteristic of these individuals as they strive to discover and become themselves. It is that the individual seems to become more content to be a process rather than a product." (p. 42)

Both Maslow and Rogers reflected the humanistic approach to building an atmosphere where interaction takes place in a setting where adults take responsibility for their own actions in terms of their own choosing. Rogers (1980) mirrored the philosophies of both Dewey and Lindeman, that to be growth producing, learning takes place with the knowledge of the individual's responsibility to the community as a whole. This central premise is summarized in the following statement:

> I have found that if I can help bring about a climate marked by genuineness, prizing, and understanding, then exciting things happen. Persons and groups in such a climate move away from rigidity and toward flexibility, away from static living toward process living, away from dependence toward autonomy, away from defensiveness toward self-acceptance, away from being predictable toward an unpredictable creativity. They exhibit living proof of an actualizing tendency. (p. 43-44)

Rogers echoed Dewey, Lindeman, and Maslow in his belief that a combination of cognitive and affective personal experience leads to experiential learning. In a climate of safety and trust, Rogers proposed a "person-centered learning" where facilitators learn

together with adults by providing learning experiences that foster learning in cooperation with others in an atmosphere enriched by caring feedback. Both Rogers and Maslow posited that if there is safety, then growth is possible. Rogerian philosophy proposes that individuals must have a voice in decisions that affect their lives. Rogers sees choices about learning decisions reflected by experience in adult lives, that are made in a climate of a caring community, as essential if adults are to grow in a changing society.

Havighurst (1952) defined the concept of a developmental task as being an age-graded task to be accomplished at or about certain stages of development, successful completion of which leads to successful completion of later developmental tasks. Failure to successfully complete a task, Havighurst felt, was likely to create difficulty with successive tasks and to evoke disapproval from the social group. Havighurst's early research has since become expanded to include the psychology of adult growth and development. Gould (1978), Levinson (1979), Neugarten (1969), and Sheehy (1976) have looked at predictable crises patterns. Their research pointed to the fact that periods of stress are apt to occur as culturally both women and men attempt to adjust from a childhood to an adult consciousness in the face of role changes that reflect transitions in adult life.

Young adults face tasks of marital adjustment, the decision to have or not to have children, the task of providing adequate housing, the decision to enhance job skills, and the need to develop skills that will facilitate their ability to act on issues of social concern. The recognition of adult concern with their own development

has important implications to adult educators who then, sensing adult concerns, are able to provide experiences directed toward fulfilling these needs. Important to both humanistic psychologists and to educators in their awareness of life-cycle development is Havighurst's concept of "teachable moments." These were perceived to be opportune learning periods when an individual is comfortable with the tasks associated with one phase of life and developmentally not pressed into tasks associated with the next stage. Teachable moments are relevant to educators because it is during these periods that adults are likely to pursue episodic learning.

The Concept of Andragogy

Self-concept, experience, readiness to learn, a concern about personal growth and development, and an orientation to learning that is both problem centered and pragmatic are concepts that are central to the andragogical approach. The concept of andragogy, developed by Malcolm Knowles, is predicated upon the assumption that the maturity and experience of adults predispose them to the need to be self-directing in their learning activities and to be perceived as self-directing by others. Building upon teaching theory and behavioral and humanistic psychology, Knowles proposed that physical and psychological needs in the self-directed learner, combined with experience and ability, create an interior disposition that is receptive to continued learning. Andragogy emphasizes the development of an attitude toward self-directed inquiry in which the individual is capable of creativity using learning resources to satisfy unique learning needs.

The three characteristics that Knowles (1950) believed to be essential to the learning process are a desire to learn, a willingness to expend the effort needed to learn, and a sense of satisfaction that is received in the learning process. In these characteristics, Knowles reflected Dewey's earlier summation of the processes of need, effort, and satisfaction. Recognizing that there are numerous ways to learn, Knowles would agree with both Maslow and Rogers that an understanding of learner needs is essential and that "successful programs start where people are" (p. 25).

Andragogy as a learning theory centers about the concept that self-directed learning is a proactive learning (Knowles, 1973). Proactive learning moves the responsibility for the initiative and sense of discovery from the teacher to the learner. Traditionally, pedagogy requires the learner to react to teacher stimuli. Reactive learning has thus to be considered as a poor preparation for lifelong learning. The proactive approach is begun by the learner's attempt to meet needs and to satisfy goals (Knowles, 1973). It is Knowles' opinion that experiences that involve the individual most directly in self-directed inquiry are apt to produce the greatest learning.

In reflecting Dewey and Maslow, Knowles (1970) suggested that societal and institutional needs and goals will have to be congruent with the needs and goals of individuals as attempts are made to offer learning that will enable self-directed learners to develop in directions that are beneficial to themselves and to the society as a whole. Knowles would agree with Rogers that it is most important to establish a climate for learning that characterizes trust, informality,

openness, mutual respect, warmth, and caring. It is also important to engage the learners in diagnosing their own needs for learning. Knowles (1973) found success using a learning contract that allows the self-directed learner to establish needs on the basis of a contemporary model. The learning contract that is drawn up embodies learning objectives, learning resources and the strategy for their use, evidence of accomplishment, and, finally, a criterion to be used as a means of validating the learning experience.

In proposing andragogy to expand the theoretical concepts of adult learning, Knowles recognized that an adult brings motivations, goals, expectations, and experience to the learning situation that are totally different from children. He suggested that adult educators recognize not only these differences but also the adult need to be self-directing in the quest for the development of their own resources.

Summary of Literature on Adults as Learners

Observations in the early 1900s led educators to propose that adults were not only able to learn but that they appeared to enjoy the learning process when certain conditions were met. They seemed to learn most effectively when they learned by doing and by experiencing the learning process as they became involved in it. Learning conditions were perceived to be most favorable when "teachers" were viewed as facilitators of knowledge who aided adults in an atmosphere of mutual interrelationship. In such a milieu, adults could see that the combination of their life experiences, seen in the light of new

knowledge, could unite to both promote and enhance their social interaction.

Viewing humans holistically, developmental psychologists have suggested that the total need of the individual be seen to encompass the physical and the psychological. The "total" need can be seen as a powerful motivator toward the fulfillment of needs that have not yet been met. Although the combination of an unmet need in an adult can give rise to an educative opportunity, this is not always the case. The atmosphere that is seen as most conducive to learning is seen as that wherein a learning environment is created that fosters the self-respect of the individual as well as promotes mutual esteem of the others involved in the learning situation. These qualities are most apt to lead to educative experiences that enhance self-confidence, self-worth, ego-strength, a sense of awareness, and a sense of usefulness in the world.

Developmental psychology has proposed that adult life cycle is composed of growth stages. Interim periods of tranquility between periods of predictable crises can offer periods of time that are seen as favorable teaching opportunities for those educators who are prepared to learn with adults as together they meet developmental challenges.

Current adult learning theory builds upon the assumption that today's adults can be seen as expecting to become involved in their own learning process. Their self-direction borne of life experiences leads them to prefer inquiry of a practical nature. It is their natural inclination, therefore, to display persistence and responsibility

in their quest of both traditional and nontraditional resources in their concern for utility and application.

Literature on Survey Research on Adults as Learners

The second source from which the literature review was drawn is presented in two parts. In Part I, a brief review of literature on survey methodology is presented.

Survey Methodology on Adults as Learners

In an attempt to add to information known about adult learning characteristics, Houle (1963) used a research methodology that employed an interview protocol. The 22 adults in the sample were either known by Houle or were recommended to him by adult educators. The instrument designed by Houle contained two parts. The first part was a statement of the purpose of the research that was sent to each person to be sampled, in advance of the interview. The second part included 19 major questions and subquestions that were used to probe or to amplify responses during the interviews. In an attempt to establish an atmosphere that was sociable and relaxed, the respondents were engaged in conversation before the interview began and after the interview was completed.

Houle chose to use an interview procedure that was as unstructured as possible. The subject was encouraged "to talk freely and discursively." Houle reported, "The interviewer merely saw to it that sometime during the interview all the questions on the instrument were dealt with" (p. 85). The interviews ranged in duration

from 45 minutes to three and one-half hours. The average length of time was two hours. All cases were transcribed and were read. Major themes for analysis were identified. Data were coded and analyzed.

In 1965, Johnstone and Rivera designed a study that used an interview protocol in an attempt to focus on adult learning activities and the extent to which American adults used learning facilities in typical urban communities. Working with researchers at Chicago's National Opinion Research Center (NORC), a highly structured interview protocol was designed to probe adult learning practices. Printed cards were used as visual aids to assist the respondents to recall information that would aid in the depth of the data being probed. Interviewers were familiarized with the purpose of the research and were trained by NORC in the procedures included in the interview protocol. Using a national probability sampling, Johnstone and Rivera's research teams interviewed 23,950 adults in 11,957 households in three midwestern cities with populations between 100,000 and 300,000.

In 1969, Tough devised a research methodology that combined an interview protocol and a small sample, as Houle had done before him. He used numerous printed cards, as Johnstone and Rivera had also done, to aid respondents to recall a series of tasks that were believed by Tough to be involved with the learning procedures employed by adults in the process of self-teaching that was thought to have accompanied their learning projects.

In his attempt to discover adult learning procedure and the assistance that adults sought in the learning process, Tough selected

40 subjects for his study who were students, relatives, or friends. Interviews took place in private homes where the atmosphere of the investigation could be quiet and undisturbed. In a highly structured interview that lasted from one and one-half to three hours, Tough probed intensively in an attempt to question each adult about his learning activities in relation to the 12 different tasks that Tough had devised to delineate the self-teaching process. Each of the 12 tasks was assigned a separate questionnaire and memo sheets for relevant qualitative data. Responses to the questionnaires were recorded on one summary chart for data analysis.

Again, in 1970, building upon the work of Houle and Johnstone and Rivera, Tough designed an interview protocol to survey 66 adults regarding the extent and the importance they attached to their learning projects. The adults, who encompassed 10 separate populations, were interviewed in their homes by three interviewers who had been trained by Tough. Questionnaires for this study were reported by Tough (1971) to have been "intensive and highly structured" (p. 16). Data from the 66 questionnaires were coded in preparation for analysis.

In a study that sampled the entire U.S. population, Penland (1977) used interviews structured by a questionnaire to focus on the exploration of the learning characteristics of the average American adult. In an attempt to validate Tough's findings on the number and the scope of adult learning projects, Penland's interviewers questioned 1,501 adults. The questions in the survey instrument were similar to those that Houle and Tough included in their interview protocols. Restricted to one-hour interviews, Penland, as Johnstone

and Rivera had done before him, organized the questionnaire to include highly structured questions that asked for closed and open-ended replies from the respondents. A prefinal version of the instrument was pretested for respondent understanding and interviewer processing by the Opinion Research Center in Princeton, N.J. "Trained interviewers were oriented to the purpose, scope, and methods of the study and were guided by the protocol materials as well as precise instructions of the interviewer supervisory personnel" (Penland, 1977, p. 23). Data handling, which included coding, organization, reduction, and display, was done at the Center for Urban Research at the University of Pittsburgh.

Summary of survey methodology on adults as learners. Using studies of Houle, Johnstone and Rivera, Tough, and Penland as precedent for methodological guidelines, the following observations can be made:

1. Subjects in smaller samples have ranged from 22 to 66.

2. Smaller samples were generally found to be convenience samples that included respondents known to the researcher or who were suggested as suitable interviewees for the purpose of the research.

3. Data obtained in the interviews were obtained by the use of questionnaires.

4. The structure of the interview depended upon the purpose of the interview and the use of open-ended or a combination of closed and open-ended questions.

5. The duration of unstructured interviews was between one and three and one-half hours. Those interviews that used a protocol combining closed and open-ended questions were completed in about one hour.

6. Tape recorders were used to record interviews in studies where the samples were small. In samples large and small, provisions were made to record information relevant to the interview that could be elaborated upon by the interviewer after the interview had been completed.

7. Printed cards were used to assist the respondents' recall when probing was attempting to attain in-depth information.

8. Attempts were made by the interviewer to establish a sociable climate that would be conducive to the ease and comfort of the respondent.

9. Interviewer training that included familiarity with the goals of the research was a part of the research methodology in each study.

10. A pilot study was run by the researcher.

11. Data from the pilot study were identified, coded, and analyzed according to the methods to be employed in the larger study, and revisions were incorporated into the research.

Findings From Surveys Using Interview Methodology

In a pioneer study in 1963, Houle surveyed the learning behavior of a group of adults who had been identified by their friends and educators as being conspicuously engaged in learning. All subjects

in the study were urban, middle class, and relatively well educated. Data obtained from in-depth interviews related to Houle that the differences between learners were a matter of the emphasis they tended to place on education. Houle proposed that while not all adults appeared to be continuing learners, those in his sample population could be categorized into three distinct groups. Those who were "goal-oriented" had a clear view of what they expected to achieve. Those who were "activity-oriented" were often found to take part in learning activities for reasons not outlined in the courses they had attended. The third group included those who were "learning-oriented" and whose lives were motivated by a strong desire to learn.

From data gained in his interviews, Houle observed that participation of adults in education rose until age 50 and then sharply declined. He also noted that the more highly educated the adult, the more likely was the adult to participate in structured learning activities. Houle's research convinced him that the scope and complexity of adult learning as a topic for further study must be brought to the attention of those offering educational experiences, who then "must not ask why but whys until there is understanding of how mature people approach the tasks and the opportunities of adulthood" (p. 81).

In 1965, Johnstone and Rivera conducted research interviewing 23,950 adults in three midwestern cities in an attempt to add to the information that was known about adult learning characteristics. Their extensive survey probed into the educational experiences of adults in the United States over a 12-month period. Interviews were structured by an instrument that focused on how different segments

of the sample population perceived and evaluated their learning experiences. Also sought was information about the number and kind of learning institutions that were likely to be found in typical urban communities with populations between 100,000 and 300,000 inhabitants.

Of special interest in their findings was the fact that, of those sampled, persistence in continued learning activities was likely to be the product of the factors of age and previous schooling. Corroborating Houle's findings on a larger scale, the subject matter chosen by Johnstone and Rivera's respondents was apt to be approached with a pragmatic concern. Projections made estimated that 25 million adults throughout the country were active in one type or another of adult learning in the year 1962. Another 17 million were enrolled in courses on a part-time basis. Seemingly an almost serendipitous finding of their research was the fact that an estimated nine million adults were engaged in "independent study," which was characterized by the survey instrument as various forms of self-teaching and self-help activities. On the basis of their 1962 findings, Johnstone and Rivera alerted the educational community to the fact that by 1982 there were likely to be 57 million American adults involved in some form of study through self-learning.

Tough's 1964 study of college graduates sought to expand the learning theory on self-teaching by asking adults themselves how they proceeded with their own self-teaching. Concerned with assessing and measuring the deliberate efforts of the respondents through their learning projects, adults were asked to single out those aspects

with which they had experienced difficulty or concern. They were then asked when, to whom, and to what extent they had turned to others for assistance.

Continued observation of adults in the learning process led Tough (1967) to define learning experience as "a highly deliberate attempt to learn some knowledge or skill" (p. 4). He introduced a time frame of reference by specifying that a self-teaching project include at least eight hours of time spent on it within the past year. Further, the learning experience was qualified by Tough's criterion that the respondent had assumed the primary responsibility for planning, control, and supervision of the entire project (1971, p. 6).

Tough's findings in 1963 indicated that 98% of the subjects in his sample were engaged in deliberate self-taught learning projects. He also found a surprising disparity between the difference in what adults thought they had learned, compared to what they had actually learned. These results led Tough to believe that there was yet much to be done to effectively improve both the method and the procedures in self-teaching inquiry.

Tough's 1970 interviews of adults from seven different populations that included professors, politicians, lower-white-collar workers, teachers, and mothers led to the discovery that the respondents had spent an average of 700 hours a year on an average of eight projects. In view of the scope and the number of hours that adults appeared to involve themselves in self-learning, Tough (1971) further defined a learning project as "a series of related episodes adding

up to at least seven hours where more than half of a persons' total motivation is to gain and retain certain fairly clear knowledge and skill or to produce a lasting change in himself" (p. 6). Further studies have raised additional questions concerning areas of adult learning that are still in need of amplification. These areas include inquiry into human and nonhuman resources used for planning learning projects and the variety and relationship of those to whom self-learning adults turn for assistance. Tough (1971) proposed that what is known about deliberate self-learning represents only the highly visible aspect of what yet remains to be learned. He suggested that research is needed in specific geographic areas including "a high priority need in some detailed studies of unmet needs concerning peer self-help groups" (p. 199).

London and his associates also used survey research when they interviewed 2,500 organizations in an attempt to obtain information about adult education being offered in Oakland, California, in 1963. A multistage probability sampling of 4,008 males between the ages of 20 and 59 years was solicited through telephone interviews. Those who participated were then matched by age and occupation with an equivalent group of nonparticipants. A more analytic survey of 599 males was obtained through in-depth interviews that were designed to focus on the relationships between adult education and the condition of the less-educated and less-skilled groups in society. The study sought answers on the rate of participation in adult education by age, race, and social class.

London's data corroborated results found by both Houle and Johnstone and Rivera. It was seen that participation in adult education was most influenced by the level of previously achieved educational attainment. Young men who had just completed their education were more likely to participate in adult educational classes than older men. The characteristics of activity and passivity of leisure-time activities indicated that those who enjoyed active leisure were more likely to become involved in adult education. That the better educated were white-collar and the less educated were blue-collar employees could be seen to exist only in areas of vocational education. In other areas, the better educated favored pursuits in academic areas. Participation of young black men was fairly similar, overall, to young white men.

Implications of London's research for adult educators included the finding that program dissatisfaction in adult education is likely to be voiced by middle-class adults seeking to expand their areas of interest. It was suspected that, lacking verbal skills that would enable them to articulate their grievances readily, the less educated were more inclined to lower attendance rates or apathy. Failing to control, the lower socioeconomic were seen to discontinue enrollment, or to drop out. London issued a caveat cautioning adult educators to be aware of their responsibilities to adult learners in view of the diversity and complexity of their social backgrounds and the numerous variables evident in the heterogeneity of their psychological make-up.

Although Hiemstra's sample population was small ($\underline{N}$=158), results of his survey research added another dimension to our knowledge

of adult learning when age was considered as the deciding factor on what adults chose to learn. Heimstra observed that despite the fact that those over 65 constitute the largest minority in the nation, only 2% of them in 1969 participated in adult education as compared with 18% for those aged 18 to 35. His 1975 research explored the factors that appeared to inhibit older adult participation and further made inquiry into the nature of aging adults' subject matter, whether of instrumental or expressive orientation and the extent to which the learning took place in a given year. As was the case with the younger adult learners cited in the literature, Hiemstra's older adult learners were pragmatic in their overall approach to learning projects. Thus, while their orientation was toward utility, the aged adults expressed a preference for learning in the direction of personal satisfaction and self-fulfillment in the areas of religion, recreation and crafts including homemaking, health and finances rather than a status-seeking type of pragmatism that would have lent itself to civic or social competencies. In his sample of urban and rural adults, lack of money, health, and the location of resources were seen as inhibiting factors to continued learning with age. Additionally, Hiemstra (1975) found that his sample population included "more minority groups, higher educated people and more urban residents than could be expected in comparison with 1970 Census data" (p. 70).

In 1977, Penland used national survey methodology to explore learner attributes toward self-planned education as seen not from what the learner said but by what changes were produced in learner behavior. Seeking to corroborate on a national scale the findings of

more limited studies, Penland followed Havelock's 1970 dissemination and utilization model of knowledge, production, dissemination, and utilization. It was Havelock's assumption that those involved in the process of obtaining information had plans to use it to some level or degree. In seeking to further Houle's inquiry into how mature adults approach the tasks and the opportunities of adulthood, Penland used Tough's concepts to measure the learning efforts of a learning project. The findings in Penland's data that may have the greatest implication to adult educators may be that adults preferred not to attend formal classes because of a lack of flexibility in the learning strategies. On a national scale, the tendency for adults to seek control for at least certain aspects of their lives was seen to carry over to adult learning to the extent that if they were not allowed the freedom to control in a formalized setting, then the American adult expressed the preference to remove him/herself from that setting in favor of self-learning with autonomy.

With a national sampling, Penland's findings supported the results that Tough had found on a smaller scale. Eighty percent of Americans over 18 years of age were seen to have been engaged in some form of learning activity in 1975. Overall, there is an 80% probability that the learning experiences in which these Americans were involved were self-initiated. Penland also found that 98% of adult learners preferred self-learning, in addition to pacing, because of an expressed concern that was apparent in their responses to fears about lacking abilities in relation to group process skills. He further found that adult learners were generally perceptive in their

analysis of both the favorable opportunities and constraints that learning opportunities were likely to provide. As such, they are apt to choose those outcomes that will have a positive effect both on the learner and the learner's environment.

In 1977, Guglielmino's research sought to establish learner characteristics through the design of an instrument that attempted to measure a self-directed learning-readiness scale. Using the Delphi technique, 14 national experts in adult education were canvassed to obtain the preferred characteristics of adult learners. The traits were perceived to be "initiative; independence and persistence in learning; one who accepts responsibility for his or her own learning and views problems as challenge, not obstacles; one who is capable of self-discipline and has a high degree of curiosity; one who is able to use basic study skills, organize his or her time and set an appropriate pace for learning and to develop a plan for completing work; one who enjoys learning and has a tendency to be goal-oriented" (p. 73). These characteristics chosen by the survey panel were borne out in response to the instrument when tested. Of importance to educators in the field is the recognition and need for development of those abilities that are seen as essential to learning readiness.

Summary of findings from surveys using interview methodology. Surveys large and small have been used as research tools to gain information about the characteristics, practices, and scope of adult learners. Populations have included national samples as well as large urban populations. Also representing a large survey, London's adult male sample attempted to seek information about adult

participation in education by the use of the demographic variables of age, race, and social class. The incremental nature of research has been lent insights from surveys conducted on a much smaller scale than those just cited. Houle sought to characteristically identify adult learner orientation in approach to the learning experience. Tough's studies using samples, often small and typically middle class, have explored the learning behavior of those adults who felt a responsibility for organizing and conducting their own learning activities. Hiemstra's adults over age 65 were still likely to favor the pragmatic approach to their learning, although as their years increased they were inclined to reduce the external scope of their learning in favor of the propensity to choose topics that were of satisfaction to themselves rather than of civic or social competence.

Penland's 1977 research looked to a national sample to generalize smaller research inquiries on a national scale. Examples of survey research that began in the early 1960s have had marked results in increasing our understanding of adult learning theory. From the interview surveys cited, it has been learned that:

1. Persistence in continuing education is apt to be dependent on age and years of previous schooling.

2. Subject matter for younger adult learners will likely be pragmatic in its orientation while older adult learners are apt to turn to learning that will foster enjoyment in their remaining years.

3. Eighty percent of Americans over 18 years of age are likely to be involved in some form of self-initiated learning activity. Current estimates propose that there are in excess of 50 million

Americans involved in self-planned learning activities within the period of one year.

4. There is an 80% probability that adult learning will be both self-initiated and self-directed.

5. Americans, as a group, harbor fears about group process. Admitting their anxieties about communication skills, they cling to a one-to-one model of learning or prefer to learn by themselves.

6. Adult learners appear to have become adept in analyzing both the favorable opportunities and constraints involved in learning situations. Because of this, they are likely to make selections that will maximize outcomes that will enhance self-esteem or favorably affect their surroundings.

Literature on Self-Help Housing

The third source from which the review of literature was drawn is the literature on self-help housing. A brief background and history of self-help housing is described to aid the reader in understanding the housing program in the present study.

The term "self-help housing" is generally used to describe a method of construction in which members of the families that will own and occupy a group of houses actually help to build their own homes using their own and each other's labor. In the United States today, this method of construction is usually undertaken by groups of families organized and assisted by a sponsor organization and assisted by a "self-help" program in a given community or geographic area (Department of Agriculture, 1981).

