

DOCUMENT RESUME

ED 034 143

AC 006 110

AUTHOR Seaman, Don F., And Others  
TITLE Behavioral Skills for Adult Basic Education: A  
Resource Document and Institute Report.  
INSTITUTION Mississippi State Univ., State College.  
PUB DATE Nov 69  
NOTE 94p.

EDRS PRICE MF-\$0.50 HC-\$4.80  
DESCRIPTORS \*Adult Basic Education, \*Adult Learning,  
\*Disadvantaged Groups, Evaluation Criteria, Guidance  
Counseling, \*Institutes (Training Programs),  
Language Arts, Mathematics, \*Participant  
Characteristics, Reading Instruction, Reading  
Material Selection, Statistical Data

ABSTRACT

A report on the Adult Basic Education teacher-training institute held at Mississippi State University, July 21-August 8, 1969, contains edited presentations of several of the instructional consultants, the contents of the final reports of the four work-study groups, and the results of an extensive evaluation of the institute. Areas covered were: the disadvantaged adult; the adult learner; utilizing andragogy methods to meet adult needs; sociology of the undereducated adult; implications for program development in adult basic education (ABE); teaching reading, and selecting materials in ABE; and guidance and counseling in ABE. Work-study groups report on family living, language arts, mathematics, and reading. Included also are: the biographical characteristics of participants, pre-and post-test data, and participant evaluations. General implications are based on observations from the data and the institute. An appendix lists the institute staff, and gives the training schedule and the raw score differences. (nl)

ED034143

# BEHAVIORAL SKILLS FOR ADULT BASIC EDUCATION

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



**A Resource Document and Institute Report  
Based upon the Mississippi Institute  
for Teacher Training in Adult Basic Education,  
Mississippi State University,  
July 21-August 8, 1969**

**Published November, 1969**

AC 6026110

ED034143

BEHAVIORAL SKILLS FOR ADULT BASIC EDUCATION

by

Don F. Seaman and Emmett T. Kohler

With the assistance of

J. Ronald Phillips and Larry D. Walker

Resource Document and Institute Report

Based upon the Mississippi Institute for Teacher-Training in Adult Basic Education sponsored jointly by the Southern Region Education Board, Mississippi State Department of Education, the College of Education, and the Division of General Extension, Mississippi State University, July 21-August 8, 1969.

Published November, 1969  
Mississippi State University  
State College, Mississippi

## PREFACE

The Adult Basic Education teacher-training institute held at Mississippi State University, July 21-August 8, 1969, was a joint effort of the Southern Region Education Board, Mississippi State Department of Education, the College of Education, and the Division of General Extension, Mississippi State University.

This report is not inclusive of everything that occurred during the institute. It contains (1) edited presentations of several of the instructional consultants, (2) the contents of the final reports of the four work-study groups, and (3) the results of a rather extensive evaluation of the institute.

The report is presented for the purpose of providing valuable information for individuals who are interested in the further development of Adult Basic Education throughout the nation, but it is primarily directed to those in the Southeastern Region. It is hoped that the contents of this report may provide some useful data for those persons engaged in similar activities in teacher-training.

The institute was one part of an overall, comprehensive plan for an attack on illiteracy in Mississippi. Participants included representatives of various agencies who are conducting Adult Basic Education programs throughout the state.

## TABLE OF CONTENTS

	Page
I. PREFACE . . . . .	i
II. LIST OF TABLES . . . . .	iii
III. PRESENTATIONS BY INSTRUCTIONAL CONSULTANTS . . . . .	1
The Disadvantaged Adult . . . . .	2
The Adult Learner . . . . .	6
Utilizing Androgogy Methods to Meet Adult Learner Needs . . . . .	9
Sociology of the Undereducated Adult: Implications for Program Development in ABE . . . . .	14
Teaching Reading in Adult Basic Education . . . . .	18
Selecting Materials in ABE . . . . .	22
Guidance and Counseling in ABE . . . . .	26
IV. WORK-STUDY GROUP REPORTS . . . . .	29
Family Living in ABE . . . . .	30
Language Arts in ABE . . . . .	34
Mathematics in ABE . . . . .	41
Reading in ABE . . . . .	48
V. EVALUATION . . . . .	55
Biographical Characteristics of Participants . . . . .	56
Sex and Race	
Sex and Age-Range	
Race and Age-Range	
Marital Status and Number of Dependents	
Position in ABE and Educational Background	
Number Attending Previous Institutes	
Amount of Experience in ABE	
Type of Population Served in Local Program	
Kinds of Training Desired	
Pre-and-Post Test Data. . . . .	62
Cognitive Change	
Affective Change	
Participant Evaluations . . . . .	69
Weekly Evaluations	
General Evaluation	
General Implications. . . . .	80
Observations from the Data	
Observations from the Institute	
VI. APPENDIX . . . . .	83
Institute Staff . . . . .	84
Training Schedule . . . . .	86
Individual Raw Score Differences . . . . .	89

## LIST OF TABLES

Table	Page
1. Sex and race of participants . . . . .	56
2. Sex and age-range of participants . . . . .	56
3. Age-range and race of participants . . . . .	57
4. Marital status and number of dependents . . . . .	57
5. Position in ABE and educational background of the participants . . . . .	58
6. Position in ABE and number of institutes previously attended by participants . . . . .	59
7. Position in ABE and amount of experience in ABE by the participants . . . . .	59
8. Type of population served by the participants . . . . .	60
9. Position in ABE and kinds of training desired by the participants . . . . .	61
10. Cognitive test statistics . . . . .	62
11. Sub-part ranks of mean values of the cognitive test . .	63
12. Semantic differential affect scores . . . . .	68
13. Analysis of 1st week evaluation responses . . . . .	70
14. Analysis of 2nd week evaluation responses . . . . .	72
15. Analysis of 3rd week evaluation responses . . . . .	73
16. Participants' opinions concerning the general structure of the institute . . . . .	75
17. Cognitive test raw score differences . . . . .	89

## SECTION I

### Presentations by Instructional Consultants

Various instructional consultants participated in the teacher-training institute during its three weeks of activity. Their contributions were well presented and gratefully received by the participants. From those presentations, a judicious selection has been made for inclusion in this final report. Of those selected, all have been edited in order that they would not exceed the space allotted for this section. However, even though the "short-forms" of the presentations cannot be equated with the original versions, it is hoped that the editing process did not lessen the quality of the presentations to a great extent.

## THE DISADVANTAGED ADULT

George Johnson  
Assistant Professor  
Community College Education  
Mississippi State University

My thoughts today will be relative to disadvantaged adults of a special kind--the poor and illiterate. I know it will be difficult for me to share all the diverse opinions which an intellectual group like this possesses, but I shall make an attempt to create a provocative climate as I describe the symptoms of the disadvantaged. In many instances there will be duplication in our methods, but these we feel to be incentives for your benefit since the duplications will serve as added depth to the generalities that I make this morning. The purpose of a conference of this nature cannot and will not be immediately appreciated until one considers all the combined facts. We must develop a frame of reference that will permit us to view the complete vastness of the problem and somehow find ways to minimize, to elevate, and to eliminate, where possible, deprivations in our communities, our states, our nation, and the world. Hopefully, stages of deprivation as we know it on this earth will not become problems on the moon. We hope that we who are here this morning will take not only a step in the right direction for man, but a leap towards prosperity for all mankind.

I shall spend the next few minutes addressing myself to these points-of-view. How can we describe a disadvantaged adult? How many do we have? Where are they located? Who are they? What are some of the general characteristics of their background? Since Mississippi is the focal point, and Dr. Seaman and Dr. Kohler of our staff have developed a comprehensive evaluation study on the subject in our state, I shall only cite data that are relevant. I will make mention of a few examples of the situation in our state, but for the most part, those examples will be left for you to peruse at your own convenience.

When Congress began about six years ago an unprecedented war on poverty, the basic importance of education in every sector was at once very clear. We know now more clearly than those responsible for the enactment that without skills, knowledge and understanding, there can be no durable and long-range solutions to the age-old human problems of vocational competency, slum housing, social injustice, and intellectual poverty that are faded properties of the poor. Thus the individual is denied the very dignity that makes him human and makes him a contributing and functioning member of our society.

When one takes time to read The Other American, a book about poverty in the United States, he finds that he is placed in a state of shock by the data that are presented. And may I point out here that for the sake of clarity, I am equating poverty with "disadvantaged", "poor", and "culturally deprived". Many writers have attempted to define these terms and describe the individuals who fall into these categories. Harrison gave a good example when he presented his definition in terms of those who are denied the minimum amount of health, food, housing, and education that our present stage of scientific life typifies as being necessary

for life in the United States. Again, we can look at poverty in another way, and give some psychological connotations. In this respect, poverty is for those whose places in society are such that they are internal exiles who will inevitably develop attitudes of exceeding pessimism, and who are therefore excluded from taking advantage of existing opportunities.

Then we might look at poverty in terms of what a man and society can be. As long as Americans are poor, the nation as a whole is in poverty. As long as there are poor in America, all of us are poor in America. Let me tell you something about what I've been reading, so you can obtain a frame of reference for our goal. You can look at poverty in many ways, and this is what we plan to do.

A disadvantaged adult is any person who lacks the educational skills which society demands and who tends to be condemned to the economic underworld--to the low paying services and industries, to factories, to sweeping and janitorial duties. Any individual who is pushed toward the relief rolls because of the technological revolution or any individual whose job has been abolished leaving him slim and remote chances of getting similar work are the persons in the United States who for reasons beyond their control cannot help themselves. They often find many factors for making opportunities in advance against them. They are characterized as being born going downward, and most stay down. They are the victims of life who must continuously grovel around in the chaos of deprivation. Let us look at a typical example.

One of the most familiar faces of people of whom we speak this morning is they get sick more than any other group in the society. We can readily see why this happens. They live in slums jammed together in unhygienic conditions with inadequate diets and lack of sufficient medical care. They are sick more often, and when they become ill, they are sick longer than any other group in society. They lose wages and days without pay. They find it difficult to hold a steady job. And because of these facts, they cannot afford nutritious diets or pay for good doctors. The disadvantaged adult is the individual who lacks the social energy and political strength to tear away misery or to turn it into a cause. Only in the larger affluent society with its help and resources is it possible for these people to help themselves. These are the individuals who come from more homes where the father is not known, where there are less marriages, more pregnancies by mother and daughter, and more people on welfare. To this end, many of them will come to you without ever having experienced one moment of love and affection in 20, 30, 40, 50, or 60 years of living.

Yes, these are the individuals who look upon the policeman, for example, as the one who arrests and beats them. In short, these are the adults whose fate is in your hand, and the reason we have come to this conference. They are a big reason for you to come and discuss your experiences. For lest we forget, we must find ways to verify our unusual beliefs about these people. I want to remind you that there are different spokes for different folds. And if you want to be successful, you must walk their walk and talk their talk.

There is a language of the poor and the disadvantaged; there is a psychology of the poor and disadvantaged. All of this you must know. The statistics of today show that there are from 40 to 60 million people who earn below the three thousand dollar cut-off and are thus considered "poor". Now this is approximately 25% of the population depending on which book you are reading. This is a money basis. Many professional teachers in Mississippi last year were classified as being poor by this criteria. As technology has grown, their share of prosperity has decreased and their participation in recession has increased. The identity of the major groups in America have been made fairly clear. The names some are called are the aged, the minority, industrial rejects, agricultural workers, and various others. In one study there were 32 million classified as poor. Of these, 11 million were under 18, and over 8 million were over 65 years of age. Do you see the significance of this? Over 6 million were non-white, and 8 million were over 21 with less than an 8th grade education. The poor and disadvantaged can be described statistically and analyzed as a group, but they need a novelist as well as a sociologist to see them. They need an American Dickens to recall the color and texture of their lives.

There are historic and economic forces that keep the poor down, and there are human beings who help out in this business. Willingly or unwillingly, there are many sociological and political reasons why the disadvantaged adult is not seen, and there are mixed conceptions and prejudices that literally blur our eyes. If you must be understood, or if you are to make necessary acts so that the disadvantaged adult can be seen, then this is the students' protests, the garbage strikers in Memphis, or the Viet Nam demonstrators. We are too drunk with wine of the world to hear them. So they say to us, "Society, you don't see or hear until we burn." Yet we counter these actions and say to this type of familiar action, "The poor should pick themselves up by the bootstraps and tie their shoes." Yet when we look, they do not have shoes; they are bare-footed. We also say they all have big cars. Like me, my father, and my grandfather, they should pay their way. But they themselves live on the dole and cheap payment.

I think if you look back, and look closely, you have a chance to sense the real explanation of being poor, of being disadvantaged, of being culturally deprived. This lies in one fact: these people made the one mistake of being born of the wrong parents, in the wrong section of the country, state, county, or city. They are in the wrong industry or living in the wrong ethnic or racial group. Most of them have never had the chance to become a part of the un-disadvantaged, the un-culturally deprived, or the un-poor.

Those of you who are deeply religious in this group, who have accepted the theologian concept, and who wish to establish contact with this group had better realize that these people accept the following lines as gold:

"The Lord went up into the mountains, and then he said:  
 Blessed are the poor in spirit for theirs is the kingdom of heaven.  
 Blessed are the meek for they shall inherit the earth.  
 Blessed are those who hunger and thirst after righteousness for they shall be filled.  
 Blessed are the pure in heart for they shall see God.  
 Blessed are the peacemakers for they shall be called the children of God."

They go on to say to rejoice and be glad, for great is your reward in Heaven.

These people have believed this religiously. This is where the paradox lies. Along comes Rockwell, Charmichael, Rap Brown, etc., and play on people's emotions, and say they will lead the people to the promised land. Those of you who are poetic will surely recognize where I am borrowing these words. This expresses very well that God made man in his own image.

"Boughed by the weights of centuries,  
 He leans upon his hoe,  
 And gazes upon the ground  
 With the emptiness of ages upon his face,  
 And on his back the burdens of the world.  
 Who made him? Did draft him in despair?  
 A face that greives not and never hopes.  
 . . . . .  
 Is this the thing that the Lord God made?  
 To have dominion over sea and land?"

Then we ask, "What shall we do with these who come to us like the man with the hoe, who are culturally disadvantaged, economically deprived, poor, unable to satisfy their minimum needs? What will we say; how will we act? Will we treat them with indifference, or will we help them in their search for that promised land in which they have been living, but which they have never really found? The challenge is before us. Good luck to each of you in your efforts to meet this challenge.

## THE ADULT LEARNER

Donnie Dutton, Ph. D.  
Associate Professor  
Adult Education  
Memphis State University

Our task here today is to examine what is known about the adult learner. We will attempt to accomplish this in the following fashion, time permitting.

### Physiological Characteristics of Adults<sup>1</sup>

#### Visual Acuity

What happens to an individual's eyes as he grows older? Visual acuity appears to attain its maximum at about eighteen years of age and declines continuously thereafter. There is a gradual but steady decline from about age eighteen to forty-two, a very sharp decline from age forty-two to fifty-five, and a steady decline thereafter.

#### Audio Acuity

What happens to the adult's ability to hear as he ages? Research tells us that an individual's audio acuity reaches its maximum between ten and fifteen years of age. It very gradually but consistently declines thereafter to about age sixty-five and tends to level off.

Older people tend to slow up in their reaction to sound. Not only do they decline in their ability to hear sounds but are slower to hear--to translate the meaning of the sound and act in response to it.

#### General Physical Changes

In addition to a loss of vision and hearing, does the adult tend to change in other ways that might have implications for you as teachers of adults? Some of these changes are:

1. Less resistance for stresses of heat, cold, and temperature changes.
2. Motor abilities decrease gradually.
3. Energy loss becomes greater.
4. Decreased strength of skeletal muscle.
5. Bones become more fragile and more exposed to fracture.
6. Speed and reaction time greatly reduced.

---

<sup>1</sup>Samuel E. Hand, A Review of Physiological and Psychological Changes in Aging and Their Implications for Teachers of Adults (Tallahassee: Florida State Department of Education, July, 1965).

Obviously, you can probably think of many implications that these changes might suggest. I will give you one now. For example, arrange for an accessible meeting place--one which requires a minimum of stair climbing.

### Learning Ability

What about the age old statement of "You can't teach an old dog new tricks." Can adults learn, or is age such a deterrent to the learning process that we are wasting our time working with the older clientele?

Without getting into a discourse on theory, let me simply say that several researchers have concluded that the adult's ability to learn declines with age. However, Lorge came along and found that adults were being penalized by the time factor--that because of the physiological factors that we have been discussing, the adult needed more time to do the same tasks as younger persons.

