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A study was made of adult basic education in a Southern rural community to determine characteristics of students and instructional staff; grade level progression, rate of dropout, student satisfaction, and appraisals of instructional staff; and the relationship between program success and characteristics of students and instructional staff. Data were collected via questionnaires, standardized tests, and interview schedules from a 1/3 random sample of students (305 persisters and 116 dropouts) and 77 teachers and teacher aides. Student gains in grade level scores were significant; nearly 3/4 stayed in the program; they were satisfied with the program; and staff were generally satisfied with student progress. Factors which seemed to favor achievement were being middle aged, having had no prior school experience, and being of rural residence. Dropouts were likely to be young, with no family responsibilities, and not too committed to a particular line of work. Staff characteristics differences between "high" and "low" achieving centers were slight but it seemed that a disproportionate share of "high" center teachers expressed concern for the problem of individualization. (nl)

EVALUATION OF AN ADULT BASIC EDUCATION PROGRAM IN A SOUTHERN RURAL COMMUNITY

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CHAPTER I

INTRODUCTION

This report presents the findings of the second phase of an evaluation of an adult basic education program for seasonal farm workers.

The document is organized into five chapters. The first chapter briefly reviews the purpose of the adult basic education program; summarizes the observations and recommendations set forth in the Phase I report; presents the purpose and scope of the Phase II evaluation; and describes the methodology employed and the limitations affecting the study.

Chapter II presents a detailed description of the students enrolled in the ABE project along with the attributes of the instructional staff deemed relevant to program success. In Chapter III various aspects of program success or effectiveness are explored. In Chapter IV, selected characteristics of the student and instructional staff are related to two primary criteria of program success, namely, student grade level gain, and rate of dropout from the program.

In Chapter V a discussion of the study findings is presented and their implications are set forth.

Background of the Adult Basic Education Program

The primary purpose of the ABE program was to provide basic education to undereducated, low income, predominantly rural adults in a southern county. The principal target audience consisted of seasonal farm workers who exhibited three disadvantaging characteristics; namely, lack of education, underemployment and lack of needed job skills. Originally the project was established to serve approximately 1,000 participants.

Basic education was conceived and defined in its broadest sense; e.g., the acquisition of the basic literacy skills of reading, writing, numerical, and oral communication,

and was directed toward developing knowledge, understanding, and problem solving abilities in relation to pre-occupational education, home and family life, health education, citizenship, community processes, and other areas of knowledge that are requisite to effective living in contemporary society.

An overriding objective of the entire program was that of pre-vocational training so that qualified participants could continue their education with maximum efficiency in newly developed adult vocational training programs.

Brief Summary of Phase I of the Evaluation

The first phase of the evaluation utilized the case-study method in which observations were made and selected samples of students, instructional staff, administrative and service personnel were interviewed to acquire insights into the adequacy of the following aspects of the ABE program:

1. physical facilities
2. audio-visual and other educational media
3. administrative arrangements
4. curriculum design
5. pre and in-service staff training
6. instructional methods and materials
7. evaluation and testing instruments
8. data collection and record-keeping system.

An examination was also made of the original project proposal in terms of its philosophy, scope and purpose, and of the educational objectives which would guide any evaluation report.

Briefly stated, Phase I of the evaluation revealed that:

(1) Physical facilities were judged to be adequate for the project. Use and arrangement of space left something to be desired in that arrangement of certain administrative/supervisory offices led to many distractions during the normal workday and the location of students in classrooms resulted in much distraction and interruption of classroom activities.

(2) Audio-visual equipment was in short supply--and little use was being made of what was available. Similarly, little equipment was being used in the preparation of teacher-made materials. Tape recorders, duplicating or photography equipment, camera supplies, etc. were apparently not available to classroom teachers to any appreciable extent.

It should be noted, however, that during this stage of the evaluation, much equipment had been ordered but had not as yet arrived.

(3) The organizational structure of the ABE program was found to be carefully conceived and with one or two exceptions administrative arrangements for developing and executing the program were satisfactory.

(4) The curriculum itself was criticized for being heavily oriented around the 3 R's with little opportunity for relating literacy education to students needs, wants, or interests or to their knowledge of the world about them.

(5) The pre-service orientation program for the administrative, supervisory and teaching staff was too superficial and broad to have particular and immediate relevance to the pressing problems of organizaing and implementing the new program. Part, if not most, of this deficiency was subsequently remedied by a continuous program of in-service training.

(6) Instructional methods being employed consisted for the most part of traditional classroom lectures by staff followed by recitation by students. Little effort was being made to use various adult education methods and techniques which have been proven effective for relating subject matter to students' needs, problems and goals; for individualizing instruction; for pacing students; for enhancing motivation to learn and succeed; and, for bringing about specific changes in terms of knowledge, understanding, reasoning and problem-solving skills, attitudes and values.

(7) Data collection and record keeping procedures were very carefully conceived and probably represented one of the best and most effective efforts in the country in this regard. It was the wealth of student information collected by teachers, counselors, social workers and the administrative staff that made the intensive study reported in Phase II possible.

As a result of the first phase of the evaluation the following nine specific recommendations were made:

1. Consideration be given to revising the present curriculum to provide a more realistic, utility oriented educational experience for students with added emphasis on consumer and health education, family and community relations, citizenship training, pre-vocational preparation and occupational guidance.

2. Additional emphasis be given to encouraging the instructional and service staff to work together in jointly preparing educational experiences that would lend themselves toward developing adults capable of making job and career choices, capable of emigrating to other communities and making satisfactory adjustments in these communities and/or capable of entering more actively into the social, economic and political life of the local community.

3. Consideration be given to earlier, more effective screening of applicants via interviews, ability testing, and medical examination so that those most likely to benefit from basic education are afforded the opportunity to do so. Students who are less likely to benefit from immeidate remedial education for physical or mental reasons should be referred to other agencies for rehabilitation and treatment. Where possible, limited medical assistance should be provided to those applicants capable of undertaking the basic education program, but who have minor deficiencies, such as poor eyesight.

4. Curriculum content be developed locally, with increased emphasis on the use of materials such as newspapers and mail-order catalogs, and the use of field trips to local businesses, government and other establishments to familiarize students with the social and vocational opportunities available to them in their local community.

5. Instructional and non-instructional staff be provided with continued in-service training opportunities. It was also recommended that the competencies of adult educators and master teachers from outside of this project be more fully utilized to provide needed training.

6. Continued emphasis be given to maintaining the very adequate record keeping and data collection activities established early in the project, with added emphasis given to the area of vocational interests.

7. Consideration be given to utilizing advanced students as sub-professional aides to help new or lesser advanced students. This would provide a leadership development opportunity for a number of the more successful students and would also serve as a model toward which beginning students could aspire in the future.

8. The program be expanded so that students progressing at a satisfactory rate may be afforded the opportunity to achieve at least an eighth grade equivalent education.

9. Consultants and project staff mutually discuss the contents of this and future evaluative reports and work toward an improved program.

The Purpose and Scope of Phases II and III of The Evaluation

The purpose of the Phase II evaluation was to provide concrete information about the effectiveness of the program through an intensive analytical study. More specifically the investigators were concerned with:

a) Determining success of the program via such criteria as grade level change, student dropout, teacher perception, and student perception; and

b) Determining relationships between program success and selected characteristics of both students and instructional staff.

In pursuing these evaluative objectives, a study design was developed wherein a representative sample of all the biographical and educational data contained in the project files were transferred to automatic data processing cards for further analysis. In addition, supplimentary data were obtained from a small sample of the students and from all teachers and teacher aides.

The following attributes of the student population were identified for purposes of this study and were obtained from existing project files:

1) Personal Characteristics
   a) age
   b) sex
   c) physical disabilities

2) Familial Characteristics
   a) marital status
   b) status in household
   c) number of dependents
   d) family income

3) Educational Characteristics
   a) previous school attendance
   b) last year of school attendance
   c) highest grade completed
   d) grade level upon entry, and at completion of the ABE project

4) Occupational Characteristics
   a) present or most recent occupation
   b) occupational aspiration
   c) duration of aspiration

5) Perceptual Characteristics
   a) perception of having problems in the ABE program
   b) perception of having problems in the home

The following characteristics of the instructional staff were identified for utilization in this study, and were obtained from all teachers and teacher aides.

1) Personal Characteristics
   a) age
   b) sex
   c) marital status

2) Educational Characteristics
   a) degree(s) held
   b) certification
   c) experience in teaching adults
   d) training in adult education

3) Professional Commitments
   a) full time vs. part time
   b) career aspirations in adult education
   c) patterns of social participation

Detailed descriptions of students and teachers in terms of the above listed variables are presented in Chapter II of this report.

In addition to the above data, a number of variables were examined that related to the "success" or effectiveness of the ABE project. These variables were:

1) Grade level change as measured by difference between pre- and post-test scores

2) Rate of dropout

3) Participant satisfaction in terms of
   a) quality of learning
   b) sources of greatest satisfaction

4) Participants' awareness of problems
   a) program related problems
   b) home related problems

5) Perceptions of the instructional staff in terms of
   a) adequacy of class size
   b) adequacy of student progress
   c) nature and intensity of certain program related problems
   d) emphasis placed on content areas

Detailed descriptions of these data are presented in Chapter III of this report.

Since the evaluative objectives set forth by the investigators were two-fold, encompassing both an exploration of program success and an assessment of those student and instructional staff attributes associated with program success, a more detailed analysis of the above mentioned variables was conducted, and is set forth in Chapter IV of this report. Program success in this study was operationally defined as a) student grade level change between pre- and post-tests (classified as high, medium or low), and b) student dropout (percentage).

These data have implications for the improvement of the ABE program to the extent that administrative and instructional staff objectively appraise these findings in light of their own experiences in teacher selection and training, curriculum organization and program planning, selection and use of methods and materials, recruitment and screening of students, functionalization and individualization of instruction, student counseling, and the like.