Self-Help Housing Outside the United States

Self-help housing is not indigenous to the United States. It has been effectively incorporated and efficiently administered in large government housing programs in Greece, Venezuela, Columbia, and Sweden. The Swedish project in 1927 that became known as The Stockholm Plan appears to be the earliest known self-help housing program in the world. Its purpose was to provide low-income self-help housing to the ill-housed residents of Stockholm.

The Greek government turned to self-help housing methods in an attempt to quickly house almost one million refugees after World War II. Since that time, between 70,000 and 90,000 houses have been built.

Self-help housing in Venezuela was a program supported by the Venezuelan National Rural Housing Program and was instituted for the purpose of providing sanitary, inexpensive housing for those people who had previously lived in the mountain areas but who had migrated to the fertile lowlands. The Five-Year Plan called for 94,000 homes to be built in areas with populations under 10,000.

Faced with a housing shortage because the low-income population had doubled between 1950 and 1960, the government instituted a self-help housing program in Columbia in 1960. In the 1960s, 52,000 houses were produced with a governmental commitment to build 10,000 homes a year thereafter (HUD, 1969).

In 1949, the Social Programs Administration of the Puerto Rican government instituted a Community Action Plan based on methods

of mutual self-help construction for low-cost housing for the purpose of resettling Puerto Rican laborers close to rural communities. Between 1949 and June 1970, 37,778 houses had been built in 369 rural communities (HUD, 1971).

Self-Help Housing in the United States

Long-range governmental policy appears to be indefinite about its long-range housing goals. A commitment to housing for low-income families made in the Housing Acts of 1933, 1949, and later in 1961 was recognized by the Housing and Urban Development Act of 1969 as not having been realized. In Section 2 of the 1949 act, the Congress affirms the national goals of "a decent home and a suitable living environment for every American family" (Public Law, 1968).

FHA Section 221 is designed to assist private industry in supplying urban housing for low- and moderate-income families and displaced families. The basic legislation for the various FmHA rural housing programs is Title V of the Housing Act of 1949, which was amended to make homeownership loans to nonfarm rural residents. Section 523 authorized FmHA to make technical-assistance grants to self-help housing groups in rural areas and small towns with populations under 10,000 residents. Self-help housing has been considered a way to assist families to attain adequate housing through the enhancement of skills that are used in the building process (Department of Agriculture, 1978).

Federal government involvement. The National Housing Act was enacted "to encourage improvement in housing standards and conditions,

to provide a system of mutual mortgage insurance, and for other purposes" (The Statutes at Large of the United States of America, Vol. 48, Part 1, pp. 1246-1265). At the national level, the Department of Housing and Urban Development supports a broad range of housing programs. Before the 1968 amendment of the Housing Act, three federal agencies shared the responsibility for administering self-help housing programs. These agencies included the Office for Economic Opportunity, the Bureau of Indian Affairs, and the Public Health Service. Since 1968, Farmers Home Administration has been the leader in the field of federal agencies that support organized mutual self-help housing activities.

Loans made by FmHA under Title V, Section 502 of the Housing Act of 1949, as amended, provide mortgage funds for self-help housing. Section 523 was amended in 1968 to provide funds for technical assistance to grantees. These funds were assigned to be used for administrative assistance, for payment of fees for preconstruction meetings, and for the provision and training of families as they construct their houses (Mutual Self-Help Housing, 1982).

State Directors of FHA are responsible for implementing federal housing programs in accordance with Public Law 90-448 and its amendments. Directives are carried out by district directors and county supervisors.

Section 523 constitutes a very small program in the range of programs administered by FmHA. The total FY82 Rural Insurance Fund for low-income loans (Sec. 502) was $2.3 billion. Of the $2.3 billion, mutual self-help housing was allotted $3.95 million in 1982.

Carry-over funds were available from previous years that enabled the program to operate at a level of $13.2 million in 1982. The National Rural Housing Coalition reported on December 12, 1982, that the Agricultural Appropriations Act has been signed into law by President Reagan allocating $12.5 million to self-help housing for 1983. This budget will allow the housing program to produce approximately the same number of homes as were built in 1982.

Early self-help housing programs. Self-help housing was first organized in the United States in 1933 at Norvelt, Pennsylvania. The project was initiated by the Westmoreland County Relief Board to provide housing for unemployed coal miners.

The Penn-Craft Self-Help Housing Project was described as having begun in Pennsylvania in the 1930s by the American Friends Service Committee. This 50-family, two-story stone house project with central heating and inside plumbing projected the concept of quality, durable housing and established the future pattern for self-help housing in the United States (Margolis, 1967).

In the United States today, 61 self-help housing programs in 26 states continue to provide housing for low- and moderate-income families as they have done since World War II. The first of these was the Flanner House Project in Indianapolis, Indiana, which was begun in 1946 by a nonprofit organization whose purpose was the redevelopment of property that once constituted a slum area in which black residents of moderate income had been inadequately housed because of credit discrimination.

Sixty-four houses had been completed by 1955 when Bauman made her study of the communication networks of 48 families. The study observed the formal and informal activities, hobbies, interests, attitudes, and openness in home neighborhoods. Also explored were the relationships within and outside of the housing program as well as the relationships between the families in the housing program and those outside the development. Bauman examined a group of 21 families with a four-year tenure and a second group of families who had resided in the development for a period of two years. She sought to study not only the interaction within the self-help groups but also the groups' interaction with the larger community of Indianapolis. All of the data considered, the factor showing the most consistent influence on family interaction within the groups was the length of residence. She found that the homogeneity of their backgrounds, work style, and living conditions led each family, however indirectly, to be related to every other family with a minimum development of stratification or the formation of cliques.

Bauman's study has implications for social planners insofar as the attention paid to social characteristics affects the members of future developments. She suggested that future housing planners put human needs and interests ahead of, if not on a par with, financial interests if a successful combination of urban planning and human interaction is to be achieved.

Self-help housing in California. No history of self-help housing in America would be complete without some background on Self-Help Enterprises (SHE) of Visalia, California, which is the

largest self-help housing program in the United States today. The program, located in the San Joaquin Valley, has educatively carried out self-help housing programs benefiting 13,501 participants from 2,271 families since 1964. Recognizing that the valley's seven counties contained housing that was hazardous and inadequate, SHE used federal funding to assist migrant and farm laborers to build new homes. Additionally, a Self-Help Rehabilitation Program was designed using Sections 502 and 504 funds, whereby residents who owned their own homes could make them safer places to live with reconstruction accomplished by family members who were supervised by SHE staff.

Over the years, SHE has found itself to be in the position of counselor as well as carpenter as groups of 8 to 12 families come together in the self-help process. Group frictions can emerge as radical changes in life styles begin to take place. Personal jealousies can flare and disputes with technical staff over money and methods can and do arise. Family structures can change and deaths occur. Even when the homes are built and occupied, behavioral changes may occur because the transition was too radical for the low-income residents to make the necessary accommodations. Families, on occasion, have failed to repay their capital cost, have fallen into default, facing eventual foreclosure and eviction. SHE generally is seen to have enhanced the self-esteem of the individuals who, while housing themselves, increased skills in numerous other areas as well (Unwin, 1974).

Education and the use of new skills. The expansion of SHE into urban areas of over 10,000 population meant that funds from the

Office of Economic Opportunity (OEO) that had been categorized for use for farm workers were not available in urban areas. The families in the urban areas would have to bear the cost of construction supervision. SHE experimented with on-site construction of prefabricated wall units and plumbing core systems. This did not provide the expected savings, and in 1969, SHE established the factory component called Bravo Industries, which prototyped at 8' x 8' exterior wall that required only one day for the erection of on-site walls in constrast to considerably more time and expense when done by the self-help groups.

As an educative part of self-help housing, Bravo has instigated a one-year training program that has enabled laborers with unskilled farm backgrounds to develop "reading, mathematics and the conceptual skills essential for the tasks related to both production and field operations" (Marshall, 1972, p. 25).

Although self-help housing programs encompass numerous aspects in the development of their programming, evaluative studies of program effectiveness are sparse. Two different aspects of programs being conducted in two different states will be cited in concluding the review of self-help housing literature.

Self-help housing in Oregon. Self-help housing in Oregon was organized in 1969 and prioritized immediately after the state's need for adult education. The study of Oregon's self-help housing program was carried out by the University of Oregon's Bureau of Governmental Research and Services for the purpose of evaluating self-help housing in meeting the needs of the rural poor in the Valley Migrant League,

whose residents were seasonal farm workers in Willamette Valley. An extremely small study, a group of five families and a group of six families were followed through the organizational, loan-processing, and construction of their homes.

Despite the educative aspects, it was noted that since property taxes were based upon real estate values that fell on the rich and the poor, self-help housing, in effect, deliberately increased the relative housing costs of low-income families. Additionally, the need to contribute 30 hours a week of labor during the project's duration was seen as a hardship in families that were already involved in labor that was physically exhausting. The program was also criticized because it was set up to attract a narrow margin of families and continued to operate within that framework. Duplication at various sites was seen as costly, as the program was not continuously in operation and required large amounts of staff-time spent in training (Department of Commerce, 1970).

An Oklahoma study. McMinn's (1974) study of three self-help housing programs in Oklahoma was undertaken in an effort to view self-help housing from an economic point of view. The interviews of 73 participants in housing programs located in three counties covered a broad range of financial topics relating to the differences in cost between the participant's current and previous household expenses. Attitudinally, the participants appeared pleased with the changes that self-help housing had brought into their lives. The author's orientation throughout the study was financial. He concluded that self-help housing offered beneficial returns both to the participants and

to the counties as increased tax bases resulted in the areas in which the construction took place. McMinn proposed that the government not overlook the fiscal advantages to the participants as well as the opportunity to house its citizenry at a cost reduction because of self-help labor.

Summary of Literature on Self-Help Housing

Seen as a cost-effective way of providing housing for the underhoused, the governments of Greece, Columbia, Venezuela, and Sweden preceded the United States in advocating self-help housing. Self-help housing offered the resettling of laborers while at the same time providing them the means of constructing low-cost housing.

By national decree, the Housing Acts of 1933 and 1949 affirmed a "decent home" as a right of every American. Governmental intervention since World War II, in the form of funds specified for self-help housing, has monitarily aided programs through the years. To date, 61 programs exist in 26 states.

Although virtually existing from coast to coast, self-help housing is a small federal program. A sparse body of data exists in the form of seemingly isolated studies that have attempted to explore the many facets of the program. Oregon's study of 11 families was both small and critical. McMinn's observations in Oklahoma noted the financial advantages to be gained by the government in continued support. Many other aspects of self-help housing yet remain unexplored.

Summary of Chapter II

Literature from three primary sources was presented in theoretic support of the assumptions on which the present study was based. Current theory in adult education builds upon the assumption that today's adults can be seen to expect to become involved in their own learning process. Their self-direction borne of life's experiences leads them to prefer inquiry of a practical nature. It is their inclination, therefore, to display persistence and responsibility in their quest of both traditional and nontraditional resources in their concern for utility and application.

In their attempts to add to what is known about adult learning characteristics, studies have developed research methodologies using interviews structured around questionnaires. Building incrementally upon previous studies, research on a national scale has corroborated the findings of small studies, both in the areas of learning characteristics and the learning practices of adults, that were first evidenced in studies using small samples.

First organized in 1933, self-help housing in the United States today is a small federal program. It is seen as a cost-effective way of providing housing for the underhoused in the 61 programs that are currently operating in 26 states. Data are sparse and studies on self-help housing appear isolated. Many areas yet remain to be explored.

CHAPTER III

METHODOLOGY

The present research was an exploration of the learning characteristics of rural adults. It was a study not only of the traditionally accepted methods of learning such as reading, studying, or viewing, but it also investigated the process of learning-by-doing and learning-by-experiencing. Its purpose was to describe certain aspects of the 45 rural adult learners, including the scope of their learning activities, the extent of their deliberate learning practices, and the quality of their learning environments.

In an attempt to define the present exploration, five broad areas of inquiry served to guide the present study. They are as follows:

1. Who are these adult learners, and what is their psychosocial profile?

2. What are their areas of learning interest, and by what processes do they learn?

3. How do they organize their learning activities?

4. How do they use their resources for learning?

5. How and in what ways was the housing program a learning experience?

The subjects of these five general areas of inquiry were 45 rural adults who represented three intact groups in varying stages of construction in a self-help housing program.

Definition of the Population

The 106 adults who constituted the population for the study were residents of Coldwater, Michigan, and outlying areas in Branch County. Coldwater, a city of 9,942 residents, is the county seat of Branch County. Situated in the south-central sector of Michigan bordering Indiana, Branch County is a rural farming county with a population of 40,188. Of the families in the population, the majority of men and women who worked outside the home were employed as blue-collar workers. An additional few were clerical employees and medical or technical assistants.

The families in the population were U.S. citizens. They had met Farmers Home Administration's eligibility requirements for entrance to self-help housing because they had previously lived in accommodations that were not deemed structurally sound or functionally adequate enough to meet the family's immediate needs. Essential for FmHA's eligibility requirements, the participating families had to have incomes that were estimated to be substantial enough to meet family living expenses, taxes, insurance, maintenance costs on existing debts including the proposed loans for their houses. The families also needed to have a credit history that indicated a reasonable ability and willingness to meet their obligations as they became due. The families, additionally, had to have the ability to furnish

their share of the 950 hours of labor that was estimated to be necessary to finish the house--regardless of the age or sex of the head of the household. The 106 adults represented a range of those who had been in the program for over three years, who had finished construction and been living in their houses from one to two years to those who had recently finished the loan processing and the 13 weeks of preconstruction meetings and who had just begun construction of their houses (Department of Agriculture, 1981).

The Sample

Since its beginning in 1972, eight groups that comprised between 7 and 18 adults in each group had participated in BBCL's federally funded self-help housing program. A convenience sample was obtained in which 45 individuals represented three different groups at different stages in the construction process. The eight groups in BBCL lent themselves to three major divisions. These included those who had completed their houses and were living in them, those who were finishing construction and almost ready to occupy them, and those who were about to begin construction. A list of names of participating family members was obtained from BBCL. The names, addresses, and telephone numbers of the members in the three groups were given to the interviewer, who began at the top of the list for the names in each group and selected the names of participants until 15 members in each group agreed to be interviewed. The data are presented in Table 1.

Table 1: Derivation of the Sample From the Population

	Group			Total
	A	B	C	
Available population	35	20	51	106
Total number from population asked to participate	18	17	17	52
Number from population who declined to participate	2	2	1	5
Number unable to be scheduled	1		1	2
Number of participants in study	15	15	15	45

Of the 106 adults who comprised the eight groups, 53 people were contacted. Forty-five individuals agreed to be interviewed. Five declined, and two people who were working full- and part-time jobs as well as spending 32 hours a week building their houses were unable to schedule a time to meet with the interviewer.

The 45 subjects who agreed to be interviewed represented 15 individuals in each of the three groups at different stages in the construction process. For purposes of identification in the research, the 15 people in Group C were living in their houses. The 15 in Group B were completing construction and were in the process of moving into their houses during the six-week period in which interviews for the study took place. The 15 in Group A were those who had just begun the construction process.

The Participants' Involvement in the Housing Program

With funding provided by FmHA, BBCL administered a Section 523 Technical Assistance Grant. The TA grants funded the administrative expense involved in providing preconstruction training and technical supervision while the houses were being built. Applicants for USDA FmHA 502 Rural Housing Loans, having applied and having met the loan's financial, employment, and credit eligibility requirements, proceeded through the loan docket stage of the self-help housing program with the assistance of BBCL's executive director. During this stage, the property was selected, house plans were submitted, plot plans were approved, and title searches were completed. Families also received assistance from BBCL in obtaining cost estimates for construction materials and any subcontracting that was required. With the loan dockets completed, the adult family members who had signed a commitment to work on the construction of their houses moved to Stage II of the program, the preconstruction meetings.

To understand more fully the housing program process as groups moved from one stage to another, the researcher attended the 13-week preconstruction meetings with a group who were about to begin construction of their houses. Each newly established group formed an association, electing a president, vice-president, and secretary-treasurer. The secretary-treasurer's duties included a weekly inspection of bank passbooks to assure that each family had begun to save the $25 a week to assist in the payment of the first year's taxes and insurance. The members of the association loosely followed Robert's Rules of Order, assuring that while the majority of members could

sway an issue, individual members knew that their views were to be heard. Each family was allocated one vote concerning scheduling weekly meetings, additional meetings if seen essential, and the times and places of social meetings, if voted.

Compulsory attendance by adult family members who worked on the construction of the house was required in the second stage of the program, which was the 13 instructional units that were held weekly at the association meetings. The schedule for the instructional section of the housing program that was covered during these weekly meetings can be found in Appendix B.

During Stage II of the program, the group of family members learned further details about the mutual self-help housing program and the sponsoring agency's responsibilities to the families. Further, the implications of interest recapture, loan payment, property taxes, and insurance requirements in compliance with FmHA regulations were clarified.

The early meetings instructed in methods of construction, safe use and handling of power tools and equipment, and construction scheduling. The final meetings included information on landscaping, home maintenance, and final inspection requirements. During these 13 weeks, the families not only learned the local codes and construction specifications, but they also began the process involved in group interaction through which leadership emerged.

The actual construction of the houses lasted about six months. During this third stage, each family contributed as much labor as was necessary to complete all of the houses in the group. In

Coldwater, 950 hours was seen to be the average of the time needed for construction. Each family was required to contribute 32 hours each week. Since most families involved in BBCL worked during the daytime at their places of employment, family members were expected to work on each other's houses in the evening and on weekends until the required 32 hours of labor each week had been attained. The labor requirements were insisted upon, regardless of the weather or the season.

The houses constructed by the participants in the self-help housing program were assessed by FmHA at $35,690. This figure included the cost of materials and the cost of the lot on which the house was built. Upon completion of the housing program, the total appraised value estimated by FmHA is $46,490 to each participating family. The resulting difference is due to the equity earned by self-help labor, which represents the equivalent of the down-payment.

Qualitative Research

The decision to use qualitative rather than quantitative methodology is consistent with research that is of an exploratory nature. The value of exploratory study has been to increase understanding in areas in which existing research is either scant or nonexistent. Unlike the quantitative methods employed by deductive theorists, exploratory research makes inquiry into uncharted areas of social phenomena. Blumer (1970) amplified this concept as follows:

> Because of its flexible nature, exploratory research is not pinned down to any particular set of techniques. Its guiding maxim is to use any ethical procedure that offers a possibility of receiving a clearer picture of what is going on in the area of social life. There is no protocol to be followed in the use of any one procedure; the procedure should be adapted to its circumstances. Thus it may involve direct observation, interviewing of people, listening to their conversations, securing life history accounts, using letters and diaries, consulting public records, arranging for group discussions and making counts of an item if this appears worthwhile. There is no protocol to be followed in the use of any one of these procedures; the procedure should be adapted to its circumstance and guided by judgement of its propriety and fruitfulness. (p. 33)

The present exploratory research was undertaken from the perspective of an information-gathering process. This form of inquiry departs from the dominant formal research paradigms because the nature of the research itself lends it to personal histories, anecdotal reports, and the use of descriptive material or data. Skager (1978) suggested that while formal research can be seen as a method of investigation, it is not the only method of inquiry.

The primary research tool used to gather data in an exploratory study is the interview procedure. Qualitative studies using interviews to gather data are subject to concerns about both validity and reliability. In an attempt to satisfy these concerns, attention was paid to the following areas in the present research.

Bruyn (1966) cited six indices of subjective adequacy. Applied to the present study, they are as follows:

1. TIME: The more time that is spent with those being studied, the more accurate the interpretation of social meanings is likely to be.
2. PLACE: The more closely the inquirer works in the geographic locus of those being studied, the more accurate the interpretation is likely to be.

3. SOCIAL CIRCUMSTANCE: The more the inquirer can relate to the subjects, the more accurate the interpretations are likely to be.
4. LANGUAGE: The more familiar the inquirer is with the subjects' language, the more accurate the interpretations are likely to be.
5. INTIMACY: The greater the degree of intimacy obtained with the subjects, the more accurate the interpretation of their remarks is likely to be.
6. CONSENSUS OF CONFIRMATION IN THE CONTEXT: The more the inquirer reiterates or recapitulates the meanings of what is said, the more accurate the interpretation of them is likely to be. (pp. 180-185)

To the extent that the interviews for the study averaged about one hour, time was a critical index of validity. The shortest interview was 45 minutes; the longest was one hour and 45 minutes. Interviews for the 15 participants in Group C were held in their homes. Those interviews in Groups A and B that were not conducted in the participants' present residences were conducted at their construction sites. The participants in the study, the researcher, and the interviewer shared a local Branch County environment.

Precautions Taken to Minimize Threats to Validity and Reliability

Face-to-face interviewing can pose a threat to response validity. This can occur because "personal contact engages general norms about self-presentation that may cause respondents to distort their answers in the direction of making a more favorable impression on the interviewer" (Bradburn, 1979, p. 166).

Germane to an interview procedure using a questionnaire to elicit responses was an awareness of the possibility of respondent anxiety. Whether the topic of adult learning was seen as threatening

was difficult to judge. It is to be noted that the subject matter does not have to be contranormative to be seen as threatening; the respondent's preconception of the interview procedure itself may suffice. It was estimated that low-income rural adults may have been sampled infrequently, if ever. The protocol in the present study took the potential for respondent anxiety into account to the extent that the interview format was relaxed and informal and the questions probed less than would have been desired.

The possibility of threat to the study by biases introduced by interviewer behavior was controlled to the extent that one person conducted the interviews. Interviewing in the presence of others was seen as an additional way in which information could have been distorted. It was felt, however, that since efforts to secure privacy often lead to a refusal to be interviewed, unlimited third-party intervention was to be noted, and its severity, as judged by the interviewer, was to be considered a criterion for withdrawal of data from the study.

Of the 45 interviews, nine were randomly taped in an attempt to allow the researcher the opportunity to confirm that the prescribed interview protocol was being followed. The nine taped interviews showed that the protocol was being followed.

Attention was also given to the concern for language. Payne (1951) cautioned that "questions tap an individual's motives, his experience, his expectancies, his unique experiences, his whole range of identifications and loyalties. In short, they are trying to discover certain parts of what we might call an individual's assumptive

world" (p. 9). Heeding Payne's advice that "the quintamensional design reminds us of the elements of opinion--awareness, general opinion, specific opinion, reasons and intensity," validity of response was sought to the extent that the questionnaire provided a latitude of response possibilities as the rural adults were asked about their learning practices (pp. 232-233). The problem of precision of word usage was attended both in the wording used in the questions and the selection of options that were offered in the Likert-type scales.

The Survey Instrument

The survey instrument is a semi-structured interview that was organized around a five-part questionnaire. It included closed and open-ended questions. The questions asked during the interview were designed to obtain specific information on the topics of broad inquiry that served to guide the present study. The broad areas of investigation were amplified as follows:

I. Who are these rural adult learners?
   - A. Demographics
     1. Age
     2. Sex and marital status
     3. Occupation
     4. Income
     5. Schooling
   - B. Psychosocial profile
     1. What were the motivations expressed by the participants in the housing program for building a house?

2. What were the anxieties expressed at the beginning of the program?
3. What benefits did the rural adults expect to derive from participation in the program?
4. How and in what ways was the program different than the participants had imagined?
5. How and in what ways did the participants in the program believe that skills developed in the program could be transferred to other areas of their lives outside the program?

II. What are the areas of learning interest?

1. What are the areas of learning interest in which the participants obtained information during the past year?
2. What processes are used to obtain information on these areas of interest during the past year?
3. What topic is seen as a special area of interest during the past year?
   a. What process is used to initiate learning?
   b. What process of learning is used after the activity is begun?

III. How and in what ways are learning experiences organized?

1. Who has the responsibility for planning learning activities?
2. From whom was assistance sought during learning?
3. What site was chosen to carry out learning activities?

4. What is the degree of difficulty expressed by the rural adults in making the decision to begin the study of the topic chosen as the special area of interest?