### Characteristics of Adults As Compared with Children<sup>2</sup>

Now, let us shift our attention to certain characteristics that tend to distinguish adult learners from childhood learners. In general, it is felt that we can state that the adult learner:

1. Is likely to be more rigid in his thinking.
2. Requires a longer time to perform learning tasks.
3. Is more impatient in the pursuit of learning objectives.
4. Requires more and better light for study tasks.
5. Has restricted powers of adjustment to external temperature changes and to distractions as age progresses.
6. Encounters greater difficulty in remembering isolated facts.
7. Suffers more from being deprived of success.
8. Is less willing to adopt new ways.
9. Has a number of responsibilities competing for his time that are more compelling than education.
10. Has more experience in living.
11. Has made a momentous voluntary decision in deciding to return to school.
12. Is more realistic.
13. Has needs which are more concrete and immediate than those of children.
14. Is not a member of a captive audience.
15. Is used to being treated as a mature person and resents having teachers "talk down" to him.
16. Is more likely to be a member of a heterogenous group than are children.
17. In general, can learn as well as youth.
18. May attend classes with mixed set of motives.
19. May be fatigued upon arriving at class.

---

<sup>2</sup>NAPSAE, A Guide for Teacher Trainers in Adult Basic Education (Washington, D. C.: National Association for Public School Adult Education, 1966), pp. II 18-19.

## Characteristics of Undereducated Adults <sup>3</sup>

Up to this point we have examined some of the physiological characteristics of adults which may have an effect on the learning situation. This was followed by discussing characteristics which were felt to distinguish the adult learner from the childhood learner.

Now, let us zero in, so to speak, on the undereducated adult or the adult basic education student. This is the area of most concern to those of you present today. Are there certain characteristics of the undereducated adult in addition to all of the things we have covered that tends to single him out as unique? Most authorities think so.

Let me preface this section by saying that the causes of illiteracy are many and varied. It is extremely important for you as teachers to recognize that there are numerous reasons why this phenomenon exists. For example, when some of these adults were children, no schools were available to them. Others had to go to work at an early age for family survival and were, therefore, not able to afford the luxury of scholarly learning. Some faced unhappy school experiences, and the list of reasons goes on and on.

The following characteristics can be found in most adults who are in need of basic education:

1. Lack of self confidence.
2. Fear of school.
3. Living in conditions of economic poverty.
4. Probably below average in scholastic aptitude.
5. Culturally deprived.
6. Values, attitudes, and goals differ from upper and middle class norms.
7. Weak motivation.
8. Unusually sensitive to non-verbal forms of communication.
9. Feeling of helplessness.
10. Varying levels of intelligence.
11. Live for today philosophy.
12. Hostility towards authority.
13. Unacceptable behavior.
14. Reticence.
15. Use of defense mechanisms.
16. Need for status.
17. Tendency to lose interest.

It behooves you as educators to attempt to understand the characteristics of adults that might affect the learning process. You should plan a variety of participating activities for the students, always observing, listening, thinking, remembering, imagining, discussing, answering, questioning, feeling, touching, moving, agreeing, and disagreeing. The more the participation on the part of the adult, the more he will be motivated, and the more he will learn.

---

<sup>3</sup>Ibid., pp. II 4-14.

## UTILIZING ANDROGOGY METHODS TO MEET ADULT LEARNER NEEDS

Dr. Harry E. Frank  
Director, Adult Education  
Auburn University  
Auburn, Alabama

Since we are living in the space age, we might compare our adult education programs to a rocket. Our rocket will be called Androgogy I. It will be directed toward meeting the objectives of the target audience who are our adult basic education learners. Our rocket is poised on a launching pad which is the philosophical base underlying our adult education programs. This philosophical base provides a firm foundation for the launching of our rocket.

In order to propel our rocket from its base, we must have powerful propellants. The primary forces lifting our adult educational programs off the pad and directing them toward proper objectives are the occupational, social, and cultural demands, and the physical and human resources that are available.

The rocket receives its initial blast from the main engines; then the payload separates and proceeds toward the objective. The payload of Androgogy I consists of learning programs, and its objective is the needs of adult audiences. Androgogy consists of programs with relevant content. The methods, materials, procedures, and resources are the booster rockets that provide thrust and guidance through the atmosphere toward the goal of meeting the general and specific objectives of the adult basic education learner. Just as a rocket has difficulty in going through the atmosphere, Androgogy I has barriers to overcome in reaching its objectives.

A sound philosophical base is necessary for any type of program. We might consider our philosophy to be that education can bring about change in individuals, that adults can learn, and that there is a public responsibility for the education of adults as well as youth. These principles are in keeping with the philosophy that every person has individual worth, and that individuals should be helped to develop to their maximum capacity. In order to do this, we need adequate adult educational facilities, as well as competent, trained, and perceptive personnel to aid learners in the learning process.

We also have a number of cultural and societal influences that affect our programs. We know that the cultural background of the ABE learner is often limited in scope and consequently affects his goals. Expanded learning activities may be needed to assist in making adjustments to the cultural setting in which the individual aspires. The cultural chasm between the learner and the teacher may need to be recognized and narrowed. The peer group outlook and family influences are strong motivational forces that give impetus to our adult learning programs.

We have a number of physical and human resources that are not being fully utilized. The underdeveloped abilities of the target

audience certainly represent a waste in potential ability. The affluent society in which we live can afford education for persons of all ages. There are un-utilized and under-utilized resources that can be brought into use to help us in our educational programs. There is a vast amount of basic knowledge that can be transmitted to the adults. We have numerous groups and organizations with goals similar to the ABE programs. They can help in obtaining moral and financial support from the government and other agencies to help promote programs that are related to the occupational, cultural and societal needs of adults.

The occupational, cultural, and societal needs and the human and physical resources are forces propelling our adult educational program toward the general objectives of the program. These general objectives may be stated in terms of assisting students and improving their life roles by providing opportunity to develop: (1) communicative abilities, (2) computational abilities, (3) knowledge and skills related to work, (4) understanding of civic responsibilities, (5) wholesome attitudes and interests, (6) ability to apply knowledge, (7) learning efficiency, (8) the development of the self potential, and (9) confidence of the individual to perform effectively in society. With these strong forces propelling the adult educational programs toward helping individuals reach their general objectives, the progress made toward these goals can be further maximized by surmounting or avoiding the existing barriers to learning.

In identifying these barriers we may need to look at the physical attributes of the individual learners. We should become acquainted with the visual, the auditory, and the general physical condition of the individual that may prevent his maximum performance. Many adult learners have rusty learning tools which, through lack of use and lack of keeping those skills sharpened, limit the individual's learning. The motivation of the individual should be considered because it is often a barrier to learning. The positive aspects of social mobility and opportunities for work advancement may help overcome such barriers.

The capacity of the individual to learn may be somewhat limited in terms of knowledge, skills or response to change. We often observe individuals who do not learn as well as they could because of the belief-disbelief system that may be based primarily on emotional response instead of on a background of knowledge.

There are also a number of time limitations that prevent individuals from participating to the fullest extent in educational activities. Some of these are set by occupational demands and others by family and societal requirements. Other real limiting conditions such as transportation, care of the family, alternate activities in the church and social activities, and the time of class meetings during the year when the educational activities are carried out influence attendance and performance of the learner.

If we consider our learning program has been launched with a number of favorable forces and has encountered barriers to learning, then it is up to the people providing the educational activities to utilize methods, materials, procedures, and resources in order to get the content

of the learning program guided toward the general and specific objectives of the individuals of the group. We may say that in the space program computers do most of the work in guiding a rocket toward its goal, but, in Androgogy, the teacher is the most important element in guiding the learning program. The teacher needs to recognize that individuals' goals may be different and will change from time to time. This would indicate that at times the learning should be in the affective area; that is, in terms of attitudes, interest, and values. At other times the learning activities and goals might be more within the cognitive area where the knowledge and understandings are necessary for the development of the individual. On the other hand, there may be times when the psycho-motor skills should be emphasized. The teacher's job is to help the students identify specific objectives and to assist them toward these objectives by guiding them through the barriers to learning with appropriate methods, materials, procedures, and resources that are available for the learning process. Certain methods are more appropriate for particular objectives. Just as the astronaut needs to guide his rocket toward a specific objective, then the teacher needs to help identify specific objectives and use the appropriate methods in reaching those objectives. When we are attempting to reach an objective of knowledge development, that is, a generalization and internalization of information, the teacher might be more inclined to use methods such as oral instruction or individual instruction along with audio-visual aids and utilization of discussions that are information based. If the teacher is assisting in bringing about understandings as particular objectives; that is, the application of information to experience, then it might be more effective to utilize the group discussion, the demonstration, the individual instruction, along with audio-visual aids and role planning to bring about these understandings.

If the primary objective is to bring about the development of skills or the incorporation of new ways through practice, the supervised practice or drill methods may be used extensively with individual instruction. Demonstrations may also be effective for this type learning as are audio-visual and oral instructions by the teacher. In the area of affective learning, the attitudes or adoption of new feelings might be developed through using the group discussion rather frequently and by carrying out role playing. Individual instruction and utilization of audio-visual aids also help in bringing about attitudinal change. Another area of affective learning--values or the adoption of ranking of beliefs--might be taught through individual instruction, group discussion, role playing, audio-visual instruction, and field trips. These methods might also be used in developing interest when the teacher is trying to provide satisfying exposure to new activities.

Just as the rocket is guided by the computer which in turn is assisted by manual manipulations, the Adult Basic Education teacher must manipulate, utilize, combine, and experiment with different programs that will bring about the direction of the individual towards the specific goals. It seems that if our rocket, Androgogy I, is to reach the target of specific and general objectives or the individuals in the group, the teacher will need to consider all the forces that help get the rocket off the ground.

Androgogy--the art and science of teaching adults--through utilization of the methods, materials, procedures, and resources available should guide adults through the barriers of learning to the attainment of their goals.

"Andragogy I"

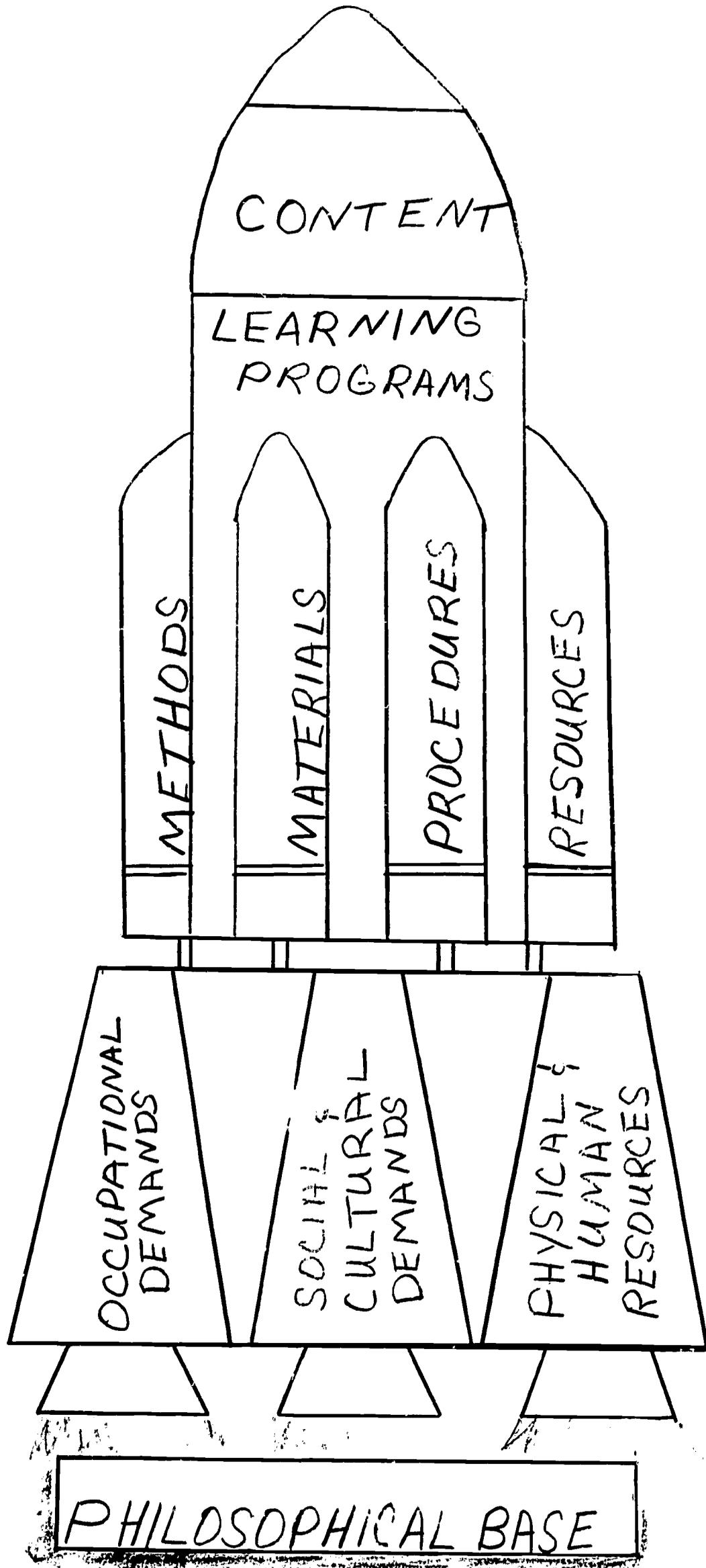


Figure 1. Andragogy in adult basic education

SOCIOLOGY OF THE UNDEREDUCATED ADULT:  
IMPLICATIONS FOR PROGRAM DEVELOPMENT IN ABE

Dr. Irwin R. Jahns  
Dept. of Adult Education  
Florida State University  
Tallahassee, Florida

The Name of the Game is "Change"

The name of the game we are playing is "change". Our reason for existing is to educate--to facilitate the inculcation of culture by our target population. This culture includes the vast array of material and immaterial aspects which man has derived. As educators we are instruments of society who are charged with the responsibility to diffuse components of our culture. Our collective goal is to facilitate the continuing socialization of people in our society. (Note that the notion of continuing education is used synonymously with continuing socialization.) This is an influence process, but we are not alone in this process.

Our students do not live in a vacuum. They have been, and are being continuously exposed to pressures that try to influence their behavior. Friends, family, neighbors, and relatives are among the many who try to influence our students. They exert tremendous pressure for stability or change. Organizations exert influence too--the church, the social organization, the club. An all-pervasive influence that must be reckoned with is the mass media--television, movies, papers, and magazines. How much positive influence can we exert in competition with all of these other forces? How can we hope to influence the direction of change in our students.

Approaches to Understanding Behavioral Change

It would seem obvious that we aren't going to have much influence if we go about our educational tasks in a random way. What guides might we find from research that will help us do a more effective job? In looking over the literature it soon becomes apparent that sociologists and psychologists do not agree. The four approaches that we shall discuss do not purport to be either sociological or psychological; they encompass elements of both--they are social-psychological.

1. The learning orientations of adults. Dr. Curil Houle, of the University of Chicago, observed that people who participate in adult education do not do so for the same reasons. After exploring the nature of participation, he concluded that three orientations seemed to prevail. These three orientations are as follows:

- a. activity oriented
- b. goal oriented
- c. learning oriented

The activity-oriented person participated primarily because adult education was an event that was more acceptable than other alternatives the adult had available to him. The adult student wanted something to

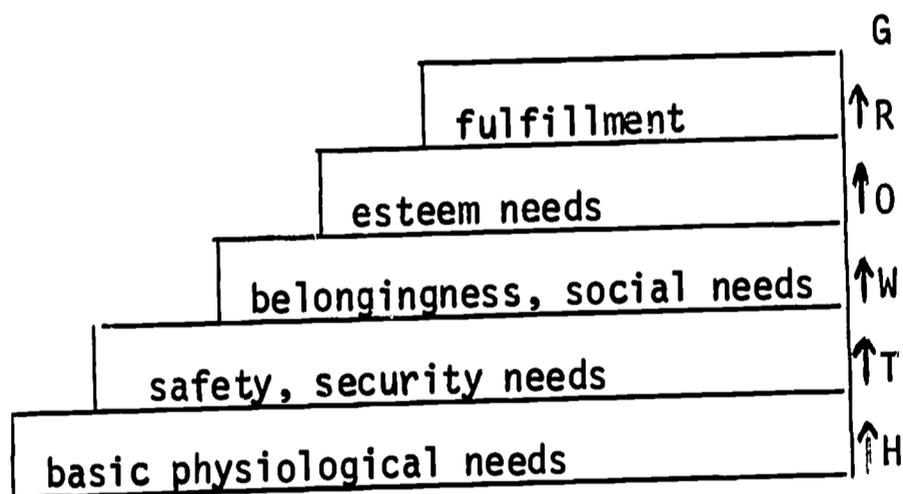
do and adult education was available. This may have been seen as a form of socializing for the adult. Through the educational offering he met people, got away from home, and in general had a pleasant time. The goal-oriented participant was enrolled in adult education primarily because he wanted to acquire some particular end which he saw desirable--such as a certificate, some particular skill, or competence in some subject area. When this goal was achieved, he would not likely re-enroll in other adult offerings until a new goal was identified. The third orientation was termed learning-oriented. Participants who were learning-oriented tended to see education as a continuous thing which was an end in itself. They enrolled in anything and everything.