Although the evaluation findings are discussed and their implications are set forth by the investigators in Chapter V of this report, the third phase of this evaluation project consisted primarily of an in-service program designed to feed back into the system the findings of the evaluation and to further explore the implications deduceable from the findings of both Phase I and II. Hopefully this information feedback provided: (1) more effective communications within the program; (2) the basis for a unified attack on significant problems; (3) a greater awareness among the total staff of their individual and collective strengths and weaknesses; and, (4) bench marks from which to measure future accomplishments.

Procedures Followed in This Evaluation

Data utilized in this report were obtained from three sources: 1) existing records in the ABE project files; 2) interviews with administrative and instructional staff; and, 3) interviews with a sample of the students.

Sampling Procedure

Information pertaining to the personal attributes and educational accomplishments of the student population were obtained from a 33 per cent representative sampling of existing records in the ABE project files. Students from all centers who were presently enrolled, as well as those who were once enrolled, but were no longer in the program, were included in this sample. Provisions were made to assure a proportionate representation of students enrolled in all centers. A summary of the relative distribution of the student sample by rural and urban centers is presented in Table 1.

TABLE 1.--Number and percentage distribution of students included in sample of ABE participants

Center	Number in Sample[a]		Per cent of Total Sample	
Urban Center				
1	43		14.1	
2	50		16.4	
3	24		7.9	
Urban Total		127		41.6
Rural Centers				
1	20		6.6	
2	28		6.6	
3	33		10.8	
4	24		7.9	
5	20		6.6	
6	20		6.6	
7	20		6.6	
8	21		6.9	
Rural Total		178		58.4
Grand Total		305		100.0

[a]It should be remembered that the number of students identified represents an approximate 1/3 sample of the total population enrolled in the ABE project at the time this sample was drawn.

Information pertaining to the attributes of the instructional staff were obtained from all teachers and teacher aides employed in this project. A group interview technique was utilized for this purpose.

Data Collection and Analysis

Data obtained from project files were transferred from existing record forms to automatic data process sheets using a numerical code developed by the investigators. In the same manner, data on instructional staff were transferred to these sheets. This coded information was punched on data process cards and was analyzed using a computer program developed by the investigators.

Limitations

Interpretation and generalization of the data presented in this report require that the reader be aware of the several limitations which affected the study. Although the investigators do not consider these limitations severe enough to invalidate this study, they do effect the extent to which one is free to generalize to this, and other ABE populations. These limitations are:

1) Sampling: A sample purports to represent the whole universe from which it was drawn. However, in the process of sampling, there is always the likelihood that exact representation of all elements in the total universe is not obtained. In this study, a one-third sample was drawn. That is, every student had one chance in three of being selected, and once selected, represented himself and two other students. Thus, error could have been introduced into the study by the inclusion, or exclusion, of students with unique attributes.

2) Accuracy of Information: Human error in the collection and recording of data is a consideration which could vastly affect study findings. The investigators proceeded under the assumption that those project staff who were responsible for the collection of student data had made few, if any, errors in collecting and recording this information. Even so, some inconsistencies were noted, especially where the same data were recorded on two or more forms. This was especially true with such data as the number of dependents reported by students and the highest grade of school completed. Much of this error is likely due to variations in the responses given by the student as he was interviewed by different persons from the project staff.

An additional limitation was imposed on the investigators by frequently occurring incomplete information on student records.

3) Data Collection: It is assumed that few, if any, errors were introduced during the coding and transferring of data from student forms to data processing sheets. However,

it is recognized that numerical coding of qualitative data often results in some loss of clarity and content.

4) Data Analysis: Only a small portion of the data obtained from project staff and students were utilized. Much of the data were found to be either incomplete or irrelevant for purposes of this study. In addition, a severe limitation of time required that data on medical examination results not be coded and utilized in this report. It is anticipated that this information will be utilized in future analyses.

5) Standardized Tests: A key variable in this study was student progress, or grade level advancement during the course of the ABE program. This progress was determined by calculating changes in scores attained on a standardized test administered at the beginning and at the termination of the program.

It was found that a number of students had not taken one or both of these tests even though they were enrolled in the program from its inception. In addition, a number of students were enrolled in the program after the initial test was administered.

Only those students who had taken the tests at the initiation and the termination of the program were included in the analyses relating to grade level advancement. Consequently, these data represent only those students who participated in the program from its beginning; took both the pre- and the post-test; and, were subjected to approximately the same number of instructional hours.

A final difficulty entering into the picture was the appropriateness of the test given. A single test was administered to the entire student population regardless of grade level. The result was that the test was overly complicated for accurate measurement among the near total illiterates in the program, and was too elementary for the more advanced students. Accuracy of grade level changes may, therefore, be brought into question.

6) Success of Program: The investigators limited the detailed analysis of program success to two criteria--grade level gain and rate of dropout. This may have provided an unduly limited definition of program "success."

CHAPTER II

DESCRIPTION OF POPULATIONS

This chapter provides a description of student participants and the instructional staff who were involved in the ABE project at the time of this investigation. The analysis is based upon data obtained from a one-third random sample of the student population and from a 100 per cent sample of the instructional staff.

Characteristics of Students

The descriptive data on students are presented in Tables 2 through 5. These data are discussed in the following order: (1) personal characteristics, (2) familial characteristics, (3) educational characteristics, and (4) occupational characteristics. The members of the instructional staff, which includes both teacher and teacher aides, are described in terms of (1) personal characteristics, (2) educational characteristics, (3) professional commitments, and (4) social participation.

Personal Characteristics

The age and sex distribution of the student sample are shown in Table 2. A majority of the students were found to be quite uniformly distributed between the age brackets of 30-39, 40-49, and 50-59. The data indicate that the highest percentage of students were in the 40-59 year age range, with 28 per cent from 40-49 years of age, and 28 per cent from 50-59 years of age. A slightly smaller proportion (24.3 per cent) were in the 30-39 year age group and 16.7 per cent were 20-29 years of age.

Although the sample provided students in all age groups, ranging from under 20 to over 60 years of age, the distribution of students is skewed towards the older end of the age continuum.

TABLE 2.--Personal characteristics of students

Personal Characteristic		Number	Per cent
Age			
Under 20		4	1.3
20-29		51	16.7
30-39		74	24.3
40-49		85	27.9
50-59		85	27.9
60+		5	1.6
No Response		1	0.3
	Total	305	100.0
Sex			
Male		163	53.4
Female		142	46.6
	Total	305	100.0
Presence of Physical Defects as Reported by Participants			
Yes		43	14.0
No		253	83.0
No Response		9	3.0
	Total	305	100.0

The student sample was practically evenly divided in terms of sex as shown in Table 2 with 53 per cent of the students being male and 47 per cent being female.

In relation to student-reported physical defects the data indicate that a majority, 83 per cent, of the students were not aware of, or at least did not report, the presence of any physical defects.

Familial Characteristics

Familial characteristics of students including marital status, status as head of household, number of dependents, and family income are presented in Table 3.

These data reveal that over one-half (54.8 per cent) of the students were married, one-fifth were single, and an additional one-fifth were either widowed or separated. The

TABLE 3.--Familial characteristics of students

Familial Characteristics		Number	Per cent
Marital Status			
Single		59	19.3
Married		167	54.8
Divorced		15	4.9
Widowed		33	10.8
Separated		30	9.8
No Response		1	0.3
	Total	305	100.0
Status in Household			
Head of Household		276	90.5
Not Head of Household		22	7.2
No Response		7	2.3
	Total	305	100.0
Total Number of Dependents			
None		9	3.0
1-5		141	46.2
6-10		125	41.0
11+		26	8.5
No Response		4	1.3
	Total	305	100.0
Annual Family Income Reported by Respondents			
Under $1000		267	87.5
$1000-1999		23	7.5
$2000-2999		7	2.3
$3000+		2	0.7
No Response		6	1.9
	Total	305	100.0

number of students who were or had been married exceeded the number of students who had never been married by a ratio of approximately 5 to 1. A large majority of the students (90.5 per cent) occupied the familial position of head of the household.

The data also indicate that most of the students were responsible for a relatively large number of dependents.

Forty-one per cent of the sample were found to have from 6 to 10 dependents and 46 per cent had from one to five dependents. Although only 8.5 per cent of the students had 11 or more dependents, nearly three times as many students were in this category as in the category representing no dependents.

Annual family income for 87.5 per cent of the students was found to be less than $1,000 and less than one per cent of the sample population had a family income in excess of $2,999 per year.

Educational Characteristics

Descriptive data pertaining to selected educational characteristics of the students are provided in Table 4.

TABLE 4.--Educational characteristics of students

Educational Characteristics	Number	Per cent
Previous School Attendance		
Have Attended School Previously	291	95.4
Have Not Previously Attended School	10	3.3
No Response	4	1.3
Total	305	100.0
Year of Last School Attendance		
1910-1919	14	4.8
1920-1929	43	14.8
1930-1939	59	20.3
1940-1949	56	19.2
1950-1959	55	18.9
1960-1965	9	3.1
No Response	55	18.9
Total	305	100.0
Highest Grade of School Completed		
None	2	0.7
1st	23	7.5
2nd	39	12.8
3rd	60	19.7
4th	68	22.3
5th	37	12.1
6th	30	9.8
7th	12	3.9

TABLE 4--Continued

Educational Characteristics	Number	Per cent
8th	15	4.9
9th	4	1.3
10th	4	1.3
No Response	11	3.6
Total	305	100.0
Pre-Test Grade Level Distribution		
Under 1.0	31	10.2
1.0-1.9	49	16.1
2.0-2.9	62	20.3
3.0-3.9	60	19.7
4.0-4.9	33	10.8
5.0-5.9	8	2.6
6.0-6.9	5	1.6
7.0-7.9	1	0.3
8.0-8.9	1	0.3
No Data	55	18.0
Total	305	100.0
Mean = 2.6	Mode = 0.0 (30 individuals)	
Median = 2.7	Range = 0.0-8.1	

Practically all (95.4 per cent) of the students in the sample had at some time attended school. An examination of the data reveals that a relatively small percentage of the students had attended school prior to 1930 (4.8 per cent) or since 1960 (3.1 per cent). On the other hand, students in the sample were most likely to have been in school during the 1930's, the 1940's, or the 1950's and in that order. It can also be observed that students were more likely to have attended their last year in school during the 1920-29 period than during the present decade.