IV. How were resources used in learning?

1. Is arranging time to learn a problem?
2. To be able to learn in an area of interest, is money a problem?
3. Are resources (people, books, etc.) difficult to find in Coldwater?
4. Are resources difficult to understand?
5. Do you prefer to learn by yourself?

V. How and in what ways in the housing program a learning experience?

A. In what ways are you currently involved in

1. Areas of business and finance?
2. Areas of construction materials and practices?
3. Areas of communication and group process?

B. In what ways can skills developed in the housing program be used in other areas of your life outside the program?

1. Areas of business and finance?
2. Areas of construction and group process?
3. Areas of communication and group process?

C. What characteristics do the rural adults in the self-help housing program attribute to "schooling" and to "learning"?

1. How is previous scooling perceived as a preparation for life?
2. How is the concept of "learning" perceived by the adults in the study?

Survey Methodology

In an attempt to understand the participants in the housing program, Part I of the survey questionnaire asked open-ended questions about the factors that led the participants to become involved in the program. The five major questions and subquestions in Part I of the questionnaire were phrased differently for each group of participants, since Groups A, B, and C represented groups at three different places in the construction process in the self-help housing program. In effect, three different questionnaires were used as survey instruments. Part I, which consisted of Questions 1 through 5, was different for members of each group. Parts II through V, which consisted of Questions 6 through 50, were the same for each group.

In addition to questions that asked about the motivating factors that led the participants to become involved in the program, Part I included major questions and subquestions pertaining to anxieties or concerns that were felt by the participants at the beginning of the program. Subjects in all three groups were asked to amplify the ways they felt that skills developed in the program could be applied to other areas of their lives. Members of Groups B and C were asked to amplify the ways in which they felt the program was different than they thought it would be. The members of Group A who had just become involved with the housing program were asked what benefits they felt would be forthcoming in the program. Members in Groups B and C were asked what new projects had come to mind since the completion of their houses.

The purpose of Questions 18 through 30 in the questionnaire was to attempt to discover the areas of learning interest on which the participants in the housing program obtained information during the past year. No conditions were placed on the applicants' responses. After several probes and suitable pauses, a printed card was handed to the respondent with topics that were categorized in 12 broad areas of interest. The printed card was used to aid the respondent in remembering additional interest areas. This was felt important, as a purpose of the study was to attempt to discover the scope of the learning interests of the rural adults in the sample.

Question 31 in the survey was open-ended and asked the 45 members in the sample to describe the methods by which they first obtained information in their areas of interest. The members were then asked to describe the methods that were later used to obtain information, if it was found necessary to do so. The interviewer was instructed to record their process in obtaining information as "academic" when the information was obtained by reading, studying, listening, or viewing. Information that was obtained by experience or learning-by-doing was recorded as "doing."

Question 32 in the survey asked the participants in the study to select one area that they considered to have been the most meaningful from the multiple areas of interest on which they obtained information during the past year. To be considered as an important area for the present research, three criteria were imposed. First, the participant had to have a fairly specific idea about what was to be learned. Second, participants had to have taken the responsibility

for planning and controlling their learning (over 51% of the time). Finally, the participants had to have spent at least eight hours on this topic during the past year.

Questions 33 through 35, which pertained to the organization of learning experiences, asked that responses from the participants in the program be given within a structured framework. Included within these questions was information about the responsibility for planning learning experiences, those from whom assistance was sought, the site chosen to carry out learning activities, and the degree of difficulty experienced in making the decision to begin learning. Also structured were Questions 36 through 41, which pertained to use of resources in learning. Responses to Questions 33 through 41 were structured by a five-point Likert-type scale.

Three different copies of Part I of the survey questionnaire, pertaining to the three different sets of questions asked of Groups A, B, and C (for Questions 1 through 5), and a copy of Questions 6 through 50, which were asked of all groups, are located in Appendix C.

Open Versus Closed Questions

The nature of an exploratory study of adult learning characteristics appeared to dictate the use of a mixture of closed and open-ended questions that were oriented to seeking responses that were informationally broad. This approach appeared to allow the respondent considerable freedom to determine the nature and the amount of the information given. The subjects were thus able to volunteer

frames of reference and attitudes that closed questions alone might have missed (Denzin, 1970, pp. 123-143).

While posing little threat to the interviewee and supplying information that often had not been asked, open-ended questions are not without their disadvantages. Stewart and Cash (1974) suggested that:

1. Open-ended questions require an interviewer who has skill in asking the questions and is able to control the interview. Essential, too, the interviewer must be able to redirect responses without creating repercussions in the thought flow that could dampen the enthusiasm of the responses that follow.

2. The most significant disadvantage of open-ended questions may be the time, effort, and money involved with codifying and converting the participants' responses into raw data or observations that are meaningful (pp. 47-67).

It was seen as the responsibility of the researcher to attempt to overcome these two "disadvantages." To do this, the following procedures were implemented. First, the use of an interview protocol was implemented that was straightforward but relaxed. Second, an interviewer-training plan was undertaken to instruct in the philosophy underlying the research and the reason for using qualitative methodology. Finally, a plan for data analysis was formulated that enabled coding of both the indices of content and demographic nature of the responses.

A Pilot of the Study

An earlier version of the instrument was pretested before the pilot study began. Five area residents ranging in age from 21 to 42 years of age, whose educational, financial, and occupational backgrounds were estimated to have been comparable to those whom the study expected to sample, were interviewed by the researcher. An effort was made to reduce the average length of the interview from one and one-half hours to a one-hour period by combining questions and clarifying wording. An attempt was also made to reduce terminology without being condescending or reductionistic in an effort to make the respondents comfortable during the interview. Payne (1951) suggested that if rigor is to be exercised, all questions will endeavor in every possible way to embrace all levels of understanding. To do this, he proposed that "the questioner must adapt the wording to the lowest educational levels without patronizing or talking down to them and without sacrificing clarity" (p. 115).

Two people from each of the three groups that constituted the population were interviewed by the researcher in a pilot study six weeks before the main study was scheduled to begin. The responses were analyzed and coded, and the raw data were tabulated using procedures identical to those that were expected to be employed in the large study. Revisions were implemented.

Interview Protocol

Following an interview protocol similar to that adopted by Schmoll (1981), the interviewer was instructed to engage the

participants in casual conversation at the beginning of each interview. Once a friendly climate had been established, the interviewer was instructed to implement the following procedures:

1. To acquaint the individual with the nature of the research, informing the respondent that participation in the interview was voluntary.

2. To assure the respondent that complete confidentiality would be maintained.

3. To mention that a copy of the research would be available locally for those who were interested in reading the outcomes of the study.

Interview Training

Nine two-hour training sessions were spent by the researcher with the interviewer, acquainting the interviewer with the purpose of the present research. The interviewer had a background in political canvassing and interviewing and had known and worked with the residents of Branch County for the past 15 years. Used as a basis for the interview training were Borg and Gall's (1979) methods and tools of survey research. Specific attention was paid to:

1. The interview as a research tool.
2. Advantages and disadvantages of the interview in research.
3. The interview guide and recording the interview.
4. Effective communication in interviews.
5. The respondents' frame of reference.

Also of assistance in training the interviewer was Filstead's Qualitative Methodology: Firsthand Involvement with the Social World (1970). Helpful to the novice interviewer trainer was information on interpreting the project, the interview conversation, problems of potential bias, cross-checking and validating information, and Filstead's suggestions for probing for depth.

Practices of interview questions were held. Since it was expected that some participants would volunteer more information than others in response to the open-ended questions, a range of probes was prepared. These sample probes were used for all interviews to the degree that they were seen to be necessary.

Since the purpose of the study was an exploration of the learning characteristics of rural adults, the process of note-taking was touched upon at all interviewer training sessions. The interviewer was instructed to record observances, cite quotations, and write memoranda that could be completed after the interview was terminated.

Data Analysis

Coding and data analysis were begun as soon as the interviews were completed. Tapes of the interviews were played, and information was transcribed from the survey questionnaires. All cases were read, and major themes for analysis were identified.

In an attempt to document all of the interview information volunteered by all of the respondents to each open-ended question, a frequency count attaching the respondents' importance to main and subthemes was prepared. Charts of the frequency of response or

participants for each of the questions in the interview can be found in Appendix D. In addition to the frequency count provided by the raw data, qualitative data were collected both from the interviews that were taped and from direct quotations and remarks noted during the interview. These data were not statistically analyzed. If a larger study were conducted, the statistic most promising would have been the nonparametric chi-square.[1] The restrictions placed on the use of the chi-square test to ascertain statistical significance of the data in frequency form led the researcher to make the decision to adopt a qualitative research methodology. The qualitative data were coded into areas pertaining to subject matter and are presented in Chapter IV.

Led by the exploratory nature of the study, the researcher felt the responsibility for presenting both frequency counts and classified qualitative data to the reader. The data are presented to enable the reader sufficient opportunity to make judgments as to the validity and the degree of confidence assigned to the conclusions. Becker (1970) referred to this procedure in the following statement:

> Qualitative research has not been systemized as that found in quantitative studies. The data does not lend itself to such ready summary. In view of this fact, evidence is

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[1] Terrace and Parker (1971) advised that "The chi-square test can be used to test the correspondence of categorized data to any hypothetical frequency distribution. For this reason this procedure is sometimes called a test for 'goodness-of-fit.' There are only a few restrictions on its use. The test should not be used when more than 20% of the cells are less than 5. The chi-square test should not be used when any cell is less than 1" (Unit 12, p. 16). The authors stated further than "a chi-square test is not permissible when the total N is less than 20. All expected frequencies must be greater than 5" (Unit 12, p. 33).

> assessed as the substantive analysis is presented. This is totally based on the fact that the reader is given greater access to the data and procedures on which the conclusions are based. (p. 199)

Finally, the degree of reliability and validity of exploratory research depends to a large extent on the researcher. Reliability depends on the degree of consistency in the data collection and the precision and insight employed in both coding and data analysis. The validity of the research depends on the extent to which detailed events are identified and classified.

Summary of Chapter III

The present study is an exploration of the learning characteristics of rural adults. Three intact groups of participants in a self-help housing program were selected according to their placement in the program's construction process. From a population of 106 rural adults, 45 participants were interviewed who are blue-collar workers in a rural county in Michigan. The housing program in which the participants are involved is a three-stage program that includes loan docket, preconstruction, and construction stages.

The present research used a qualitative methodology because of its exploratory nature and the fact that sufficient a priori information was lacking from which to raise questions or state hypotheses. Threats to validity and reliability in the study were recognized, and in an attempt to counteract them the following measures were taken:

1. The interviewer was chosen because of previous interview experience, and having lived in Branch County for 15 years, the

interviewer was familiar with the language and customs for Branch County residents.

2. The setting for the interviews was chosen for the convenience of the respondents. An attempt was made to assure a sociable, informal atmosphere that was both convenient and comfortable for the respondents.

3. Attention was paid to the precision of the language used in the questionnaire in an attempt to assure comprehension without the loss of clarity.

4. Nine two-hour training sessions were used by the researcher to familiarize the interviewer with the purposes of the study, the methodology being used, and the interview protocol that was to be used.

5. The pilot study for the research was pretested by the researcher and revisions were made in the survey instrument. A pilot of the study was run by the researcher. Data were identified, coded, and analyzed for presentation using the procedures to be employed in the study. Coding and analysis revisions were incorporated into the present research.

The survey instrument designed for the present research is a five-part questionnaire that uses a combination of closed and open-ended questions. Since the participants in the study represent groups chosen because they were at three different stages in the construction process, the five questions and subquestions that are used to probe and amplify responses to Part I of the questionnaire, which attempts to describe the psychosocial profile of the rural adults, are different

for each group. Questions 6 through 50 are the same for all three groups.

To acquaint the reader with the three stages of the housing program and the processes involving the rural adults participating in it from loan clearance through construction, a brief description of BBCL's operating procedure was included in the chapter.

CHAPTER IV

PRESENTATION OF THE DATA

The present study was conducted to explore the learning characteristics of rural adults in a self-help housing program. In this chapter, the data collected by a survey questionnaire are presented in two parts. In Part I, the qualitative data are identified and expressed as frequencies. The frequencies are organized and are displayed around components and patterns of learning experiences that the instrument was designed to record. In Part I of this chapter, the following areas are addressed:

QUALITATIVE DATA EXPRESSED AS FREQUENCIES

I. Demographics and psychosocial profile
   - A. Demographics
     1. Age
     2. Sex and marital status
     3. Occupation
     4. Income
     5. Schooling
   - B. Psychosocial profile
     1. Motivation expressed for participation in the program
     2. Anxieties expressed by participants at beginning of program
     3. Transfer of skills to areas outside the program
     4. Participants' perception of program after construction
     5. New projects planned by participants

II. Areas of learning interest
    1. Areas of learning interest in which information was obtained during the past year
    2. The processes used to obtain information on areas of interest during the past year
    3. The topic seen as a special area of interest during the past year by participants in the program

III. Organization of learning activities
    1. Responsibility for learning activities
    2. Those from whom assistance was sought in learning
    3. Site chosen to carry out learning activities
    4. Degree of difficulty expressed by participants in making the decision to begin the study of special area of interest

IV. Use of resources
    1. The use of time as a resource
    2. The use of money as a resource
    3. Finding resources for special area of interest
    4. Understanding resources for special area of interest
    5. Self as a resource: the preference to learn by oneself

V. The self-help housing program as a learning experience
    A. Current involvement
        1. Areas of business and finance
        2. Areas of construction materials and practices
        3. Areas of communication and group process
    B. Transfer of skills
        1. Areas of business and finance
        2. Areas of construction materials and practices
        3. Areas of communication and group process
    C. Characteristics of "schooling" and "learning" as perceived by the rural adults participating in the self-help housing program
        1. School as a preparation for life
        2. The concept of "learning" expressed by adults in the study

In Part II of Chapter IV, the qualitative data are presented in the form of direct quotations that were made by participants in the housing program. Their responses were organized into four major areas for convenience in presentation. These areas are psychosocial profile, transfer of skills, changes reported in self-concept, and the housing program as a learning experience.

The presentation of the data in this chapter follows the above outline. In several areas, tables of organized frequencies are presented to assist the reader. To present raw frequency data on the areas that have been explored, a method of standardization was seen as essential. An arbitrary criterion was established by the researcher that is used in the following discussion. In referring to frequency of observation in the data, a figure of 75% and above is regarded as a strong indicator. Fifty to 75% is considered moderate. Below 50%, while seen as being of interest, is to be considered a weak measure.

Part I: Qualitative Data Expressed as Frequencies

Demographics

The participants in the housing program were asked to supply information about their age, marital status, occupation, income, and schooling. The following discussion presents an organization of their replies by topic. In the program, Group A had just begun construction of their houses. Those in Group B had just finished construction and were in the process of moving into their houses during the period of time when the interviews took place. The members in Group C had resided in their houses between one and two years.

Age. There was a large degree of similarity in the ages of the members in all three groups. The ages of the 45 subjects ranged from 20 to 45 years. Table 2 shows the membership of each group by age.

Table 2. Membership in Each Group by Age

Age	Group			Total
	A (N=15)	B (N=15)	C (N=15)	
20	3	-	-	3
21	1	1	1	3
22	1	-	-	1
23	1	3	6	10
24	-	5	2	7
25	1	2	-	3
26	3	3	1	7
27	2	-	1	3
28	1	-	-	1
29	-	-	2	2
30	-	-	-	-
31	1	-	1	2
32	-	-	-	-
33	1	-	-	1
34	-	-	-	-
35	-	-	-	-
36	-	-	-	-
37	-	-	-	-
38	-	-	-	-
39	-	-	-	-
40	-	-	-	-
41	-	-	-	-
42	-	-	1	1
43	-	-	-	-
44	-	1	-	1
Total	15	15	15	45

As Table 2 shows, the largest clustering is at age 23, with 10 (22%) of the total sample in this age group. The second largest clustering

of ages is seen at ages 24 and 26, with both groups having seven subjects in each category.

Sex and marital status. There were eight females and seven males in each of the three groups. Thirty-four of the 45 subjects in the total sample were married. The remaining 11 included six who were single and five who were single heads of households. Of these 11 participants in the program who were not married, three were in Group A, five were in Group B, and three were in Group C. Table 3 shows the sex and marital status of subjects by group.

Table 3. Sex and Marital Status of Participants in Each Group

Group (N=15)	Married	Single		Single Head of Household		Total
		M	F	M	F	
A	12	1	1	1	-	15
B	10	1	2	1	1	15
C	12	1	-	-	2	15
Total						45

Occupation. The members in the three groups comprised medical/technical occupations as well as a variety of blue-collar workers. The largest concentration of occupations occurred in Group A, with seven individuals employed as factory workers. Group B had the widest range of occupations, with its members employed in 10 of the 14 occupations that represented the total sample. Group C was the only group to have members with occupations in the medical/technical fields. Group C had three members whose occupations included licensed practical

nurses and a day-care aide at a local medical facility. The subjects in the sample reflected the local economy. One factory worker in Group A, a plumber and a painter in Group B, and a residential day-care aide and factory worker in Group C reported to the interviewer that their employment had been terminated. These five cases represented five families whose major income supporters had been laid off indefinitely from their places of employment. These data are shown in Table 4.

Table 4. Membership in Each Group by Occupation

Occupation	Group			Total
	A (N=15)	B (N=15)	C (N=15)	
Medical/technical	-	-	3	3
Clerical	2	2	2	6
Mason	-	-	1	1
Drafting	-	1	-	1
Welder	-	1	-	1
Truck driver	1	1	-	2
Plumber	-	1	-	1
Painter	-	1	-	1
Miller	-	1	-	1
Mechanic	-	1	-	1
Bartender	-	-	1	1
Construction	-	-	2	2
Homemaker	5	4	1	10
Factory worker	7	2	5	14
Total	15	15	15	45

Income. Federal eligibility considerations for loans made under Title V, Section 502 of the Housing Act before January 1982 specified an adjusted family income of less than $11,200 a year. This figure was reached by adjusting the total family income, less 5%, less

$300 for each dependent child. Adherence to this financial-eligibility requirement is essential if applicants in the program expect to apply to receive interest credit. A revision of the eligibility requirement was made in January 1982, allowing the adjusted total family income to a figure less than $18,000 a year.

Members in Group C became eligible for the housing program with an adjusted annual family income of $11,200 a year. Because of the revision in 1982, the members of Groups A and B became eligible with the annual adjusted income of $18,000 a year. The mean adjusted family income for the participants who comprised the total sample was about $14,000 a year.

Schooling. Table 5 shows the frequency of responses made by the participants in the program when asked about previous schooling.

Table 5. Membership in Each Group by Previous Schooling

Schooling	Group			Total
	A (%) (N=15)	B (%) (N=15)	C (%) (N=15)	
Less than high school	4(27)	1	-	5
High school graduate	7(47)	6(40)	10(67)	23
Vocational training beyond high school	-	2	1	3
One year of college	4(27)	5(33)	1	10
Two years of college	-	1	3	4
Total	15	15	15	45

Four (27%) of Group A had attained less than high school completion, and an equal number had attained college for at least a part

of one year. Group B exhibited the widest range of educational experiences, with eight (53%) of its members having had college or vocational experiences beyond high school. All 15 members of Group C were high school graduates. Fourteen of the 45 members in all three groups attended college between one and two years. Seventeen (38%) of the 45 members in the total sample had schooling beyond high school in the form of vocational training or college course work.

Psychosocial Profile

In an attempt to understand the rural adults in the sample, Part I of the survey questionnaire asked open-ended questions about the factors that led the participants to become involved in the program. The five major questions and subquestions in Part I of the questionnaire were phrased differently for each group since Groups A, B, and C represented groups at three different places along a construction continuum in the self-help housing program.

In addition to the questions that asked about the motivating factors that led the participants to become involved in the program were major questions and subquestions pertaining to anxiety or concerns at the beginning of the program. The subjects were also asked to amplify the ways they felt that skills developed in the program could be applied to other areas of their lives. The 30 members in Groups B and C were asked to discuss their views about the housing program now that their houses had been completed, and all participants were asked to discuss any additional projects that had come to mind.

The frequency of the participants' responses to the five questions in Part I of the survey questionnaire is discussed in the following order: motivation, anxiety, transfer of skills, views about the program, and new projects.

Motivation. When asked to give the reasons for their involvement in the program, 12 members (80%) of those in Group A, who had just started construction of their houses, reported that the desire to own a home was the greatest motivational factor for their involvement with BBCL. In this group, 10 (67%) of the responses additionally noted the financial incentive that existed within the program that allowed labor to be used in lieu of a cash down-payment. Eight (53%) of those in Group A also reported the desire to belong, to stay in one place, and to have neighbors. Five (33%) of Group A's responses indicated the wish to finally control their own property as a reason for wanting to build and to own their own homes. When those in Group A were asked waht they felt the housing program would do for them, 13 (87%) of their responses indicated that in addition to acquiring a home, BBCL also afforded them the opportunity to learn new skills as they were building their houses.

Members in Group B were in the final stages of construction as the survey began, and its members moved into their houses as the study was completed. Thirteen members (87%) of those in Group B indicated that their strongest reason for attendance in the program was their desire to own a home. An additional nine (60%) of their replies indicated that labor for down-payment was also a strong incentive.

Looking back to their entrance into the housing program in 1979, all 15 members of Group C reported becoming involved with BBCL because they, too, felt that it offered them the opportunity to build and to own a new home. Eleven (73%) of those in Group C also felt that the fact that the program also allowed labor to be used for a down-payment was also an important factor in their decision to enter the program.

Anxiety. When asked to amplify any worries or concerns about the program, four (27%) of those in Group A reported having fears about a lack of construction abilities. Ten (67%) of the members in Group B expressed no worries or fears about their abilities when they first began construction of their houses. Of the five who were anxious, two reported being unsure of their construction abilities, and two individuals expressed concerns about personal stamina. When the respondents in Group B were asked how they felt about their anxieties after the construction of their houses had been completed, 10 (67%) reported feeling no additional confidence than before they began the program. Three (20%) of those in Group B reported feeling very confident of their abilities.

Of the three groups, Group C most frequently expressed fears about their abilities at the beginning of the program, with nine (60%) of the 15 members reporting this concern, compared to four people (27%) of those in Group A and five (33%) of those in Group B. Three members (20%) of Group B reported feeling very confident of their abilities now than their houses were completed. The program was a

marked confidence builder for those in Group C, with nine (60%) reporting themselves very confident about their abilities.

Transfer of skills. When they were asked to amplify the ways in which they felt that skills developed in the program could be used in other areas of their lives, five (33%) of those in Group A expressed the belief that newly learned skills represented an enhancement for job opportunities.

As did Group A, the members of Group B reported seeing the possibility of knowledge transfer to other areas of their lives. Eight members representing 53% of Group B reported feeling that job skills would be increased. Six (40%) of Group B's members also saw application of skills for future building and for home repair.

Fourteen (93%) of those in Group C also agreed with Groups A and B that developed skills could be useful in other areas. Six (40%) of those in Group C saw their enhanced skills as responsible for their increased confidence in themselves. This factor was not mentioned by those members in either Group A or Group B.

Views about the program. Members in both Group B and Group C were asked if the program, upon its completion, was different than they had imagined it to be when they first began construction of their houses. Ten (67%) of those in Group B reported feeling that the program was different than they at first thought that it would be. These differences were seen by five (33%) to have included more difficulties in both working with and communicating with others than they had originally imagined there would have been. Nine members (60%) of Group C additionally felt that the program was different than

they expected it would be. Five people (33%) reported that they had experienced more difficulty in working with and getting along with others in their group. An additional four (27%) felt that there had been more work and longer hours than they had, at first, believed.

New projects. The members in Groups B and C were asked what new projects had come to mind upon the completion of their houses. Having just finished construction, all 15 members in Group B reported that they could see continuing involvement with house-related projects. Eleven (73%) planned immediate projects that in some way involved finishing their basements. Nine members (60%) saw their efforts directed toward completion of deck, porch, fence, or patio.