We might ask ourselves "What are the learning orientations of our students in adult basic education?" Does this suggest how we might go about recruiting and retaining students in our classrooms?

2. Hierarchy of Needs. A second approach which helps us understand the behavior of people in general was formulated by Abraham Maslow in a book entitled Motivation and Personality. Maslow's hierarchy is based on the idea that the human is fundamentally a growth-oriented being and that man will continuously strive to be that which he has the potential to be. This is an optimistic notion that contradicts the Freudian idea that man is basically propelled by selfish motives.

Embodied in this notion is the idea that things can go wrong which block or inhibit man's latent growth potential. A failure to fulfill individual needs at any given level is sufficient to inhibit individual movement toward his potential. This hierarchy of needs is set forth in Figure 3.

Figure 3 - The Hierarchy of Needs (adapted from Maslow, Motivation and Personality)



Does this schema suggest what might be considered in our programs in order for our students to become effectively functioning members of our society? Many people think it does.

3. Social Expectations. A third approach which can be used to understand human behavior has to do with social expectations. This notion is based on the premise that most people behave in ways that are consistent with the expectations others have of them, whether these persons are real or imaginary. If a person, especially a

respected or influential person, expects someone else to behave in a particular way, he will likely behave that way, at least upon occasion. That is, in the presence of the other person, or otherwise under his influence, he would less likely inhibit the expected behavior than he would under other circumstances. (This is almost saying we have a self-fulfilling prophecy at work in our relations with other people, which might explain why students who we expect to fail, usually do, and those we expect to do well, usually do.)

These expectations are learned from childhood, in some rather complex ways, and they influence what we think of ourselves and the world in which we live--who we are and our relationships in the world. Sociologists call this the "looking-glass self"--we see ourselves as other people reflect us. This can readily be observed in young people--how do they learn whether or not they are good ball players or good runners? They soon learn they might be good at some things and poor at others. Their reactions to other people's reflections might be to conform to this expectation or to fight the expectation in which case they possibly might try to become just the opposite.

4. Developmental Tasks. The fourth way through which we can understand the behavior of our students is what are known as developmental tasks. These tasks are merely basic problems that are generated in the process of living. They must be mastered if we are to live successfully. For instance, the baby must learn to nurse. Later he must learn to crawl and to walk. Somewhere along the way he must learn to differentiate between elements in the environment so that he will not be harmed. If these tasks are not mastered, then the infant will not be able to succeed in later stages of life where these tasks are expected and required--at least he will not be able to get along as well.

But not all of the developmental tasks are based on the maturation or aging of our physical bodies. Some are social, like learning to get along with others, such as brothers and age-mates. Whereas the way in which one masters maturational tasks is dictated by nature, the way one masters socially generated tasks is dictated by the social environment in which the individual finds himself.

Do adults have particular developmental tasks which must be mastered? Yes, they do. The aging of our bodies exerts an influence which we are not likely aware of until our early middle years. Those people over 40 are usually quite aware of aging and the adjustments that must be made. But the tasks that the adult must master are more social than maturational in nature. How well they are mastered is in part determined by the biological machinery which God has given us. They are more determined, however, by social expectations and the individual aspirations we hold.

Another notion that Havighurst talks about that is related to developmental tasks is the notion of teachable moment. When a task comes to the conscious awareness of the individual, and when he commits himself to meeting that task, then the individual looks around for information or help on how to do this. This is the teachable moment. This is when the individual is most amenable to help and subject to influence, for good or for bad.

How do we adult educators cope with these teachable moments? Generally we ignore them. We are so busy implementing the curriculum we fail to capitalize on situations that could have more meaningful value to our students. So we lose, by default, some of our influence potential.

To what extent can, and should, adult education be concerned with influencing the adult to meet his developmental tasks? What changes would have to come about for adult education to do this?

In summary, if our game is change, we can ask ourselves in light of the above formulations, "What are the forces which aid and the forces which impede change on the part of our students?" Also, "What are the forces that aid or impede our designing a curriculum which is more focused on the particular problems and concerns of our students?"

## TEACHING READING IN ADULT BASIC EDUCATION

Carol M. Geeslin  
Reading Clinician  
Reading, Education, and Developmental Center  
Madison, Florida

The first several weeks of school are, and always have been, the most hectic for any teacher. To insure a good beginning, each student must meet with immediate success, and the teacher has the job of placing each student in materials that offer immediate success. To place a student in materials, a teacher should use an informal reading inventory (often called an "informal" or a "quick and dirty") to find the proper difficulty level for the student.

The informal reading inventory should place the student into one of the following reading levels:

### 1. Reading levels

- a. The independent reading level is the highest level at which the student reads orally with 5% or fewer errors.
  - (1) The independent level is too easy for students to use to learn to read.
  - (2) The ease of the independent level makes it perfect for reading to gather information in content areas (reading to learn).
- b. The instructional reading level is the level at which the student reads orally with greater than 5% errors but less than 10% errors.
  - (1) The instructional level is a range of difficulties. The more confident students may be given material which causes 9%, 10%, or even 11% reading errors. Less confident students, or students using the material with some concept load, should be given material which causes only 7%, 6%, or even 5% reading errors.
  - (2) Students who are struggling with the concept load of a content area should not have the reading difficulty of material on their instructional level. Instructional level material is for reading instruction, and not content area instruction.
- c. The frustrational reading level is the lowest level at which the student reads orally with greater than 10% reading errors.
  - (1) Students on their frustrational levels learn very little, except that reading is a difficult and unpleasant task.

- (2) Students on their frustrational levels show all the signs of anxiety; twisting their hair, rubbing their palms on their legs, sweating, refusal to try, etc.
- (3) Students should be kept on their instructional or independent levels, not their frustration levels.

### Determining Reading Levels

In order to determine the level in which to place a student, certain kinds of errors must be counted. Those errors are as follows:

- (1) Reversals
- (2) Substitutions
- (3) Additions
- (4) Omissions - except dialectical dropped endings
- (5) Hesitations
- (6) Repetitions
  - a. Each repetition counts as one error
  - b. Any other error corrected by a repetition is repeated.
- (7) Mispronunciation - except for regional or dialectical pronunciations.
- (8) Help
- (9) Disregard of pronunciation

Giving a "quick and dirty" informal reading inventory and determining the number of errors made does not tell the teacher all she needs to know about a student's reading ability. The next step is to ask the questions "What kind of errors did the student make? What do these errors reveal about this student's reading?" An analysis of specific reading errors provides the teacher new insight about skills the student needs to be taught.

### Individual Skills Kit

In the course of teaching reading, you will often find a student needing extra work in a particular skill area or several specifiable areas. When this occurs, you are faced with the problem of finding extensive exercises for raising the student's ability level in that skill. This is a difficult assignment. Most workbooks do not contain sufficient exercises on any one skill for developing a student's ability in that skill. Moreover, it is often difficult to acquire a variety of materials on one grade level for specific skill development. True, through the years, most teachers have accumulated an extensive collection of isolated workbooks, texts, and worksheets. But the time consumed looking through the entire assortment for exercises, makes the material almost unusable. What is needed is an orderly arrangement, by grade level, of exercises developing a particular skill or skills. What is needed is an optimum material: an individual skills kit.

The individual skills kit is a box divided into readability levels. Each readability level is divided into skill areas, with folders under

each skill area containing exercises on different aspects of the main skill. For example, in readability level three, the main areas might be comprehension, word recognition, study skills, and word meaning. Folders under the division of comprehension might include exercises in such specific skills as: main idea, noting details, inferences, following directions, and cause and effect. A sample index of skills for the kit is listed on page 6 of this paper. After reviewing this index, it is obvious that not all of the skills listed are appropriate for inclusion in each readability level. Certainly, the study skills and some of the comprehension skills are not appropriate for readability level one. In constructing the kit, you will have to decide which of these skills should be included in each level.

A variety of materials may be used in constructing a skills kit. Old workbooks, texts, or worksheets, may be cut up and used very successfully. This is an excellent time for teachers to make use of materials accumulated through years of teaching and also of materials made by teachers. Another source of materials is publishing companies. Many published materials are low in cost and have a format especially conducive to kit construction.

#### How To Make A Reading Skills Kit

1. Decide which readability level you want to work with.
2. Choose a main skill area from the sample index such as word meaning and label a divider for it.
3. Label a folder with one of the specific skills in that area: such as antonyms, synonyms, homonyms, etc.
4. Find a material that belongs to you, personally, not the school, in your chosen readability level and look through it for an example of the skill you have chosen.
5. If you find an example use a razor blade and cut out that page.
6. When you have cut out the page, place it between two sheets of acetate and staple the acetate together at the four corners. Place the finished product in its appropriate folder.
7. Repeat this procedure for all the skill areas for every grade level.
8. Make answer cards for each lesson or group of lessons.

Once you have completed construction of the individual skills kit, it is time to put it to good use. The skills kit can be used as a supplement to the basic reading program or for remedial work with students needing concentrated study in a specific skill area.

When a student needs special help in a skill, he should not have to attend to the difficult aspects of reading such as vocabulary or concept load, as well as to learning the skill. For this reason, when using the skills kit for remedial help, it is wise to have students

working on skills on their independent level. If the kit is used as a part of the basic reading program, the student should work in the kit on the same level as his instructional level. Therefore, a student's instructional and independent levels must be known.

The ideas and suggestions mentioned in this paper have been specifically directed to the area of reading itself. However, reading skills kits can be constructed for the areas of science and math, or any of the other content areas. Teachers should assess the needs of their students. They should examine the structure of the courses they teach. Then the teacher will know the areas in which construction of skills kits might be most beneficial.

## SELECTING MATERIALS IN ABE

Mrs. Dorothy Minkoff  
Adult Education Research Center  
Newark State College

When we talk about materials, we talk about materials for specific kinds of things. We also talk about materials to work with different kinds of people with different kinds of problems. So that you all will know what I'm talking about during the program (writes on board), N/E means Non-English-speaking individuals, and ESL means English as a second language. The materials and methods used are entirely different. TSAE is a new term which means "teaching standard American English." We think students who have dialects should be taught standard American English. They should be taught as if they are learning a second language. By this we mean English which you would need while getting along on the job. We are not destroying his language with which he comes to you, but essentially you are teaching him another language. When you destroy a person's native language, you destroy his native culture. We do not want to do this.

The first thing I would like to do to familiarize you with materials is to start out by giving you what I think is the goal or the reason I believe you were hired as a teacher. It is to correct as quickly as possible the educational deficiencies of your students. Now that might not sit too well with some people. I didn't say you change his life style, and I didn't say you change him to make him a better person or citizen. I said you corrected his educational deficiencies. As far as I am concerned, this is what his education is for. First you start with this; other things the individual wants will follow. Then the question is asked, "How do we correct educational deficiencies quickly?"

I feel that one way is to develop a program based on the effective use of curricular materials, but be careful that specific materials are chosen and others are not chosen. The first thing you must know is which skills you are going to be teaching. There are two areas in teaching reading; one is word-meaning and the other is comprehension. These are the very basic skills of word identification. The first kind of skill is the picture clues with which you are all familiar and sight words which are identifications and memorizations. Then we have independent techniques without which you will never become a reader. You use the other as long as you teach reading, but the student must be able to use context clues to comprehend meaning. He must be able to break down words phonetically, by structure, and be able to use the dictionary to know the multi-meanings of words. These have to be taught.

In the area of comprehension we have a context, that is, the situation which contains the sentence. Comprehension means fact. Interpretation is drawing conclusions which is a higher level intellectual skill. Critical reading is the next higher level, followed by specific word meanings. This is extremely critical because how we use words and our frequency of using multi-meaning words is a key to how well we read. Those of you who are not familiar with reading people might be interested in a book on the teaching of reading called Foundations of Reading Instruction by Betts. It's old, but it is the

most comprehensive in the field. It is for children, but can also be used for adults. Betts started some of the first reading clinics in the country.

I don't say that you first have to teach the short sounds, then something else. There is no particular sequence to teach reading skills except that you teach the foundations first. How well you teach these foundations depends upon your materials and your purpose. A person who is not particularly listening-oriented cannot be taught phonetically. You must teach him another way. A person with sight problems--you must find another way of teaching him besides by sight. So the way depends on the individual and also the material. Once you learn various sequences of teaching reading, then you are on your way to saying, "Here is a piece of material. What do I look for in selection?"

I have broken it down into three areas--subject matter, skill development, and other criteria. The subject matter you deal with should be adult oriented. It should be about jobs, consumer problems, and the day-to-day adult life. It should deal with current issues--war, peace, taxes, etc. It should reflect meaningful life styles for the black. Materials should reflect what is going on in the world.

Skill development must be sequential. You should not try to teach a higher level until the foundation is laid. The material should be logical and presented in logical sequence or else the adult will turn you off. It should be continually reinforced and skills should be reviewed frequently. Skills should be taught as a continuous thing throughout the material because only through practice do you integrate the skill. When at all possible, the material, the subject matter, and the skill development should be integrated. For instance, when you are teaching reading you should be teaching writing at the same time, and if you are teaching writing, you should be teaching spelling at the same time. Especially in teaching math, the material should help develop the individual's ability to use other materials. Materials should be flexible enough to allow for individual differences. The major thing in skill development is that students should always experience success. Success breeds success.

Another criterion is the fact that basic reading materials should illustrate. As you get into the higher skills, they're really not that necessary, but illustrations have to explain and must be multi-ethnic. If you are working with a multi-racial group. Pictures must be of adults, not children. Directions must be clear. Students must be able to follow directions themselves when possible. Materials should have a teacher's manual that is separate from the book. The manual should not be a step-by-step presentation of the material from the book, but rather the manual should present guides for the teacher. You should not become too dependent on the manual.

I'd like to emphasize some of the major concepts for consideration that I think you should be aware of:

1. There are individual differences among all learners. I can't emphasize this enough.

2. All adult students are voluntary students. If you don't give him what he needs, he turns you off.
3. All learning must be done in the classroom. It's not that I don't believe in homework; I do. But don't expect the student to take his book home and learn on his own. The basic teaching should be under direction of the teacher.
4. You must give these things a chance for continuous mastery and success. And you must restore confidence in the student's ability to learn. You will discover that a great many adults think they cannot learn. Hopefully the material will not reflect the school-like atmosphere.
5. The materials should be "tailor-made" for each student. You have heard teachers say to publishers, "I have your complete material system; this is your complete program."

(At this point, the Scope and Sequence Chart was introduced.)

After you learn and become familiar with the sequence of skills, you may wonder how I choose specific materials for specific students. I don't know if testing is a dirty word or not, but there are three different kinds of testing we are concerned with. First is either screening or placement. This is usually a short test, and it will give you a gross grade placement. Grade placement is no good because you have to give a diagnostic test. From that test you should learn what specific skills the student has and does not have. If it's a competent test, you will know what materials to give him. The first thing to do is to isolate the specific area of skills deficiency of each individual student. After he becomes familiar with the teacher and the class, then it is time to give him an individual test.

After you have tested him, it is the teacher's job to develop a program of individual skills development. Sit down with the student and explain to him the test results and explain to him what you are going to do. The next step is to integrate the student into the group. It might not be the same group for every skill. There's no magic number for grouping. Group according to skills. Also, I think that you should have a specific daily and weekly lesson plan for each student. Each student should have his own folder with this information in it.

He should know what is expected of him. It is up to the teacher to make certain the student understands the material with which he is working. He should be shown how to do it. Many teachers have not the time, but a teacher should know page by page and card by card every single piece of material a student uses. She must have worked every problem, or else how does she know the answer? If you can catch differences in language usage, for instance, mid-west and eastern usage, then you make it easier for the student and avoid problems. There may be some stories that women will not be interested in. You could skip those.