In terms of highest grade completed, the data indicate that more students, 22.3 per cent, completed the 4th grade level than any other grade level. The next grade level in terms of number of students completing was the third grade level, completed by 19.7 per cent, followed by the second grade level, completed by 12.8 per cent. Less than two per cent of the students were found to have completed the ninth grade.

The data in Table 4 also indicate the grade level distribution of students as measured by pre-test scores. It can be seen that the mean grade level score for the entire sample was 2.6, and the median grade level attainment was found to be 2.7. Students ranged in tested grade level attainment from 0.0 to 8.1.

More than 77 per cent of the students tested below the 5th grade level and nearly one-half tested below the 3rd grade level. Less than three per cent of the students achieved scores at the 6th grade level or higher.

Occupational Characteristics

The present or most recent kind of jobs held by students and their vocational aspirations are presented in Table 5. These data incidate that a majority of the students (61 per cent) were or had been employed as farm laborers compared to 15.4 per cent in the field of domestic services and 5.6 per cent in the skilled or semi-skilled occupational areas.

In terms of vocational aspiration, more students (22 per cent) preferred to work in the field of "mechanics" than in any other area. The next highest area of occupational choice was in the area of dressmaking and sewing (19.3 per cent). None of the other vocational areas were identified by as many as 7 per cent of the student population. These vocational areas, identified by students, are presented in rank order of preference in Table 5.

Summary of Student Characteristics

The following description provides a general profile of the student population in the adult basic education program.

There was a slightly better than 50/50 chance that the student would be between the ages of 40 to 59. The student was about as likely to be in his 40's as he was to be in his 50's.

The student was almost as likely to be female as male and more likely than not, was not aware of (at least did not report) having any physical defects. Furthermore, the chances were better than 4 to 1 that the student would either be married, or would have been married at some time during his life.

TABLE 5.--Occupational characteristics of students

Occupational Characteristics	Number	Per cent
Nature of Current or Most Recent Job		
Farm Labor	186	61.0
Non-Farm Labor	50	16.4
Domestic Services	47	15.4
Semi-Skilled or Skilled	17	5.6
No Response	5	1.6
Total	305	100.0
Vocational Aspirations		
Mechanic	67	22.0
Sewing-Dressmaker	59	19.3
Factory Worker	20	6.6
Construction Worker	19	6.2
Appliance Repairman	19	6.2
Anything	17	5.6
Typing-Bookkeeping	9	3.0
Nursing	9	3.0
Cook	8	2.6
Housework and Child-care	8	2.6
Plumber-Welder	8	2.6
Janitor	5	1.6
Beautician or Barber	5	1.6
Painter	5	1.6
Teacher	5	1.6
Waiter-Sales	4	1.3
No Response	38	12.5
Total	305	100.0

The "typical" ABE student occupied the role of "head of the household" and as such was about as likely to have six or more dependents as he was to have five or fewer dependents. His family income was under $1000 per year.

From an educational point of view, the typical ABE student terminated his schooling between 1930 and 1960 at approximately the 4th grade level. However, his current grade-level performance was below the 3rd grade level.

Occupationally, the typical student, if a male, aspired to work in the field of mechanics or, if a female, in the field of dressmaking. He was either presently employed or was last employed as a farm laborer or in domestic services.

Characteristics of Instructional Staff: Teachers and Teacher Aides

The descriptive data on teachers and teacher aides are presented in Tables 6 through 9. Characteristics of the instructional staff felt to be pertinent to the purposes of study are discussed in the following order: (1) selected personal characteristics, (2) educational characteristics, (3) professional commitment to adult education, and (4) patterns of social participation.

Personal Characteristics

The data in Table 6 indicate that a higher percentage of the teachers (38.9 per cent) and teacher aides (40.0 per cent) were in the 26 to 35 year age range than in any other age group. It is also indicated that a considerably higher percentage of teacher aides than teachers were in the youngest age group of 25 years or under. The majority of the teachers were over 35 years of age, whereas the majority of teacher aides were 35 years of age or under.

The sex distribution of the instructional staff shown in Table 6 reveals that females were more numerous than males among both teachers and teacher aides, and considerably more so among the teacher aides where the female to male ratio was seven to one.

In terms of marital status, the data indicate that approximately twice as many teachers were married as were single. This is exactly the reverse in the case of teacher aides. A relatively small number of teachers and teacher aides fell in the divorced, widowed or separated categories. In general, the instructional staff could be classified as being either married or single.

Educational Characteristics

The educational level of the instructional staff is presented in Table 7. All of the teachers had completed the Bachelor's Degree; nearly one-third had completed some graduate work; and slightly more than eight per cent had obtained the Master's Degree. In the case of teacher aides, none of them had completed the Bachelor's degree although a majority (64 per cent) had completed some college work. Only four per cent of the teacher aides were found to have less than a high school level of education.

TABLE 6.--Personal characteristics of instructional staff

Personal Characteristics	Teachers		Teacher-aides	
	Number	Per cent	Number	Per cent
Age Distribution				
25 years old or less	2	5.6	8	32.0
26-35	14	38.9	10	40.0
36-45	7	19.4	1	4.0
46-55	6	16.7	3	12.0
56 or more	7	19.4	3	12.0
Total	36	100.0	25	100.0
Sex				
Male	15	41.7	3	12.0
Female	21	58.3	22	88.0
Total	36	100.0	25	100.0
Marital Status				
Single	8	22.2	6	48.0
Married	21	58.3	12	24.0
Divorced	1	2.8	2	12.0
Widowed	4	11.1	3	8.0
Separated	2	5.6	2	8.0
Total	36	100.0	25	100.0

The data further indicate that all of the teachers were certified, whereas practically all of the teacher aides (96 per cent) lacked certification status.

The extent of prior adult teaching experience is also shown in Table 7. A majority of teachers and teacher aides had not had previous adult teaching experience, but more teachers (47 per cent) than teacher aides (28 per cent) were found to have had some experience as teachers in an adult education situation. A large majority of both teachers and teacher aides reported having had some kind of academic training (credit or non-credit) for their work in adult education.

More likely than not, the relatively high proportion of teachers (86 per cent) and teacher aides (92 per cent) reporting having had academic training in adult education is a reflection of their systematic participation in the pre-service and in-service education activities which were an integral part of the adult basic education program.

TABLE 7.--Educational characteristics of instructional staff

Educational Characteristics	Teachers		Teacher-aides	
	Number	Per cent	Number	Per cent
Educational Level				
Some High School	0	0.0	1	4.0
Completed High School	0	0.0	7	28.0
Some College	0	0.0	16	64.0
Bachelor's Degree	22	61.1	0	0.0
Some Graduate Work	11	30.6	0	0.0
Master's Degree	3	8.3	0	0.0
No Response	0	0.0	1	4.0
Total	36	100.0	25	100.0
Teacher Certification Status				
Certified	36	100.0	1	4.0
Not Certified	0	0.0	24	96.0
Total	36	100.0	25	100.0
Previous Experience in Teaching Adults				
Yes	17	47.2	7	28.0
No	19	52.8	18	72.0
Total	36	100.0	25	100.0
Academic Training in Adult Education--Credit or Non-Credit				
Yes	31	86.1	23	92.0
No	5	13.9	2	8.0
Total	36	100.0	25	100.0

Professional Commitment to Adult Education

The data in Table 8 summarize the commitment which ABE instructional staff indicated for adult education. These data indicate that more than half of the teachers were involved in the program on a part-time basis, whereas almost all of the teacher aides (92 per cent) perceived the program as their full-time job commitment.

TABLE 8.--Professional commitment of instructional staff to adult education

Commitment Category	Teachers		Teacher-aides	
	Number	Per cent	Number	Per cent
Time Commitment				
Full-time	15	41.7	23	92.0
Part-time	21	58.3	2	8.0
Total	36	100.0	25	100.0
Commitment to Adult Education as a Career				
Yes	32	88.9	19	76.0
No	4	11.1	6	24.0
Total	36	100.0	25	100.0

When asked about their professional commitment to the field of adult education as a career, a large majority of both teachers (89 per cent) and teacher aides (76 per cent) expressed the opinion that given the opportunity, they would like to commit themselves full-time to teaching adults.

Patterns of Social Participation

As revealed by the data in Table 9 practically all of the teachers and teacher aides were church members. Moreover, teachers and teacher aides were similar in their patterns of church attendance with a majority attending either once a week or twice a month and approximately one-fourth attending church on a twice-a-week basis.

The participation patterns of the instructional staff indicate that teachers were much more likely than teacher aides to be members of secular organizations. The three types of organizations most likely to attract both teachers and teacher aides were (1) professional associations, (2) P.T.A.'s, and (3) Fraternal organizations. The order varied somewhat, however, with professional associations assuming the most prominent position for teachers while P.T.A.'s assumed this position for teacher aides.

On the average, teachers were found to hold membership in two or more organizations; whereas, teacher aides were found to hold membership in less than two organizations.