As did the members of Group B, all 15 members in Group C reported involvement with new projects that in some way were connected with their homes, and like the members in Group B, nine members representing 60% of those in Group C included deck, porch, fence, or patio in the projects that they named. Additionally, four members in Group C reported the construction of a garage, and four reported the intention to build an additional room. Four members in Group C reported feeling that they had learned enough about house construction through their association with BBCL to build another house.

Areas of Learning Interest

Areas of learning interest in which information was obtained during the past year. The purpose of Questions 18 through 30 in Part II of the questionnaire was to discover the areas of learning interest on which participants in the program obtained information

during the past year. No conditions were placed on the applicant's responses. After several probes and suitable pauses which allowed the interviewer to check responses, a printed card was handed to the respondent with topics that were categorized in 12 broad areas of interest. The purpose of the printed card was to aid the respondent in remembering additional areas on which information was obtained during the past year.

The 45 people in the total sample reported that they had obtained information on 269 topics in 12 general areas of interest. (See Table 6.) The largest number of responses were made by the members in Group B, who reported 96 interest areas. Group C's members reported 91, and members in Group A 82. The areas of interest that members of all three groups reported most frequently were woodworking and home projects (84%), business and finance (82%), and yard care (78%). Areas of interest reported by the three groups less frequently were homemaking (73%) and consumerism (62%). Fifty-one percent of members in all three groups reported obtaining information on both job skills and hobbies during the past year. Table 6 shows the relationships between the members in each group and their areas of interest. The areas of interest most frequently reported by members in Group A were woodworking and home projects and business and finance. All members of Group B identified woodworking and home projects and yard care as areas of learning interest in which they had obtained information during the past year. The areas of interest most frequently reported by members in Group C were homemaking, marriage and family, business and finance, hobbies, consumerism, and academics.

Table 6. Membership in Each Group by Areas of Interest of Participants

General Areas of Learning Interest	Group A (N=15)	Group B (N=15)	Group C (N=15)	All Groups N	All Groups %
Homemaking	10	11	12	33	73
Woodworking and home projects	13	15	10	38	84
Marriage and family	5	7	8	20	44
Physical activities and sports	6	6	4	16	36
Business and finance	12	12	13	37	82
Job skills	8	9	6	23	51
Hobbies	7	6	10	23	51
Religion	1	3	1	5	11
Academics	2	3	5	10	22
Consumerism	9	9	10	28	62
Yard care	9	15	11	35	78
Other	-	-	1	1	2
No general area of interest	0	0	0	0	0
Total	82	96	91	269	

Process used to obtain information on areas of interest.

Question 31 in the survey asked the 45 members in the sample to describe the methods by which they first obtained information in their areas of interest. The members were then asked to describe the methods that were used to obtain additional information, if it was found necessary to do so, after activities in the area of interest had begun. The interviewer was instructed to record their process of obtaining information as "academic" when information was obtained by reading, studying, listening, or viewing. Information that was obtained by experiencing or in learning-by-doing was recorded as "doing." To simplify the recording process for the interviewer, the symbol "Ac" was used to refer to the academic approach, and the symbol "Do" was used to mean learning-by-doing. Table 7 shows the relationship between

Table 7. Group Membership by Learning Process in Areas of Interest

General Interest Area	Learning Process[a]											
	Group A (N=15)				Group B (N=15)				Group C (N=15)			
	First		Later		First		Later		First		Later	
	Ac	Do	Ac	Do	Ac	Do	Ac	Do	Ac	Do	Ac	Do
Homemaking	9	1	-	10	5	6	-	11	6	6	1	11
Woodworking/home projects	12	1	-	13	14	1	-	15	4	6	2	8
Marriage and family	4	1	-	5	4	3	1	6	2	6	-	8
Physical activities/sports	-	6	-	6	4	2	-	6	-	4	1	3
Business and finance	12	-	-	12	12	-	-	12	9	4	-	13
Job skills	7	1	-	8	6	3	-	9	3	3	-	6
Hobbies	1	6	-	7	2	4	-	6	2	8	2	8
Religion	1	-	-	1	2	1	1	2	1	-	-	1
Academics	2	-	2	-	3	-	2	1	5	-	-	5
Consumerism	8	1	-	9	8	1	-	9	5	5	1	9
Yard care	7	2	-	9	12	3	-	15	6	5	-	11
Other	-	-	-	-	-	-	-	-	-	1	-	1

[a]First = Type of learning process used to initiate learning activity.
Later = Type of learning process used after activity had been started.
Ac = Learning by studying, reading, or viewing.
Do = Learning by doing or experiencing.

the processes used by participants in each group to obtain information and the areas of interest.

Of the three groups, Groups A and B appear most alike in the approach they used to obtain information in their areas of interest. Members in Group A and Group B reported that they most frequently used an academic approach before becoming involved in woodworking and home projects, business and finance, yard care, and consumerism. The members in Group B reported that they most frequently used an academic approach to gaining information in the later stages of information seeking on the topics of marriage and family, religion, and academics.

As seen in Table 7, members in Group C reported that in obtaining information in areas of interest, 50% of the time they used an academic approach and 50% of the time they learned by doing. This is seen in the areas of homemaking, job skills, consumerism, and yard care. In Group C, of the ten members whose area of interest was woodworking and home projects, four began by using an academic approach. Two members later turned to an academic approach before proceeding with their activities. One of the four members in Group C whose area of interest was sports and physical activities became academically involved in obtaining information in later stages of the activity. A similar occurrence is seen where two of the ten members in Group C whose interests were hobbies began their process of obtaining information by a process of learning-by-doing and later reported turning to academic inquiry. This is also seen to be the case where of the ten members in Group C whose interest area was consumerism, one member

turned to academic involvement in later stages of activity in this area.

Table 8 shows the frequency with which the members of the total sample used the academic process to obtain information in initial and in later stages, by areas of interest that are ranked in order of participant involvement. Data for Table 8 were obtained from information drawn from Tables 5 and 6.

Table 8. Frequency and Percentage of Times That Subjects in the Sample Used an Academic Process to Obtain Information in Initial and Later Stages of Learning by Ranked Areas of Interest

General Areas of Learning Interest by Rank	N	Ac First[a]		Ac Later	
		N	%	N	%
1. Woodworking/home projects	38	30	79	2	5
2. Business and finance	37	33	89	-	-
3. Yard care	35	25	71	-	-
4. Homemaking	33	20	61	1	3
5. Consumerism	28	21	75	1	4
6. Job skills	23	16	70	-	-
Hobbies	23	5	22	2	9
7. Marriage and family	20	10	50	1	5
8. Physical activities/sports	16	4	25	1	6
9. Academics	10	10	100	4	40
10. Religion	5	4	80	1	20

[a]First = Type of learning process used to initiate learning activity.
Ac = Learning by studying, reading, or viewing.

Academic involvement that included reading, studying, listening, or viewing was used in an attempt to gain information on areas of interest before the activity was begun by 30 (79%) of the 38 members in the total sample who chose woodworking and home projects. This was also seen to be the case where 33 (89%) of the 37 members whose interest was in the area of business and finance. Twenty-one (75%) of the 28 members interested in obtaining information on consumerism also reported academic involvement in their initial stages of learning. In these three areas of interest (all reported with frequencies beyond 75%), two individuals who chose woodworking and home projects and one who chose consumerism reported turning to further academic involvement in later stages of involvement in their areas of interest.

Fewer participants reported the areas of yard care, job skills, homemaking, and marriage and family, and the frequency of their responses was weak regarding any interest in academically pursuing information on these topics after the initial attempts to learn were made. Academic subjects were of interest to only a small number of participants in the program. Of the five people who selected religion as a topic on which information was obtained during the past year, one person continued to become academically involved in later stages of interest in the topic.

Areas of special interest. Question 32 in the survey asked the participants in the program to select one area that they considered to have been the most meaningful from the multiple areas of interest on which they had obtained information during the past year. To be considered as an important area for the current research, three

criteria were imposed. First, the participant had to have had a fairly specific idea about what was to be learned. Second, participants had to have taken the responsibility for planning and controlling their own learning (over 51% of the time). Finally, the participants had to have spent at least eight hours on this topic during the past year. Table 9 shows the single area of learning interest for each member of each group by category of interest.

Table 9. Membership in Each Group by Special Area of Learning Interest

Special Area of Learning Interest	Group			All Groups	
	A (N=15)	B (N=15)	C (N=15)	N	%
Homemaking	-	-	1	1	2
Woodworking/home projects	10	9	2	21	47
Marriage and family	-	-	3	3	7
Physical activities/sports	-	1	-	1	2
Business and finance	2	1	3	6	13
Job skills	2	-	1	3	7
Hobbies	-	-	1	1	2
Religion	-	-	-	-	-
Academics	-	-	-	-	-
Consumerism	1	-	1	2	4
Yard care	-	4	1	5	11
Other	-	-	2	2	4
Total	15	15	15	45	

The largest area of concentration in the special areas of learning interest for all three groups was woodworking and home projects, with 21 (47%) of the participants making this choice. Ten of these members were in Group A and nine were in Group B. The second largest area of special interest was found in Group B, with four (27%) of the group's members involved in the area of yard care. Of the

three groups, Group C expressed the widest diversity with special areas of interest in nine of the 12 categories. In comparison with the general areas of learning interest, of the 12 categories, eight were selected as special areas for learning. Missing were the areas of physical activities and sports, religion, and academics.

As can be seen in Table 9, Groups A and B shared an interest for specialization in the area of woodworking and home projects, while members in Group C indicated a wide range of diversity by selecting nine of a possible 12 categories.

Organization of Learning Activities

The following areas pertain to the organization of activities surrounding the one topic that the participants in the program described as the single most meaningful topic on which information was obtained during the past year. Included in this section are questions that asked the subjects for responses within a structured framework. To be covered in presenting the data in this section are the following areas: the areas of responsibility for planning learning activities, those from whom assistance was sought during learning activities, the site chosen to carry out learning activities, and the degree of difficulty expressed by the participants in making the decision to begin the special area of interest. Multiple responses were often given in answer to questions on the above areas.

Responsibility for planning learning activities. Table 10 shows the types of planners used for learning in the subjects' special areas of interest.

Table 10. Membership in Each Group by Type of Planner Used

Type of Planner Used	Group			All Groups	
	A (N=15)	B (N=15)	C (N=15)	N	%
Self	15	15	13	43	96
Class/instruction	8	7	1	16	36
One-to-one (someone considered experienced)	13	14	6	33	73
Nonhuman resources	3	4	7	14	31

Question 33 in the survey asked the participants: "How did you go about planning your special area of interest?" Ninety-six percent (43) of the responses from the rural adults indicated that they planned their own approach to obtaining information on their special areas of interest. Thirty-three (73%) of those in all three groups reported turning to another person for assistance in planning their special learning activity. As can be seen in Table 10, the responses of Groups A and B to this question were very similar. While those in Group C expressed a marked preference for self-planning, the responses from Group C indicated that its members were less likely to turn to either a class or some form of instruction or to seek assistance in planning from another person as was the case with members in Groups A and B. Additionally, those in Group C were more apt to turn to nonhuman resources in planning their special learning activity than either those in Group A or Group B.

Assistance. Question 34 in the survey asked the participants: "When you needed assistance with your special learning activity, where

did you turn for help?" The source of help from whom those in the three groups sought assistance is presented in Table 11.

Table 11. Membership in Each Group by Source of Assistance in Learning

Sources of Help	Groups			All Groups	
	A (N=15)	B (N=15)	C (N=15)	N	%
Intimates	11	11	7	29	64
Acquiantances	-	-	5	5	11
Experts/professionals	10	13	10	33	73
Nonhuman resources	2	5	8	15	33
Small group	8	7	-	15	33

Thirty-three (73%) of the responses from the three groups indicated that the rural adults turned to someone they considered to be an expert or professional when assistance was needed. Twenty-nine (64%) reported turning to intimates (parents, brothers, sisters, spouse, or close friend). Thirty-three percent of the responses indicated that members of all three groups turned to either nonhuman resources or small groups when help was needed. Responses indicated that those in Group C were more likely to turn to acquaintances than intimates when they needed assistance. The members in Group C were more apt to turn to nonhuman resources for assistance than members in either Group A or Group B.

Site chosen to carry out learning activities. Question 35 in the survey asked the respondents: "Where did you carry out the

learning experience for your special area of interest?" Forty (89%) of the responses from members in all three groups indicated that the rural adults in the sample preferred to learn at home. The frequencies of preference for learning sites are presented in Table 12. Seven (47%) of the respondents in Group A additionally named the building site as a preferred location for the learning involving their special areas of interest. Members in Group C expressed preferences for the greatest number of locations at which to learn.

Table 12. Membership in Each Group by Site Chosen for Learning Activity

Chosen Location for Learning	Group			All Groups	
	A (N=15)	B (N=15)	C (N=15)	N	%
Home	12	15	13	40	89
School	1	1	3	5	11
Public library	-	3	4	7	16
Employment	2	-	2	4	9
Other	-	-	2	2	4
At building site	7	3	-	10	22

The decision to begin. Question 36 in the survey asked the respondents: "Did you have any difficulty making the decision to begin your learning on the topic of your special area of interest?" The respondents were asked to structure their answers around a five-point Likert-type scale that recorded replies that ranged from "almost always" to "rarely." The data for this question are presented in Table 13. Thirty-six (80%) of the responses from the 45 adults in

all three groups indicated that they rarely found difficulty in making the decision to begin. Three people (20%) of those in Group B reported that making the decision to begin was a problem.

Table 13. Membership in Each Group by Difficulty of the Decision to Begin Learning Activity

Difficulty Making Decision to Begin Learning Activity	Group			All Groups	
	A (N=15)	B (N=15)	C (N=15)	N	%
5 Almost always	-	-	-	-	-
4	-	3	1	4	9
3 Sometimes	1	2	2	5	11
2	-	-	-	-	-
1 Rarely	14	10	12	36	80
Total	15	15	15	45	100

Use of Resources

Use of time as a resource. Question 37 in the survey asked the respondents: "Was arranging time to learn a problem?" The subjects were asked to structure their answers around a five-point Likert-type scale that recorded replies in a range from "almost always" to "rarely." The data for this question are presented in Table 14. Scheduling time for the area of special interest was rarely seen to be a problem for 32 (71%) people in the total sample. Twelve people representing 27% of the sample did find scheduling a difficulty. One person in Group A and two in Group B found the organization of time a problem to be considered very frequently.

Table 14. Membership in Each Group by Organization of Time for Learning

Organization of Time for Learning		Group A (N=15)	Group B (N=15)	Group C (N=15)	All Groups N	All Groups %
5	Almost always	1	2	-	3	7
4		-	1	-	1	2
3	Sometimes	2	3	4	8	18
2		1	-	-	1	2
1	Rarely	11	9	12	32	71
	Total	15	15	15	45	100

The use of money as a resource. Question 38 in the survey asked the respondents: "To be able to learn about your special area of interest was money a problem?" The subjects were asked to structure their replies on a five-point Likert-type scale that recorded replies from "almost always" to "rarely." The data for this question are presented in Table 15. As the table indicates, the use of money as a restraint on learning resources was not seen to be a problem for 36 (80%) of the total sample. The members in Groups A and B gave very similar responses. Group C exhibited the widest range of responses of the three groups.

Finding resources. Ninety-eight percent (44) of the members in the three groups reported finding no difficulties in locating resources in response to Question 39 in the survey. Replies to this question were also structured on a five-point Likert-type scale.

Table 15. Membership in Each Group by the Use of Money as a Restraint on Learning Resources

Money Seen as a Problem		Group A (N=15(	Group B (N=15)	Group C (N=15)	All Groups N	All Groups %
5	Almost always	-	-	1	1	2
4		-	-	-	-	-
3	Sometimes	2	-	4	6	13
2		-	1	1	2	5
1	Rarely	13	14	9	36	80
	Total	15	15	15	45	100

Understanding resources. Question 39 asked the respondents if resources were difficult to understand. Replies to this question were also structured on the five-point Likert-type scale that recorded responses from "almost always" to "rarely." Thirty people in the three groups representing 67% of the members in the sample reported having no difficulty with comprehension. Thirty-one percent (14) in the sample indicated that they had had difficulty in this area. The responses from those in Groups A and B were very similar. The members in Group B expressed the widest range of responses and reported having had the most difficulty in finding understandable resources. The data are included in Table 16.

Self as a resource. Included in a group of questions that asked for structured responses about the use of human and nonhuman resources, the study asked the members of the three groups: "Do you prefer to learn by yourself?" The data from the replies are shown in

Table 16. Membership in Each Group by Difficulty in Understanding Resources

Difficulty in Understanding Resources		Group A (N=15)	Group B (N=15)	Group C (N=15)	All Groups N	All Groups %
5	Almost always	-	-	-	-	-
4		-	1	-	1	2
3	Sometimes	5	6	3	14	31
2		-	-	-	-	-
1	Rarely	10	8	12	30	67
	Total	15	15	15	45	100

Table 17. Twenty-four people representing 53% of the total sample replied that at times they preferred to learn by themselves. The responses from the three groups were very similar for the 11 (24%) who indicated that they almost always preferred to learn by themselves. Members of Group A, more than Groups B and C, indicated from their responses that they rarely enjoy learning by themselves.

The Self-Help Housing Program as a Learning Experience

Current involvement. The data that were obtained from the questions in the study that asked about current involvement in the housing program were obtained from open-ended questions. Table 18 presents the frequencies of the responses by each member of each group in the areas of business and finance, construction materials and practices, and communication and group process.

Table 17. Membership in Each Group by Preference to Learn by Oneself

Prefer to Learn by Oneself	Group			All Groups	
	A (N=15)	B (N=15)	C (N=15)	N	%
5 Almost always	4	3	4	11	25
4	1	1	2	4	9
3 Sometimes	6	10	8	24	53
2	1	-	-	1	2
1 Rarely	3	1	1	5	11
Total	15	15	15	45	100

Table 18. Group Membership by Areas of Current Involvement

Current Involvement	Group			All Groups	
	A (N=15)	B (N=15)	C (N=15)	N	%
Business and finance					
Budgeting	15	15	15	45	100
Checking, savings, mortgages, loans	15	15	15	45	100
Taxes and insurance	15	15	15	45	100
Construction materials/practices	15	14	12	41	91
Communication/group process					
Working and interacting in small groups	14	14	12	40	89
Discussing common interests and activities	13	14	7	34	76

As shown in Table 18, all 45 members of the three groups reported being currently involved in each phase of the financial aspect of the housing program. Ninety-one percent of the sample

representing 41 participants indicated current involvement with some aspect of construction. Forty people (89%) indicated that they were working and interacting in small groups. Groups A and B were similar in their responses concerning discussion in small groups. Group C's seven responses represented 50% less-frequent discussion in small groups than those reported by either Group A or Group B.

Transfer of skills to other areas. The data that were obtained from questions in the study that asked about the transfer of skills to other areas were obtained from open-ended questions. Table 19 presents the frequencies of the responses by each member of each group in the areas of business and finance, construction materials and practices, and communication and group process.

Table 19. Membership in Each Group by Transfer of Skills to Other Areas

Transfer of Skills to Other Areas	Group			All Groups	
	A (N=15)	B (N=15)	C (N=15)	N	%
Business and Finance					
Budgeting	12	13	13	38	84
Mortgage, loans	12	14	14	40	89
Taxes and insurance	12	7	12	31	69
Construction materials/practices	15	14	15	44	98
Communication/group process					
Working with others	13	12	12	37	82
Discussing with others	12	10	7	29	64

Forty participants representing 89% of the total sample indicated in their responses that information obtained in the housing program in the areas of mortgage procedures and the financing of loans was transferable to other areas of their lives outside the program. Thirty-eight (84%) indicated that the procedures developed in budgeting in BBCL would have application elsewhere. While 12 members in Groups A and C indicated that information gained in BBCL about taxes and insurance would be of use in other areas, seven members in Group B saw the application of the information in areas outside of the housing program.

Forty-four (98%) of the total sample reported that information on construction materials and practices that was obtained in BBCL would be of use in other areas.

In the area of communication and group process, 37 (82%) of the respondents indicated that the skills developed in BBCL in working with others would have uses in other areas of their lives. In the entire area of transfer of skills, the greatest diversification in the three groups was evidenced in their replies to questions concerning communication with others. Twenty-nine participants of the 45 (64%) in the total sample reported feeling that communication skills developed in BBCL would have application in other areas of their lives. Of Group C, who had been in the program between two and three years, seven people of the 15 in the group saw the transferability of communication skills. Of Group B, who had been involved in the housing program one and one-half years, 10 of the group's 15 members reported that they could see a use for the communication skills developed in

the program. Twelve of Group A's 15 members reported that they felt communication skills could be used in other areas of their lives away from the housing program.

Characteristics of "schooling" and "learning" expressed by adults. Question 42 in the survey was structured in asking for a response to the question: "How well do you think that your previous schooling prepared you for adult life?" A five-point Likert-type scale was used to measure responses in a quality of schooling from "poorly" to "well." The frequencies of the responses of the individuals in each group are presented in Table 20. Twenty-five people, representing 56% of the total sample, indicated by their replies that they thought previous schooling had moderately equipped them in preparation for adult life. Thirty-nine respondents (87%) in all three groups indicated that they felt previous schooling had equipped them for adult life to a degree that was felt to be represented between "moderately" and "well." The viewpoint that previous schooling had prepared them "moderately" to "poorly" for adult life was reported by 31 individuals who represented 69% of the 45 members in the three groups. The data are presented in Table 20. The nine people in Group A and ten in Group C who felt that previous schooling had provided a moderate preparation for life represented the largest percentages of response on a single measure in the five-point scale. With two people and three people, respectively, Groups A and B were similar in their responses regarding previous schooling as a poor preparation for adult life.

Table 20. Membership in Each Group by School as a Preparation for Life

School as a Preparation for Life		Group			All Groups	
		A (N=15)	B (N=15)	C (N=15)	N	%
5	Well	1	2	3	6	13
4		3	4	1	8	18 87%
3	Moderately	9	6	10	25	56
2		-	-	1	1	2 69%
1	Poorly	2	3	-	5	11
	Total	15	15	15	45	100

When asked to think of a word that succinctly expressed "learning" experiences for them, the open-ended responses from the participants fell into three foci that were categorized by the researcher as being positive, negative, and those that appeared to express a quality of life. When chosen as being positive, learning was seen as being interesting, fun, adventure, fulfillment, or bringing satisfaction. When chosen as being negative, learning was seen to take time, to be hard or difficult, to require perfection, or to be forcing. When chosen to reflect a quality of human life, learning was seen by the rural adults in the housing program as representing experience, knowledge, understanding, communication, and challenge that was represented in everyday life through working, doing, and living. The data for this question are presented in Table 21.

"Experience" was the descriptor cited most frequently. It was used by four members in Group C, three members in Group B, and

one member in Group A. The descriptor used with the second greatest frequency was "difficult." It was used by three members in Group A and no members in Groups B or C. Group A gave 12 different descriptors, which was the widest range of responses for the three groups in the sample.

Table 21. Membership in Each Group by Perceived Characteristics of Learning

Perceived Characteristics of Learning	Groups			All Groups	
	A (N=15)	B (N=15)	C (N=15)	N	%
Positive	6	7	2	15	33
Negative	4	2	3	9	20
Quality of life	5	6	10	21	47
Total	15	15	15	45	100

Part II: Presentation of Qualitative Data

In this part of the chapter, the qualitative data gathered during the interviews for the study are presented in the form of direct quotations that were made by participants in the self-help housing program. Their responses are organized in four major areas for convenience in presentation, as follows:

I. Psychosocial profile
   A. Motivation for involvement in the program
   B. Anxieties about abilities before the program and during the program's continuation

II. Transfer of skills to other areas
   A. Areas of business and finance
   B. Construction materials and practices
   C. Communication and group process
III. Changes in self-concept expressed by the participants in the study
IV. The self-help housing program as a learning experience

Psychosocial Profile

The respondents gave a variety of reasons for wanting to become involved in BBCL. Their most frequent reasons made reference to wanting to own a home. The following quotations are representative of the motivational factors that led the participants to the program.