Now you think, well, that's all fine and good, but we don't select the materials; the State Department selects the materials. But I would like to see the day when the teacher and the supervisor get together and select the materials. This is the way it should be. The best programs use this committee method of choosing materials. They sit down with someone who might be a student and also get his reaction to the material.

Only the student knows if the material will be offensive to him. Your material should be different from program to program, from cycle to cycle, from year to year, but you do build up a core of materials. If the teacher becomes aggressive enough with the supervisor, she will have more to say about the materials. We have to remember that the materials are only as good as the teachers who use them. The student needs to share his learning, and the only way to do this is with the group. When you work with a student, you must come together as a group to share the learning.

There's more to learning than the reading and writing skills. The teacher has to learn that she controls the group. If the student stays or goes away, or if he learns or doesn't learn, it is a reflection on her, her use of materials, and her personality. Materials are a part of it, but the teacher is the main part of any class. As such, you are the key to the success or failure of the ABE program, locally, state-wide, and nationally. I hope you will make every effort to select and utilize materials wisely in this important endeavor.

## GUIDANCE AND COUNSELING IN ABE

Dr. Marshall Morrison  
Associate Professor of Education  
Alabama State College  
Montgomery, Alabama

Ladies and gentlemen of the ABE Institute, this is by no means my first trip to Mississippi. My father was a former Mississippian, and he thought that Mississippi was the greatest State in the Union. I admired him for that. It is always refreshing to me for any individual to think well of his home, his home state, his church, his school, or his organization. He left Mississippi at age 21, illiterate, not even knowing how to read and write. He went to Kentucky to receive his education, and developed the first public high school for Negroes in the state of Tennessee. So that tells me Mississippi might not be too bad.

It would be relatively easy to talk to public school teachers because all you have to do is tell them to follow a few simple principles, and the job is done. But with ABE teachers, that's a hole a little bit deeper than talking with teachers in public schools. You've got to get your information correct because ABE teachers are dealing with individuals who want answers right now. You often hear of people talking about the "now" generation, but I suggest to you that the ABE students are the "now" generation. Whatever assistance they want from society, they want it "now". If they don't get it now, then they will not continue. You have to be mighty careful how you work with these individuals, how you teach them, and what you tell them, because in most cases they've had more experiences than we have had. They may be illiterate, but they're not ignorant. It's important to know the difference between these two words, because some of the most intelligent people I've ever known were illiterate.

Dr. Seaman said you wanted to hear something on the matter of counseling. We must have counseling in ABE. That's why the ABE student is there. Preferably every ABE teacher ought to be a counselor, but when you have some very peculiar or specific problems, there ought to be someone in the system to whom you can refer these students. Let's make counseling a part of the total school program. I'm trying to tell you that counseling is not something that you set aside in the school like English or any other subject.

A few weeks ago we listened to commentary after commentary about the astronauts' journey to the moon. Wasn't it a great experience to see the ladder come down and watch during those tense moments as the astronauts descended that ladder, put their feet upon the moon, and began to gather materials and evidence. As I think of counseling, I think there is a very great analogy here. You know, we sent men into space and it worked. We sent guided missiles up and they worked. Now we in the educational fields are also sending out what we call guided missiles in the form of our graduates. There the similarity ends. The scientists sent up a missile, and it begins to make its revolution around the earth. If something goes wrong, they have what they call a panic button. They can push that panic button, and that guided missile

is destroyed. But we can't do that with our graduates. Unfortunately, if something goes wrong with them, they can continue on and on and become a destructive force in the world.

I heard the other day that there are 10 million murderers walking the streets of America. These 10 million murderers have not been incarcerated; they have not been indicted; they've never been arrested. I doubt whether they will ever make headlines. I'm not talking about racists or robbers. You will find these 10 million murderers in American classrooms--10 million teachers teaching subjects they don't like to students they hate. If they don't like it, they ought to get out of the classrooms.

When you begin describing guidance, you can take it from two stand-points: one as strictly a point-of-view, or two from the stand-point of a service. I'm sorry to say that for the most part, even in our public schools, guidance is always looked at from the stand-point of a point-of-view. What was it that the wise man said? Feed a man a fish, and you feed him a meal; teach a man to fish, and you feed him for life. Feed a man a fish today, and tomorrow I've got to feed him another fish. Maybe that brings up another need for guidance, counseling, teaching, and learning in ABE. We need not so much donations and charity, but teaching. Peter said, "Silver and gold have I none, but such as I have I give unto you." Guidance from a stand-point of a point-of-view expresses this idea.

Counseling suggests respect for the individual as a person of worth and dignity--respect for the individual; not some individuals, but all individuals; respect for individual differences and different value patterns. I heard somebody speak the other day about the changes that inhibit adults; the changes in value patterns. Our schools are geared to middle class values, and teachers belong to the middle class. There must be respect for the student. I want you to understand the term "respect". Respect him the way he is, and that's difficult. I have a friend who has an ABE class. One of the ladies in his class looked over and saw a man in another class. She said, "Hey, you ole S. O. B.; where the H--- have you been?" The teacher in the other classroom said, "Oh Mr. \_\_\_\_\_, did you hear that?" My friend said, "Yes, I heard it." She said, "What are you going to do about it?" He said, "Nothing. That's the way she talks; that's part of her culture. But I would suggest there are other ways in which we greet our friends. What she was really saying to him was, 'Hey, good friend, I missed you so much. Where have you been?'" Can we accept this individual just as she is? And not try to make her completely over right now? Maybe, just maybe this might give us a reason why this group of people dropped out of school.

There is a difference between a filling station and a service station. A filling station is for the advantage of the owner, but a service station is there for the services it can render the customer. Attendants check the tires, check the oil, and sweep out the car. We would like to consider guidance from the stand-point of service--orientation, welcoming the student when he comes to school, helping him find the class, and making him feel he is a member of the school.

Counseling is a one to one relationship--the counselor and the counselee focusing on the problem of the counselee. And in this situation it might be a little more important than guidance which is a group situation. You need individuals who can relate to people, establish rapport with people, and instill confidence in people. Who is better able to do that than the classroom teacher? We say, "Oh, we can't have a counseling program because we don't have any counseling people." Well, you are the counseling person. And I suggest even though you might not have the finesse, the professional training, if you have been teaching you will find that counseling has been going on.

If on the basis of an objective test ABE students are found to be ignorant, they toss down a lot of terminology that they are not accustomed to using. If we designed a test using terminology characteristic of the South and give the test to those in Harvard, or Yale, they wouldn't do well either. "Test my vocabulary in order to test my intelligence." Then the test doesn't test what it's supposed to test.

You need to give students information. You know, it takes a lot of guts to come back to your ABE class and say, "Look here, I'm a failure." That's what's so ridiculous about advertising ABE in the newspaper. What good does it do to put it in the newspaper when I can't read? That's as ridiculous as the fellow who write a letter and said, "P. S., if you don't receive this letter, please write me and let me know."

I can laugh at myself. I feel better if I can cuss myself out and laugh at myself. We need to see the funny side of all things. I like fundamentals. Fundamentals are all right--and fun is alright. When you take the "fun" out of "fundamentals" you see what is left? Laugh at the students and let the students have the fun of laughing at you. They will get a big kick out of laughing with you. Group guidance has to do with groups. It's harder to get to a group than it is to get to an individual. That's why I appeal for a one-to-one personal contact in counseling.

Counseling is whatever I want and need to make me happier. You can be a counselor on the street or on the phone. Helping students overcome whatever is keeping them from obtaining their goal is the counselor's responsibility.

It is important because we failed the first time with these people, because we wanted to give them something. This time he comes to us with something--a need. Now he's coming back for a second chance. When should counseling occur? In the morning? In the afternoon? The time for you to help me with my problem is when the problem is there. It should occur when it is needed. Who should do the counseling? All teachers should be a counselor. Don't ever discredit yourself with these abilities. You are the most important person in the lives of your students. Their future depends upon you. Don't fail them! Let's put "services back into education, particularly in ABE.

## SECTION II

### Work - Study Group Reports

During the second and third weeks of the institute, the participants were divided by choice into four work-study groups, e. g., Family Living, Language Arts, Mathematics, and Reading. Group members were assigned the task of developing curriculum content which they deemed important for Adult Basic Education students in the subject-matter area which they had selected.

The final reports of those groups are presented with little editing except for clarity and continuity. The institute staff members were exceptionally pleased with the outcome of the group work. The credit for the reports goes to the participants, particularly the group leaders and recorders and to the staff specialists who assisted each group. Hopefully, the effects of these reports will be seen in the utilization of their content in local programs throughout the state, the southeastern region and where applicable, in other states.

## FAMILY LIVING IN ABE

Mississippians are people of many backgrounds and races who live and work together. The purpose of this report is to indicate the skills, attitudes, and understandings necessary for each person to be a contributing citizen as well as a successful recipient in our society.

To achieve this purpose the following topics are presented:

- A. Educating for Responsible Citizenship
- B. Earning and Spending Money
- C. Recreation
- D. Health and Safety
- E. Home and Family Life

Since it would be difficult to select materials in this area for the three different levels, the following units have been developed to be presented to all students regardless of the level at which they enter the program.

### A. Educating for Responsible Citizenship

#### Objectives:

1. The adult student should know the historical background of the American form of government.
2. The adult student should know the responsibilities and privileges of citizenship at the local, state, and national levels.

In order to achieve these objectives, the adult student should:

- a. Be introduced to the story of the discovery of America and its early settlers.
- b. Be introduced to the ideas leading to the American Revolution and the formation of American democracy.
- c. Know the importance of the Constitution, Bill of Rights, and formation of American political parties.
- d. Know the necessity of taxation.
- e. Know the necessity of law and order.
- f. Know the "workings" of the American jury system.
- g. Know how to protect and preserve real property.
- h. Become aware of community organizations.

- i. Become aware of the general organization and function of governmental units, local, state, and national.
- j. Become acquainted with the organization and financial support of the school system.
- k. Know the necessity of voting and participation in the workings of political parties.
- l. Become acquainted with public facilities and public officials available to them.
- m. Become acquainted with the organization and financial support of the eleemosynary institutions.

## B. Earning and Spending Your Money

### Objectives:

- 1. The adult student should know how to apply for and hold a job.
- 2. The adult student should know the fundamentals of budgeting.
- 3. The adult student should know the importance of proper buying skills.
- 4. The adult student should know credit advantages and disadvantages.

In order to achieve these objectives, the adult student should:

- a. Know the availability of jobs through employment agencies, newspaper ads, friends and family.
- b. Know the importance of proper personal appearance when interviewed for a job.
- c. Become aware of wage and hour laws.
- d. Become aware of fringe benefits--social security, retirement, insurance, vacation and compensations).
- e. Know about taxes connected with earning and spending money.
- f. Know insurance (benefits, hospitalization, life, automobile, home, burial, fire, and theft).
- g. Have knowledge of union dues, pension, organizations, seniority, and retirement.
- h. Know budgeting.
- i. Know buying skills through types of stores, (department, discount, chain, etc.)
- j. Become aware of the cost of credit (30 day charge, revolving charge and installment plan).
- k. Become aware of personal loans (co-signer and signature loans).
- l. Know the advantages and disadvantages of credit.
- m. Become aware of chattel mortgage and conditional sales contract.

## C. Recreation

### Objectives:

- 1. The adult student should foster physical, mental, and emotional health through recreation.

2. The adult student should develop opportunities for social adjustment.
3. The adult student should learn to display good sportsmanship.
4. The adult student should achieve joy and happiness through recreation.
5. The adult student should utilize the use of leisure time to enrich his culture.

In order to achieve these objectives, the adult student should:

- a. Become aware of recreational resources available in his community, i. e., library, parks, playgrounds, YMCA, YWCA, etc.
- b. Become aware of types of activities that can be utilized with the resources, i. e., tennis, volleyball, handball, horseshoes, etc.
- c. Provide recreational activities within the family.
- d. Know the general procedures for proper care of public facilities.
- e. Know rules and regulations governing recreational activities, i. e., hunting, fishing, boating, etc.
- f. Become aware of various creative pastime hobbies, i. e., gardening, various kinds of needlework, woodworking, carving, etc.
- g. Attend public school activities, i. e., concerts, art shows, musical plays, sports events.

#### D. Health and Safety

Objectives:

1. The adult student should develop the ability to practice good health habits in everyday living in order to protect the health of family members and community.
2. The adult student should develop interest and ability on the part of each family member to use acceptable hygiene practices and understand the relationship of this to healthful living.
3. The adult student should develop abilities and skills necessary in giving adequate care to the sick in the home and the community.
4. The adult student should develop an ability to improvise some suitable equipment to be used in caring for the sick in the home.

In order to achieve these objectives, the adult student should:

- a. Know how first-aid is administered and how simple equipment can be improvised and used in the home.
- b. Know the methods and procedures that can be used to keep up the morale of the patient.
- c. Know how to use available medical and health services.
- d. Know how to contribute toward the improvement of health in the community.
- e. Know how to safe-guard the home water supply.

- f. Be aware of home safety practices.
- g. Be able to recognize common diseases.
- h. Know the hazards involved in the use of electrical and heating appliances and home accidents.
- i. Know the acceptable procedures in infant and child care.
- j. Know how to obtain help from local resources (doctor, ambulance, fire department, police, etc.).
- k. Know about good nutrition (meal planning, shopping, and food preparation.).
- l. Know about the problems connected with sanitation.
- m. Know about good physical care of the body (diet, check-ups, eye, teeth, etc.).
- n. Know the rules for drivers and pedestrians.
- o. Practice safety procedures regarding drugs, flammable and inflammable materials.
- p. Know about Civil Defense operations.

#### E. Home and Family Life

##### Objectives :

- 1. The adult student should know the basic functions of the family.
- 2. The adult student should become aware of how family goals and values are transferred and how these affect the community.
- 3. The adult student should know the importance of communication and understanding among family members.
- 4. The adult student should know family planning in order that the family may enjoy a better life.

In order to achieve these objectives, the adult student should:

- a. Become aware of the role of the parent in the home.
- b. Become aware of the role of the child in the home.
- c. Know the elements of a happy marriage.
- d. Become aware of the affects of superstitious beliefs on family and community.
- e. Know the aspects of good personal hygiene.
- f. Know good home management.
- g. Learn how to judge quality in foods.
- h. Learn how to plan a well balanced diet.
- i. Learn how to select foods high in nutritional value but low in cost.
- j. Learn how to select good inexpensive clothing.
- k. Learn how to rent or purchase homes based on income, size of family, and community locations.
- l. Learn how to select and buy quality furniture.
- m. Become aware of the importance of planning and saving for children's education.
- n. Know the importance of having insurance.
- o. Become aware of the cost of utilities and how to conserve them.
- p. Know how to economize in transportation.
- q. Become aware of resources on planned parenthood.

## LANGUAGE ARTS IN ABE

### Introduction

What is new and challenging in Language Arts? Much! New suggestions, new programs, and new techniques are being called to the attention of the Educational World. Foremost of these is the relationship of Language Arts to Adult Basic Education. Both teachers and authors are being challenged. Adult Education is seeking to take the best of the present and relate it to the time-tested materials of the past so that the teaching of reading, writing, listening, viewing, and speaking will help the adult learner develop into a self-confident individual who is better able to cope with the problems of middle-class America.

Considerable attention must be given to classroom climate, and how it interacts with teaching. The good teacher must be in command in every situation at all times whether consciously or unconsciously. This can happen only by a sense of competence and assurance. The teacher must know how content illuminates classroom climate. In short, know your student as well as your subject matter. From the fusing of the two the teacher develops his own method of teaching. One without the other does not create a learning situation in the classroom, and this should be the basic objective of every teacher. Teach the student--not the book.

### Scope and Sequence

The basic concern of every ABE teacher in regard to scope is to find the beginning level of each student and help him progress as far as his need and interest demand.

The sequence to be used by the ABE teacher must be determined for each individual student in his class. He must decide which sequence will bring about the desired results for each--and use that sequence.

The overall objective of the ABE teacher should be to prepare the student - as far as his abilities will permit - to function in the society in which he lives. The specific objectives within this overall objective are:

1. To increase the vocabulary of the ABE student to meet his needs.
2. To help the student confront himself with content, with himself through content, and with content through his inner needs as an ABE Student.
3. To teach students to speak, listen, and write effectively.
4. To inform students--not reform them.
5. To encourage self-expression which leads to self-understanding.

6. To develop communicative abilities in students.
7. To make Language Arts functional in ABE.

Every effort has been made to give the ABE teacher a general concept of the purpose and objectives of Language Arts in the Adult Basic Education program. In the pages that follow are some guidelines which we believe will help the ABE teacher to attain these objectives.