TABLE 9.--Patterns of social participation of instructional staff

Participation Characteristics	Teachers		Teacher-aides	
	Number	Per cent	Number	Per cent
Church Membership				
Yes	35	97.2	25	100.0
No	0	0.0	0	0.0
No Response	1	2.8	0	0.0
Total	36	100.0	25	100.0
Frequency of Church Attendance				
Twice a Week or More	9	25.0	6	24.0
Once a Week	13	36.1	10	40.0
Twice a Month	12	33.3	8	32.0
Few Times a Year or Less	2	5.6	1	4.0
Total	36	100.0	25	100.0
Membership in Secular Organizations or Associations[a]				
None	3	8.3	12	48.0
Labor Union	0	0.0	0	0.0
Professional Association	30	83.3	4	16.0
Lodge and Fraternities	15	41.7	4	16.0
Civic Organizations	3	8.3	0	0.0
P.T.A.	24	66.7	11	44.0
Veterans Organizations	3	8.3	0	0.0
Political Organizations	1	2.8	1	4.0
Other	1	2.8	2	8.0
Mean number of memberships	2.2		1.4	
Types of People Visited[b]				
Relatives	28	77.8	20	80.0
Neighbors	25	69.4	15	60.0
Occupational Associates	22	61.1	13	52.0
Fellow Church Members	19	52.8	13	52.0
Organizational Associates	12	33.3	4	16.0

TABLE 9--Continued

Participation Characteristics	Teachers		Teacher-aides	
	Number	Per cent	Number	Per cent
Class Members	11	30.6	6	24.0
Childhood Friends	11	30.6	8	32.0
Mean number of types of people visited	3.6		3.2	
Frequency of Visiting Friends				
Once a Week or more	16	44.4	19	76.0
Twice a Month	4	11.1	3	12.0
Once a Month	7	19.4	0	0.0
Few Times a Year	8	22.2	2	8.0
Never	0	0.0	1	4.0
No Response	1	2.8	0	0.0
Total	36	100.0	25	100.0
Use of Leisure Time[c]				
Reading	27	75.0	20	80.0
Watch Television	20	55.6	14	56.0
Fixing Things	12	33.3	4	16.0
Gardening	7	19.4	5	20.0
Play With Children	4	11.1	6	24.0
Resting	4	11.1	4	16.0
Thinking	1	2.8	2	8.0
Visiting	10	27.8	8	32.0
Recreation and Amusements	18	50.0	14	56.0

[a]Data are not cumulative since most of the instructional staff belong to more than one organization.

[b]Data are not cumulative since most of the instructional staff identified more than one type of people whom they visit.

[c]Data are not cumulative since most of the instructional staff identified more than one use of leisure time.

In terms of the kinds of people visited, relatives were most likely to be visited by the instructional staff. The next most frequently visited group for both teachers and teacher aides was "neighbors," followed in order by "job associates," and "fellow church members." More than half of all teachers and teacher aides visited relatives, neighbors, job associates and fellow church members. Less than half of the instructional staff were found to visit organizational associates, class members, or childhood friends. The data also indicate that teacher aides visited friends more frequently than did teachers.

Reading, visiting, watching television, gardening and various other recreational pursuits were the most frequently mentioned leisure time activities of instructional staff. Playing with children was also a frequent activity for teacher aides and the general category of "fixing things" was prominent for teachers.

Summary of Instructional Staff Characteristics

The following description provides a general profile of the characteristics of the teachers and teacher aides in terms of their similarities as well as their differences.

More than a third of all instructional staff members were between the ages of 26 and 35 inclusive. In general teachers were older than were the teacher aides, although the age range in both groups varied from less than 25 to more than 56 years of age.

Teachers and teacher aides were more apt to be female than male--and this was particularly true in the case of teacher aides. As a group, the teachers were more likely than not to be married, whereas teacher aides were more likely to be single.

All teachers had completed a college degree. Nearly all teacher aides had finished high school and a majority of the aides had some college education. All teachers were certified. Even though a majority of the instructional staff had no previous experience in teaching adults, most had some training in adult education. A very large proportion of the instructional staff expressed their commitment to a possible career in adult education.

Most instructional staff were church members, and attended at least twice a month. Most were also members of at least one non-church organization. However teacher aides were about as likely not to belong as to belong to an organization.

Most instructional staff visited relatives, neighbors, job associates and fellow church members. Teacher aides, however, visited their friends more frequently than did teachers. Leisure time activities were very similar for teachers and teacher aides.

CHAPTER III

PROGRAM SUCCESS

This chapter provides a description of the accomplishments of the adult basic education program as measured by: (1) the extent and direction of change between pre- and post-test scores (reported as grade level scores), (2) rate of dropout, (3) participant satisfaction, (4) participant perception of problems, and (5) instructional staff members' perception of the program.

Success Measured by Grade Level

Choice of grade level as a criterion of program success leads to a concern with pre-program grade level distribution, post-program grade level distribution, and differences between the two. An examination of Table 10 reveals that over three-fourths (77.1 per cent) of the student body came to the program with a grade level of less than 5.0 and nearly half (46.6 per cent) with less than 3.0. Other related features of the pre-program distribution were: (1) a range from 0.0 to 8.1, (2) a mean of 2.6, (3) a median of 2.7 (there were equal numbers of individuals above and below the 2.7 grade level), and (4) a mode of 0.0 (more individuals--30--displayed a 0.0 grade level than any other single grade level).

By comparison, it may be observed in Table 10 that nearly half of the participants "tested out" at grade levels beyond 4.0 after having been in the program for several months and none of them displayed levels under 1.0. Other related features of the post-test score distribution were: (1) a range of 1.1 to 11.4; (2) a mean of 4.9; (3) a median of 4.5 (there were equal numbers above and below the 4.5 post-grade-level); and (4) modes of 3.1, 3.6, and 4.0 (these levels were each displayed by eight individuals).

When direction of grade-level change was considered (also Table 10), it was found that approximately 93 per cent of the 183 individuals for whom pre- and post-test data were available, experienced some grade level advance. By contrast

TABLE 10.--Program success as measured by grade level

Grade Level	Number	Percentage
Pre-Test Grade Level Distribution		
Under 1.0	31	10.2
1.0-1.9	49	16.1
2.0-2.9	62	20.3
3.0-3.9	60	19.7
4.0-4.9	33	10.8
5.0-5.9	8	2.6
6.0-6.9	5	1.6
7.0-7.9	1	0.3
8.0-8.9	1	0.3
No Data	55	18.0
Total	305	100.0
Mean = 2.6 Median = 2.7	Mode = 0.0 (30 individuals) Range = 0.0-8.1	
Post-Test Grade Level Distribution		
Under 1.0	0	0.0
1.0-1.9	6	2.0
2.0-2.9	28	9.2
3.0-3.9	52	17.0
4.0-4.9	51	16.7
5.0-5.9	35	11.5
6.0-6.9	28	9.2
7.0-7.9	11	3.6
8.0-8.9	5	1.6
9.0-9.9	4	1.3
10.0-10.9	5	1.6
11.0-11.9	4	1.3
No Data	76	24.9
Total	305	100.0
Mean = 4.9 Median = 4.5	Mode = 3.1, 3.6, 4.0 (8 individuals each) Range = 1.1-11.4	

TABLE 10--Continued

	Number	Percentage
Direction of Grade Level Change		
Advanced	170	92.9
Declined	10	5.5
No Change	3	1.6
Total	183	100.0
Extent of Grade Level Advance		
Under 1.0	24	13.9
1.0-1.9	43	24.9
2.0-2.9	38	22.0
3.0-3.9	38	22.0
4.0-4.9	17	9.8
5.0-5.9	6	3.5
6.0-6.9	6	3.5
7.0-7.9	1	0.6
Total	173	100.0
Mean = 2.6	Mode = 3.1 (8 individuals)	
Median = 2.5	Range = 0.0-7.2	

approximately six per cent recorded some loss and approximately two per cent recorded no change at all in grade level.

Finally, to ascertain extent of grade-level advance, gain scores were computed for the 173 individuals who did in fact advance. Although not discernible from the data in Table 10, subsequent tabulation and "t" test on mean gains by Center revealed that each Center secured a mean gain which could have been due to chance less than one time in a hundred. It can be explicitly observed from the data, however, that a majority of the students gained from 1 to 3.9 grade levels during the course of the program. Whereas, fewer than 14 per cent of the participants gained less than one grade level, more than 17 per cent of them gained as much as or more than four grade levels and nearly 8 per cent gained five or more grade levels.

The mean gain for all students was found to be 2.6 grade levels, eight students gained 3.1 grade levels and seven students each gained 1.5 and 1.6 grade levels respectively.

The median change in grade level score was 2.5 and the range was from 0.0 to 7.2.

Success Measured by Rate of Dropout

As can be seen in Table 11, nearly three-fourths of the students who at one time or another enrolled in the ABE project were still enrolled at the time the study was conducted. Conversely, slightly less than 28 per cent of the students dropped out of the program prior to the time this study was conducted.

TABLE 11.--Program success as measured by rate of dropout

Category	Number	Percentage
Persisted	305	72.4
Dropped	116	27.6
Total	421	100.0

Success Measured by Participant Satisfaction

When asked questions relating to their perception of the quantity of learning that resulted from the program, a majority of the participants (56 per cent) expressed the opinion that "very much" learning had taken place, 32 per cent said that the program was "about average" in terms of how much was learned, and 2.6 per cent felt that "little" learning had taken place as a result of the program (Table 12).

In general, it can be said that many of the participants felt that they were learning "an average" amount and that a majority of the participants felt that they were learning "very much" as a result of the adult basic education program.

When asked about the sources of their greatest satisfaction with the program (Table 12) nearly half of the students reported that "learning in general" provided their greatest source of satisfcation, and slightly more than a third of the subjects expressed the opinion that learning

TABLE 12.--Program success as measured by participant satisfaction

	Number	Percentage
Quality of Learning		
Very Much	171	56.1
Average	98	32.1
Little	8	2.6
No Response	28	9.2
Total	305	100.0
Source of Greatest Satisfaction		
Specific Subject Matter	104	34.1
Learning in General	151	49.5
Prepare for Job	9	3.0
Relate to Other People	3	1.0
Miscellaneous	12	3.9
No Response	26	8.5
Total	305	100.0

specific subject matter accounted for their greatest satisfaction in the program.

Only one per cent of the sample replied that the opportunity to relate to other people was the greatest source of satisfaction and only three per cent indicated that the opportunity to prepare for a job provided their greatest source of satisfaction.