Motivation for involvement in the program.

> I've rented all my life. . . . I never had anything that I could say was my own. I've paid all that money out for years--in rent and it's all gone. Now I want to own my own home.
>
> The pride of owning your own home.
>
> I wanted a home for the kids and I.
>
> To have a new house to live in. . . . This is the only way that I could get one.
>
> It is a challenge to have a place of my own--something that I've worked for.
>
> I really wanted to build my own home, myself.
>
> To build our own home. I was excited about a brand new house--instead of a run-down apartment.
>
> I wanted a house of my own for the kids. I am tired of living in places like this [trailer] with poor septic and everything.

> We couldn't afford down-payments. We are sick of living in apartments. We've lived in four or five different places since we have been married. We want a steady place where the kids can go to the same school.
>
> We wanted to get out of a trailer and into a house and have real neighbors and friends who know you.

Anxieties about abilities. The respondents reported a variety of concerns that indicated worries about lacking construction capabilities. Also reported were apprehensions about small-group interaction. The following quotations are representative of their concerns.

> I never even pounded a nail before and all of a sudden I'm doing wiring and plumbing. I was scared to death at first--but I'm doing real fine.
>
> I had fears about not being able to see it through. I have had a bad back and I was afraid it would take too much. Then I made up my mind to try it. It was a challenge--but I did it.
>
> I was in a group where I didn't know anybody. I didn't like it at first but I did fine.
>
> I was worried--just wondering if we would make it through the program. Now, because of BBCL, I have construction as a trade.
>
> I'm not worried about the program. I am very confident that we will get all the help that we will need.
>
> I was worried about getting along with strangers.
>
> Being a woman and coming out here with all these guys, I was scared to death--but I did OK.
>
> I was afraid to use power tools. I also didn't know how we would get along with the other people.
>
> I worked in a group where I didn't know anybody else. It was scary.
>
> The first day I was scared to death. I didn't know how to wire or do plumbing. When we were shown how to do something, I had to ask them to repeat it over and over again--but I finally got the hang of it.

Transfer of Skills to Other Areas

Areas of business and finance. The respondents were asked in what manner the financial skills that were used in the housing program might be applicable to other areas of their lives. The following quotations are representative of their perceptions of the transfer of knowledge in this area. The data were organized by the researcher according to the degree of the transfer expressed by the participants. The ordering is as follows: First, those responses where the participants easily saw the transfer of knowledge are presented; second, those responses are presented that indicated that the present study had opened up the possibilities of a transfer of knowledge to the participants; and finally, those responses are presented that did not appear to see a use for the knowledge in other areas.

Transfer of knowledge easily seen by participants:

> With the budget training that we got, now, with my day-care business, I am able to think about allowances for extras. I found that I didn't really know how to budget before we did this house.
>
> I can plan things more than I used to be able to. I have a savings account, now, for the first time in my whole life.
>
> I am much more confident about finances now. I feel that I have more financial worth and more value than I ever realized.
>
> Now that we're in this house, we're saving to buy the things that we need. If we want something, we save until we can afford to go out and buy it.
>
> We had to save $25 each week for the first year to help us to pay for our insurance and taxes when we got into the house. That made us continue to save--even when we didn't have to.
>
> Now that I've saved and worked to build this house, someday I plan to buy a farm--and after this house, I know that I can do it. I've always wanted to do that.

Well yes, we probably will continue to use some of the things we've learned like saving to pay for taxes and like that, but as far as being heavy budgeters--we're not.

Now I know where my money goes . . . to police, to roads and to people who get laid-off. It has helped me to understand.

I am going to question more what they're using our taxes for. That's MY money they'll be using.

I contacted the City Office the other day about the tax statement that I received. I wanted to know more what it was all about.

We're now concerned about taxes and insurance. You learn to plan ahead. We don't throw away mileage brochures that come in the mail, anymore. We look at them because now they affect us.

The possibility of transfer of knowledge seen by participants:

No, I'd never really thought about it--but I guess you could use some of these things later on.

I have been so busy building the house that I haven't had time to think about it. I suppose that somewhere down the line I'll have to give it some thought.

No, I hadn't thought about it--but I can see where certain things might carry over into your life, though.

No appearance of transfer of knowledge to other areas:

Well, maybe, but I'd never really thought about using any of this financial stuff once we got the house built.

No, I don't imagine that I'll become involved in any kind of banking again--now that I've got the house.

No--I never did much believe in budgets.

Areas of construction materials and practices. The following responses are representative of the answers that were given by the respondents concerning the potential use of construction skills in areas outside of the program. The majority of the participants could

readily see the applicability of construction skills. The data were organized by the researcher according to the transfer expressed by the participants. The ordering is as follows: First, those responses where the participants easily saw the transfer of knowledge are reported; second, those responses are presented that indicated that the present study had opened up the possibility of a transfer of knowledge; and finally, those responses are presented that did not appear to see a use for the knowledge in other areas.

Transfer of knowledge easily seen by participants:

> I've learned more here in the past few months than I ever thought I would and a built a house, too. I'll just bet that I could build other things.
>
> Our eleven year old helped us to work on the house. There is nothing he can't do now. He is still helping people we know to build their garages. He's really learned a lot that he'll probably use in his whole life.
>
> Everything I've learned is because of the experience with the house. I hadn't any experience in any areas of construction before. Now I know that I will be able to repair things in the house when they go wrong.
>
> This past winter I took a job in construction that I wouldn't have gotten otherwise. I didn't have the self-confidence to go ahead and do it before. Now, I've done the house and I can do it again.
>
> My seventeen year old son worked with me on the house. He's almost as capable as though he was in the program. He could almost build a house on his own because of his working with me. I haven't had to call a repairman since I moved in.

The possibility of knowledge transfer seen by participants:

> No, I hadn't thought about it. But I can see where it'd probably come in handy fixing things.

No appearance of transfer of knowledge to other areas:

No, I can't see where it'd help. Once you've built the house, the house is finished.

No, why would you want to do any of this again?

Areas of communication and group process. The following responses are representative of the answers that were given by the respondents concerning the potential use of communication skills that were developed in the self-help housing program. The majority of the participants could readily see the application of these skills to other areas of their lives. Very few participants reported seeing no continuing use for the communication skills after their houses were completed. To assist the reader, the researcher organized the participant responses into those areas where the transfer of knowledge was easily seen by the participants, those areas where the possibility of a knowledge transfer was seen by the respondents, and finally, those areas where there appeared to be no appearance of a transfer of knowledge to areas outside the program.

Transfer of knowledge easily seen by the participants:

The problems that we've had with people, here, worked out and we've grown close and can communicate and share things. I just know that this will work in other parts of our lives, too.

I was put in a group of people I didn't know well and we learned to work out our problems and get the job done. If I can do it with them--I can do it with anybody.

I learned how to get along and cope with other people--and believe me, that's something new for me. I'm planning to use it right along.

We've learned to share a lot of information that we learned here with our friends. I imagine we'll keep right on doing it.

Now I am more comfortable meeting with and getting used to other people in groups than I ever was before. I am hoping that this keeps up with other people and not just those we know through building the house.

You get to know that other people have ideas and opinions about how to do things and you learn that you have to give a little. This could be helpful in lots of other ways.

I used to have a hard time talking to people. Now, after the house, I've learned that you have to communicate. This could help me at home with my family and at my job.

Having to get along with people you never knew before, you had to build up cooperation. We worked at it, had arguments--but it all panned out and we made it through, together. I believe I can keep on doing this.

I'm a lead-man at the factory where I work. The program has sure helped. After ten months experience with BBCL it is easier to work with problems at work--and in other places.

I'm working with a small group of people and I can't pull rank like I did in the service. You've got to work together, to give and take and listen to opinions. This has helped me with my kids.

I have learned to deal with people. I just learned that watching people's facial expressions helps when you're dealing with them.

Right from the start we had our Association Meetings where we could stand up and share our ideas. It really helped me to say what I want to when our family gets together.

Five years ago I was real shy. With this project and my job, now I am able to speak up at work to my foreman. It has really helped me at my job.

<u>The possibility of knowledge transfer seen by participants</u>:

I've always been alone--never been with others in groups. Maybe it is because this was my first experience--but I'm more leery now. I'm not as trusting. I guess I'm more disappointed and more anxious of working with others since I built the house.

I guess I'd have to say I never thought of it in that light before.

No, I hadn't really thought about it but I can see where getting along with lots of different people would help.

No appearance of transfer of knowledge to other areas:

No--not really. I never thought about it before.

Changes in Self-Concept Expressed by Participants in the Study

The following statements were made by the participants in the study and are representative of the responses that were made pertaining to their perceived changes in ego strength, self-awareness, and self-identity.

> I came into this program without knowing anything. I spent more time than I thought I would but I DID IT ALL MYSELF. I didn't have anybody helping me. I spent most of the hours myself. I'm real proud.
>
> I feel a lot more confident in building another house. It makes me feel that I did something worthwhile.
>
> I tackled something that I didn't know if I would make it or not--but I did it. It has given me more confidence as a woman.
>
> I did it all by myself! It's an accomplishment that you made yourself. The house is something that you mold, yourself, as you're building it.
>
> Now I have more confidence. I used to be extremely shy. After building the house I KNOW I can do things. I don't feel shy any more.

The Self-Help Housing Program as a Learning Experience

All 45 participants in the housing program reported seeing BBCL as a learning experience. The following quotations are representative of the ways in which their experiences were personally applicable.

> Now that I've built this house, I want to take night classes in drafting so that I can put down on paper what I know in my head.

BBCL and building this house has taught me that when you want something in life it is not going to be handed to you. You have to work hard for it and accept the financial burden that comes along with anything that you want.

I have more of a sense of having roots and belonging in the community. I pay attention to taxes. I am soon going to be a registered voter for the first time in my life.

I've always wanted to be an interior decorator. After building the house I've decided . . . someday I'm going to college.

My knowledge is broader now. I have people coming to me and asking me questions. Mr. C. told us that would happen, but I didn't believe him.

They should change the program. You should punch a clock for the time you spend at the building site. That would be fair for everyone . . . at least it would keep track of the hours spent by those who worked.

I am a little nervous about the learning ahead--but I think that others must be as nervous as me. I'm really excited. I'm just waiting to get in there and get started. It's going to be hard--but it's going to be a fun-hard.

I guess that I've always been lucky because it was always easy for me to learn. I've always wondered why schools seemed to give kids so much stuff you can't use when you're older. The learning in the program has really been important to me. Just think of it--we're not only getting a house, but a NEW house! How many other young people can say that?

I just can't wait to start learning different things about building the house and I can't wait for the day to move in. Those are two days that I have been living for since I first heard of BBCL. I can't believe this is really happening to us.

I believe that self-help building is important to anyone starting out. Cooperation is the key. Mr. C., he's the instigator of the whole thing. You have to have someone to do that. You place all your trust in him to do the best job for you. He's the centerpoint . . . and the whole program revolves around him.

I think that it is a fantastic idea! We probably wouldn't have had a house until we were in our forties. Now, here we are in our early twenties and we have a house that we've worked for and we have something to show for our work.

It was well worth the blood, sweat and guts involved in the project. It was hard work but I'm glad we did it.

It is probably one of the better things I've ever done. I would never have a house otherwise with the economy the way it is. I learned a lot and I could probably do it again by myself if I had to. I'm sure glad I did it.

It's not been easy. There've been times where I felt discouraged and wanted to drop out. Those were the times when there were lulls in getting building materials. But now that it's almost there, you get more excited about moving in. It's really your home.

I would never do it again.

I think that it is a very good program. A fantastic experience! The time went fast because the people in the group got along so well. There were hardly any misunderstandings in the group. I am proud of what I've accomplished but under the same circumstances I would never go through it again.

No matter what they tell you, it's going to be harder than you think. It really is! John sat there and told us that it wasn't going to be easy . . . it wasn't going to be easy, and you find out that it's not! You also find out that if you want something bad enough you're going to work for it.

It's exciting! I know who my neighbors are going to be and that we're working together for the same thing. We're all the same age with young families. I hope that we can work together--as a group in the community.

I don't think that they could have thought of anything better for low-income people in Coldwater. I was immensely pleased with the whole experience. Our group has been able to grow, like a family, in our neighborhood. We have backyard picnics and we remember each other in special ways on birthdays and holidays and most especially at Christmas.

Summary of Part I

For ease in reading, the chapter summarization follows the headings that were presented in the body of the chapter.

Demographics

The findings of the study based on information gathered during one-hour interviews indicated that all three groups in the sample

population were similar in age, with the greatest cluster of ages to be seen at age 23. The three groups were identical in their male/female ratio as well as the number of subjects in each group who were married or single. Occupationally, the sample comprised blue-collar workers, with 14 (31%) factory workers forming the largest single occupational category. The combined adjusted family income for the sample averaged $14,000 a year. High school graduates formed the largest educational category in an educational range that extended from less than high school to two years of college.

Psychosocial Profile

All three groups in the sample responded most frequently that their involvement in the self-help housing program was a result of their motivation to own a house. Mentioned almost as frequently was the fact that the program allowed labor to be used as a down-payment. Also evidenced was the desire "to belong" as well as to become a part of a community while having the opportunity to learn new skills while building a house.

Participants in all three groups expressed concerns about construction abilities and communicating with others in small groups as the program began. Of the three groups, the members in Group C reported these concerns the most frequently, yet those in Group C expressed the most confidence in themselves after their houses had been completed.

Areas of Interest

Woodworking and home projects (84%), business and finance (82%), yard care (78%), and consumerism (62%) were the areas most frequently chosen by the members in the three groups as areas of interest on which information had been obtained during the past year.

Learning process. Members of the three groups reported that they obtained information by reading, studying, listening, or viewing before becoming involved in learning activities in areas of general interest. The members in Group C, more than those in Group A or Group B, indicated that their approach to learning in general areas of interest was one of learning-by-doing or learning-by-experiencing. Once the process of obtaining information on an area of interest had begun, the members of Group C were more likely than those in Groups A or B to monitor their own progress and turn to an academic involvement when further assistance was needed. The members in Group A were less likely than the members in Groups B and C to become academically involved by seeking information by reading, studying, listening, or viewing, once a project had begun.

Areas of learning interest. Twenty-one (47%) of the members of all three groups focused their learning projects in the area of woodworking and home projects. The second area most frequently chosen was yard care, with five subjects (11%) choosing this area as a topic of study as a special area of interest.

Organization of
Learning Experiences

Responsibility for planning learning activities. Forty-three (96%) of all three groups reported that they planned their learning activities. Thirty-three (73%) additionally reported that they had sought assistance in planning from another person whom they considered experienced in a particular area of interest. Sixteen people representing 36% of the total sample indicated that they had turned to an organized class for assistance in planning their learning activities.

Assistance sought in learning activities. Thirty-three (73%) of the members in all three groups indicated that when assistance was needed for learning activities, they turned to someone whom they considered expert or professional. Twenty-nine (64%) also indicated that intimates (parents, siblings, close friend, or spouse) were sources whose assistance they frequently asked. The members in Group C turned less frequently to intimates for assistance than did the members of Groups A and B. The members in Group C turned to non-human resources for assistance more frequently than did the members of either Group A or Group B.

Site chosen to carry out learning activities. Forty (89%) of the 45 rural adults sampled indicated that they carried out their learning activities at home.

The decision to begin. Thirty-six members (80%) of the total sample indicated that they rarely found difficulties in making the

decision to begin learning activities in the special-interest areas chosen for learning projects.

Use of Resources

Scheduling time for learning activities was rarely found to be a problem for 32 (71%) of the members in all three groups. Thirty-six (80%) indicated that money was rarely seen as a problem in learning activities involving special-interest areas. Forty-four (98%) of the members in all three groups reported finding no difficulties in locating resources needed for learning in special areas of interest. Difficulty in understanding resources was rarely seen as a problem for 30 (67%) of the members in all three groups. It was sometimes seen as a problem for 14 (31%) of the members in the three groups. Twenty-four (53%) of the total sample replied that at times they preferred to learn by themselves. Responses from the three groups indicated that 11 (24%) members almost always preferred to learn by themselves.

The Self-Help Housing Program as a Learning Experience

Current involvement. All 45 members in the three groups reported current involvement in the financial aspects of the housing program. Ninety-one percent of the sample representing 41 participants indicated current involvement in some area of construction. Forty (89%) members in all three groups indicated interaction in small groups. Thirty-four members (76%) reported that they were currently discussing current interests and activities. Of these 34 members, 13 members were in Group A, 14 members were in Group B, and 7 members were in Group C.

Transfer of skills. Forty-four (98%) members of the total sample indicated by their responses that information on construction materials and practices used in the housing program would have application in other areas of their lives. Thirty-eight (84%) members in Groups A, B, and C indicated that the procedures developed in budgeting in the housing program would have application elsewhere. In the area of communication and group process, 37 (82%) of the respondents indicated that skills developed in BBCL in working with others would have uses in other areas of their lives. Twenty-nine (64%) of the 45 members in the sample reported seeing a use for the communication skills developed in the housing program in other areas of their lives.

Characteristics of "schooling" and "learning" expressed by adults. Twenty-five (55%) members in Groups A, B, and C reported that they felt that previous schooling had moderately prepared them for adult life. Six of the 45 members (13%) indicated that previous schooling had prepared them well for adult life. Five members in the total sample (11%) indicated that they felt previous schooling had been a poor preparation for adult life.

When asked to use a word that described "learning" experiences, the 45 members of the three groups reported 22 different descriptors that appeared to have three major foci. When categorized by the researcher as being "positive," "negative," and "quality of life," 15 (33%) were chosen as being positive, 9 (20%) as being negative, and 21 (47%) as seen to reflect quality-of-life experiences. "Experience" was the descriptor most frequently cited. It was used by four

members in Group C, three members in Group B, and one member in Group A. The descriptor used with the second greatest frequency was "difficult." It was used by three members in Group A and was not used by any members in either Group B or Group C. Group A's responses indicated 12 different descriptors, which was the widest range of responses for the three groups in the sample.

Summary of Part II

Psychosocial Profile

Motivation. The respondents gave a variety of reasons for wanting to become involved in the self-help housing program. The most frequent responses included references to wanting to own a home, to belong, and to become part of an established neighborhood. The members of the three groups also indicated that a strong motivator was the fact that the housing program offered the opportunity for participants in the program to use labor in lieu of a cash down-payment for their houses.

Anxieties. Many of the responses of the participants in the program indicated concerns about lacking construction capabilities. Also reported were apprehensions about working with and communicating with others in small-group settings.

Transfer of Skills to Other Areas

Budgeting appeared to be the most easily recognized aspect of the area of financial skills that could be transferable to other areas of the participants' lives outside the housing program. Other evidences indicating that a transfer of knowledge was taking place

included the participant's attention to savings, taxes, insurance, purchases, and a recognition of overall financial worth.

Construction materials and practices was an area in the program where most of the participants could readily see the applicability of skills learned in the program in other areas of their lives. A very small number reported seeing no use for these skills after their houses were built. In the areas of communication and group process, more members of the three groups reported being able to see a future use for the ability to work with others than saw a use for the ability to communicate effectively with others in small groups outside the program.

Changes in Self-Concept Expressed by Participants in the Study

The participants in the program spoke of their accomplishments with a sense of pride and enthusiasm of which they had not before been aware. Statements reflecting self-confidence and self-identity were reported in association with a sense of accomplishment that accompanied the building of their houses.

The Self-Help Housing Program as a Learning Experience

All 45 participants in the housing program reported seeing BBCL as a learning experience. With the confidence gained by building their own houses, many participants had begun learning activities in a variety of interest areas.

CHAPTER V

SUMMARY AND CONCLUSIONS

The present study was conducted for the purpose of exploring learning characteristics of rural adults. For this purpose, three intact groups were interviewed who were involved in varying stages of a self-help housing program. The five major areas that were chosen to direct the inquiry are as follows:

1. Who are these rural adult learners, and what is their psychosocial profile?

2. What are their areas of learning interest, and by what processes do they learn?

3. How do they organize their learning activities?

4. How do they use their resources for learning?

5. How and in what ways was the housing program a learning experience?

Chapter V presents a summary of findings and the conclusions that were drawn from findings in data obtained in one-hour interviews of 45 rural adults involved in a self-help housing program. The findings are first presented in brief. Their presentation follows the five major areas that were chosen to direct the study. Conclusions are then presented relative to their implications for adult educators. Recommendations for future research and concluding remarks complete the chapter.

Summary of Findings

Area 1: Who are these rural adult learners, and what is their psychosocial profile?

1.1 The participants in the study were younger than might have been imagined, with the greatest cluster of ages to be seen at age 23.

1.2 Thirty-four of the 45 adults participating in the housing program were married and 11 were single. Of the 11 who were single, five were single heads of households. Two were male and three were female. Fifty-three percent of the population were female.

1.3 Occupationally, the sample comprised a variety of blue-collar workers, with 14 (31%) factory workers forming the largest single occupational category.

1.4 The combined family income of individuals participating in the housing program averaged $14,000 per year.

1.5 Forty (89%) of the 45 participants in the program had graduated from high school or had training beyond high school. Twenty-three (51%) were high school graduates. Seventeen (38%) had between one and two years of training beyond high school that included vocational specialization or between one and two years of college coursework.

1.6 The reasons most frequently cited by participants for involvement in the program were to own a house for themselves and their families, to "belong," and to become a part of the community. Mentioned almost as frequently as a motivational factor was the fact that the housing program afforded the opportunity to use labor in lieu of a down-payment for the houses.

1.7 Anxieties expressed at the beginning of the program included concerns about a lack of construction abilities. Also indicated were fears about working with and communicating with others in small-group interaction.

Area 2: What are their areas of learning interest, and by what processes do they learn?

2.1 Areas of interest in which all 45 participants in the program had obtained information during the past year were woodworking and home projects, 38 (84%); business and finance, 37 (82%); yard care, 35 (78%); and consumerism, 28 (62%).

2.2 The subjects in the study reported that obtaining information was accomplished before the learning project began, by an academic process in their approach to 86% of the categories in 12 broad areas of interest. After the learning project had begun, the initial academic process of inquiry was changed to become one of learning-by-doing in their approach to 92% of the interest areas in the 12 general categories.

2.3 Twenty-one (47%) of the participants in the study focused their special learning activity during the past year on woodworking and home projects. The second area most frequently chosen was yard care, with five (11%) members making this choice as a special area of study.

Area 3: How do they organize their learning activities?

3.1 Forty-three (96%) of the members of all three groups reported that they planned their own learning activities during the past year. When assistance was needed in planning, 33 of the 45 (73%)

reported seeking help from another person whom they considered experienced in a particular area of interest.

3.2 Thirty-three (73%) of the members in all three groups reported turning for assistance in learning to someone whom they considered expert or professional. Twenty-nine (64%) reported that the "expert" who was selected was likely to be an intimate (parents, sibling, close friend, or spouse).

3.3 Forty (89%) reported that they carried out their learning activities at home.

3.4 Thirty-six (80%) rarely found difficulty in making the decision to begin learning in the area of interest chosen as the most meaningful learning activity undertaken in the past year.

Area 4: How do they use their resources for learning?

4.1 Thirty-two (71%) of the participants in the program indicated that scheduling time to learn was rarely a problem.

4.2 Thirty-six (80%) of the subjects in all three groups indicated that money was rarely among the restraints to learning resources.

4.3 Difficulty understanding resources was rarely seen as a problem for 30 (67%) of the members in the sample. Understanding resources was sometimes seen as a problem by 14 (31%) of the participants in the study.

4.4 Twenty-four individuals (53%) in the sample replied that at times they preferred to learn by themselves. Eleven (24%) indicated that they always preferred to learn by themselves.

Area 5: How and in what ways was the housing program a learning experience?

5.1 All 45 participants in the program reported current involvement in the financial aspects of the housing program.

5.2 Forty-one (91%) of the members in all three groups indicated current involvement in some area of construction.

5.3 Forty (89%) of the members in the sample indicated that they were involved in interaction in small groups. Thirty-four (76%) of the members reported discussing current interests and activities.