## LEVEL I

### I. Writing Skills

- A. Capitalization of proper names, titles, holidays, beginning of sentences, etc.
- B. Punctuation marks as in using a period at end of sentence, abbreviations, etc.
- C. Spelling
  1. Pronunciation and enunciation of words.
  2. Phonetic analysis and structural analysis.
  3. Ability to spell words in sight-word vocabulary.
  4. Ability to spell words that relate to areas studied and in practice work.
- D. Writing with practice in motor coordination and letter formation.

### II. Sentence Sense

- A. Developing the concept of the sentence as a complete thought.
- B. Understanding the structure of the three kinds of sentences: statement, question, and command.
- C. Understanding the parts of a sentence (subject, predicate, etc.)

### III. Letter Writing

- A. Form for writing a friendly and a business letter.
- B. Form for address on envelope.
- C. Understanding the pattern for content of letters.

### IV. Vocabulary Skills

- A. Using new words in communicating facts and ideas.
- B. Understanding and using terms in study of English.

### V. Correct Usage

- A. Learning to use correctly the verbs see, saw, run, ran, etc.
- B. Learning to use has, had, have.
- C. Learning to use I and me in correct order with other nouns.
- D. Learning to use those and these correctly.
- E. Learning to use do and does correctly.

### VI. Grammar

- A. Learn the function of nouns.

- B. Learn the function of nouns.
- C. Learn the function of adjectives.

## VII. Listening, Speaking, and Viewing

- A. Communication through oral conversations, role playings, discussions, news reports, telephone conversations and introductions.
- B. Parliamentary Procedures on conducting a meeting and writing minutes.
- C. News Media
  1. Newspaper--teach the use of the contents of the newspaper.
  2. Television--teach the aspect of education, enjoyment, entertainment, and discrimination.

## LEVEL II

### I. Writing Skills

- A. Capitalization of proper names, titles, topics in an outline, first word in a quotation, names of organizations, proper adjectives, regions of the country, etc.
- B. Punctuation usage as: colon after greeting in a business letter, exclamation point, quotation marks, period in a list or outline, comma to separate words in a series, etc.
- C. Paragraph
  1. Complete sentences.
  2. Indention.
  3. Detecting extraneous sentences.
  4. Writing original paragraphs.

### II. Sentence Sense

- A. Define sentence as complete thought.
- B. Recognize four kinds of sentences: statement, question, command, exclamation.
- C. Distinguish between complete and incomplete sentences.
- D. Correct faulty sentences.
- E. Vary sentence beginnings.
- F. Write original sentences, especially within paragraphs.
- G. Understand purpose and form of the kinds of sentences.
- H. Avoid short, choppy sentences by combining them through the use of connecting words.
- I. Use various kinds of sentences to vary expression.
- J. Teach subject and predicate in detail including simple and compound.
- K. Teach objects of a verb and a preposition.

### III. Letter Writing

- A. Meeting standards of headings, margins, indentions, and for writing and spelling in all written work.
- B. Form for business letter.

#### IV. Listening Skills

- A. Recall material required to answer specific question.
- B. Follow the logic and sequence of a discussion.
- C. Add new, interesting words to the vocabulary.
- D. Receive directions and messages accurately.
- E. Take notes during a talk or report.
- F. Summarize an oral report.
- G. Evaluate radio programs and television presentations.
- H. Select key words, important ideas, transitional phrases, etc.
- I. Recognize emotive expressions.

#### V. Vocabulary Skills

- A. Ability to use new words in discussion, reports, explanations, etc.
- B. Get meaning of new words from context.
- C. Develop ability to choose vivid, descriptive and action words to add interest to sentences.
- D. Enrich vocabulary by using new meanings for already familiar words.
- E. Choose words to express exact meaning.
- F. Apply knowledge of grammar (parts of speech) to aid in selecting the right word for the desired function, as well as the correct word form.

#### VI. Correct Usage

- A. Learn to use the present, past, and participle verbs correctly.
- B. Use "a" and "an" correctly.
- C. Leave out unnecessary words.
- D. Compare adjectives and adverbs correctly.
- E. Choose the correct forms of pronouns for subject and object.

#### VII. Grammar

- A. Distinguish between common and proper nouns.
- B. Learn that nouns may be singular or plural.
- C. Learn to spell common forms of plurals.
- D. Learn function of noun, verb, pronoun, adjective, adverb, preposition, conjunction and interjection.
- E. Recognize prepositions and prepositional phrase.
- F. Differentiate between: singular, plural, and possessive pronoun; subject and object forms of pronouns; agreement of predicate with subject (usage).

#### VIII. Speech Skills

- A. Voice
  - 1. Speak loudly and distinctly, sounding initial and final consonants clearly.
  - 2. Strive for clear and pleasing tone.
  - 3. Speak with expression.

- B. Enunciation and pronunciation.
  1. Speak each word clearly and distinctly, sounding initial and final consonants clearly.
  2. Use lips, teeth, tongue to enunciate clearly.
  3. Learn to use pronunciation aids in dictionary, such as syllabication, accent marks and diacritical marks.
  4. Practice pronouncing every syllable.

#### IX. Comprehension Skills

- A. Anticipating the main idea.
- B. Interpreting the main idea.
- C. Drawing conclusions.
- D. Making references.
- E. Recalling what has been read.

### LEVEL III

#### I. Mechanics in Writing

- A. Legibility--shaping, connecting, and spacing of words in a sentence.
- B. Capitalization--difference in small and capital letters.
- C. Abbreviation--period is part of abbreviation.

#### II. Filling out Applications--jobs, scholarships, school, etc.--classroom practice.

#### III. Sentences According to Meaning--Recognition of each by writing examples and finding examples in the book.

- A. Declarative--makes statement.
- B. Interrogative--asks a question.
- C. Imperative--gives a command.
- D. Exclamatory--expresses strong feeling.

#### IV. Verbs (action)--Recognizing the difference in the kinds of verbs--as transitive, intransitive, irregular, regular.

- A. Principal parts--present tense, past tense, past participle--Why called principal parts?
- B. Agreement of verb and subject--subject-verb relationship
  1. Single and plural verbs--what determines the number of a verb?
  2. Single and plural subjects--difference in the singular and plural form of subject (nouns, pronouns)

#### V. Pronouns--stand for words or substitutes for nouns.

- A. Pronouns to watch--personal pronouns--decline personal pronouns.
- B. Possessive pronouns and contractions--difference in contractions and personal pronouns.
  1. Possessive personal pronouns do not have the apostrophe.
  2. Contractions are made from a pronoun and verb.

- VI. Punctuation--used for clarity, and to get one's breath.
- A. Differences in the basic marks of punctuation.
  - B. When each is used, and reason not rule for using each.
- VII. Letter Writing
- A. Business letters (formal)--application, information, inquiries, etc.
    1. Parts--heading, inside address, salutation, body, closing, signature.
    2. Examples of each written by students.
  - B. Friendly letters (informal)--courtesy, sympathy, etc.
    1. Parts
    2. Comparison in parts of a formal and informal letter.
- VIII. Effective listening--pupils speak first, then teacher speaks to them.
- A
    - A. Active listening--correlate work and play--teacher throws out "cliff-hangers"
    - B. Listening Problem--find the causes and try to remove them.
    - C. Dictating--3 or 4 minutes used as a dictation period.
- IX. Giving Directions--this is a very practical service.
- A. Organizing--to lessen confusion--let them do this in class.
  - B. Remembering--know the directions before trying to give them to others.
  - C. Explaining--should be definite and clear, but not too detailed.
- X. Paragraph--choose topic, select material, first draft, revise and complete.
- A. Narrative--telling a story.
  - B. Descriptive--telling about a scene, picture, etc.
  - C. Argumentative--giving the pros and cons.
  - D. Explanatory--telling how to make a dress, bake a cake, etc.
- XI. Communication--expressing ideas orally.
- A. Group Discussions--choosing topics, participation, leading.
  - B. Informal Conversations--introductions, friendly visits, telephone manners.
  - C. Diction--using correct language--recognizing slang.
  - D. Formal conversation--parliamentary procedure, business interviews, etc.
- XIII. Spelling
- A. Building better spelling habits--making the student spelling conscious.
  - B. Mastering spelling difficulties by calling attention to their individual spelling difficulties.

## (DEFINITIONS OF TERMS)

1. Climate--the prevailing temper or environmental conditions.
2. Command--to have at one's immediate disposal.
3. Communication--a technique for expressing ideas effectively.
4. Concept--an abstract idea generalized from particular instances.
5. Critical--exercising or involving careful judgement or judicious evaluation.
6. Extraneous--foreign; not essential.
7. Illuminates--to make clear.
8. Infuse--to instill a principle or quality in.
9. Paraphrasing--the restating of different words of a piece of writing to clarify a difficult passage.
10. Précis--a concise summary of essential points, statements, or facts.
11. Programming--to arrange or furnish a program of or for.
12. Scope--the extent of treatment of a subject matter.
13. Sequence--the arrangement of a course of study designed to express a coherent relationship.
14. Syllabication--the act, process, or method of forming or dividing words into syllables.

## MATHEMATICS IN ABE

### Purpose

It is becoming widely recognized by educators throughout the country that the techniques and approaches to teaching the adult learner are different from the methodology utilized in the teaching of mathematics to children. It is the purpose of this paper to (1) present some of the items which 21 ABE math teachers consider essential concepts and skills necessary to the adult learner and (2) compile a suggested outline for the implementation of a mathematics program in ABE.

### Objectives

1. To increase the adult learner's competency in practical computational skills.
2. To increase the adult learner's ability to recognize situations in daily living requiring mathematical solutions and to select the appropriate techniques for solving them.
3. To provide a point of departure for the spiraling effect of increased individual effectiveness in mathematics.

### LEVEL I

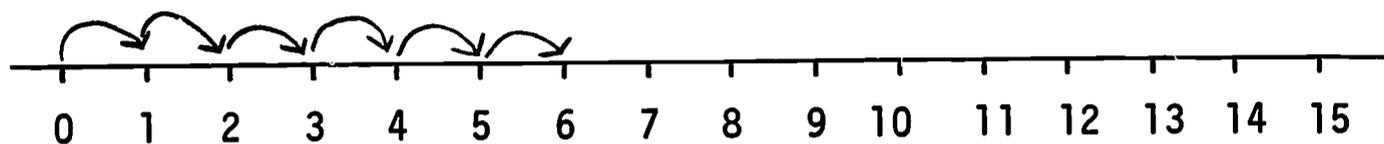
#### I. Numeration

- A. Counting number symbols 1-1000, and understanding place value--ones, tens, thousands.
- B. Reading and writing numbers.
- C. Recognizing cardinal and ordinal numbers.
- D. Recognizing Roman numerals.

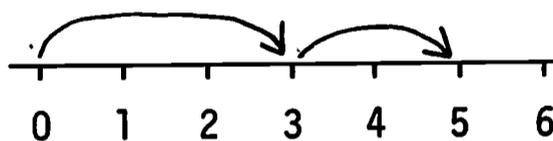
#### II. Fundamental Operations With Whole Numbers

- A. Addition and Subtraction
  1. Vocabulary
  2. Concept Review
- B. Understanding Relationships Between Addition and Subtraction  
Example: The idea that  $3+4 = 4+3$  may easily be illustrated by using three clothespins of one color and four of another on a hanger; by turning it around, it shows that this does not change the sum. The commutative property is taught without the necessity of naming it. Also taught is that subtraction is the inverse of addition.
  1. by use of the table of basic addition and subtraction
  2. by use of the number line  
Example: The number line is an invaluable aid in teaching many concepts in simple arithmetic. The ruler is actually an example of the number line.

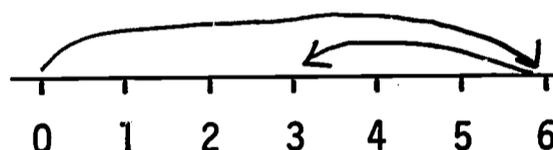
- a. counting - students must realize that we are counting spaces, not points.



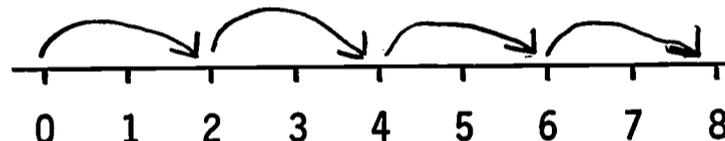
- b. addition -  $3+2 = 5$



- c. subtraction -  $6-3 = 3$



3. addition and subtraction of one digit, two digit, three digit and four digit numbers.
- C. Understanding the relationship of multiplication to addition, and the relationship of division to subtraction.
1. vocabulary
- Example: Continued use of number line - multiplication as repeated addition.  $2 \times 4 = 8$



- D. Understand the relationship of multiplication to division.
- E. Strengthen the understanding and meaning of zero.

III. Size Concepts: larger than, tall-short, longer than, etc.

IV. Understanding the Concepts of Fractions

- A. Writing common fractions
- B. Relationships between money, fractions, decimals, and percents.

V. Measurement

- A. Linear - inch, foot, yard, etc.
- B. Liquid - cup, pint, quart, etc.
- C. Weight - pound, ounce, etc.
- D. Time - hour, half-hour, days, etc.
- E. Temperature

VI. Development of Basic Formula For Simple Geometric Figures:

- A. Squares
- B. Circles

- C. Rectangles
- D. Triangles

VII. Problem Solving by Relating All Four Processes in Oral and Reading Problems.

- A. Emphasize problems in areas that are meaningful to:
  - 1. banking
  - 2. credit Buying
  - 3. insurance
  - 4. loan companies
  - 5. salary
  - 6. budgeting
  - 7. recipes
  - 8. groceries and comparison prices

## LEVEL II

## I. Number and Numerals

- A. Counting - reinforce and expand counting skills.
- B. Recognition - separating numerals into hundreds, thousands, millions, etc., and reading of numerals according to this grouping.
- C. Roman numerals - extend to larger numbers using addition and subtraction properties.

## II. Place Value

- A. Interpretation - 3 or more digit numbers.
  - 1. basic method of telling time
  - 2. counting money
- B. Review of number line
  - 1. construct number line
  - 2. explanation of meaning and usage

## III. Fractions

- A. Comparison of fractions; meaning of fractions; carry-over of fractions to measurement.

## IV. Decimals

- A. Extend the usage of decimals in measurement and money counting; conversion of fractions to decimals; perform the fundamental operations with decimals.

## V. Sets

- A. Equivalence
  - 1. one-to-one correspondence of elements
  - 2. one-to-one correspondence of "same" elements
  - 3. introduction of symbols for equality and equivalence
- B. Union and intersection symbols
  - 1. one-and-one element
  - 2. one-and-two elements
- C. Regrouping and renaming of sets
  - 1. adding
  - 2. subtraction
  - 3. multiplication
  - 4. division

## VI. Measurement

- A. Read and use a ruler and yardstick.
- B. Read a recipe with emphasis on the units of liquid measurements.
- C. Compute working hours and read schedules.
- D. Money usage.

## LEVEL III

- I. Reinforce and Extend Fundamental Numerical Principles Covered in Level II.
- II. Addition
  - A. Facts
  - B. Adding columns
  - C. Regrouping in addition
  - D. Decimals
  - E. Fractions
  - F. Money
  - G. Word Problems
  - H. Review above processes
- III. Subtraction
  - A. Facts
  - B. Subtracting columns
  - C. Regrouping and renaming
  - D. Decimals
  - E. Fractions
  - F. Money
  - G. Checking
  - H. Word problems with practical applications
  - I. Review above processes in addition and subtraction
- IV. Multiplication
  - A. Facts
  - B. By place numbers
  - C. Decimals
  - D. Fractions
    1. whole number
    2. mixed numbers
    3. proper and improper
  - E. Money
  - F. Zeros
  - G. Word problems
  - H. Review above skills
- V. Division
  - A. Facts
  - B. Review short division
  - C. Long division
  - D. Trial quotients and true quotients
  - E. Place division - one through four digits
  - F. Remainders
  - G. Decimals
  - H. Fractions
    1. by whole numbers
    2. by fractions
    3. mixed numbers

- I. Money
- J. Word Problems
- K. Review above skills

## VI. Measurement

- A. Area
- B. Length
- C. Liquid and dry
- D. Distance
- E. Weights
- F. Temperature
- G. Circumference

## VII. Percent

- A. Converting common fractions
- B. Converting decimal fractions
- C. Reading percent
- D. Percent less than one
- E. Translating percent to decimals; percent to fractions and vice versa.
- F. Finding what percent one number is of another
- G. Finding percent of a number
- H. Percentage uses
  - 1. interest
  - 2. commission
  - 3. discount
- I. Interest in credit buying

## VIII. Graphs and Charts

- A. Line graphs
- B. Bar graphs
- C. Circle graphs

## IX. Simple equations

## X. Ratio and Proportion

## XI. Roman Numerals

## XII. Income Tax and Insurance

## XIII. Budgeting

### Aids and Techniques for Level III

Number concepts can be taught by:

1. Use of objects and pictorial materials; practical application of mathematical problems, i. e. by advertisements in newspapers, grocery lists, clothing, etc., and planning the family budget.