Success Measured by Participants' Perception of Problems

Students were asked if they were having any problems at school or if they had problems at home. Their responses, reported in Table 13, indicated that nearly 32 per cent perceived the existence of a problem (or problems) in relation to their participation in the program whereas slightly more than 10 per cent perceived a problem(s) in relation to the home. The majority, however, indicated that no problems existed.

TABLE 13.--Program success as measured by participant perception of problems

	Number	Percentage
Perception of Program Related Problems		
Problems Exist	97	31.8
No Problems Exist	176	57.7
No Response	32	10.5
Total	305	100.0
Perception of Home Related Problems		
Problems Exist	32	10.5
No Problems Exist	239	78.4
No Response	34	11.1
Total	305	100.0

Success Measured by Perceptions of the Instructional Staff

In relation to class size, an examination of Table 14 shows that none of the instructional staff (teachers or teacher aides) felt that classes were too small. On the other hand, slightly more than half of the teachers and nearly a third of the teacher aides believed that the classes were too large. More teacher aides (68 per cent) than teachers (44 per cent) expressed the opinion that class size was "just about right."

Student progress was judged to be satisfactory by a large majority (over 80 per cent) of the teachers and teacher aides.

TABLE 14.--Program success as measured by perceptions of instructional staff

	Teachers		Teacher Aides	
	Number	Per cent	Number	Per cent
Perceptions Concerning Class Size				
Too Large	20	55.6	8	32.0
About Right	16	44.4	17	68.0
Too Small	0	0.0	0	0.0
Total	36	100.0	25	100.0
Perceptions Concerning Student Progress				
Satisfactory	30	83.3	22	88.0
Non-Satisfactory	6	16.7	3	12.0
Total	36	100.0	25	100.0

Perceptions Concerning Nature and Intensity of Program Related Problems

Nature of Problems	Teachers[a]		Teacher Aides[a]	
	Largest (N=36)	Smallest (N=36)	Largest (N=25)	Smallest (N=25)
Individualization	36.1	11.1	32.0	12.0
Pacing for Fast and Slow Learners	55.6	25.0	60.0	12.0
Applications of Subject Matter to Life	22.2	33.3	36.0	12.0
Recruitment	19.4	22.2	12.0	20.0
Dropout	19.4	30.6	16.0	32.0
Regularity of Attendance	11.1	27.8	4.0	12.0
Grade Placement	22.2	33.3	16.0	36.0
Measuring Student Progress	16.7	19.4	12.0	44.0
Finding Appropriate Materials	44.4	27.8	24.0	16.0
Preparation of Materials	11.1	27.8	20.0	48.0
Helping Student With Personal Problems	44.4	27.8	32.0	32.0

TABLE 14.--Continued

Perception Concerning Content Emphasis of Program Content Emphasis	Mean Score[b] for Teacher (N=251)	Mean Score[b] for Teacher Aides (N=172)
Language	3.5	4.2
Reading	3.4	3.9
Mathematics	3.7	4.0
Citizenship	3.3	3.5
Occupational	3.2	3.6
Family and Community Living	3.3	3.7

[a]Each respondent identified the three largest and the three smallest problem areas--thus cell percentages are non-additive.

[b]Mean score was derived from reactions (on five point scale - 1 = no emphasis and 5 = very much emphasis) to seven criterion statements for each content area.

The nature and intensity of program-related problems as perceived by teachers and teacher aides is also presented in Table 14. The largest four problems in rank order by the percentage of teachers and teacher aides reporting were as follows:

Largest Program Problems

Teachers	Teacher Aides
1. Pacing Instruction for Fast and Slow Learners (55.6%)	1. Pacing Instruction for Fast and Slow Learners (60%)
2. Finding Appropriate Materials (44.4%)	2. Making Application of Subject Matter to the Lives of the Students (36%)
3. Helping Students With Personal Problems (44.4%)	3. Helping Students With Personal Problems (32%)
4. Individualizing Instruction (36.1%)	4. Individualizing Instruction (32%)

The smallest problems in rank order by percentage of teachers and teacher aides reporting were:

Smallest Program Problems

Teachers	Teacher Aides
1. Grade Placement (33.3%)	1. Preparation of Materials (48%)
2. Making Application of Subject Matter to Lives of Students (33.3%)	2. Measuring Student Progress (44%)
3. Dropout (30.6%)	3. Grade Placement (36%)

The preceptions of the instructional staff regarding content areas being emphasized in the program is presented as the last section of Table 14.[1] The data disclose that teacher aides consistantly assigned higher ratings to each content area (e.g., felt greater emphasis was being given in each area) than did the teachers. Both teachers and teacher aides indicated that the greatest emphasis was being placed on "mathematics" followed by "language" and "reading" in that order.

It should also be noted that family and community living, occupational education and citizenship education were ranked lowest, by both teachers and teacher aides alike, in terms of the extent that these areas were being emphasized in the program.

The rank order of the content areas in terms of degree of emphasis assigned by teachers and teacher aides is given below:

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[1]Teachers and teacher aides were asked to respond to forty-two criterion statements reflecting six content areas (language, reading, mathematics, citizenship, occupation, family and community living). Each respondent gave an emphasis rating to each criterion statement (1 = no emphasis and 5 = very much emphasis). Average ratings furnished for six content areas by 36 teachers and 25 teacher aides are shown in Table 14.

Rank Order of Content Areas in Terms of Program Emphasis

Teachers	Teacher Aides
1. Math	1. Math
2. Language	2. Language
3. Reading	3. Reading
4. Family and Community	4. Family and Community
5. Citizenship	5. Occupational
6. Occupational	6. Citizenship

Summary of Program Success

Following is a brief summary of the factors used as criteria for determining program success.

The grade level criterion furnished evidence to support a claim of success. The mean gain was found to be 2.6 grade levels. Seventeen per cent of the students gained four or more grade levels and eight per cent gained five or more grade levels. The range in the grade level distribution of the students at the end of the program was from 1.1 to 11.4. At the beginning of the program a majority of the students were at the 4th grade level or below, but at the end of the program a majority of the students were above the 4th grade level of competency. The median grade level at the end of the program was 4.5.

Ninety-three per cent of the participants advanced in grade level. Moreover, it was found that the positive gains in grade level score were highly significant. It should be pointed out, however, that less than six per cent of the participants were operating at or above the eighth grade level at the completion of the program.

In terms of dropout, the study revealed that nearly three-fourths (72.4 per cent) of the students stayed in the program. The dropout rate of 27.6 per cent, representing slightly more than one-fourth of the students, can be interpreted as being low or high depending upon the criteria one wishes to apply. The literature suggests that this would be a very low dropout rate in adult basic education--particularly in non-stipend projects. Comparative data for projects where students are provided with stipends are not immediately available. However, a dropout rate of less than 33 per cent would usually be interpreted as being relatively low in the field of adult education.

In relation to student satisfaction with the quantity of learning taking place, only 2.6 per cent of the participants felt that "little" was being learned. On the other hand, 56 per cent of the participants believed that "very much" learning was being accomplished in the program.

Most students found the greatest satisfaction in learning in general and a third of the students found greatest satisfaction in learning about specific content areas. A very small number of students obtained their greatest satisfaction from being able to relate to other students or from being in a program that would enhance their opportunities for future employment.

In general the participants did not perceive that they were having problems in relation to their school work or in relation to their home life. However, when problems were perceived, they were three times more likely to be perceived in relation to the educational program as they were in relation to the home.

From the viewpoint of the instructional staff, teachers were more likely than teacher aides to view the classes as being too large in size, whereas teacher aides were more likely to believe that class size was "about right."

Most of the teachers and teacher aides were satisfied with the overall progress being made by students.

The major problems identified by teachers and teacher aides alike related to the pacing of students; helping students with personal problems; and individualizing instruction. Teachers were much concerned with the problem of finding appropriate materials, whereas teacher aides were more concerned with making applications of the program to the lives of the students. The problem of grade placement was not a major concern for most teachers or teacher aides.

Content areas receiving the most emphasis as perceived by both teachers and teacher aides were the traditional academic areas of mathematics, language and reading. Areas receiving the least emphasis were the interdisciplinary areas of family-life education, education for citizenship responsibilities and occupational education.

CHAPTER IV

CHARACTERISTICS OF PARTICIPANTS AND INSTRUCTIONAL STAFF ASSOCIATED WITH PROGRAM SUCCESS

The findings presented, analyzed, and discussed in Chapter II related to selected characteristics of the student population and of the instructional staff. In Chapter III criteria for measuring program success were described.

Chapter IV constitutes the results of an effort to relate student and instructional staff characteristics to program success. In other words, the emphasis here, rather than being on what was accomplished is on the why of variation in accomplishments.

Student Characteristics and Program Success

Personal Characteristics

Age of student was not found to be associated with program success when success was measured by level of achievement. Age was associated with success, however, in terms of student dropout and persistence of attendance as shown in Table 15. These data reveal that the highest dropout rate occurred in the 30 and under age group. It can be observed that as age increased the proportion of students who dropped out of the program decreased. Differences as great or greater than those found with reference to the dropout criterion would be expected by chance factors alone fewer than one time out of a hundred.

The relationship between age and the student achievement criterion was not statistically significant. Data in Table 15 do suggest, however, that students from 31 to 39 years of age were more likely to be "very high" achievers than were students who were younger or older.

TABLE 15--Success by age

Age	Number	Achievement					Dropout		
		Very High	High	Medium	Low	Very Low	Number	Dropped	Persisted
30 and Under	33	18.1	21.2	15.2	24.2	21.2	93	40.9	59.1
31-39	42	28.6	16.7	9.5	26.2	19.1	105	29.5	70.5
40-49	46	19.6	19.6	23.9	17.4	19.6	110	22.7	77.3
50 and over	51	13.7	21.6	31.4	17.7	15.7	109	17.4	82.6
		$X^2 = 10.6$ D.F. = 12 P = N.S.					$X^2 = 15.5$ D.F. = 3 P = > .01		

TABLE 16.--Success by sex

Sex	Number	Achievement					Dropout		
		Very High	High	Medium	Low	Very Low	Number	Dropped	Persisted
Male	104	14.4	21.2	25.0	20.2	19.2	232	29.7	70.3
Female	69	27.5	17.4	14.5	21.8	18.8	189	24.9	75.1
		$X^2 = 6.2$ D.F. = 4 P = N.S.					$X^2 = 1.2$ D.F. = 1 P = N.S.		