5.4 Thirty-eight (84%) of the members in the three groups indicated that they believed that financial procedures that were developed in the self-help housing program would have application in other areas of their lives.

5.5 Forty-four (98%) of the members in the total sample indicated that they believed that knowledge about construction materials and practices that was developed in the housing program would have application outside the program.

5.6 In the areas of communication and group process, 37 (82%) of the members in all three groups indicated that they believed that skills developed in working together in the program would have uses in other areas. Twenty-nine (64%) of the 45 members reported seeing a use for the communication skills developed in the housing program in other areas of their lives.

Summary of Similarities and Differences in the Three Groups

Learning characteristics of three intact groups of rural adults were explored at three different stages in the construction of their houses in a self-help housing program. In the many areas of inquiry, similarities and differences in the groups were found.

Differences in the three groups. The members in Group C differed from those in Groups A and B in 13 areas of inquiry. Members in Group B differed from those in Groups A and C in nine areas. Members in Group A differed from the members in Groups B and C in six areas of inquiry.

The large difference between Group C and the other two groups was examined. The members in Group C had finished construction and had been living in their houses between one and one-half and two years when the current study was begun. They had a lower annual adjusted family income than the members in Groups A or B. An FmHA financial eligibility revision in 1981 increased the adjusted family income for Sec. 502 rural housing loans from $11,200 a year to $18,000 a year. The members of Groups A and B entered the self-help housing program under the revised eligibility requirements. This meant that the annual adjusted income for the members of Group C was less than the adjusted family incomes for the members of Groups A and B. The members of Group C also differed from those in Groups A or B in that they fell in the middle range in the number of years of schooling. Group A, with four of its members who were not high school graduates, had the least schooling; Group B, with eight of its members having one to two

years of training beyond high school, had the most schooling. The members in Group C reported themselves to be involved in a greater number of new learning projects during the past year than members in Groups A and B.

The members in Group C expressed most frequently their concern about working with and communicating with others at the outset of the program. As the first group of families in Coldwater to build their homes in the self-help housing program, the members of Group C encountered difficulties that the other groups did not meet. The members in Group C "stick-built" their own houses. Financial considerations have since led the program director to implement a policy by which the foundations of framing of the houses for successive groups were professionally contracted by BBCL. This policy allowed the participants in Groups A and B to begin the program in a house whose foundations had been poured and whose walls were framed. Having struggled through these procedures themselves, the members in Group C expressed personal satisfaction with their accomplishments more frequently than did the members in Groups A or B.

The members in Group C expressed the widest range in areas of general learning interest during the past year. They reported themselves, less frequently than did the members in Groups A or B, to approach learning projects by reading, studying, viewing, or listening <u>before</u> becoming involved in the project. More than did the members of Groups A or B, those in Group C turned to an academic approach in their learning projects <u>after</u> the learning project had begun. Those in Group C turned to an acquaintance or a nonhuman resource (books,

etc.) more frequently than did the members in Groups A or B when assistance was needed with a learning project. The use of money as a restraint on learning resources was most often expressed by members in Group C. The members in Group C reported being currently less involved than the members in the other two groups in continuing to communicate with others in small groups about interests and activities that affected members in the group.

Similarities in the three groups. Demographically, the three groups were identical in the number of males and females in each group. All three groups concurred that their primary reason for involvement in BBCL was, first, the desire to obtain a house for themselves and their families and second, the fact that the program allowed the use of their labor as a down-payment for their homes.

In all three groups, the members reported that their learning projects were self-planned. When assistance was needed, all 45 members sought help in learning from someone whom they considered expert or professional. The members in the three groups were alike in that they preferred to learn at home and reported rarely finding difficulty organizing to begin their learning projects. Little difficulty was expressed either in locating or in understanding learning resources in Coldwater.

The members of all three groups were alike in reporting high current involvement in the areas of business and finance, construction materials and practices, and working with others in small groups. Regarding the transfer of skills developed in the program to other

areas of their lives, 95% of the membership in all three groups reported seeing continued uses for skills learned in the program.

The enthusiasm for the program expressed by members in all three groups was high. Those who were in Group A expressed eagerness in their anticipation to begin construction. The members in Group B, who had just finished construction, expressed enthusiasm at the prospect of moving into the homes that they had worked so hard to complete. The members in Group C evidenced happiness, satisfaction, and pride of ownership after having lived in their homes between one and one-half and two years.

Conclusions

The following conclusions are presented in an order that follows the five major areas that were chosen to direct the study.

Demographics and Psychosocial Profile

Demographics. The descriptive knowledge gained from interviewing the 45 rural adults involved in the self-help housing program suggests that the rural adults in the population from which the sample was drawn are in an age group where ages are heavily concentrated between 20 and 32 years. Seventy-five percent of these young adults are likely to be married, and one-half of the 25% who are single are likely to be single heads of households. The rural adults in the population are likely to represent a variety of blue-collar occupations. Fifty-one percent of the population will be high school graduates, and 38% are apt to have between one and two years of specialized education

beyond high school that will include vocational training and college coursework. Incomes are likely to fall within the range of between $11,000 and $18,000 per year, with an average income estimated to be $14,000 per year.

Psychosocial profile. The reasons most frequently cited by the participants in the study for involvement in the housing program were to own a house for themselves and their family, to "belong," and to become part of the community. While the motivation to home ownership has most generally been ascribed to those who are married, the rural adults in the population for the present study may be reflecting the current trend to alternative lifestyles. Although 34 of the subjects in the sample were married, 11 individuals reported themselves as single or single heads of households. Included in these 11 people were six females and five males who took upon themselves the sole responsibility to fulfill the estimated 950 hours that were needed to complete the construction of their houses.

From the responses of the participants in the study, it is likely that the members of the population echoed housing literature regarding the sociology of land tenure in the strong feelings they attached to the social implications of homeownership. Homeownership is a powerful motivator. The power of the home in America today is still to be seen as a cultural norm symbolizing both the protective aspect and the milieu that fosters both physical and spiritual growth. As a social microcosm, the family home is seen to educate and to build the moral character that is attributed as a basis for good citizenship.

As such, homeownership is an espoused personal goal that is continually societally reinforced.

Recalling Maslow's observation that a fulfilled need is not a motivator and that motivators represent needs not yet fulfilled, it is suggested that the pervasive cultural value of homeownership was one of the most powerful forces that led the rural adults to the housing program and continued to sustain them throughout the long building process. In so doing, the participants in the study exemplified the fulfillment of criteria essential to the learning process held by Lindeman and Dewey, namely, need, effort, and satisfaction.

Tough's research on why people learn further delineated satisfaction into three aspects. The first, interior to self, was seen as pleasure. It took the form of the joy and delight that one feels. Second, also interior to self, is the satisfaction included in the self-esteem with emphasis on the enhancement of self-image. Finally, there is the esteem of self, perceived externally, in the form of a high regard of self as seen by others.

The social reinforcement of the motives of the 45 subjects in the sample suggests that those in the population from which the sample was drawn underwent similar processes from the concept of homeownership to the practical outcome of a house successfully constructed. It is suggested that data collected in the present study are applicable to the 106 rural adults who constituted the population and that the following observations from the study relate to motivations that were reinforced among the participants in the study.

1. The learning outcomes in the housing program were the result of unmet needs in which there was congruence between the personal goals of the participants and societal goals.

2. The unmet needs of the rural adults in the housing program were felt strongly enough that the participants recognized the disparity between not knowing and the desire to acquire certain skills.

3. The rural adults in the housing program were strongly motivated to own a home, and they were willing to put forth the effort needed in the attainment of that goal.

4. The process of learning involved in building a house was reported by the adults to be satisfying physically, psychologically, and socially.

5. Continued positive feedback existed between those in BBCL and the rural adults relative to learner progress.

Areas of Learning Interest

The rural adults in the study were pragmatic in their approach to both general areas of interest and their specific interest in their learning projects. Their intention to apply usefully what they had learned was the strongest motivation for the majority of their learning projects. As reflected in studies by Johnstone and Rivera (1965), Penland (1977), and Tough (1971), attendance at academic classes that were formally structured interested only a minute percentage of rural adults. As with other adults cited in the literature, those in the sample took a proactive stance toward their inquiries that was

reflected by their self-direction, which appeared to represent their need to take control of this aspect of their lives.

Each of the adults sampled was involved in seeking information on an array of topics. The 45 adults expressed interest in 268 areas of general inquiry on which they had deliberately set out to gain and maintain fairly specific information during the previous year. Areas of inquiry in order of their interest to the adults were woodworking and home projects, business/finance, yard care, homemaking, and consumerism. The scope of their learning is seen as noteworthy since 66% of the adults were involved in constructing their houses 32 hours each week in addition to their full-time employment during the period of the year about which this question was asked.

The scope and the pragmatic nature of the inquiry in the areas of interest of the 45 subjects in the study sample are characteristics that are likely to exist in the population of rural adults from whom the sample was drawn.

Learning process. Data from the study indicated that the 45 adults in the sample first approached a topic that they wanted to explore by using an academic approach to learning that included reading, studying, listening, or viewing. After gaining the amount of information that was estimated to be necessary to pursue a learning project in a particular area, the approach that the rural adult had used for the first encounter with an area of interest was changed to one of learning-by-doing or learning-through-experiencing.

Thirteen (29%) of the 45 adults reported learning by the use of an academic process after the project had begun. It can be

suggested that the adults in the study were successful in appraising what it was that they wanted to know before a learning project was begun. Once the learning activity had begun, progress in 71% of the areas approached was monitored in learning by a hands-on process, while in 29% of the other areas, the participants in the housing program academically continued to search for additional information.

Organization of Learning Activities

In response to the experiences that they encountered in building each other's houses, the rural adults in the study generally evidenced characteristics that were similar to the characteristics that a national panel of adult educators felt were "likely to describe the highly self-directed learner" (Guglielmino, 1977, p. 73). These learning traits included confidence, an ability to comprehend, initiative, organization, persistence, and a drive for autonomy as seen in the desire to plan and control their own learning activities.

Planning. Ninety-five percent of the responses in the study indicated that the rural adults preferred to plan their own learning projects. Their decision to learn in situations involving a one-to-one interaction with someone considered an expert was mentioned in 73% of the replies. These figures are comparable to the 95% found in Tough's study (1967, p. 41) and higher than Penland's national survey (1977, p. 99), in which 76% of the entire U.S. population was seen to view themselves as self-planners in at least one or more major learning projects in the period of a year. The high frequency of response in favor of self-planning in the Coldwater study may be a result of

the fact that 77% of the areas chosen for self-study pertained to some aspect that relates directly to the respondent's involvement with housing. Few opportunities exist in Coldwater that would include instruction planned by others in an area this specialized.

The limitations on the amount of information that could be obtained in a one-hour interview prevented an in-depth approach to the topic of the decision to begin the learning activity. Tough's (1971) research in this area delineated at least 60 conceptually distinct steps in the process. Although 80% of those in the three groups reported rarely encountering difficulty in starting a learning project, in-depth research in this area will be needed to ascertain whether being low-income and rural are factors that weigh heavily enough to restrict decision making to a "yes" or "no" process.

Assistance. Seventy-three percent of the responses of the total sample in the current study indicated that the participants in the housing program turned to intimates (parents, siblings, spouse, or personal friends) for assistance with learning activities, while 59% of the subjects in the Penland study did so. Ninety-five percent of the replies in the present study indicated a preference for seeking assistance in learning on a one-to-one basis from someone seen as a professional. The respondents in the Penland study indicated by their replies that 49% sought assistance from another person. Additionally, 89% of the subjects in the present study indicated the desire to carry out learning activities in their own homes. These findings in the present study may be related to the anxieties expressed by members in the study concerning group interaction.

The anxieties most frequently expressed at the beginning of the program included concerns about a lack of construction capabilities. Also indicated were fears about working with and communicating with others in small-group interaction. It is suggested that the concerns reported from the 45 adults who constitute the sample in the study are representative of the concerns of the 106 adults who constitute the population for the study.

Sidney Harris (1982) recently wrote of the conflict that can occur between the individual and the group. His remarks are germane to the present study. In comparing Americans and those in other cultures, he said:

> I sometimes wonder whether Americans especially have not paid too much tribute to the cult of "individualism," at the expense of other drives and motives. "Getting ahead" as an individual may have come to take too much precedence over "getting along" as a member of a closely-knit group with common aims. A functioning society, it seems to me, requires a delicate balance between the legitimate aspirations of the person and the basic needs of the group. (p. 17)

A strong preference for individualism may also relate to the adult's remembrance of a tightly structured system of classroom learning that left few options for personal control. For a number of reasons, adult learners show a marked preference for individualized study where learning is limited to an exchange with another person or the use of nonhuman resources in lieu of group interaction.

Similar results were found by Penland (1977). Seen lacking are group-interaction skills that have inhibited not only outlook about group process but also have contributed to the attitude that effective group participation was not even to be attempted. In

referring to the fear that American learners have of the group process, Penland noted its importance to educators and those who are in a position to try and change attitudes that would favor participation in informal groups. The need for American adults to develop skills that would assist them to express themselves in interpersonal interaction to their educational advantage was stated by Penland as follows:

> The talking out of one's ideas about a situation, a personal diagnosis or even retrieved informative data appears to be a necessary step in the learning process for most people. But of equal or even greater importance is the deep-felt need to preserve the "right" to set one's own learning style and pace. Unfortunately, stereotypes about the group limit the range of exploration in the minds of many people to another person or thing (non-human planner) over which one can exert personal and immediate influence. (p. 98)

The explorative atmosphere that educators recognize as contributory to expressive learning, through the use of interaction skills, is the milieu proposed by Maslow and Rogers. They reflect the humanistic approach of a creative learning environment wherein group-process skills can be learned in an atmosphere of safety that is conducive to growth. Educational interaction appears to take place to best advantage in a setting where adults take the responsibility for their own actions in terms of their own choosing. Such an atmosphere engenders a creative, active, sensitive, empathic, and nonjudgmental stance.

The Use of Resources

Because of its exploratory nature, the present research was limited in its approach in certain areas to no more than a brief examination. The use of resources, as in-depth studies on the subject by Tough have indicated, is such an area. The members of the three

groups sampled reported rarely finding the organization of time a problem in attending their learning projects. Money was more frequently reported a concern for members in Group C than for those in Group A or Group B. This may be related to the fact that having lived in their houses between one and two years, learning projects for this group may have been forced to compete with house taxes and insurance payments for their financial support.

The Self-Help Housing Program as a Learning Experience

Two parts of the self-help housing program are highly visible. An important part of the program is the development of skills in the areas of construction materials and practices that are used to build a house. Also necessary are skills that are needed to understand loan procedures, interest, taxes, and budgeting. It becomes apparent to participants in the housing program that a knowledge of consumer goods is also essential because of the numerous decisions that must be made regarding the quality and the cost of equipping a new home. Participants in the program soon realize that knowledge is also needed in the areas of yard care and home repair.

Transfer of Knowledge

Conclusions drawn from the data indicated evidence of a transfer of knowledge developed in the self-help housing program to other areas of the participants' lives. Ninety-five percent of the rural adults had the capacity to recognize and to relate the ways in which the transfer was being made in the areas of business and finance and

construction materials and practices. Less apparent to the participants themselves were the communication and group-process skills that were developed in order to be able to work and communicate effectively with others in small groups. In the program, the development of skills that facilitated interpersonal interaction became a practical necessity, at least during the period of time when the houses were being constructed. The respondents reported that they were not as aware of the transfer of communication and group-process skills to other areas of their lives as they were of skills developed in financial or construction areas.

Adult learners can be unaware of what has been happening to them, or they may not perceive the processes in which they were involved on a daily basis. Tough (1967) credited further examination of self-teaching to his own surprise in discovering that he had followed these steps during a self-teaching project "although at the time he had not been aware that he had been doing so" (p. 1).

It is believed that individuals behave in terms of what is real. This necessitates the evaluation of the integration of what is perceived as real in relation to oneself at the moment of the action. Learning, then, can be said to be a process of discovering one's relationship to people, things, and ideas. This results in the ability of the adult to discern facts, circumstances, or experiences that are apparent to the senses. When, with continued exposure to observable events, a discrepancy is found to exist, the learner can make the needed changes. These changes will not be made unless the adult perceives or is assisted by someone who can aid in facilitating the

process (Pittenger & Gooding, 1971). Adult educators can assist in this role.

Habermas (1971) and Mezirow (1981) proposed that cognitive function can be seen to exist in at least three distinct domains: manipulation, interpretation, and emancipation/perspective transformation. Manipulation is a domain with which educators are already familiar. Adult behavior in this area is measured by change that is seen as relative to a priori behavioral objectives. It is the second and third areas of interpretation and emancipation to which Mezirow would draw our attention and which have special relevance to this research. In these areas of learning domains, learning is seen not as an understanding of meaning by observation but "as an interpretation of the ways they and others with whom they are involved construct meanings, typify and label others and what they do and say as we interact with them" (p. 18).

Emancipation as a cognitive domain involves a freeing of self-knowledge. A knowledge of self-reflection releases us from the control over our lives that has been taken for granted as being beyond our control. This development of a critical awareness that customs that have been institutionalized in the past need not continue to be so is what Freire (1970) called "conscientization." Critical awareness, called "emancipation" by Habermas (1971) and "perspective transformation" by Mezirow (1981), can be realized by sudden insight or attained by the slow process of a revision of assumptions, a posture that was held by Gould (1978).

In his presentation of A Critical Theory of Adult Learning and Education, Mezirow (1981) proposed that educators have not only failed to recognize the crucial distinction among the three domains but they continue to assess educational progression through measurement of learned skills or competencies from behavioral objectives. This procedure, when applied to the interpretive or emancipatory domains, is seen as ineffective. Instead, Mezerow suggested that social interaction calls for an educational approach that focuses on helping others interpret the way they and others interact. Perspective transformation (emancipation) was seen by Mezirow as needing "an emphasis on helping the learner identify real problems involving reified power relationships rooted in institutional ideologies which one has internalized in one's psychological history" (p. 18).

Educators who are aware of the appropriate and thus the most effective approach to each domain are then in a position to facilitate cognitive growth as adult learners develop a critical consciousness through their interpretation and subsequent introspection of the social milieu. The fact that the rural adults in the study were not always aware of the transfer function does not mean that they were not using it. They may simply have been unaware of the process in which they were involved or unable to give these processes a name. Alerted to this, educators can aid them in the expansion of their human awareness toward the enrichment of their cognitive functioning. This can be seen as essential if adult educators attempt to fulfill their commitment to assisting adults in acquiring the physical, psychological,

and social skills seen necessary for survival in times of rapid change.

An Educational Role

A role for adult educators in today's society should be to focus attention on the educational components often inherent in social action programs yet usually ignored. Assistance by educators in a program's recognition of its educational perspectives, where an underemphasis now exists, can be seen to aid in establishing priorities that would realign a program's resources to include a recognition of its educational role.

As an example, the Housing Act of 1949 was legislated to allocate funds for the construction of "adequate" dwellings for the underhoused. Although the statute does not specify an educational focus, it is possible to view it as having inherent educational dimensions (U.S. Department of Agriculture, FmHA, Acts of Congress, 1982, pp. b1-b73). The educative intent of the law can be seen to be implemented to the degree that the U.S. Department of Agriculture's directives (through Farmers Home Administration) for "assistance," "technical supervision," "counseling," "training," and the 13 weeks of preconstruction meetings in the mutual self-help housing program are interpreted as educational by personnel from the national to the local level.

The interpretation and practical application of the law by Farmers Home Administration has resulted in Mutual Self-Help Housing Guidelines (FmHA Instruction 1944-A, Exhibits A-G, WSDC, revised

Dec. 1981). These guidelines indicate the direction that the housing programs will take at the local level. These guidelines are incorporated into operations manuals that, in turn, specify local procedures. Although self-help housing programs follow FmHA's guidelines, local interpretations of procedures vary from county to county and from state to state. BBCL in Coldwater is in the business of building houses. Its policies and procedures, however, indicate an awareness of an educational dimension inherent in all three stages of its program.

The Housing Program as a Facilitator of Learning

Examination of BBCL leads the researcher to believe that the program fulfills the literature's definition of an enriching adult learning experience within the concepts of the andragogic approach. The rural adults in the study were seen to approach the program voluntarily. They came with backgrounds diverse in life experiences including a richness of aptitudes and abilities. Their concern for adequate housing for themselves and their families was real. Not inclined to the theoretic, their approach was pragmatic and problem centered, evolving from circumstances seen to surround needs applicable to their particular stage of life-cycle development.

The program offered educative learning experiences to the rural adults in a well-selected variety of learning modalities. These options in various stages of the program's structure gave adults the opportunity to learn

1. Alone--using both an academic and an experiential process.

2. On a one-to-one basis in interaction with the director, construction supervisors, and each other.

3. Through social interaction in the small-group process both at the preconstruction meetings and at the site as the rural adults mutually assisted in the building of one another's houses.

Implications

The participants in the self-help housing program reflected the rural adults in the population from which the sample was drawn. The rural adults in the population, then, are young adults in their early twenties and thirties who are likely to be married and parents of young families. Young adults face tasks of marital adjustment, the decision to enhance job skills, and the need to develop new skills that will facilitate their ability to act on issues of social concern. The recognition of adult concern with their own development has important implications to adult educators who can then attempt to provide a range of experiences directed to fulfilling these needs.

The young adults in the population are highly self-directed in life. They expect the control for the decision-making process, which they daily exert over their own affairs, to be carried over into their learning activities. The awareness that adults are proactive learners who accept the responsibility for the initiative and the willingness to expend the needed effort in the attainment of unmet goals has implications for adult educators. It then becomes the responsibility of the educator to facilitate learning that will enable self-directed learners to develop in directions that are beneficial to themselves and to the society as a whole.

Through background and training, the subjects in the population bring a variety of life's experiences to their learning activities. With these experiences they also bring a need for affection, for self-respect and self-confidence. An awareness of the needs of the rural adult learner has implications for the adult educator who, understanding the social and psychological factors that combine to form full humanness, endeavors to facilitate in the creation of a learning atmosphere that reflects the safety and encouragement that ultimately encourages growth.

The rural adults in the population are likely to be pragmatic and display both initiative and persistence. They have indicated an ability to organize their learning activities by careful management of their resources. They have also expressed the desire to learn in a variety of interest areas that, in addition to the pragmatic, encompass areas of personal satisfaction and self-fulfillment that include recreation, crafts, hobbies, and leisure-time activities. The adults in the population reported apprehensions about interaction in small groups. Aware that they lack communication skills, many prefer to learn alone. The recognition of adult concern for the development of communication skills has important implications to adult educators who then can attempt to provide a humanistic approach to a creative learning environment wherein expressive learning through the development of interaction skills can take place in an atmosphere that is active, sensitive, empathic, and nonjudgmental.

Recommendations for Future Research

The present research has brought to light some of the learning characteristics existing in a small sample of low-income adults involved in a specific self-help housing program. The sample was not intended to provide an unbiased sample of rural adults. As an exploratory study, it has raised questions in numerous areas.

1. What are the learning characteristics and how do adults learn in self-help housing programs in other areas? In Wisconsin? In California? Are BBCL learners unique or are they representative of all low-income rural adult learners?

2. Were the positive learning experiences reported by the participants in the self-help housing program in the present study a result of a powerful bond between the adult learners and BBCL's director?

3. Is there a relationship between self-directed learning and self-help housing programs? How differently do rural adults learn who are not involved in a program of this type? The motivation of those involved in BBCL was extremely high. What motivates other rural adults to learn?

4. Does the process of learning employed by rural adults vary with those in different socioeconomic classes? To what extent does income curtail or enhance learning?

5. Is there a difference in learning practices between rural and urban adults?

6. How can adults be aided in the development of their recognition of the transfer of knowledge to other aspects of their lives?

7. Will there be a difference in the selection of learning projects and the processes of learning between a group of adults who have been made aware of skill transfer and those who have not?