2. Integrating mathematics with consumer problems that the adult is concerned with, that is, banking, loans, etc.
3. Use of examples relating to the background that the students are familiar with, that is, in farm areas use things that the student knows.
4. Relate mathematics to the vocabulary and reading knowledge that the people know. Utilize the concepts of modern mathematics by teachers trained in the techniques of the newer concepts where applicable. Math should be integrated with all learning, with special emphasis on individual differences.

## READING IN ABE

Since the beginning of time man has sought means of expression, communication, and comprehension. What better way can the under-educated adult express himself, communicate with the world around him and comprehend the meaning of his experiences than through reading?

With this thought in mind we must explore the world of reading and and broaden the students reading ability with materials of interest and use to him.

There should be definite reading concepts, abilities, and skills incorporated into each phase of reading.

Among the general objectives of a good ABE Reading Program, the following are found to be important:

1. To increase the student's vocabulary, leading to an independent reading level for each student.
2. To meet the needs of daily living and help the student become a more knowledgeable, participating citizen through his increased ability to read.
3. To develop word attack skills, recognition skills, and phonetic skills in the student that will enable him to engage in meaningful reading experiences.
4. To develop appreciation, ideals, attitudes, and effective use of reading by ABE students.

### Specific Objectives For Level I

The ABE student should learn:

1. To recognize the basic sight words in sequence and pattern in reading.
2. To read material to get a central thought.
3. To utilize materials to find specific answers to his everyday questions.

### LEVEL I - GRADE 0 - 3

#### I. Vocabulary Development

- A. Construct a sight vocabulary
  1. Flash cards to show similar and different words
  2. Charts - words in alphabetical order
  3. Questions concerning the meaning of words after using them in a sentence
  4. Meaningful phrases - defining specific words in sentences
- B. Identify Synonyms, Antonyms, Homonyms
  1. Crossword puzzles
  2. Pictures of objects that pupils can match words as Pin-Pen, Held-Weld

3. Matching exercise that illustrates homonyms
  4. Word substitutes - change the meaning of several sentences by replacing words with opposites
- C. Rhyming Words
1. Consonant substitutes that build new words as Bar-ar
  2. Word families are formed by the formula CVC as bag-bad-car
  3. Make riddles using rhyming words as, ran-nan-tan-can
- D. Phonics
1. Initial, medial, and final consonant sounds by substitutions
  2. Blending consonant sounds as in fl, ch, sh, cr, etc.
  3. Short vowel sounds - i as in bit
  4. Long vowel sounds - i as in bite

## II. Comprehension

- A. Reading for meaning
1. Ask questions about the selections read
  2. Share ideas by letting pupils quiz each other on a selection
  3. Following directions - let pupils select a card with certain instructions and have them carry them out.
- B. Locating Main Idea
1. Read, re-read to find how many endings a story could have
  2. Recognizing methods - present sentences in improper order, let class arrange correctly
  3. Key words or phrases are underlined that show main idea of the selection
- C. Understanding Directions
1. Role-playing
  2. Visual aids as signs from Highway Department
  3. Oral and written directions to follow
- D. Organizing Ideas
1. Dividing words into like categories
  2. Telling a story in sequence
  3. Summarizing

## III. Functional Reading Skills

- A. Insurance
1. Resource personnel
  2. Kits from representatives that explain policies
- B. Advertisement
1. Newspaper articles of interest
  2. Audio and Visual Communication media
- C. Job Application
1. Personnel director - guest speaker
  2. Application forms for practice
- D. Political Elections
1. Lecture by elected officials
  2. Solicitation - handbills, pamphlets, etc.
- E. Safety
1. Highway Safety Patrolman - guest speaker
  2. Posters and charts on road signs

3. Directions on appliances
4. Fire precautions - discussed by a member of the Fire Department
5. Labels on drugs, medicines, and various compounds - lecture by health nurse

### Specific Objectives for Level II

The ABE student should learn:

1. To increase reading speed to suit his purpose.
2. To recall main events of a story.
3. To grow in ability to read material in the content area.
4. To recognize the known parts of words.
5. To answer questions pertinent to the material.

### LEVEL II - Grade 4-6

#### I. Vocabulary Skills

- A. Recognizing words learned in Level I and add one thousand more frequently used words
  1. Dictionary - look up new words encountered in texts
  2. Prepare word list of foreign words and phrases and use these for some class discussions
  3. Charts that describe character of such people as Lincoln, Kennedy, etc.
  4. Sentence strips with written tongue twisters
- B. Review synonyms, antonyms, homonyms, and make up an exercise using heteronyms (ex. lead-lead, bass-bass, read-read)
  1. Crossword puzzles
  2. Underlining synonyms, antonyms, homonyms, and heteronyms in a teacher-made paragraph
- C. Learning and using the dictionary and telephone directory
  1. Dictionary - review letters in alphabetical order and divide the dictionary into parts
  2. Directory - (Let your fingers do the walking through the yellow pages for emergencies and advertisements)
  3. Dictionary chart that displays the parts of the dictionary, syllabication, etc.

#### II. Comprehension Skills

- A. Finding and interpreting the main idea
  1. Answering questions
  2. Having students underline main ideas in red pencil and supporting ideas in blue
- B. Critical Reading Skills
  1. Analyze a variety of reading materials by distinguishing facts from fiction
  2. Discuss what is "promised" as a toothpaste commercial

- C. Following Directions
  1. Give examples by letting the group work an exercise together
  2. Role-playing

### III. Functional Reading Skills

- A. Reading the newspaper to gain insight in occupational - vocational information
  1. Discuss selections
  2. Interpret what the author of the selection has stated
- B. Interpreting occupational and vocational information
  1. Use of resource personnel
  2. Pamphlets from the world of work

### IV. Word Recognition Skills

- A. Using contextual clues in finding new and unfamiliar words
  1. Read entire selection to determine meaning of a word or words.
- B. Using configuration clues for word recognition
  1. Outlines of general shapes of words (ex. Miss---ippi)
  2. Have students locate little words within big words
- C. Phonic analysis in word recognition
  1. Review words with long vowel sounds ending with silent "e"
  2. Use consonant sounds, initial, medial, and final consonants
- D. Structural Analysis
  1. Compound words by combining two simple words (ex. airplane, overseas, cannot, etc.)
  2. Contractions - use of the apostrophe to show omission of a letter or word
  3. Prefixes and suffixes - syllables or words added to root words to change or alter its meaning.
  4. Hyphenated and non-hyphenated words (foreign-born, stepmother, etc.)
  5. Inflectional forms (by adding s, ed, ing)

### V. Information Reading

- A. Reading and completing forms
  1. Realistic sample - teacher-made
  2. Actual forms
  3. Practice in filling out these forms
- B. Developing the ability to read simple and necessary signs
  1. Display various signs that students meet in everyday life
  2. Sight vocabulary of practical signs with which students might become familiar
  3. Ads from newspaper for information concerning jobs

## Specific Objectives for Level III

The ABE student should learn:

1. To understand that a word or group of words may be used to express a meaning or give an understanding.
2. To increase his ability to read with a reasonable speed, accuracy and understanding of printed materials.
3. To read materials related to his world of work and personal interests.
4. To develop the ability to use word attack skills, the dictionary, and syllabication in order to increase his use of new words.
5. To apply reading skills in both leisure time and functional situations.

### LEVEL III - GRADE 7-8

#### I. Vocabulary Development

- A. Review basic sight words of previous levels by using sentences, paragraphs and short stories.
- B. Have students construct sentences with increasing difficulty using synonyms, homonyms, antonyms, and heteronyms to provide drill in word usage.
- C. Have students underline rhyming words from a teacher-made list on the chalk board.
- D. Drill students in use of phonetic families and phonograms to provide practice in remembering new words.
- E. Have students associate words with meanings and ideas in printed materials.
- F. Help students make flash cards of new words learned for retention.

#### II. Comprehension Skills

- A. Have students identify main ideas in paragraphs.
- B. Encourage students to interpret thought units of increasing size:
  1. The phrase
  2. The sentence
  3. The paragraph
  4. The composition
- C. Have students read for specifics.
  1. Give and follow directions.
  2. Locate answers to specific questions.
  3. Arrange ideas in sequences.
  4. Evaluate and criticize what author says.
  5. Summarize passages.
  6. Outline larger readings.

#### III. Functional Reading Skills

- A. Have students read insurance policies for clarification of difficult words and clauses.
- B. Read advertisements for occupational and vocational purposes.

- C. Read and fill out application blanks in preparation for jobs.
- D. Encourage students to read and practice Parliamentary Procedures to learn how to:
  - 1. Conduct meetings
  - 2. Elect officers
  - 3. Vote in elections
- E. Locating Information
  - 1. Give students practice in using indices, table of contents, and glossaries to find materials.
  - 2. Assign students to use encyclopedias and telephone directories to find specific data.
- F. Interpret and develop safety rules for home, highway, and school.

#### IV. Word Recognition Skills

- A. Let class review previously taught skills.
- B. Have students construct new words using roots, affixes, inflectional forms, contractions, possessives, irregular plurals, and compound words.
- C. Drill students in initial consonants, blends, word families and more difficult word patterns.
- D. Dictionary skills.
  - 1. Practice students in use of primary and secondary accents for pronunciation purposes.
  - 2. Provide students with experiences in using diacritical marks to pronounce more accurately words encountered in reading.
  - 3. Have students determine origins of words.
  - 4. Practice students in syllabication of three or more syllable words.
  - 5. Have students read several definitions, then choose one to fit his purpose.

#### V. Context Clues

- A. Review concepts previously taught.
- B. Practice students in associating words with ideas in paragraphs.
- C. Introduce unfamiliar words in context and have students tell the meanings of them - e. g. chalkboard, overhead projector.
- D. Provide exercises to focus students minds sharply on word meaning.
- E. Encourage students to supply missing words in sentences according to context.

#### VI. Reading for Pleasure

- A. Creative Interest
  - 1. Encourage students to read books and book-related materials about hobbies to develop interest in leisure-time activities.

A/

2. Encourage the reading of newspapers and magazines correlated with personal interest of students.
  3. Provide students with experiences that will help them be selective when looking for interesting and enjoyable reading materials.
- B. Library skills.
1. Give students practice in locating books using the Dewey Decimal system.
  2. Have students browse to see how books are arranged on shelves.
  3. Have students select books using card catalog.
  4. Provide practice in finding parts of a book and let them discuss their importance.

## VII. Oral Reading

- A. Have students read aloud, poems, songs, and prose to note pronunciation difficulties.
- B. Let students read plays, monologues and dramatic readings for emphasis and euphony.
- C. Read orally to entertain others.

### SECTION III

Numerous instruments were utilized to evaluate the three-week institute. Two pre-and-post tests were administered. The first constituted an attempt to measure any cognitive change which the participants may have made, whereas the second test was designed to determine if any affective change had occurred during the three weeks of instruction.

A questionnaire was administered at the end of each week to (1) determine the "emotional climate," (2) obtain reactions to the specific subjects or topics presented, and (3) encourage participants to recommend procedures for improving the remainder of the institute. A "general evaluation" instrument was administered at the conclusion of the institute to determine overall reactions to the entire learning experience. In addition, the Kropp-Verner Evaluation Scale was utilized to obtain a composite rating of the institute.

The data in this section is presented as follows:

- A. Biographical Characteristics of Participants
- B. Pre-and-Post Test Data
- C. Participant Evaluations
- D. Implications

## A. BIOGRAPHICAL CHARACTERISTICS OF PARTICIPANTS

### Sex and Race

Data pertaining to the sex and race of the participants are presented in Table 1. Almost two-thirds of the students were female. More than two-thirds were black.

Table 1. Sex and race of participants

Race	Male	Female	Total	Percent
Black	13	42	55	69.6
White	14	10	24	30.4
Total	27	52	79	100.0

### Sex and Age-Range

The sex and age of the participants are shown in Table 2. The mean age of the participants was 40.5 years, and the median age was 40 years. Proportionately, males were somewhat younger than females.

Table 2. Sex and age-range of participants

Age-Range in Years	Male	Female	Total	Percent
Over 60	3	2	5	6.3
51 - 60	3	8	11	13.9
41 - 50	4	17	21	26.6
31 - 40	11	11	22	27.8
21 - 30	6	13	19	24.1
No Response		1	1	1.3
Total	27	52	78	100.0

### Age-Range and Race

In Table 3, data pertaining to age-range and race are summarized. It can be observed that, proportionately, the number of blacks and whites above and below the median age of 40 years was almost even.

Table 3. Age-range and race of participants

Age-Range in Years	Black	White	Total	Percent
Over 60	4	1	5	6.3
51 - 60	7	4	11	13.9
41 - 50	16	5	21	26.6
31 - 40	13	9	22	27.8
21 - 30	14	5	19	24.1
No Response	1		1	1.3
Total	55	24	79	100.0

### Marital Status and Number of Dependents

As shown in Table 4, over 30 percent of the participants were unmarried. Eighty-six percent had fewer than four dependents.

Table 4. Marital status and number of dependents of the participants

Marital Status	Number of Dependents									Total	Percent
	0	1	2	3	4	5	6	7	8+		
Single	6	1	0	1	0	0	0	0	0	8	10.1
Married	6	11	12	16	3	3	1	0	3	55	69.6
Widowed	1	1	3	0	0	0	0	0	0	5	6.3
Divorced	2	2	5	1	0	0	1	0	0	11	14.0
Total	15	15	20	18	3	3	2	0	3	79	100.0

### Position in ABE and Educational Background

Data pertaining to the participants' positions in the ABE program and their educational background are summarized in Table 5. Seventy-five percent were teachers, most of whom were trained in elementary education. Eighteen percent were administrators whose educational backgrounds were in various areas. It is interesting to note that more than one-fourth of the participants indicated that their educational backgrounds were different from the four areas listed in Table 5. It would be desirable to know what kinds of training were contained in the category, "other".

Table 5. Position in ABE and educational background of the participants

<u>Educational Background</u>	<u>Teacher</u>	<u>Teacher-Trainer</u>	<u>Admin-istrator</u>	<u>Counselor</u>	<u>Total</u>	<u>Percent</u>
Elem. Educ.	36	1	1	1	39	49.4
Sec. Educ.	0	0	1	0	1	1.3
Administration	3	1	2	0	6	7.6
Counseling	2	0	1	0	3	3.8
Other	17	1	4	0	22	27.8
No Response	1		5	2	8	10.1
Total	59	3	14	3	79	100.0

### Number Attending Previous Institutes

As shown in Table 6, eighty-six percent of the participants had not previously attended an institute of this type. Proportionately, more teacher-trainers and administrators had attended previously than teachers.

Table 6. Position in ABE and number of institutes previously attended by the participants

Position in ABE	Number Previously Attended			
	None	One	Total	Percent
Teacher	54	5	59	74.7
Teacher-Trainer	1	2	3	3.8
Administrator	10	4	14	17.7
Counselor	3	0	3	3.8
Total	68	11	79	100.0

#### Amount of Experience in ABE

Data pertaining to the amount of experience the participants had had in ABE is presented in Table 7. Fifty-four percent of the participants had been employed in the ABE program less than twelve months, but 16 percent had been employed more than two years.

Table 7. Position in ABE and amount of experience in ABE by the participants

Position in ABE	Months of Experience						Total
	0-6	7-12	13-18	19-24	+24	No Response	
Teacher	8	28	4	7	8	4	59
Teacher-Trainer	0	1	0	0	2	0	3
Administrator	2	3	0	1	3	5	14
Counselor	1	0	0	0	0	2	3
Total	11	32	4	8	13	11	79

#### Type of Population Served in Local Program

The type of population served through local programs by the participants is shown in Table 8. Over 50 percent of the participants

served a rural population through their ABE programs. It is interesting to note that none of the participants felt that they served a migrant population. This may indicate a need for some interpretation of the term, "migrant".