More than 28 per cent of the students 31 to 39 years of age were "very high" achievers compared to 18.1 per cent in the 30 year and under category, 19.6 per cent in the 40-49 year category and 13.7 per cent in the 50 year and older category.

Although there is not a great deal of difference among age groups in relation to the percentage falling into the two lowest achievement ranges, it can be observed that a higher per cent (approximately 45 per cent) of the students 39 or under were in the low achievement groups compared with approximately 35 per cent of the students 40 years or older.

Students in the 40-49 and the 50 and over age groups were found to be distributed with smaller proportions on either the high or the low achievement extremes, whereas those two age groups under 40 were distributed with somewhat smaller proportions in the medium achievement group and larger proportions toward either the high or the low achievement extremes. As noted earlier, students in the lower age range also tended to drop out of the program more than did the older students.

The data in Table 16 suggest that males tended to drop out at a slightly higher rate than did females and that females were also more likely to attain the status of "very high" achievers. In fact, the percentage of women in the very high achievement range was almost twice that of men. However, these differences in achievement and dropout rates between male and female students were not found to be significant at the .05 level of confidence and probably could be accounted for in terms of sample error.

Based upon the limited evidence obtained in this investigation it appears that sex of student is not a principle factor in either achievement or dropout.

Chi square analysis in Table 17 revealed no significant relationship between place of residence (rural vs. urban) and program success when measured by either dropout rate or student achievement. In other words, rural students were as likely to persist in the program or drop out of it as were urban students, and they were as likely to be ranked in the high or low achievement categories as were their urban counterparts. It should be recognized, however, that a larger portion of rural students than urban students were "very high" achievers.

A more microscopic examination of the Residence-Sex factors is presented in Table 18. It was felt that a sex differential might exist between rural and urban residence in relation to student achievement.

TABLE 17.--Success by residence

Residence	Number	Achievement: Very High	High	Medium	Low	Very Low	Dropout: Number	Dropped	Persisted
Urban	41	12.2	24.4	26.8	14.6	22.0	179	29.1	71.0
Rural	132	22.0	18.2	19.0	22.7	18.2	242	26.5	73.6

$X^2 = 4.3$ D.F. = 4 P = N.S. $X^2 = 0.4$ D.F. = 1 P = N.S.

TABLE 18.--Success by Residence and Sex

Residence and Sex	Number	Achievement: Very High	High	Medium	Low	Very Low	Dropout: Number	Dropped	Persisted
Rural Male	83	18.1	19.3	25.3	19.3	18.1			
Rural Female	49	28.6	16.3	8.2	28.6	18.4			
Urban Male	21	0.0	28.6	23.8	23.8	23.8			
Urban Female	20	25.0	20.0	30.0	5.0	20.0			

$X^2 = 17.4$ D.F. = 12 P = N.S.

As can be seen in the table, the percentage distribution of males and females irrespective of rural or urban residence was fairly even in the low achievement category. It can also be observed that none of the urban males achieved in the "very high" category, whereas more than 18 per cent of the rural males achieved at this level and 25 per cent or more of the females achieved at this level. On the other hand, the conspicuous absence of urban males at the "very high" achievement level is partially compensated for by the fact that a higher percentage of urban males, than rural males or urban or rural females, achieved at the "high" achievement level.

The specific and overall differences in achievement by sex and residence were not found to be significant by Chi square analysis.

Table 19 presents the data obtained to describe the relationship between student achievement and dropout and student's self-report of physical disabilities. Although no significant relationships were revealed by these data, it can be observed that a smaller percentage of students reporting a physical disability(s) dropped out (18.9 per cent) than did students who reported having no disability (28.5 per cent).

It should also be noted that 30 per cent of those students reporting physical disabilities achieved at the "very low" level as compared to only 16.9 per cent of students at this level who reported having no physical disabilities.

Subsequent analysis of actual health records may further clarify the relationship between physical disability and student achievement and rate of drop out.

Familial Characteristics

As seen in Table 20 marital status was not found to be significantly associated with program success in terms of achievement or dropout. Although these data indicate that student achievement and the tendency to stay in or drop out of the program is independent of marital status, it can be observed in this particular sample that a higher percentage of the divorced students were "very high" achievers than were students in any of the other marital categories. It can also be seen that none of the divorced students were in the "very low" achievement category. In spite of their higher achievement, the divorced students were found to be higher in dropout rate than were the other students. Next

TABLE 19.--Success by self reported physical disabilities

		Achievement						Dropout	
Self Report	Number	Very High	High	Medium	Low	Very Low	Number	Dropped	Persisted
Physical Disability	20	25.0	15.0	25.0	5.0	30.0	53	18.9	81.1
No Physical Disability	148	18.9	20.3	21.0	23.0	16.9	354	28.5	71.5
		$X^2 = 5.1$ D.F. = 4 P = N.S.					$X^2 = 2.2$ D.F. = 1 P = N.S.		

to divorced students, students who were separated from their spouses ranked higher than single, married and widowed students in terms of the percentage of them in the "very high" achievement category. Separated students, however, appeared to differ from divorced students in terms of dropout rate. Whereas the highest per cent drop out was found among divorced students (37.5 per cent) the lowest per cent drop out was found among separated students (21.1 per cent).

The data in Table 20 suggests also there is a slight tendency for single students to achieve at a relatively low level.

The findings of this study as shown by the data in Table 21 do not support the hypothesis that program success (student achievement and dropout rate) is associated with the number of dependents of the student. Stated another way, whether or not a student will show low, medium or high grade level advancement or whether or not he will stay in or drop out of the program is not related to the size of the family for which he is responsible.

As can be seen in Table 22, family income was not found to be associated with student achievement or rate of dropout.

Since a majority of the students reported a family income of less than $1,000, the statistical arrangement of the data provided for limited discriminatory analysis.

Educational Characteristics

As can be seen in Table 23, no significant relationships were found to exist between prior school attendance and either achievement or dropout. Although virtually no difference was found in dropout rate it can be noted that those who had never attended school before tended to more frequently achieve in the "very high" achievement range than those who had previously attended school. It is also of interest to note that none of the students with no prior school experience achieved in the "medium" range whereas this category was the one within which those who had attended school at some time in the past were quite likely to fall.

The data showing the relationship between year of last school attendance and program success are presented in Table 24. Neither criterion (achievement or dropout) was found to be significantly related to last year in which school was attended. There was, however, a consistent tendency for relatively higher dropout rates among those who

TABLE 20.--Success by marital status

Marital Status	Number	Achievement: Very High	High	Medium	Low	Very Low	Number	Dropout: Dropped	Persisted
Single	33	18.2	27.3	15.2	15.2	24.2	83	28.9	71.1
Married	102	17.7	18.6	21.6	22.6	19.6	232	28.0	72.0
Divorced	7	42.9	0.0	28.6	28.6	0.0	24	37.5	62.5
Widowed	18	16.7	22.2	22.2	22.2	16.7	43	23.3	76.7
Separated	12	33.3	16.7	16.7	16.7	16.7	38	21.1	79.0

$X^2 = 9.6$ D.F. = 16 P = N.S.

$X^2 = 2.5$ D.F. = 4 P - N.S.

TABLE 21.--Success by number of dependents

Number of Dependents	Achievement						Dropout	
	Number	Very High	High	Medium	Low	Very Low	Number	Dropped	Persisted
0 - 1	12	16.7	16.7	33.3	25.0	8.3	52	26.9	73.1
2 - 3	31	22.6	25.8	25.8	9.7	16.1	87	35.6	64.4
4 - 5	34	14.7	23.5	14.7	20.6	26.5	78	28.2	71.8
6 - 7	33	24.2	15.2	15.2	30.3	15.2	76	27.6	72.4
8 - 9	33	17.9	21.4	21.4	21.4	17.9	57	26.1	79.0
10 or More	28	17.9	21.4	21.4	21.4	17.9	57	26.1	79.0

$X^2 = 11.2$ D.F. = 20 P = N.S. $X^2 = 4.8$ D.F. = 5 P = N.S.

TABLE 22.--Success by family income

Income	Achievement						Dropout	
	Number	Very High	High	Medium	Low	Very Low	Number	Dropped	Persisted
Under $1000	152	20.4	17.8	21.7	21.7	18.4	370	27.8	72.2
$1000 or more	19	15.8	36.8	15.8	10.5	21.1	42	23.8	76.2

$X^2 = 4.6$ D.F. = 4 P = N.S. $X^2 = 0.3$ D.F. = 1 P = N.S.

TABLE 23.--Success by prior school attendance

School Attendance	Number	Achievement: Very High	High	Medium	Low	Very Low	Number	Dropout: Dropped	Persisted
Attended	165	18.2	19.4	21.8	21.2	19.4	401	27.4	72.6
Never Attended	7	57.1	14.3	0.0	14.3	14.3	14	28.6	71.4
		$X^2 = 7.0$ D.F. = 4 P = N.S.					$X^2 = 0.0$ D.F. = 1 P = N.S.		

TABLE 24.--Success by last year in which school was attended

Year	Number	Achievement: Very High	High	Medium	Low	Very Low	Number	Dropout: Dropped	Persisted
1956-65	12	16.7	16.7	8.3	33.3	25.0	33	30.3	69.7
1951-55	21	33.3	14.3	9.5	14.3	28.6	48	29.2	70.8
1946-50	19	26.3	26.3	21.1	15.8	10.5	47	27.7	72.3
1941-45	11	9.1	18.2	18.2	18.2	36.4	32	28.1	71.9
1936-40	14	14.3	14.3	35.7	14.3	21.4	43	23.2	76.7
1931-35	13	23.1	7.1	23.1	23.1	23.1	34	20.6	79.4
1926-30	21	14.3	14.3	33.3	19.1	19.1	42	19.1	81.0
Prior to 1926	15	6.7	26.7	33.3	33.3	0.0	34	17.7	82.4
		$X^2 = 22.8$ D.F. = 28 P = N.S.					$X^2 = 3.5$ D.F. = 7 P = N.S.		

attended school more recently. This finding is much like the one reported earlier where it was found that age was negatively associated with rate of dropout. In other words, the older students (representing those with the greatest time gap between the present and date of last school attendance) were the least likely to drop out of the program.