8. An integral part of the self-help housing program is individual participant development in the areas of communication and group process. Future research may consider studies to explore the extent to which these skills are individualistically or particularistically oriented. Do members of self-help housing programs become involved in community building through civic and social interaction in the larger community after their houses are constructed?

Future research may consider a follow-up of the adults in the present study. The following questions are presented for consideration.

1. Will the enthusiasm of the rural adult participants in the study continue to endure in the direction of self-directed learning activities? Has the positive reinforcement of the cultural value of homeownership aided them toward becoming confirmed adult learners?

2. Will their learning projects continue to expand to encompass the community? The society?

3. What effect has participation in BBCL had on husband/wife relationships? On family relationships?

4. Did participating in BBCL have an effect on the learning activities of the children of those involved in the program? Their adult friends and relatives?

5. Has there been a change in the attitudes of perceived self-satisfaction of those who have been involved that has been of an enduring nature? How has this change manifested itself in observable behavior?

Concluding Remarks

Results of the study have raised questions about the learning characteristics, scope, and learning practices of low-income rural adults. They are believed to be a segment of the population, though large in number, that has heretofore been relatively unattended regarding the characteristics they contribute to the overall profile of the adult learner.

The rural adults in the study were seen to be highly motivated by the desire to house themselves and their families. They were seen to be self-directed learners who were problem-centered in their involvement in a wide variety of interest areas that pragmatically centered on the construction of their homes. Their approach to the learning projects on which they sought information involved a learning process that was initially found to be academic in that it encompassed reading, studying, listening, or viewing before the activity began. Once initiated, however, their learning assumed a posture that was seen to monitor itself in a hands-on stance of learning-by-doing. Concerns about working with and communicating with other adults in small groups were voiced as a source of anxiety at the beginning of the program.

In addition to insights into the learning processes employed by the rural adults and their concerns about communication and group-process skills, of particular interest to the researcher was their apparent lack of awareness of the cognitive-transfer function of skills newly learned or developed in the program. Findings in these three areas may have implication to educators who are concerned about their ability to recognize the uniqueness of adult learners and the differences that occur not only physically and chronologically but also in the ability of the adult to experience, to think, to reason, and to learn.

BBCL has offered the opportunity to observe an interaction between unique adult learners and a nontraditional learning model. Early in the 1900s, Dewey proposed that, to be true to itself, education must embryonically reflect society. In 1970, Illich noted that to a great extent this concept of Dewey's philosophy had not yet been implemented nor, Illich suggested, is it likely to be until the walls of classrooms are pushed out to include additional unique learners and more nontraditional resources with the goal of transforming the entire culture into a milieu where learning continues to be a part of everyday life.

APPENDICES

APPENDIX A

COMMON QUESTIONS AND ANSWERS ON SELF-HELP HOUSING

APPENDIX A

COMMON QUESTIONS AND ANSWERS ON SELF-HELP HOUSING

1. What is self-help housing?

   Self-help housing is a method by which families can achieve home ownership. Families form an informal association, elect officers, and agree to help each other build houses with technical assistance provided by a competent construction supervisor.

2. How does a self-help housing program work?

   Three elements are necessary to make self-help housing work:
   a. Technical assistance
   b. Mortgage loans
   c. Families who want homes of their own, and are willing to do part of the work in building their homes

3. How many families must there be in a self-help housing group?

   Generally, 8 to 10 families make up a self-help housing building group (association).

4. How many hours of labor does each family contribute to the construction of all the houses in the group?

   Each family contributes as much labor as is required to complete all the houses in the group. Generally about 1,200 hours of labor per family is required, with each family contributing about 32 hours each week. "Family" hours include the labor of the husband, wife, and any child 16 years of age and over, and friends.

5. When are the houses built?

   Since most of the families in a self-help housing program must work during the day, most of the work on the houses is done in the evenings and on weekends. If a family is not willing to give up many of their free evenings and weekends during the construction of the houses, they should not join a self-help group.

6. How large can a self-help house be?

   The size and number of bedrooms in a self-help house are determined by the number of people in the family and the amount of loan it can afford to repay--two, three, four, and five bedrooms, depending on the size of the family.

7. If the head of the household is a woman, can she participate in a housing program?

   Yes. However, the groups should seek assurances that sufficient labor will be provided by her and her family.

8. What is technical assistance?

   Technical assistance is the process of organizing and supervising groups of families in the building of their own homes. It is usually provided by a non-profit sponsor and may include the following functions:
   a. Recruiting families who are interested in sharing labor in the construction of each other's homes.
   b. Assisting at weekly meetings of the families at which the self-help program and subjects related to home ownership, such as taxes and insurance, are explained and discussed.
   c. Assisting families in locating suitable building sites.
   d. Assisting families in selecting house plans which meet their needs and are within their ability to repay.
   e. Assisting families in obtaining cost estimates for construction materials and any subcontracting that will be required.
   f. Providing assistance in the preparation of applications for land and construction material loans.
   g. Supervising and training of families in the proper construction of their homes.

9. Who provides technical assistance?

   The staff of BETTER BRANCH COUNTY LIVING, INC., which is a non-profit corporation receiving grant funds from the FARMERS HOME ADMINISTRATION (FmHA).

10. Do the self-help participants pay for technical assistance?

    No. This service is provided without charge by BETTER BRANCH COUNTY LIVING, INC.

11. Who provides the house plans?

    BETTER BRANCH COUNTY LIVING, INC., has a variety of house plans which families may choose from.

12. Who provides the loan money for the land, construction materials, and any subcontracting that may be required in rural areas?

    FINANCIAL ASSISTANCE: The Farmers Home Administration usually provides the loans for the land, construction materials, and any subcontracting that may be required.

13. Who can qualify for a self-help housing loan from the Farmers Home Administration?

To qualify for a self-help housing loan from the Farmers Home Administration, a family must:

a. Plan to build their house in a community of 10,000 people or less.
b. Be without adequate housing.
c. Have a reasonably good credit rating.
d. Have an ability to repay a loan.
e. Be able and willing to work on the houses.
f. Have a gross adjusted income of less than $15,600 dollars a year.

14. Can a family build their home in any community of 10,000 or less?

No. Each Farmers Home Administration state office has a list of the communities of 10,000 or less where homes can be built with Farmers Home Administration loans.

15. Can a family that works and lives in a city obtain a loan to build a house in the country if the family plans to continue working in the city?

Yes.

16. What are the terms of FmHA self-help loans?

The loans are for up to 33 years. The interest rate is 11 percent (as of March, 1980), but subsidies can be provided that will bring the interest cost to as low as 1 percent, depending on the family income and size.

17. What costs can be included in an FmHA self-help housing loan?

The following items can be included in a Farmers Home self-help housing loan:

a. Land.
b. Land preparation costs, including fill dirt.
c. Title clearance (including insurance where applicable).
d. Recording fees.
e. Tool rental.
f. Building materials.
g. Subcontracting services.
h. Water well (or hookup to central system).
i. Septic tank (or sewer hookup).
j. Stove (range and oven if it becomes real estate upon installation).
k. Kitchen cabinets.
l. Driveway and culvert.
m. Landscaping (grass and foundation shrubs).

n. Initial loan installments.
o. Fence when money is left over after all construction is completed.

18. What are some of the items that cannot be included in the loan?

Some of the items that cannot be included in the loan are:
a. Property taxes unless past due at the time of loan closing.
b. Fire insurance.
c. Utilities.

19. When is the first monthly payment on an FmHA self-help housing loan due?

When a loan docket is completed, an estimate is made of how long the period of construction will be and the amount of payments that will be due during this period. If the borrower is unable to meet these payments with personal funds, the payments may be included in the loan. When the loan is closed this amount is immediately paid back to FmHA. The participant must begin making full monthly payments no later than one month following the completion of the house.

20. Do welfare payments count as part of annual income?

Welfare payments are included as part of annual income when computing the participant's eligibility for an FmHA self-help loan including interest credit.

APPENDIX B

SCHEDULE OF PRECONSTRUCTION MEETINGS

APPENDIX B

SCHEDULE OF PRECONSTRUCTION MEETINGS

Meeting #1

A. What is Self-Help Housing
B. Sponsoring Agency
C. How to qualify for program
D. Where the money comes from
E. Requirements for participation
F. Length of program
G. Family labor
H. Cost of construction

Meeting #2

A. USDA FmHA 502 loans
B. Loan Processing
C. Interest Credit
D. House Payments
E. Loan Servicing from FmHA

Meeting #3

A. Color scheme
B. Optional Changes
C. Items Not Allowed
D. Minimum Property Standards

Meeting #4

A. Membership Agreement and Election of Officers
B. Promissory Note
C. Association Name
D. Mandatory Group Savings (taxes and fire insurance)
E. Election of Officers
F. Weekly Association Dues

Meeting #5

A. Review of families loan package
B. Cost estimates
C. Loan docket forms
D. Signatures

Meeting #6

A. Property taxes
B. Due dates for taxes
C. Saving for tax payments
D. Insurance
E. Claims

Meeting #7

A. Methods of construction
B. Credit ratings
C. Budgeting for house payments

Meeting #8

A. Methods of construction
B. Construction terms
C. Construction materials
D. Use of hand tools
E. Safety
F. General phases of construction

Meeting #9

A. Use of power tools and equipment
B. Building materials
C. Construction schedule
D. FmHA inspections
E. Clean job site
F. City building inspections
G. Material handling
H. Records kept by supervisor
I. What supervisor expects

Meeting #10

A. Purchase of materials
B. Family labor schedules
C. Identification signs
D. Plans for initial construction activities

Meeting #11

A. Role of the title company or abstractor
B. Escrow accounts
C. Closing statement
D. Fees paid by family
E. Checking account
F. Insurance
G. Appointments for loan closings

Meeting #12

A. Loan money for landscaping
B. Shrubs
C. Yard maintenance
D. Local resources for landscaping

Meeting #13

A. Home maintenance
B. FmHA requirements
C. FmHA final inspection

APPENDIX C

SURVEY QUESTIONNAIRE

APPENDIX C

SURVEY QUESTIONNAIRE

GROUP A: Starting Construction NUMBER _____

TIME INTERVIEW STARTED _____
TIME INTERVIEW ENDED _____ DATE _____
LENGTH OF INTERVIEW _____

Hello. My name is _____. I made an appointment with you earlier this week to interview you to gather information about HOW ADULTS LEARN. This study is being carried out to examine self-help housing as a learning process. We are interested in the sorts of things people learn. Everyone learns, but different people learn different things, and in different ways. There are no "right" or "wrong" answers. It is YOUR experience and opinions that are important.

No name will appear on the information that we collect. You have been assigned a number to protect your identity. Your name will not be associated with the responses that you will make to the questions being asked.

As self-help housing programs develop throughout the country, it would be helpful to understand why you wanted to become involved in BBCL .

1. What are your reasons for wanting to become involved in BBCL ?
   P 1. Why did you want to become involved in a self-help housing program ?
   P 2. What other reasons can you think of ?

2. Why do you want to own your own home ?
   P 1. What are the reasons that this is important to you ?
   P 2. Do any other reasons come to mind ?

GROUP A

3. What do you feel that BBCL will do for you ?
   P 1. What do you feel that you will gain from the program ?
   P 2. What other advantages can you think of ?

4. Do you have any worries or fears about your abilities as you start construction on your house ?
   Yes _____ No _____
   If yes:
   P 1. What kinds of worries or fears do you feel ?
   P 2. What other kinds of concerns can you think of ?

5. Have you considered that the skills that you will be learning in BBCL can be used in other areas of your life ?
   Yes _____ No _____
   If yes:
   P 1. What are some of the ways that you think that these abilities can be used ?
   P 2. Do any other uses for these skills come to mind ?

GROUP B: FINISHING CONSTRUCTION AND MOVING INTO HOUSE

TIME INTERVIEW STARTED _____ NUMBER _____
TIME INTERVIEW ENDED _____
LENGTH OF INTERVIEW _____ DATE _____

Hello. My name is _____. I made an appointment with you earlier this week to interview you to gather information about HOW ADULTS LEARN. This survey is being carried out to examine self-help housing as a learning process. We are interested in the sorts of things people learn. Everyone learns, but different people learn different things, and in different ways. There are no "right" or "wrong" answers. It is YOUR experience and opinions that are important.

No name will appear on the information that we collect. You have been assigned a number to protect your identity. Your name will not be associated with the responses that you will make to the questions being asked.

As self-help housing programs develop throughout the country, it would be helpful to understand why you wanted to become involved in BBCL.

1. What were your reasons for wanting to become involved in BBCL ?
   P 1. Why did you want to become involved in the program ?
   P 2. What other reasons can you think of ?

2. Now that you have been in the program, was the program different than you thought that it would be ?
   Yes _____ No _____
   If yes:
   P 1. In what ways was it different than you had expected that it would be ?
   P 2. Can you think of other ways it may have been different than you first thought that it would be ?

GROUP B

3A. Did you have any worries or fears about your abilities when you started construction on your house ?
Yes _____ No _____
If yes:
P 1. What were your concerns ?
P 2. Can you remember any other concerns that might have worried you when you first became involved in the program ?

3B. Now that you have built your house, do you feel more confident about these things ?
Yes _____ No _____

4. Now that you have built your house, have any new projects come to mind ?
Yes _____ No _____
If yes:
P 1. What are some of the new projects with which you have become involved ?
P 2. Do any other projects come to mind ?

5. Have you considered that you will be using financial, construction and communications skills that you have learned in BBCL in other areas of your life after the program has been completed ?
Yes _____ No _____
If yes:
In what areas do you see yourself using these skills ?
P 2. Can you think of other ways that these skills might be used outside of the program ?

GROUP C: LIVING IN HOUSE 1½ to 2 YEARS

TIME INTERVIEW STARTED _____ NUMBER _____
TIME INTERVIEW ENDED _____
LENGTH OF INTERVIEW _____ DATE _____

Hello. My name is _____. I made an appointment with you earlier this week to interview you to gather information about HOW ADULTS LEARN. The survey is being carried out to examine self-help housing as a learning process. We are interested in the sorts of things people learn. Everybody learns, but different people learn different things, and in different ways. There are no "right" or "wrong" answers. It is YOUR experience and opinions that are important.

No name will appear on the information that we collect. You have been assigned a number to protect your identity. Your name will not be associated with the responses that you will make to the questions being asked.

As self-help housing programs develop throughout the country, it would be helpful to understand why you wanted to become involved with BBCL.

1. What were your reasons for wanting to become involved in BBCL ?
   P 1. Why did you want to become involved in the program ?
   P 2. What other reasons can you think of ?

2. Now that you have built your house, was the program different than you thought that it would be ?
   Yes _____ No _____
   If yes:
   P 1. In what ways was it different than you expected it to be ?
   P 2. Can you recall any other ways that you felt that the program was different than you had imagined it would be ?

GROUP C

3A. Did you have any worries or fears about your abilities when you started construction of your house ?
Yes _____ No _____
If yes:
P 1. What kinds of things were you concerned about ?
P 2. Can you recall any other concerns that you might have had before the program began ?

3B. Now that you have built your house, how do you feel about your ability to do these things ?

4. Now that you have finished your house and have been living in it for some time, have any new projects come to mind ?
Yes _____ No _____
If yes.
P 1. What other new projects have you become involved with ?
P 2. Do any other projects come to mind ?

5. Have you considered that you will be using the financial, construction and communications skills that you have learned in the program in other areas of your life when the program ended ?
Yes _____ No _____
If yes:
P 1. What are some examples of areas where you believe that these skills can be used ?
P 2. Can you think of other uses for these skills ?

The following activities are often engaged in by adults

FINANCIAL

6. Adults often prepare budgets. Are you doing this now ?
Yes _____ No _____
Is this something that youwould have been doing 3 years ago ?
Yes, or Yes, but not to the same extent _____
No _____
Do you believe that you are more capable in this area now ?
Yes _____ NO _____
If yes:
Why do you feel that you are more capable in this area now ?

7. Have you considered that budgetking skills can be carried over to other areas of your life ?
Yes _____ No _____
If yes:
P 1. In what other areas of your life do you see yourself using budgeting skills ?
P 2. How do you see yourself using your ability to budget after the program is finished

8. Many adults establish checking and savings accounts, arrange mortgages and loans. Are you doing this now ?
Yes or Yes, but not to the same extent _____
No _____
Is this something that you would have been doing 3 years ago ?
Yes _____ No _____
Do you feel more confident in these areas now ? Yes _____ No _____
Why do you feel more confident ?

9. Have you considered that you will be using the financial skills that you have gained in BBCL in other areas of your life ?
Yes _____ No _____
If yes:
P 1. In what other ways do you see yourself using these skills ?
P 2. What other uses for these financial skills come to mind ?

10. Owning a house often means obtaining information about taxes and insurance. Are you doing this now ?
Yes or yes, but not to the same extent _____
No _____
Do you feel more confident in these areas now ? Yes _____ No _____
If yes:
P 1. Why do you believe you are more confident ?
P 2. What do you think brought about the change ?

11. Have you considered that the knowledge you've gained in BBCL about taxes and insurance could be useful in other areas of your life ?
Yes _____ No _____
If yes:
P 1. In what other areas of your life do you see yourself using this knowledge ?
P 2. Do any other situations come to mind where you believe that these skills could be used to advantage ?

CONSTRUCTION

12. Often there is a need to become involved in some tpye of construction such as roofing, siding, electrical, rough plumbing, sheetrock/drywall, rough heating, pouring cement, hanging cupboards, decorating or painting. Are you doing any of these things now ?
Yes , or yes, but not to the same extent _____
No _____
Do you feel more confident now Yes _____ No _____
P 1. Why do you feel more confident now ?
P 2. What has happened to make you feel more confident now ?

13. Had you thought about the fact that these construction skills could be used in other areas of your life outside of the program ?
Yes _____
No _____
If yes:
P 1. How do you see yourself using these construction skills ?
P 2. In what other ways do you see these skills carrying over to other parts of your life ?

GROUP PROCESS

14. Many people share equipment and interact with each other in groups. Are you doing this now ?
Yes _____
No _____
If yes:
Is this something that you would have been doing 3 years ago ?
Yes, or yes, but not to the same extent _____
No _____
Do you now feel more confident in this area now ?
Yes _____ No _____
If yes:
P 1. What do you feel has caused this change ?
P 2. What other reasons can you think of that would cause you to feel more capable in this area now ?

15. Have you considered that while working with others in BBCL, communication skills can be developed that can be used in other areas of your life ?
Yes _____
No _____
If yes:
P 1. In what other areas of your life do you see increased skills in working with others to be an advantage ?
P 2. Do other situations come to mind where the ability to work with others would be helpful ?

16. Adults often meet in groups to discuss common interests and activities. Are you doing this now ?
Yes _____
No _____
Is this something that you would have been doing 3 years ago ?
Yes or yes, but not to the same extent _____
No _____
Do you feel more capable now about expressing your opinions ?
What do you think contributed to the change ?

17. Have you considered that the skills that you have gained discussing in groups while building your house can be carried over to other areas of your life ?
Yes _____
No _____
If yes:
P 1. How do you see yourself using increased skills to communicate?
P 2. Where else do you see y ourself using these skills ?

INTERVIEWER INSTRUCTIONS FOR QUESTIONS 18 THROUGH 32

These instructions pertain to GENERAL AREAS OF LEARNING INTEREST (questions 18 through 31) and SPECIAL AREA OF LEARNING INTEREST (question 32). Areas of learning interest will be looked at three separate times in an effort to obtain information for different questions.

THE FIRST TIME that it is approached, an attempt will be made to discover the overall or general areas of learner interest. Answers to responses will be checked in SECTION I (questions 18 through 30) on page

THE SECOND TIME, an attempt will be made to discover the learning process and its sequence by asking whether the topics were approached in an academic or hands-on procedure. The respondent will then be asked which method was used to initiate the learning process and which was implemented after the learning had begun. Answers to responses will be in SECTION II.

THE THIRD TIME, the respondent will be asked to single out the ONE specific area considered to have been the most important learning experience during the past year. The answer will pertain to question 32 on page

The following probes are given to help you elicit responses from the participants in the housing program about their general areas of interest during the past year.

P 1. Try to think back over the past 12 months. We are interested in any deliberate effort you made to learn anything at all. Anything can be included, regardless of whether it was easy or hard, big or little, important or trivial, serious or fun.
(PAUSE -- CHECK ANY TOPIC MENTIONED BESIDE APPROPRIATE CATEGORY)

P 2. It doesn't matter when your effort started, as long as you have spent some time at it during the last year.
We want to get as complete a list as possible, because we think that people make far more attempts to learn than anyone realizes. We can include any sort of information, skill or understanding that you deliberately tried to gain -- just as long as some number of hours were spent at it during the past year. Can you recall any other areas of general interest ?

(HAND RESPONDENT CARD ON WHICH CATEGORIES 18 THROUGH 30 ARE PRINTED)

P 3. Here is alist of some of the things that people learn. It may help to remind you of other areas in which you have obtained information during the past year. Read the list and try to remember whether you have tried to learn something similar.

TAKE BACK PRINTED CARD

GENERAL AREAS OF LEARNING INTEREST				
SECTION I			SECTION II	
			LEARNING PROCEDURE	
			INITIAL APPROACH	LATER APPROACH
18.		HOMEMAKING: sewing, cooking, gardening, canning decorating		
19.		WOODWORKING, home construction projects, refinishing furniture, etc.		
20.		MARRIAGE AND FAMILY: child development, personal development, communication skills, mental health		
21.		PHYSICAL ACTIVITIES AND SPORTS: healthcare, running swimming, etc.		
22.		BUSINESS AND FINANCE. taxes, insurance, abstracts, liens, titles		
23.		JOB SKILLS. mechanics, machine shop, electronics, radio, sterio, typing, bookkeeping. New skills for present job or skills for new job.		
24.		HOBBIES: art, photography, etc. SPECIFY _____		
25.		RELIGION: scripture study, church classes		
26.		academics: English, Science, Mathematics, Psychology,etc.		
27		CONSUMERISM: information about items to be/were purchased		
28		YARD-CARE. landscaping		
29		OTHER AREAS OF SKILL OR KNOWLEDGE		
30.		NO GENERAL AREA OF INTEREST		

INTERVIEWER INSTRUCTIONS FOR SECTION II OF QUESTIONNAIRE, p.

Use Ac to designate learning by reading, studying,viewing or listening.
Use Do to designate learning by doing- by experiencing.

31. LEARNING PROCESS: Of those areas that you have selected as having obtained information, how did you go about the process of learning the information that you wanted to know ? Was the knowledge obtained by reading, studying, viewing or listening or did you learn what you wanted to know about a topic as you went along ? Which process did you use to start learning about your topics of general interest ? What learning process did you use after the initial learning experience had begun ?

32. Of the areas of general interest that were just mentioned, which ONE TOPIC do you feel was most important to you ?

NOTE: To be considered important, this is an area that
1. You had to have had a fairly specific idea about what you wanted to learn
2. YOU took the responsibility for planning and controlling your own learning (over 51% of the time)
3. You spent AT LEAST EIGHT HOURS on this topic during the past year

MOST IMPORTANT AREA OF INTEREST _____

NOTE: The following information being asked about organization of learning activities and use of resources pertains the ONE special area of interest chosen by the respondent.

33. How did you go about planning your special area of interest ?

Self-planned ? _____
Class or some type of instruction ? _____
One-to-one (you found someone who knew about the area) _____
Nonhuman resources (books, tapes, records,etc.)? _____

34. When you needed assistance with your learning, where did you turn for help ?
Intimates (parents, brother, sister, spouse, close friend) _____
Acquaintances (friends, relatives not named in above) _____
Experts, professionals ? _____
Small group working together ? _____

35. Where did you carry out your learning experience ?
Home _____
School _____
Church _____
Public library _____
Other: Specify _____

We are still talking about the special learning area that you felt was most important to you during the past year.

Use this scale to measure your responses on the following questions.