Table 8. Type of population served by the participants

Type of Population	Male	Female	Total	Percent
Inner-City	9	18	27	34.2
Farm	13	24	37	46.8
Rural Non-Farm	1	3	4	5.1
Migrant	0	0	0	0.0
Other Urban	3	5	8	10.1
No Response	1	2	3	3.8
Total	27	52	79	100.0

#### Kinds of Training Desired

Data pertaining to the kinds of training desired by the participants are summarized in Table 9. The categories, "Methods and Techniques of Teaching Adults," and "Teaching Reading," were requested by about one-half of the participants. However, 20 percent did not indicate a preference for any kind of training. It is assumed that they were interested in all phases of the training.

Table 9. Position in ABE and kinds of training desired by the participants

Kinds of Training Desired	Teacher-Admin- Trainer		Coun- selor		Total	Percent
	Teacher	Admin- Trainer	Coun- selor	Admin- Trainer		
Teaching Multi-Level Classes (Individual Instruction)	5	0	1	0	6	7.6
Teaching Reading	10	1	0	0	11	13.9
Teaching Language Arts (Eng., Communications, etc.)	4	1	0	0	5	6.3
Methods and Techniques of Teaching Adults (ABE)	21	1	2	0	24	30.4
Recruitment	3	0	2	0	5	6.3
Administrative Procedures	1	0	2	1	4	5.1
Teaching Mathematics	3	0	1	0	4	5.1
Teaching Family Living	2	0	0	0	2	2.5
Understanding Disadvantaged Adults	1	0	1	0	2	2.5
No Response	9		5	2	16	20.3
Total	59	3	14	3	79	100.0

## B. PRE-AND-POST TEST DATA

Cognitive Change

One of the major areas of interest of the institute was the amount of cognitive change that may have resulted from the instructional program. A simple design of pre-testing and post-testing the participants with the same instrument was employed. This instrument was constructed from questions obtained from the instructional consultants prior to the beginning of the institute. All questions were then arranged in mixed form resulting in a 65-item cognitive instrument to be administered. The time interval between pre-and-post testing was the three weeks during which the institute was being conducted.

Results

A regressed estimate of true change was utilized as one method of analysis of the changes which may have occurred as a result of the institute. In addition, traditional test and item analysis were computed on both the pre-and-post test scores.

The results of the traditional analysis of pre-and-post test are reported in Table 10.

Table 10. Cognitive test statistics\*

Variable	Pre-Test			Post-Test		
	Mean	Std. Dev.	Std. Error	Mean	Std. Dev.	Std. Error
Raw Score	19.39	4.77	0.55	24.27	5.07	0.58
Corrected Score	4.38	6.00	0.69	10.69	6.55	0.75
	Reliability = .501 Kuder-Richardson = 20 Std. Error of Measurement = 3.37			Reliability = .501 Kuder-Richardson = 20 Std. Error of Measurement = 3.38		

\*Pre-and-Post Test Correlation = .65

A list of the subjects who attended the institute, identified by their social security number, is found in the Appendix. For each participant, his pre-and-post test scores and raw score change are given.

Examination of the cognitive test data yielded somewhat disappointing results. The raw score mean change was 4.88 points, but the reliability of the change scores was virtually zero. With the reliability so low, further analysis is precluded, being both fruitless and wasteful.

Table 11 reports the results of rank ordering among the means of the sub-parts (subject-matter areas) of the cognitive test.

Table 11. Sub-part ranks of mean values of the cognitive test

Sub-Parts Names	Pre-Test	Post-Test	Change
Teaching Method	1	1	3.5
Counseling	2	2	3.5
Family Living	3	4	6
Undereducated Adults	4	5	5
Materials	5	3	1
Testing	6	7	7
Adult Education	7	6	2
Reading	8	8	8

$$\text{Rho}_{\text{pre-post}} = .91$$

$$\text{Rho}_{\text{pre/change}} = .88$$

$$\text{Rho}_{\text{post/change}} = .94$$

## Discussion

Examination of Table 11 indicates very high and positive Rank Order Correlation between the means of the sub-tests. This indicates that as a result of instruction, one instructional unit did not out-gain any of the others in relative position among the participants. It is not certain what this would have meant if we had found a low rank-order correlation, other than to say that instruction in certain sub-areas was relatively more effective than others. At this point we can say that each of the instructional areas was equally effective or ineffective, as you may choose.

With the reliability approaching zero, many of the interesting analyses that could be used with change scores were thwarted. The low change reliability is easily explained by examining the extremely low reliability of the pre-and-post test. Implications of this are that in the future when the cognitive evaluations are planned, much more time and detail must go into the construction and validation of the cognitive test. Unless the reliability of the pre-and post-test can be increased appreciably, the idea of investigation using change scores is out of the question.

The change in means of 4.88 points is not significant. If we took the test at face value, this would indicate that there has been little or no cognitive change as a result of the institute. At this point it would be difficult to support this position. The low reliability indicates that the test had some glaring defects. One defect that was voiced, or is believed to be known by the institute evaluators, is that the test did not, in all cases, measure what the instructors were teaching.

In the future it is believed that each instructor should submit a table of specifications that is more or less rigidly determined by the evaluation team and that the instructor should indicate the proportion of time to be spent on each topic. He should also submit at this time a number of items that would measure knowledge in the areas taught. These items would then become the base of the cognitive test. These items then should be tried out and submitted to traditional item analysis techniques in order to "sharpen" the tests. At the end of each instructional period, the instructor should rate himself very carefully, indicating at that time the degree that each area was taught or not taught during the period of instruction.

Without at least content validity, we can expect very low reliabilities to be associated with our cognitive tests.

In summary, we feel that the test was somewhat unreliable, therefore making any statements as to the gain in knowledge of adult basic education would be tenuous at best. It is recommended that in the future a degree of rigor be imposed upon the instructors in submitting questions for the cognitive evaluated instruments and that this should be used as a guide in rating the individual instructors.

### Affective Change

An attempt was made to determine any affective change which may have occurred during the institute by means of the semantic differential technique (E. E. Osgood, G. J. Suci, and P. H. Tannenbaum, The Measurement of Meaning, University of Illinois Press, 1975.) Participants were asked to indicate their feelings toward selected ABE concepts, i. e., "Individualized Instruction," "Adult Student," etc., by means of responding to a series of bipolar adjective scales, i. e., "good-bad," "desirable-undesirable," etc. For example, if a participant had positive feelings toward the concept, "Individualized Instruction, he or she would indicate so as follows:

INDIVIDUALIZED INSTRUCTION						
Good	X	_____	_____	_____	_____	Bad
Approve	_____	X	_____	_____	_____	Disapprove
Useful	X	_____	_____	_____	_____	Useless

When participants desired to elicit negative feelings, they would place their responses on the blanks nearest the negative-type adjectives.

The data were compiled and analyzed to determine if any significant changes may have occurred during the institute. The results of the data analysis are presented in Table 12. Although changes occurred with respect to each concept ("Mean Difference" column), none of the changes in attitude were significant at the .05 level of significance except for the concept, "ABE Dropout". Even though a significant positive change occurred, the overall attitude toward this concept remained somewhat negative. Perhaps the change in attitude toward the "ABE Dropout"

could possibly be due to the recognition by the participants of a greater range or variety of necessary reasons why a student becomes a dropout. This information seemed to permeate the discussion at various times during the institute.

Table 12. Semantic Differential affect scores

Concept	Pre-Test			Post-Test			Mean Difference
	Mean	Std. Dev.	Sample	Mean	Std. Dev.	Sample	
Individualized Instruction Teaching Reading in ABE Underdeveloped Adults	32.4063	6.5725	64	33.3714	8.1617	70	.9651
Testing in ABE Multi-Level Teaching	32.9275	8.1788	69	32.9333	8.5319	75	.0058
	14.2424	20.3100	66	18.0139	20.6640	72	3.7715
	21.8028	13.4171	71	22.1892	14.1853	74	.3864
	23.2727	16.8016	66	21.2800	17.1090	75	-1.9927
Counseling Record-Keeping ABE	30.2857	10.6065	70	32.7792	8.4552	77	2.4935
Materials Adult Student ABE	29.0137	11.1112	73	28.3684	14.0881	76	-.6453
	29.5942	11.5686	69	29.7632	10.3123	76	.1690
	29.8529	9.5781	66	29.9737	11.0297	76	.1208
Drop-out	-17.1562	20.0944	64	- 8.2985	23.7748	67	8.8577*

\*Significant at the .05 level

## C. PARTICIPANT EVALUATIONS

### Weekly Evaluations

During the course of the institute evaluations were acquired at the end of each of the three successive weeks of instruction. Participants were asked to respond to the weekly evaluations by expressing their feelings about the content and presentation of specific topics of interest presented by the instructional consultants. The responses were compiled and the results were presented to the participants in the form of an evaluation report on the first day of the following week. Individual ratings were acquired by circling the numerical value assigned to the selected choices as shown in the illustration below:

#### TOPIC I (Background of the Undereducated Adult)

<u>Content</u>		<u>Presentation</u>	
Highly Useful	4	Excellent	4
Useful	3	Good	3
Of Little Use	2	Fair	2
Of No Use	1	Poor	1

An analysis of the responses from the evaluation of the first week is presented in Table 13. The first column in the table shows the mean value of participants' ratings of the topics presented. For example, a mean of 3.44 for the topic, "Background of the Undereducated Adult," indicates that the participants felt the content of this topic to be about midway between "useful" and "highly useful." The mean rating for the presentation of each topic can be interpreted in the same manner. The standard deviation and standard error of the mean for each topic are also presented.

Table 13. Analysis of 1st week evaluation responses

Subject	Content			Presentation		
	Mean	S.D.	S.E.	Mean	S.D.	S.E.
Background of the Undereducated Adult	3.44	.7660	.0867	3.19	.7212	.0817
The Undereducated Adult in the Learning Situation	3.53	.5278	.0598	3.54	.6779	.0768
Expectations of the ABE Teacher	3.51	.6595	.0747	3.32	.6545	.0741
Effective Classroom Teaching in ABE	3.49	.5523	.0625	3.37	.6054	.0685
Recruiting and Retention in ABE	3.50	.6190	.0701	3.40	.6312	.0715
Record Keeping Procedures	3.72	.5559	.0629	3.56	.5245	.0594
S.D. = Standard Deviation			S.E. = Standard Error of the Mean			

As observed from the Table 13, the content presented during the first week was rated fairly even. The presentations rated slightly lower than the content.

In addition, participant suggestions and comments relative to the content and presentation were summarized. Those comments, both positive and negative, in order of importance, are indicated below.

Background of the Undereducated Adult

- (a) Presentation too hurried
- (b) Undereducated not all black
- (c) Needed practical examples

The Adult in the Learning Situation

- (a) Excellent outline - well presented
- (b) Jokes not always in good taste
- (c) Needed more practical examples

Expectations of the ABE Teacher

- (a) Presentation moved slow
- (b) Should have been more clear

Effective Classroom Teaching in ABE

- (a) Time too limited
- (b) Not a typical classroom situation

Recruiting and Retention of ABE Students

- (a) Good because it was based on survey
- (b) Need more suggestions
- (c) Should be more specific

Record Keeping Procedures

- (a) Greatly needed
- (b) Need more practice, if possible

Participants were asked for suggestions or comments pertaining to the overall conduct of activities for each of the three weeks of the institute. Those suggestions from the first week's evaluation were:

- (a) More order needed when questions are asked
- (b) More group discussion sessions needed
- (c) General idea-exchange session needed
- (d) Less repetition-cover more material

Table 14 contains the data from the evaluation of the second week of the institute. As shown, the content of the topic, "Teaching Mathematics to ABE Students," was rated somewhat lower than the others. Comments pertaining to all topics may be found below. The presentations of two topics also received somewhat lower ratings.

Participant suggestions and comments relating to the content and presentation of second week subject-matter are presented below.

Methods and Techniques of Instruction

- (a) Need more time for reactions
- (b) Very practical
- (c) Excellent philosophical base
- (d) Entertaining, but not informative

Sociology of the Undereducated Adult

- (a) Too scholarly
- (b) Excellent content
- (c) Presentation was clear and inspiring
- (d) Discussion was too "competent and comfortable"

Table 14. Analysis of 2nd week evaluation responses

Subject	Content			Presentation			
	Mean	S.D.	S.E.	Mean	S.D.	S.E.	
Methods and Techniques of Instruction	3.64	.5339	.0605	3.67	.5011	.0567	
Sociology of the Undereducated Adult	3.40	.5661	.0641	3.44	.6156	.0697	
Teaching Reading to ABE Students	3.51	.6188	.0701	3.36	.7020	.0795	
Teaching Mathematics to ABE Students	3.05	.7712	.0873	3.03	.8054	.0912	
Teaching Language Arts in ABE	3.38	.7426	.0841	3.24	.8707	.0986	
Teaching Family Life and Community Living	3.41	.6730	.0762	3.01	.8451	.0957	
S.D. = Standard Deviation			S.E. = Standard Error of the Mean				

#### Teaching Reading to ABE Students

- (a) Need more "how-to-do-it"
- (b) Only one method of teaching reading
- (c) Need more of this - continually
- (d) Geared too much for middle class

#### Teaching Mathematics in ABE

- (a) Content needed more practicality
- (b) Too much emphasis on children
- (c) Needed examples of "how-to-do-it"
- (d) Very useful

#### Teaching Language Arts in ABE

- (a) Speakers spoke too fast
- (b) Time for questions too limited
- (c) Needed more application to ABE

#### Teaching Family Life and Community Living

- (a) Voice of second speaker too low
- (b) One speaker disturbed from questions
- (c) Combination of speakers good
- (d) Need more "handout" materials

Overall suggestions from the second week evaluation were:

- (a) Devote more time to certain subjects--more specifics and less generality
- (b) Some participants are rude to the speakers
- (c) Avoid topics of controversy
- (d) Need a compiled report at the end of institute
- (e) Some group leaders dictatorial
- (f) Institute seems to improve with age

The data from the third week evaluation are shown in Table 15.

"Testing and Evaluation in ABE" and "Publishing Company Representatives" received somewhat lower ratings. Comments regarding all of the topics are listed below.

Table 15. Analysis of 3rd week evaluation responses

Subject	Content			Presentation		
	Mean	S.D.	S.E.	Mean	S.D.	S.E.
Selecting Materials for ABE	3.60	.6515	.0738	3.45	.6960	.0788
Testing and Evaluation in ABE	2.92	.7857	.0890	3.01	.7472	.0846
Publishing Company Representatives	3.17	.6916	.0783	2.90	.7488	.0848
Counseling in ABE	3.46	.8008	.0907	3.42	.7988	.0904
Evaluation of ABE in Mississippi	3.67	.6379	.0722	3.62	.6493	.0735
S.D. = Standard Deviation			S.E. = Standard Error of the Mean			

Participant suggestions and comments relating to the content and presentation of the topics are found below.

#### Selecting Materials for ABE

- (a) Speaker tended to "talk down" to participants
- (b) Very good, particularly the involvement of participants in practical exercise
- (c) Not enough flexibility in presentation
- (d) Materials selected and presented well
- (e) Too much material presented for the available time

### Testing and Evaluating ABE Students

- (a) Presentation "too technical" for participants
- (b) Needed handouts to follow
- (c) Good presentation, very helpful
- (d) Material covered too much about testing in general, not enough applicability to ABE

### Representatives of Publishing Companies

- (a) Materials not oriented to ABE
- (b) Rotation of groups was excellent
- (c) Not enough time for presentations
- (d) Some representatives were discourteous
- (e) Level I materials very helpful

### Counseling in ABE

- (a) Excellent content and presentation
- (b) Too general, needed more specificity
- (c) Need individuals in the state program to demonstrate how they counsel adults

### Evaluation of ABE in Mississippi

- (a) Presentation too hurried
- (b) Valuable information
- (c) Need follow-up on students who were tested

Overall suggestions for the third week were:

- (a) Shorten the institute to two weeks, more night sessions, less commuting
- (b) Well planned, very informative
- (c) Use speakers who are working in ABE
- (d) Need more demonstrations of "how-to-do-it"
- (e) More breaks of less time in duration
- (d) Future consultants should spend more time in the institute and work in discussion groups

### General Evaluation

In addition to the weekly evaluations of program content, an overall evaluation of the general structure of the institute was conducted. A composite analysis of this evaluation is presented in Table 16.