It can also be observed that the students who had been out of school the longest tended to be "medium" in their school achievement, whereas those who had dropped out most recently (mid 1940's to 1965) were likely to be either "high" or "low" in their level of achievement.

An analysis of the data in Table 25 failed to reveal any significant associations between grade level completed and either achievement or dropout.

Although not a significant difference, it can be observed that students who had completed only the first grade were not represented in the "very high" achievement category whereas 42.9 per cent of them were in the "very low" achievement categories. However, in general the level of achievement was as likely to be high, low or average, irrespective of the highest grade completed.

Inspection of the data in Table 26 shows that achievement was significantly related to the students' pre-test grade level score. The "very high" and "high" achieving students were more likely than not to be those who had the lowest pre-test grade level scores (0.0 to 2.0). These students were also less likely than those testing at higher grade levels to achieve at the "low" or "very low" levels. No differences in dropout rate were observed among students when grouped by level of pre-test score.

As can be seen in Table 27, highly significant differences were found to exist between student achievement and post-test scores. The higher the post-test score the more likely were the students to be "very high" or "high" achievers and the least likely were they to be "very low" achievers.

TABLE 25.--Success by highest grade completed

Highest Grade Completed	Number	Achievement					Number	Dropout	
		Very High	High	Medium	Low	Very Low		Dropped	Persisted
1st	14	0.0	14.3	28.6	14.3	42.9	32	21.9	78.1
2nd	25	28.0	4.0	28.0	16.0	24.0	54	27.8	72.2
3rd	34	8.8	23.5	32.4	26.5	8.8	77	22.1	77.9
4th	31	22.6	25.8	19.4	19.4	12.9	93	26.9	73.1
5th	25	12.2	24.0	12.0	20.0	32.0	49	24.5	75.5
6th	18	22.2	33.3	5.6	27.8	11.1	47	36.2	63.8
7th and Above	20	30.0	10.0	15.0	25.0	20.0	46	23.9	76.1

$X^2 = 32.6$ D.F. = 24 P = N.S. $X^2 = 3.7$ D.F. = 6 P = N.S.

TABLE 26.--Success by pre-test grade level score

Pre-Test Score	Number	Achievement					Number	Dropout	
		Very High	High	Medium	Low	Very Low		Dropped	Persisted
0.0-2.0	65	23.1	24.6	30.8	16.9	4.6	96	14.6	85.4
2.1-3.2	60	16.7	21.2	10.0	26.7	25.0	93	9.7	90.3
3.3-8.1	48	18.8	10.4	20.8	18.8	31.3	99	15.2	84.9

$X^2 = 23.7$ D.F. = 8 P $> .01$ $X^2 = 1.5$ D.F. - 2 P = N.S.

TABLE 27.--Success by post-test grade level score

Post-Test Score	Number	Achievement: Very High	High	Medium	Low	Very Low
0.0-3.7	47	0.0	14.9	27.7	27.7	29.8
3.8-5.4	64	12.5	15.6	15.6	29.7	26.6
5.5-11.4	62	41.9	27.4	21.0	6.5	3.2

$X^2 = 53.9$ D.F. = 8 P = .001

Occupational Characteristics of Students

While no significant patterns of achievement or dropout emerged when comparisons were made in relation to nature of students' employment (Table 28), a slight trend was found suggesting that persons employed in domestic services tend to acheive at higher levels and dropout less than do students employed in other areas. This finding is consistent with earlier findings suggesting that women in adult basic education tend to exceed the achievement levels of men and that they are also less likely than men to drop out of a program.

A comparison between year of last employment and program success (achievement and dropout) is presented by the data in Table 29. Although no significant trends were uncovered, it can be seen that there was a slight tendency for persons who had been unemployed the longest (last job prior to 1960) to achieve at the "very low" level. These same individuals also represent the lowest dropout rate in this particular analysis.

This trend might be explained on the basis of the achievement-age relationship reported earlier in which case the older students were found to be less likely to drop out. It may be that the older students are also representative of those who have been unemployed the longest. It can also be observed that the more recent the last employment, the more likely was the student to achieve at the higher levels of achievement.

Data describing the relationship between students' success in the program and their vocational aspirations are shown in Table 30. In general these data indicate that the

TABLE 28.--Success by present or most recent job

Job	Number	Achievement: Very High	High	Medium	Low	Very Low	Number	Dropped: Dropped	Persisted
Farm Labor	121	18.2	19.0	20.7	23.1	19.0	257	27.6	72.4
Non-Farm Labor	27	25.9	11.1	22.2	22.2	18.5	71	29.6	70.4
Domestic Services	14	28.6	21.4	21.4	0.0	28.6	54	16.7	83.3
Others	9	0.0	44.4	22.2	22.2	11.2	28	32.1	67.9

$X^2 = 11.2$ D.F. = 12 P = N.S. $X^2 = 3.6$ D.F. = 3 P = N.S.

TABLE 29.--Success by year of last employment

Year of Last Employment	Number	Achievement: Very High	High	Medium	Low	Very Low	Number	Dropped: Dropped	Persisted
1966-67	119	22.7	24.4	14.3	21.0	17.7	258	26.4	73.6
1965	21	23.8	9.5	33.3	23.8	9.5	64	26.6	73.4
1960-64	8	12.5	12.5	50.0	0.0	25.0	34	32.4	67.7
Before 1960	5	0.0	20.0	40.0	0.0	40.0	12	16.7	83.3

$X^2 = 17.5$ D.F. = 12 P = N.S. $X^2 = 1.2$ D.F. = 3 P = N.S.

TABLE 30.--Success by vocational aspiration

Type of Vocation	Number	Achievement: Very High	High	Medium	Low	Very Low	Dropout: Number	Dropped	Persisted
Skilled	33	15.2	15.2	27.3	21.2	21.2	58	10.3	89.7
Mechanics	47	14.9	23.4	19.2	23.4	19.2	83	19.3	80.7
Semi-Skilled	10	30.0	30.0	10.0	30.0	0.0	30	13.3	86.7
Domestic Services	41	29.3	12.2	14.6	22.0	22.0	84	11.9	88.1
Semi-Professional	12	8.3	41.7	15.7	8.3	25.0	37	18.9	81.1
Anything	13	30.8	15.4	30.8	23.1	0.0	22	22.7	77.3

$X^2 = 24.8$ D.F. = 20 P = N.S. $X^2 = 4.3$ D.F. = 6 P = N.S.

TABLE 31.--Success by duration of vocational aspiration

Duration	Number	Achievement: Very High	High	Medium	Low	Very Low	Dropout: Number	Dropped	Persisted
More than 15 years	35	25.7	17.1	17.1	22.9	17.1	96	17.7	82.3
6-15 years	43	9.3	18.6	27.9	25.6	18.6	70	4.3	95.7
3-5 years	22	18.2	13.6	18.2	13.6	36.4	55	18.2	81.8
2 years or less	12	16.7	33.3	0.0	41.7	18.3	23	21.7	78.3

$X^2 = 15.2$ D.F. = 12 P = N.S. $X^2 = 8.3$ D.F. = 3 P = .05

expressed career choice of the adult basic education student has little to do with his level of achievement or with his tendency to stay in or drop out of the program.

The length of time such vocational aspirations were held however was related to the drop out criterion. Reference to Table 31 reveals that individuals who had harbored their aspirations for six or more years were more likely to persist in the program than those who harbored their aspirations for five or less years.

Program Related and Home Related Problems

As can be seen in Table 32, virtually no differences existed among students in achievement level or in rate of dropout when compared on the basis of whether or not they perceived a problem or problems that were related to the adult basic education program itself.

A significant difference was found among students depending upon whether or not they believed the program could serve as a resource to help solve program related problems (Table 33). Here it can be seen that none of the students who believed the program would not help resolve program problems dropped out, whereas 14.2 per cent of the students who believed that program problems would be solved by the program dropped out.

No differences were found in student achievement by their perceptions of whether the program could or could not help to resolve program related problems.

The findings as revealed by Table 34 show no significant differences in student achievement relative to their perceptions of having or not having home related problems.

A relationship was found, however, between drop out and perceptions of program as a resource to help solve home related problems (Table 35). It can be seen that students who do not anticipate that the program can contribute much to the solution of home related problems tend to drop out less than those who view the program as one which will help solve these problems.

TABLE 32.--Success by perception of program related problem(s)

Perception of Problem	Number	Achievement: Very High	High	Medium	Low	Very Low	Number	Dropout: Dropped	Persisted
Perceived Problem	64	18.8	25.0	20.3	21.9	14.1	113	14.2	85.8
Did Not Perceive Problem	94	22.3	14.9	21.3	20.2	21.3	205	14.2	85.9

$X^2 = 3.4$ D.F. = 4 P = N.S. $X^2 = 0.0$ D.F. = 1 P = N.S.

TABLE 33.--Success by perception of program as a resource to help solve program related problem(s)

Perception	Number	Achievement: Very High	High	Medium	Low	Very Low	Number	Dropout: Dropped	Persisted
Program Can Help	60	20.0	23.3	21.7	21.7	13.3	106	14.2	85.9
Program Cannot Help	73	23.2	13.7	21.9	20.6	20.6	108	0.0	100.0

$X^2 = 2.9$ D.F. = 4 P = N.S. $X^2 = 16.4$ D.F. = 1 P = .001

TABLE 34.--Success by perception of home related problem(s)

Perception of Problem	Number	Achievement					Dropout	
		Very High	High	Medium	Low	Very Low	Number	Dropped	Persisted
Perceived Problem	16	37.5	18.8	18.8	12.5	12.5	36	11.1	88.9
Did Not Perceive Problem	142	18.3	17.6	21.8	22.5	19.7	282	15.3	84.8
		$X^2 = 3.8$ D.F. = 4 P = N.S.					$X^2 = 0.4$ D.F. = 1 P = N.S.		