5 Almost always
4
3 Sometimes
2
1 Rarely

36. Did you have difficulty making the decision to start your learning on the topic of your special interest area ? _____

37. Was arranging time to learn a problem ? _____

38. To be able to learn about your area of interest was money a problem ? _____

39. Were resources (people, books, etc.) difficult to find in Coldwater ? _____

40. Were resources difficult to understand ?

41. Do you prefer to learn . by yourself ? _____

Use the following scale on this question

5 Well
4
3 Moderately
2
1 Poorly

42. How well do you think that your previous schooling prepared you for adult life ? _____

43. Can you give me a word (ONE WORD) that would descrive "learning" for you ?

_____

DEMOGRAPHICS

44. Age _____

45. Sex _____

46. Schooling

Less than high school graduation _____

High school graduate _____

Vocational training beyond high school _____

Up to one year of college _____

Up to two years of college _____

College graduate _____

47. Occupation _____

48. Married _____

49. Single head of household _____

50. Single

ADDITIONAL REMARKS OR COMMENTS BY RESPONDENTS

APPENDIX D

SURVEY DATA WORKSHEETS

APPENDIX D

SURVEY DATA WORKSHEETS

PART I PSYCHOSOCIAL PROFILE

GROUP A: STARTING CONSTRUCTION N= 15

1. What are your reasons for wanting to become involved in BBCL ?
   a. To build a house 12
   b. Program allowed labor for down-payment 10
   c. To add to financial worth 3
   d. Building a house is a worthwhile venture 1

2. Why do you want to own your own home ?
   a. The desire to belong, stay in one place, have neighbors 8
   b. To have a home and a yard that I can fix as I choose 5
   c. Better atmosphere for raising a family 2
   d. A house is a financial investment 2
   e. The pride of owning a home 1

3. What do you feel that BBCL will do for you ?
   a. To learn skills while building a house 13
   b. To own a home 8
   c. Work with other young people 3
   d. A sense of accomplishment 1

4. Do you have any worries or fears about your abilities as you start construction of y our house ?
   Yes 4
   No 11
   If yes: What kinds of anxieties do you feel ?
   a. Not sure of construction capabilities 4

5. Have you considered that the skills that you will be in BBCL can be used in other areas of your life ?
   Yes 15
   No 0
   If yes: What are some of the ways that you think that these abilities can be used ?
   a. Use of skills in home repair 10
   b. Increasing job skills 5
   c. More confidence in ability to handle responsibility 3
   d. To assist family, friends 1

GROUP B: FINISHING CONSTRUCTION-MOVING INTO HOUSE N= 15

1. What were your reasons for wanting to become involved in BBCL ?

a. To build a house	13
b. Program allowed labor for down-payment	9
c. Improve/learn new skills	1
d. Add to financial worth	1

2. Now that you are in the program, was it different than you had thought ?

Yes	10
No	5
If yes: In what ways was it different than expected ?	
a. Difficulty getting along/working with others	4
b. More work	2
c. Longer hours	2
d. Easier	2
e. More responsibility than I had expected	1

3A. Did you have any worries or fears about your abilities when you started construction of your house ?

Yes	5
No	10
If yes: What were your concerns ?	
a. Not sure of construction skills	2
b. Concerns about physical stamina	2
c. Concer about getting along/working with others	1

3B. Now that you have built your house, how do you feel about these things ?

a. Somewhat more confident	2
b. Much more confident	10
c. Very confident	3

4. Now that you have built your house, have any new projects come to mind ?

Yes	15
No	0
If yes: What projects have you considered ?	
a. Finish basement	11
b. Deck/porch/fence/patio	9
c. Landscaping	2
d. Driveway	2
e. Sliding glass doors	2
f. Small storage building	1
g. Garage	1
h. Minor improvements	1

5. Have youconsidered that you will be using financial, construction and communications skills that you have in BBCL in other areas of your life after the program has been completed ?

Yes	14
No	1

If yes: In what other areas do you see yourself using these skills ?

a. Increasing job skills	8
b. Use of skills in home repair	6
c. Increasing communication skills	3
d. Assisting family or friends	1

GROUP C: LIVING IN HOUSES 1-2 YEARS N= 15

1. What were your reasons for wanting to become involved in BBCL ?

a. To build a house	15
b. Program allowed labor for down-payment	11
c. Improve/learn new skills while building a house	1

2. Now that you have built your house was the program different than you had expected that it would be ?

Yes	9
No	6

If yes: In what ways was it different ?

a. Difficulties getting along/working with others	5
b. More work	4
c. Longer hours	4
d. Difficulties acquiring skills	2

3A. Did you have worries or fears about your abilities when you started construction of your house ?

Yes.	9
No	6

If yes What kinds of concerns did you have ?

a. Lack of construction abilities	7
b. Concern about personal stamina	2

3B. Now that you have finished your house, how do you feel about these things ?

a. Somewhat more confident	2
b. Much more confident	4
c. Very confident	9

4. Now that you are living in your house, have any new projects come to mind ?

Yes	15
No	0

If yes: What projects have you considered ?

a. Finish basement	6
b. Deck/porch/fence/patio	4
c. Garage	4
d. Build another house	4
e. Add a room	3
f. Build a small storage building	2
g. Landscaping	2
h. Minor improvements	1

5. Have you considered that you will be using the financial, construction and communications skills that you have in the program in other areas of your life- now that the program has ended ?

Yes	14
No	1

If yes: In what ways do you see yourself using these skills ?

a. Increased confidence in self	6
b. Use of skills for home repair	4
c. Increasing job skills	3
d. Greater understanding of people	3
e. Increased ability to manage personal affairs	2
f. Increased ability to communicate	1
g. To build another house	1

PART II CURRENT ACTIVITIES

FINANCIAL	A	B	C
6.Many adults prepare budgets, are you doing this now ?			
Yes	15	15	15
No	0	0	0
Is this something that you would have been doing 3 years ago ?			
Yes, or Yes, but not to the same extent	8	5	11
No	7	10	4
Do you believe that you are more capable now?			
Yes	15	12	12
No	0	3	3
Why do you feel that you are more capable now ?			
a. Building the house	13	10	10
b. A combination of building the house and training received outside of the program	2	2	2

		A	B	C
8.	Many adults establish checking and savings accounts, arrange mortgages and loans. Are you doing these things now ?			
	Yes	15	15	15
	No	0	0	0
	Is this something that you would have been doing 3 years ago ?			
	Yes, or Yes, but not to the same extent	6	7	8
	No	9	8	7
	Do you feel more confident in these areas now ?			
	Yes	15	14	13
	No		1	2
	If yes: Why do you feel more confident ?			
	a. Building the house	12	13	13
	b. Combination of building the house and training outside of the program	2		
	c. Confidence in ability to handle personal affairs	1	1	
10.	Many adults obtain information about taxes and insurance. Are you doing this now ?			
	Yes	15	15	15
	No	0	0	0
	Were you doing this 3 years ago ?			
	Yes, or yes, but not to the same extent	1	3	3
	No	14	12	12
	Do you feel more capable in these areas now ?			
	Yes	15	14	15
	No	0	1	0
	What do you think brought about the change ?			
	a. Building the house	15	14	13
	b. A combination of building the house and experiences outside of the program		1	1
	c. Don't know			1

CONSTRUCTION SKILLS

12.	Many adults throughout some part of their lives become involved in construction (roofing, siding, electrical, rough plumbing, sheetrock/drywall, rough heating, pouring cement, hanging cupboards, decorating and painting). Are you doing this now ?			
	Yes	15	14	12
	No	0	1	3
	Is this something that you would have been doing 3 years ago ?			
	Yes or yes, but not to the same extent	3	5	5
	No	12	10	10

	A	B	C
Do you feel more capable now ?			
Yes	15	15	15
No	0	0	0
What do you think brought about the change ?			
a. Building the house	15	14	15
b. A combination of building the house and experiences outside of the program		1	

COMMUNICATION AND GROUP PROCESS

14. Many adults share equipment and interact with other adults in groups. Are you doing this now ?			
Yes	14	14	12
No	1	1	3
Is this something that you would have been doing 3 years ago ?			
Yes, or yes, but not to the same extent	2	8	6
No	13	7	9
Do you feel more capable in this area now ?			
Yes	14	11	13
No	1	4	2
If yes: What do you think brought about the change ?			
a. Building the house	15	11	13
b. A combination of building the house and experiences outside of the program		4	2
16. Many adults meet in groups to discuss common interests and activities. Are you doing this now ?			
Yes	13	14	7
No	2	1	8
Is this something that you would have been doing 3 years ago ?			
Yes, or yes, but not to the same extent	1	4	3
No	14	11	12
Do you feel more capable in this area now ?			
Yes	15	14	15
No	0	1	0
What do you think contributed to the change ?			
a. Building the house	14	13	15
b. A combination of building the house and experiences outside of the program	1	2	0

PART III TRANSFERENCE OF SKILLS TO EVERYDAY LIFE

	A	B	C
7. Have you considered that the budgeting skills that you have in the program can be carried over to other areas of your life outside of the program ?			
Yes	12	13	13
No	3	2	2
If yes: In what ways do you see yourself continuing to use these skills ?			
a. More confidence in handling money	7	9	7
b. Greater awareness when buying new products or appliances	7	4	2
c. Skills for employment		1	2
d. More confidence in handling personal affairs	2	1	1
e. More capable at job			1
f. Don't know		1	
9. Have you considered that the financial skills (knowledge of loan procedures,etc.) that you have used in the program can be used in other areas of your life ?			
Yes	12	14	14
No	3	1	1
If yes: In what other areas of your life do you see yourself using these skills ?			
a. Establishing a pattern of saving	2	2	5
b. Becoming established at a financial institution	8	6	3
c. Greater ability to manage personal affairs	3	5	5
d. Addint to future employment skills		1	1
e. Greater confidence in self	1	1	
11. Have you considered that the knowledge that you have gained in BBCL about taxes, liens and insurance can be useful in other areas of your life ?			
Yes	12	7	12
No	3	8	3
If yes: In what other areas do you see yourself using these skills ?			
a. Teaching my children about finance		1	
b. Talking to friends and relatives/others	9	4	3
c. An increase in ability to manage personal affairs	4	2	8
d. Increasing job skills			1
e. Greater sense of self-confidence	1		

CONSTRUCTION SKILLS

		A	B	C
13.	Have you considered that the skills that you have used while building your house can be used in other areas of your life ?			
	Yes	15	14	15
	No		1	
	If yes: In what other areas do you see yourself using these skills ?			
	a. Increasing job skills	6	8	4
	b. Helping friends and relatives	7	5	6
	c. Part-time employment opportunities	1	3	2
	d. Building another house-someday	1	1	2
	e. Using skills for home repair	5	2	1

COMMUNICATION AND GROUP PROCESS

15.	Have you considered that the skills that you have used when working with others while building your house can be used in other areas of your life ?			
	Yes	13	12	12
	No	2	3	3
	If yes: In what areas do you see yourself using these skills ?			
	a. Spouse/children	1	1	
	b. Job	3	3	7
	c. Greater understanding of others	12	10	6

17.	Have you considered that the skills that you have used when discussing in groups while building your house can be used in other areas of your life ?			
	Yes	12	10	7
	No	3	5	8
	If yes: In what other areas do you see yourself using these skills ?			
	a. Spouse/children	2	1	
	b. Job	4	3	2
	c. Relatives and friends	2	1	
	d. Better understanding of working with others		1	3
	e. More confidence in self			3
	f. Increased understanding of others	4	3	1
	g. Increased ability to communicate	2	2	

PART IV AREAS OF LEARNING INTEREST, ORGANIZATION OF LEARNING ACTIVITIES AND USE OF RESOURCES

AREAS OF GENERAL INTEREST IN WHICH INFORMATION HAS BEEN OBTAINED DURING THE PAST YEAR

		A	B	C
18.	Homemaking	10	11	12
19.	Woodworking, refinishing home construction projects	13	15	10
20.	Marriage and the family	5	7	8
21.	Physical activities and sports	6	6	4
22.	Business and finance	12	12	13
23.	Job skills	8	9	6
24.	Hobbies	7	6	10
25.	Religion	1	3	1
26.	Academics	2	3	5
27.	Consumerism	9	9	10
28.	Yard-care	9	15	11
29.	Other			1
30.	No general area of interest			

31. LEARNING PROCESS: Ac= learning by studying, reading, viewing
Do= learning by doing, experiencing

GENERAL AREAS OF INTEREST	A				B				C			
	FIRST		LATER		FIRST		LATER		FIRST		LATER	
	Ac	Do	Ac	Do	Ac	Do	Ac	Do	Ac	Do	Ac	Do
Homemaking	9	1		10	5	6		11	6	6	1	11
Woodworking	12	1		13	14	1		15	4	6	2	8
Marriage and Family	4	1		5	4	3	1	6	2	6		8
Physical activities/sports		6		6	4	2		6		4	1	3
Business and Finance	12			12	12			12	9	4		13
Job skills	7	1		8	6	3		9	3	3		6
Hobbies	1	6		7	2	4		6	2	8	2	8
Religion	1			1	2	1	1	2	1			1
Academics	2		2		3		2	1	5			5
Consumerism	8	1		9	8	1		9	5	5	1	9
Yard-care	7	2		9	12	3		15	6	5		11
Other										1		1

32.	Special areas of interest by group	A	B	C
	Homemaking			1
	Woodworking	10	9	2
	Marriage and Family			3
	Physical activities/sports	1		
	Business and Finance	2	1	3
	Job skills	2		1
	Hobbies			1
	Religion			
	Academics			
	Consumerism	1		1
	Yard-care		4	1
	Other			2
33.	How Planned			
	Self	15	13	13
	Class/instruction	8	7	1
	One-to-one	13	14	6
	Nonhuman resources	3	4	7
34.	Where do you turn for help			
	Intimates	11	11	7
	Acquaintances			5
	Experts/professionals	10	13	10
	Nonhuman resources	2	5	8
	Small group	8	7	
35.	Where carry out learning experience			
	Home	12	15	13
	School	1	1	3
	Public library		3	4
	Employment	2		2
	At buildint site	7	3	
	Other			2
36.	Difficulty starting learning project			
	5 Almost always			
	4		3	1
	3 Sometimes	1	2	2
	2			
	1 Rarely	14	10	12

		A	B	C
37.	Was time a problem			
	5 Almost always	1	2	
	4		1	
	3 Sometimes	2	3	3
	2	1		
	1 Rarely	11	9	12
38.	Was money a problem			
	5 Almost always			1
	4			
	3 Sometimes	2		4
	2		1	1
	1 Rarely			
39.	Resources difficult to find			
	5 Almost always			
	4			
	3 Sometimes			1
	2			
	1 Rarely	15	15	14
40.	Resources difficult to understand			
	5 Almost always			
	4		1	
	3 Sometimes	5	6	3
	2			
	1 Rarely	10	8	12
41.	Prefer to learn by self			
	5 Almost always	4	3	4
	4	1	1	2
	3 Sometimes	6	10	8
	2	1		
	1 Rarely	3	1	1
42.	School as a preparation for life			
	5 Well	1	2	3
	4	3	4	1
	3 Moderately	9	6	10
	2			1
	1 Poorly	2	3	

43. Learning is characterized as	A	B	C
Interesting		3	1
Time			2
Experience	1	3	4
Knowledge		2	1
Understanding			1
Job			1
Doing	1		2
Living			1
Enjoyment/fun	3		1
Hard/difficult	3	1	1
Adventure		1	
Working	1		
Great		1	
Helpful	1	1	
Fulfillment/satisfaction	1	1	
Forcing		1	
Challenge		1	
Everyday	1		
Easy	1		
Communication	1		
Perfection	1		

PART V DEMOGRAPHICS

44. AGE			
20	3		
21	1	1	1
22	1		
23	1	3	6
24		5	2
25	1	2	
26	3	3	1
27	2		1
28	1		
29			2
30			
31	1		1
32			
33	1		
34			
35			
36			
37			
38			
39			
40			
41			
42			1
43			
44		1	

		A	B	C
45.	SEX			
	Female	8	8	8
	Male	7	7	7
46.	Education			
	Less than high school	4	1	
	High school	7	6	10
	Vocational training beyond high school		2	1
	Up to one year of college	4	5	1
	Up to two years of college		1	3
	College graduate	0	0	0
47.	Occupation			
	Medical/technical			3
	Clerical	2	2	2
	Stone mason			1
	Drafting		1	
	Welder		1	
	Truck driver	1	1	
	Plumber		1	
	Painter		1	
	Miller (flour)		1	
	Mechanic		1	
	Bartender			1
	Construction			2
	Homemaker	5	4	1
	Factory worker	7	2	5
48.	Married	12	10	12
49.	Single head of household	1	2	2
50.	Single	2	3	1

BIBLIOGRAPHY

BIBLIOGRAPHY

Bauman, E. N. "Social Interaction in a Self-Help Housing Program." Ph.D. dissertation, New York University, 1956.

Becker, H. S. "Problems of Inference and Proof in Participant Observation." In Qualitative Methodology. Edited by W. Filstead. Chicago: Markham Publishing Co., 1970.

Blumer, H. "Methodological Principles of Empirical Science." In Sociological Methods. Edited by N. Denzin. Chicago: Aldine, 1970.

Borg, W. R., & Gall, M. D. Educational Research. New York: Longman, 1979.

Bradburn, N., & Sudman, S. Improving Interview Method and Question Design. San Francisco: Jossey-Bass, 1979.

Bruyn, S. T. The Human Perspective in Sociology: The Methodology of Participant Observation. Englewood Cliffs, N.J.: Prentic-Hall, Inc., 1966.

Cohn, J. The Palace or the Poorhouse: The American House as a Cultural Symbol. East Lansing: Michigan State University Press, 1979.

Denzin, N. K. The Research Act. A Theoretical Introduction to Sociological Methods. Chicago: Aldine, 1970.

Dewey, J. Democracy and Education. New York: Macmillan, 1916.

_____. Experience and Education. New York: Collier Books, 1938.

Etzioni, A. "Basic Human Needs: Alienation and Inauthority." American Sociological Review 33 (1968).

Filstead, W. Qualitative Methodology: Firsthand Involvement in the Social World. Chicago: Markham Publishing Co., 1970.

Freire, P. Pedagogy of the Oppressed. New York: Continuum, 1970.

Gessner, R., ed. The Democratic Man: Selected Writings of Eduard C. Lindeman. Boston: Beacon Press, 1956.

Gould, R. L. Transformations: Growth and Change in Adult Life. New York: Simon and Schuster, 1978.

Guglielmino, L. "Development of the Self-Directed Learning Readiness Scale." Ph.D. dissertation, University of Georgia, 1977.

Habermas, J. Knowledge and Human Interests. Boston: Beacon Press, 1971.

Harris, S. "We Must Learn to Borrow From the Cultures of Others." Detroit Free Press, October 22, 1982.

Havighurst, R. J. Human Development and Education. New York: Longman, 1952.

Hiemstra, R. The Older Adult and Learning. Lincoln: The University of Nebraska Press, 1975. Syracuse: ERIC Clearinghouse on Adult Education, ED 117 371, 1975.

Houle, C. O. The Inquiring Mind. Madison: The University of Wisconsin Press, 1963.

Illich, I. Deschooling Society. New York: Harper and Row, 1970.

Johnstone, W. C., & Rivera, R. Volunteers for Learning: A Study of the Educational Pursuits of American Adults. Chicago: Aldine, 1965.

Knowles, M. S. Informal Adult Education. New York: Association Press, 1950.

_____. The Modern Practice of Adult Education. New York: Association Press, 1970.

_____. The Adult Learner: A Neglected Species. Houston: Gulf Press, 1973.

Legislative Update. National Rural Housing Coalition, 1016 16th Street West, Washington, D.C., 20036, November 26, 1982.

Levinson, D. J. The Seasons of a Man's Life. New York: Knopf, 1978.

Lindeman, E. C. The Meaning of Adult Education. New York: Republic, 1926.

London, J.; Wenkert, R.; & Hagstrom, W. O. Adult Education and Social Class. Berkeley: Survey Research Center, The University of California, 1963.

Margolis, R. J. Something to Build On: The Future of Self-Help Housing in the Struggle Against Poverty. Washington, D.C.: International Self-Help Housing and the American Friends Service Committee, 1967.

Marshall, R. The Bravo Story. HUD-1451. U.S. Department of Commerce, NTIS, PB-214 175/2, 1972.

Maslow, A. H. Motivation and Personality. New York: Harper and Row, 1954.

_____. The Farther Reaches of Human Nature. New York: Viking Press, 1971.

McMinn, R. D. "The Self-Help Method of Supplying Housing to Rural Low-Income Families." Ph.D. dissertation, The University of Oklahoma, 1974.

Mezirow, J. "A Critical Theory of Adult Learning and Education." Adult Education 32 (Fall 1981).

Morris, E. W., & Winter, M. Housing, Family and Society. New York: John Wiley and Sons, 1978.

Mutual Self-Help Housing. Rural America, 1346 Connecticut Ave., N.W., Washington, D.C., June 1982.

Neugarten, B. L. Middle Age and Aging. Chicago: University of Chicago Press, 1968.

Payne, S. The Art of Asking Questions. Princeton: Princeton University Press, 1951.

Penland, P. Individual Self-Planned Learning in America. Pittsburgh: The University of Pittsburgh Press, 1977.

Pittenger, O. E., & Gooding, C. T. Learning Theories in Educational Practice. New York: John Wiley and Sons, 1971.

Public Law 90-448, 90th Congress, S3497, August 1, 1968, 82 Stat., Section 2.

Rogers, C. R. A Way of Being. Boston: Houghton-Mifflin, 1980.

Schmoll, B. J. "A Description of Mentor/Mentee Relationships Among Persons Engaged in or Preparing for Professional Roles." Ph.D. dissertation, Michigan State University, 1981.

Sheehy, Gail. Passages: Predictable Crises in Adult Life. New York: Dutton, 1976.

Skager, R. Lifelong Education and Evaluation Practice. UNESCO Institute for Education. Oxford: Pergamon Press, 1978.

The Statutes at Large of the United States of America. From March 1933 to June 1934. Vol. 48, Part 1, Public Acts and Resolutions. 73d Congress, Sess. II, CH 847, June 27, 1934 [H.R. 9620.] [Public, No. 479.] National Housing Act.

Stewart, C. J., & Cash, W. B. Interviewing. Principles and Practices. Dubuque: W. C. Brown Publishers, 1974.

Terrace, H., & Parker, S. Psychological Statistics: Nonparametric Statistics. Vol. VI. San Rafael, Calif.: Individual Learning Systems, Inc., 1971.

Tough, A. Learning Without a Teacher. Toronto: The Ontario Institute for Studies in Education, 1967.

_____. The Adult's Learning Projects. Toronto: The Ontario Institute for Studies in Education, 1971.

_____. Interview Schedule for Studying Some Basic Characteristics of Learning Projects. Toronto: The Ontario Institute for Studies in Education, 1975.

Unwin, R. The Story of Self-Help Enterprises. Published under a grant from the Migrant Division of the Office of Economic Opportunity, Washington, D.C., 1974.

U.S. Department of Agriculture. Farmers Home Administration. Self-Help Technical Assistance Grants, Section 523. Rural America. Washington, D.C., 1978.

_____. FmHA Section 502 Rural Housing Loan Policies, Procedures and Authorization. FmHA Instruction 1944-A (Rev. ed.), 1981.

_____. Acts of Congress Administered by or Affecting Farmers Home Administration. Revised May 1982.

U.S. Department of Commerce. Self-Help Housing in Oregon. Oregon University, Eugene. Bureau of Governmental Research and Service. Grant from HUD, Urban Planning Assistance Program, NTIS, PB 200967, 1970.

U.S. Department of Housing and Urban Development. Division of International Affairs. Aided Self-Help Housing: Improvement, Ideas and Methods. Exchange No. 18. Washington, D.C.: Government Printing Office, 1969.

_____. Self-Help Housing in Puerto Rico. International Brief No. 5. Washington, D.C.: Government Printing Office, No. 2300-0188, 1971.