Table 16. Participants' opinions concerning the general structure of the institute

Subject	Mean	S.D.	S.E.
Meals	3.62	.6690	.0757
Lodging	2.79	1.2521	.1418
Meeting Rooms	3.45	.5006	.0567
Program Schedule	3.46	.5964	.0675
Amount of Free Time	3.35	.9511	.1077
Speakers (Consultants in General)	3.19	.5596	.0634
Extent of opportunities to share ideas with others	3.41	.6920	.0784
Extent the <u>content</u> of institute will be of use in local ABE program	3.63	.6469	.0732
Extent <u>Methods and Techniques</u> of institute will be of use in local programs	3.46	.6779	.0768
Satisfaction with services (registration, parking, maid, mail, etc.) provided during the institute	3.08	.9226	.1045
Personal feelings concerning number of participants at the institute	3.29	.7578	.0858

S.D. = Standard Deviation

S.E. = Standard Error of the Mean

The data analysis is again based upon the following rating scale:

Excellent	4
Good	3
Fair	2
Poor	1

As indicated in Table 16, most of the components were rated ( $\bar{X}$ ) about midway between "good" and "excellent." However, some were rated somewhat lower. Those comments, positive and negative, listed most frequently about the various components are presented below.

#### Meals

- (a) Well prepared and delicious
- (b) needed one banquet-type meal

#### Lodging

- (a) Failure of elevator to work properly
- (b) Drinking water not cold enough
- (c) Need accommodations with more privacy

#### Meeting Rooms

- (a) Need all rooms in same building
- (b) Prefer Dorman Hall to Hilbun Hall
- (c) Too cool on certain days

#### Program Schedule

- (a) Excellent
- (b) Breaks were too long
- (c) Too much time for group discussions
- (d) Need more night sessions
- (e) Need a two-week institute instead of three-weeks

#### Amount of Free Time

- (a) Too much free time
- (b) Needed more during last week

#### Speakers (Instructional Consultants)

- (a) Should have more experience in ABE
- (b) Covered too much material in limited time
- (c) Well informed and pleasant

#### Opportunities to Share Experiences with Others

- (a) Best part of institute
- (b) Small group discussions excellent for this
- (c) Need more of this

#### Usefulness of Content to Local ABE Program

- (a) Most useful
- (b) Similar to what I am now using

Usefulness of Methods and Presentation to Local ABE Program

- (a) Most useful
- (b) Depends upon how well I can explain them to other local staff

Satisfaction with Services Provided During Institute

- (a) Maid service not entirely satisfactory
- (b) Good overall service - considerate personnel

Feelings About Number of Participants

- (a) Need more participants from each county
- (b) Too many participants
- (c) Number just right

Participants were asked to indicate which subject-matter they felt would be most helpful if presented during the follow-up workshops for ABE teachers. Their responses are listed, in order of importance, as follows:

1. Teaching reading in ABE
2. Methods for teaching ABE students
3. Testing and interpretation of test scores
4. Counseling ABE students
5. Opportunities for students beyond ABE programs
6. Selection of materials
7. Recruiting for ABE programs
8. Professional ethics in teaching ABE students

Those attending the institute were encouraged to indicate which kinds of information would have been most helpful to them prior to the institute. Those suggestions, in order of importance, are as follows:

1. Kinds of topics to be studied
2. List of participants who will attend
3. Schedule of activities, including speakers.

4. Admission requirements to the university
5. Group assignments, if possible

Participants were asked to indicate the two most valuable ideas they had received from the institute. Their composite ideas, listed in order of importance, were:

1. Teacher's role in counseling ABE students
2. How to evaluate ABE enrollees
3. Methods and techniques of teaching ABE students
4. Selecting materials for ABE
5. How to recruit students into ABE programs
6. Keeping adequate records in ABE
7. Qualities of good teachers in ABE
8. General information about the State-wide ABE program

The major weaknesses of the institute, in order of importance, as felt by the participants were:

1. Rudeness of some participants in general sessions
2. Too much material covered for time available
3. Speakers not always practical
4. "Take-home" materials from some speakers
5. Participants from different programs have different problems
6. All teachers and supervisors could not attend
7. Institute too long - should have been two weeks
8. Need more personal contact with speakers
9. Some planned social activities needed
10. Parking problems for commuters

The final component of the general evaluation of the institute was the "Attitude Scale Technique for Evaluating Meetings," developed

by Russell P. Kropp and Coolie Verner, Florida State University. According to the authors, this scale appears to be a valid instrument for getting an overall rating of participant reaction to meetings as well as comparing participant satisfaction of one type of process against another. The ratings of the participants were analyzed and the obtained weighted mean, according to values on the Kropp-Verner Scale, was 3.38. The most positive value possible is 1.13, and the most negative value possible is 10.89, with a median value of 6.02.

Based upon this analysis, it is evident that, in general, participants felt that the institute was very helpful and gave it a rating well on the positive side of the median.

## D. GENERAL IMPLICATIONS

### Observations from the Data

When reviewing the evaluation data presented in Section III of this report, certain implications are evident. Those which appear to be most important are as follows:

1. No attempt has been made to generalize in any way from the institute participants to the population of ABE staff personnel involved in the program sponsored by the Mississippi State Department of Education. The participants were not randomly selected, and there is no accurate way of knowing how representative they were of the entire ABE staff in the state. Also, six of the participants were special students who were employed in programs other than that sponsored by the State Department of Education.
2. In order to conduct an effective evaluation, more extensive planning and somewhat more control must be exercised by the staff. A case in point is the lack of reliability of the cognitive data obtained from the pre-post tests in this institute. As a result, little, if any, confidence can be placed in the data or any of the trends, changes or conclusions contained therein. One reason for this was the lack of coordination between what the instructional consultants indicated they would teach in their presentations and what they actually taught. This is known to be a fact because some consultants indicated this to be true after their presentation. Methods of avoiding this shortcoming are discussed in Section II - Pre-and-Post Test Data.
3. It is quite possible that an institute, structured for general instruction, may not be an effective way of training teachers for Adult Basic Education. This implication is based upon: (1) responses from

the participants indicating that the institute should be limited to two weeks, and (2) the lack of reliability in the pre-and-post test cognitive data. The latter suggestion also implies that the entire approach to the "general-type" institute may be somewhat in error. Instead of trying to "cover the waterfront" and present a limited amount of information about a number of topics, perhaps a shorter, in-depth approach would be more effective. More concentration and work in a limited number of subject-matter areas (one or two per week) for two weeks in duration would limit the range of material covered, but it would likely produce participants who would be more knowledgeable about ABE over a longer period of time. This needs some investigation before definite conclusions can be reached.

### Observations from the Institute

As previously mentioned, 73 of the participants were employed in the ABE program sponsored by the State Department of Education. The institute was planned for 75 participants, but due to the lateness of official notification of approved funding, several potential participants were unable to attend. If not for the ability of certain local administrators to find replacements at the last minute, it is quite possible the number would have been smaller. It is hoped that this situation can be avoided in the future by somewhat earlier official funding if and when institutes of this type are conducted.

In addition to the general implications cited above, one other must be cited. Although some shortcomings have been noted, the most significant strength of the institute, from beginning to end, was the overwhelming enthusiasm of the participants. This characteristic permeated the entire program and never seemed to decrease as the hours and days became weeks. At no time did anyone refuse to participate or do anything he or she may be asked to do, even when there was no advance warning. The institute staff members definitely feel that the enthusiasm and dedication of the participants will, in turn, influence the local programs of which they are a part, resulting in an overall improvement and upgrading of the ABE program throughout the state. It is hoped that the experiences gained from this training institute will contribute, in some way, in this endeavor.

APPENDIX

## INSTITUTE STAFF

### Planning Committee

Mr. Joe Baddley, State Coordinator, Adult Education, Mississippi State Department of Education

Miss Bonnie Hensley, Consultant in Materials and Reading, Mississippi State Department of Education

Mr. Jack Shank, Dean of Continuing Education, Meridian Junior College

Mr. Wylie Wood, Supervisor, Adult Basic Education, Vocational-Technical Center, Itawamba Junior College

Mrs. Alma Jo Rayburn, Adult Basic Education Teacher, Tupelo, Mississippi

Miss Martha Harris, Adult Basic Education Teacher, Meridian, Mississippi

Dr. Don Seaman, Mississippi State University

Mr. Lewis Ryan, Mississippi State University

### Program Development

Mr. Joe Baddley, Director, ABE Institute

Dr. Don Seaman, Associate Director, ABE Institute

Mr. Lewis Ryan, Staff Associate, ABE Institute

Dr. Leonard McCullough, Staff Associate, ABE Institute

### Subject-Matter Specialists

Mrs. Flora Brown, Language Arts

Mrs. Virginia Chain, Family Living

Mrs. Theresa Lewis, Reading

Mrs. George Underhill, Mathematics

### Instructional Consultants

Dr. M. Donnie Dutton, Associate Professor, Adult Education, Memphis State University

Mr. Thomas Edwards, Chairman, Social Science Studies, Coahoma Junior College, Clarksdale, Mississippi

Miss Mary Ann Elkin, Mississippi State Board of Health

Dr. Harry Frank, Director, Adult Education, Auburn University

Mrs. Carol Geeslin, Reading Clinician, Reading, Education, and Developmental Center, Madison, Florida

Dr. Irwin Jahns, Assistant Professor, Adult Education, Florida State University

Mr. George Johnson, Assistant Professor, Community College Education, Mississippi State University

Dr. Emmett Kohler, Director, Bureau of Educational Research, Mississippi State University

Mrs. Dorothy Minkoff, ABE Materials Specialist, Adult Education Resource Center, Newark State College

Dr. Marshall Morrison, Associate Professor of Education, Alabama State University

Mrs. Augustine McPhail, English Consultant, Mississippi State Department of Education

Mrs. Elizabeth Speak, Mississippi State Department of Public Welfare

### Group Leaders and Reporters

#### I. Discussion Groups

<u>Group</u>	<u>Leader</u>	<u>Reporter</u>
1	Stanley Flowers	Mrs. Daphna Parker
2	Billy Coleman	Mrs. Della Hodge
3.	R. L. Grimes	Mrs. Alvonja Fouche
4	James Gray	Mrs. C. N. Strange
5.	Jack Shank	Mrs. Mary Veasy
6	Tommy Hitt	Mrs. Mary Garrett

#### II. Work-Study Groups

<u>Group</u>	<u>Leader</u>	<u>Recorder</u>
Family Life	O. M. McNair	Bobby Stevens
Language Arts	Mrs. Mary Johnson	Mrs. Jane Barrett
Mathematics	Willie Anderson	Mrs. Marjorie Wareham
Reading	J. Ronald Phillips	Miss Rose Sias

TRAINING SCHEDULE - ABE INSTITUTE  
MISSISSIPPI STATE UNIVERSITY  
FIRST WEEK

"ABE - The Learner, The Teacher, The Learning Situation"

Mon., July 21	Tues., July 22	Wed., July 23	Thurs., July 24	Fri., July 25
8:30 A.M. (Dorman Hall) Welcome to MSU Pre-Testing Introduction of Staff and Participants General Orientation - Institute Pro- cedures	"The Undereducated Adult" "The Adult in the Learning Situation" "Characteristics of the ABE Student"	"Expectations of Others of the ABE Teacher" "(Panel-Local Director, Teacher, Supervisor) (Panel-Students in Local Class)	Demonstration of Effective Classroom Teaching in ABE Participant Observa- tions and Reactions	"Recruitment and Retention of ABE Students" "Record-Keeping Procedures in ABE"
12:00 - 1:15 P.M. "Overview of ABE - National, State, and Local Levels" Group Assignments Group Meetings - Personal Ex- pectations for the Next Three Weeks	Discussion Group Meetings - Im- plications of the Morning Discus- sions General Session - Group Reports on Implications	LUNCH "Desirable Classroom Behavior of ABE Teachers" - Discus- sion Group Work and Reports to General Session	"Effective Teaching of ABE Students at Various Levels" "How to Teach ABE in Multi-Level Class- room Situations"	Group Problems - Practicum in Effective Record-Keeping Group Reports - Problems in Record-Keeping in ABE First-Week Evalua- tion
5:00 - 7:00 P.M. General Session - Idea Exchange		DINNER Film Forum - "To Touch a Child"		
9:00 P.M.	TERMINATION OF DAILY ACTIVITIES			



TRAINING SCHEDULE - ABE INSTITUTE  
MISSISSIPPI STATE UNIVERSITY  
SECOND WEEK

"Teaching Methodology, Program Development, Subject-Matter Skills"

Mon., July 28	Tues., July 29	Wed., July 30	Thurs., July 31	Fri., Aug. 1
8:30 A.M. "Methods and Technique for Adult Classroom Instruction" "Individualized Instruction in ABE"	"Sociology of the Undereducated Adult - Implications for Program Development in ABE"	"Teaching Reading to ABE Students" "Fundamentals of Teaching Reading to Illiterates"	"Teaching Math to ABE Students" "Identifying Math Skills Needed at the Various Levels in the ABE Program"	"Teaching Family Life and Community Living Skills in ABE"
12:00 - 1:15 P.M. Discussion Group Problems - Practicum in Selecting Appropriate Methods "Devices for Teaching ABE Students in the Learning Situation"	Study Groups - Selection of Basic Skills and/or Understandings Needed by ABE Students Group Reports	LUNCH Study Groups - Reactions and Questions about Teaching Reading in ABE	"Teaching Language Arts in ABE" Language Arts Skills Identification	Selection and Orientation of Study Groups for Work Skill Development
5:00 - 7:00 P.M. Demonstration of Teaching Devices by Groups		DINNER General Session - Procedures for Study Groups During the Remainder of the Institute		
9:00 P.M.	TERMINATION OF DAILY ACTIVITIES			

TRAINING SCHEDULE - ABE INSTITUTE  
 MISSISSIPPI STATE UNIVERSITY  
 THIRD WEEK

"Materials, Counseling, Testing, and Evaluation"

Mon., Aug. 4	Tues., Aug. 5	Wed., Aug. 6	Thurs., Aug. 7	Fri., Aug. 8
8:30 A.M. "Selecting Materials for ABE - What Determines a Good Material?"	"Testing and Evaluating ABE Students - Testing for Placement, Achievement, and Motivation"	"Counseling in ABE - Who, When, How, etc." "Counseling in Initial Placement and Later in the Program"	"An Evaluation of the ABE Program in Mississippi - A Report of Results"	Post-Testing Work-Study Group Reports
12:00 - 1:15 P.M. Work-Study Groups: Skills Needed by ABE Students in Various Grade Levels	LUNCH	LUNCH	Work-Study Groups: Prepare Final Reports	Group Reports Future Plans for ABE in Mississippi
5:00 - 7:00 P.M. Work-Study Groups (Continued)	"Commercial Materials for ABE"	Work-Study Groups: Skills Needed by ABE Students in Various Grade Levels  DINNER	Work-Study Groups: Prepare Final Reports	
9:00 P.M.	"Commercial Materials for ABE"	Work-Study Groups: (Continued)	Work-Study Groups: Prepare Final Reports	
TERMINATION OF DAILY ACTIVITIES				

Table 17. Cognitive test raw score differences

Subject Identification*	Pre-Test	Post-Test	Difference
428662	32	29	-3
428804	30	28	-2
428820	29	26	-3
428822	29	28	-1
427829	29	37	8
426925	28	34	6
421607	28	30	2
413463	26	31	5
426762	25	78	-7
460529	25	26	1
426123	25	27	2
427369	25	22	-3
427243	25	29	4
427227	24	36	12
427425	24	27	3
428504	24	29	5
428609	24	24	0
422327	23	25	2
426366	23	21	-2
428844	23	22	-1
353424	21	23	2
427628	21	23	2
425625	21	25	4
426546	21	24	3
245562	21	23	2
426625	20	25	5
426249	20	21	1
427627	20	25	5
426847	20	28	8
513303	20	29	9
428869	20	27	7
427428	19	25	6
535266	19	27	8
427628	19	17	-2
391363	19	25	6
246010	19	19	0
428100	18	36	18
426766	18	26	8
427669	18	(No Score)	
179220	18	20	2
426526	18	25	7
427661	18	16	-2
427367	18	15	-3
428366	18	23	5
426448	18	25	7
428072	18	20	2
425563	17	30	3
428424	17	31	14
420283	17	19	2

587381	17	23	6
427947	17	22	5
428606	17	(No Score)	
425643	17	19	2
587101	17	28	11
409361	17	21	4
408463	17	21	4
485260	16	18	2
426763	16	25	9
426889	16	22	6
424385	15	26	10
427669	15	29	14
427627	15	12	-3
425788	15	22	7
428789	15	28	13
425428	15	26	11
428409	14	27	13
425444	14	19	5
425329	14	15	1
426865	14	27	13
426627	14	18	4
428606	14	22	8
426545	14	19	5
587162	13	25	12
427845	12	23	11
428481	11	22	11
587184	11	18	7

\*First six digits of social security number.  
 Three participants did not take the pre-test.