TABLE 35.--Success by perception of program as a resource to help solve home related problem(s)

Perception	Number	Achievement					Dropout	
		Very High	High	Medium	Low	Very Low	Number	Dropped	Persisted
Program Can Help	15	33.3	20.0	26.7	13.3	6.7	31	12.9	87.1
Program Cannot Help	110	19.1	17.3	20.0	24.5	19.1	163	1.8	98.2
		$X^2 = 3.5$ D.F. = 4 P = N.S.					$X^2 = 9.2$ D.F. = 1 P = > .01		

Summary of Student Characteristics and Program Success

In th. first half of Chapter IV, the data were analyzed to determine the kind and direction of associations that might exist between selected characteristics of students and their succe:s in the program.

The overall findings revealed that 15 of the 21 specific student characteristics were not significantly associated with level of achievement or rate of dropout. The six student characteristics associated with success criteria beyond the .05 level of confidence were:

1. Age - negatively associated with dropout; the older the student, the less the likelihood of dropping out.

2. Pre-test score - associated with achievement, students receiving the lowest pre-test scores were more likely to achieve at the higher levels.

3. Post-test score - associated with achievement; students with the highest post-test scores achieved at the highest levels (in terms of grade advancements).

4. Duration of vocational interests - associated with dropout; students with vocational interests lasting 6-15 years less likely to drop out than those students with interests lasting for more than 15 years or less than 6 years.

5. Perception that program could help resolve program related problems - associated with dropout; students who believed that program would help resolve program related problems were more likely to drop out.

6. Percept.:.. that program could help resolve home related problems - associated with dropout; students who believed that program would help resolve home problems more likely to drop out.

Instructional Staff Characteristics and Program Success

Having completed an examination of clientele characteristics relative to program success, attention is now focused on characteristics of instructional staff. More particularly, data will be presented in this section which are relevant to answering the question, "Do teachers and teacher

aides of relatively high achieving students exhibit a different set of characteristics than do those of relatively low achieving students?" The data collection and analysis procedures requisite to answering this question are described below.

Information concerning characteristics of instructional staff was secured via a group interview schedule administered to 77 teachers and teacher aides (identified by program administrators as the total program teaching staff). Once this was done, the help of program administrators was again enrolled to identify student with teacher. Results of this effort immediately pointed to the need for some telescoping or grouping of teachers and students. There were simply not enough students identified with each teacher to make a statistical analysis feasible. Consequently, teachers and students were grouped by center and mean gain scores, criteria of success, were computed for each of eight rural centers and one urban center class.[1] Finally, the nine centers were grouped into High, Medium and Low categories according to the mean gain of their students; thus, teacher characteristics of high, medium and low centers and mean gain scores of high, medium and low centers became the two units of analysis.

Details of the above breakdown are given in Table 36. It should first be recognized that all nine centers produced gains which were significant beyond the .01 level of significance. This fact, however, should not mask the rather marked variations that occurred between centers. The three high centers produced an overall mean gain of 3.37 (low of 3.21 by Center C and high of 3.67 by Center A) as contrasted with the three low centers which exhibited an overall gain of 1.75 (low of 1.33 by Center I and high of 1.91 by Center G). Interestingly enough, the same variational directions were generally established with reference to the "dropout" criterion. The three high centers exhibited an overall dropout rate of 16.7 per cent (low of 13.0 per cent by Center B and high of 20.0 per cent by Center A) as contrasted with the three low centers which sustained an overall dropout rate of 28.2 per cent (low of 17.5 Center G and high of 37.5 by Center I). The dropout criterion was confounded to some extent, however, by a peaking in the medium category. The medium centers sustained the highest overall dropout rate (38.3 per cent). This bit of evidence together with the knowledge that one of the three medium

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[1]It was not possible to compute gain scores for the two Urban P.M. classes because of incomplete pre- or post-test data.

TABLE 36.--Success by centers

	Achievement (Means)				Dropout	
	Number	Pre-Test	Post-Test	Mean Gain[a]	Number	Dropped	Persisted
High Centers							
A	15	3.55	7.22	3.67	25	20.0	80.0
B	17	3.05	6.27	3.22	23	13.0	87.0
C	14	2.29	5.50	3.21	24	16.7	83.3
Total	46	2.98	6.35	3.37	72	16.7	83.3
Medium Centers							
D	18	2.33	4.97	2.66	38	36.8	63.2
E	35	2.39	4.81	2.42	74	41.9	58.1
F	16	2.61	4.72	2.11	29	31.0	69.0
Total	69	2.42	4.84	2.41	141	38.3	61.7
Low Centers							
G	30	2.26	4.17	1.91	40	17.5	82.5
H	15	2.34	4.20	1.86	31	31.0	69.0
I	15	2.94	4.27	1.33	32	37.5	62.5
Total	60	2.45	4.21	1.75	103	28.2	71.8

[a] "t" test revealed significance >.01.

centers was in fact an urban class, have contributed to the researchers' decision to largely ignore the medium centers in subsequent analyses.

With this brief introduction, our task now becomes one of exploring systematically the associations between center achievement (high, medium and low student gain centers) and characteristics of instructional staff[1] (teachers and teacher aides of high, medium and low student gain centers). The latter group of variables were further classified to serve as a data organizing framework.

[1] Twenty-four of the staff could not be identified with students in the sample, thereby total number was reduced from 77 to 53.

Personal Characteristics

Reference to Table 37 reveals little difference in average ages of teachers or teacher aides among high, medium and low centers. The single distinguishing feature of Table 37 appears to be the relatively more advanced age of teachers and teacher aides for medium achieving centers.

Data concerning sex distribution of teachers and teacher aides in high, medium and low centers are found in Table 38. An examination of this table discloses that low achieving centers had a disproportionately high percentage of male teachers. Approximately 64 per cent of the teachers in low centers were male as compared to approximately 44 per cent of the teachers in high centers.

TABLE 37.--Success of centers by mean age of their instructional staff

Center Achievement	Teachers	Teacher Aides
High	35.9	28.8
Medium	45.9	42.8
Low	38.0	27.8

TABLE 38.--Success of centers by sex of their instructional staff

Center Achievement	Teacher			Teacher Aides		
	Number	Male	Female	Number	Male	Female
High	9	44.4	55.6	6	16.7	83.3
Medium	11	27.3	72.7	8	0.0	100.0
Low	11	63.6	36.4	8	25.0	75.0
Total	31	45.2	54.8	22	'13.6	86.4

The marital status of instructional staff in high, medium and low achieving centers appeared to be quite equally distributed. However, as revealed in Table 39, a somewhat larger proportion of the high center teachers were married (55.6 per cent) than were the low center teachers (45.5 per cent). Conversely, a somewhat higher portion of low center teachers were single (36.4 per cent) and separated (18.2 per cent) than were high center teachers (22.2 per cent and 0.0 per cent respectively). Likewise, a larger proportion of teacher aides were married and a smaller proportion were single in high achieving centers compared with low achieving centers.

Educational Characteristics

Levels of formal education achieved by teachers and teacher aides employed by high, medium and low achieving centers are reported in Table 40. The medium achieving centers had a disproportionately large share of teachers with some work beyond the Bachelor's Degree (54.5 per cent). By comparison, high and low centers exhibited similar and relatively low percentages in this regard--22.2 per cent of the high center teachers and 27.3 per cent of the low center teachers had taken some degree work beyond the Bachelor's Degree. Thus, high achieving centers were not those which had the highest incidence of teachers with formal study beyond the Bachelor's degree. This generalization was also true for teacher aides--in fact, a higher proportion (75.0 per cent) of low center aides had received some college education than had the aides of either high or medium centers.

Previous experience in teaching adults as still another educationally related characteristic is considered in Table 41. An even more pronounced inverse relationship between educational background of teachers and student achievement appears in this table than appeared in Table 40, which was concerned with formal education. Only 33.3 per cent of the high center teachers had previous experience in teaching adults while 63.6 per cent of the low center teachers had acquired such experience. This relationship is exactly reversed, however, when the experiential background of teacher aides are considered. In this instance high centers exhibited the highest portion (33.3 per cent) of aides with experience, and low centers exhibited the lowest portion (12.5 per cent).

TABLE 39.--Success of centers by marital status of their instructional staff

Center Achievement	Number	Teachers					Number	Teacher Aides				
		Married	Single	Widowed	Divorced	Separated		Married	Single	Widowed	Divorce	Separated
High	9	55.6	22.2	11.1	11.1	0.0	6	66.7	16.7	0.0	16.7	0.0
Medium	11	72.7	18.2	9.1	0.0	0.0	8	25.0	12.5	37.5	0.0	25.0
Low	11	45.5	36.4	0.0	0.0	18.2	8	50.0	37.5	0.0	12.5	0.0
Total	31	58.1	25.8	6.5	3.2	6.5	22	45.5	22.7	13.6	9.1	9.1

TABLE 40.-- Success of centers by educational level of instructional staff

Center Achievement	Number	Teacher			Number	Teacher Aides		
		Bachelor's Degree	Some Graduate	Master's Degree		Some High School	High School Diploma	Some College
High	9	77.8	11.1	11.1	6	0.0	33.3	66.7
Medium	11	45.5	54.5	0.0	8	12.5	37.5	50.0
Low	11	72.7	27.3	0.0	8	0.0	25.0	75.0
Total	31	64.5	32.3	3.2	22	4.5	31.8	63.6

Professional Orientation

Time commitment as a criterion of professional orientation is considered in its relationship to center achievement in Table 42. As revealed in this table, medium achieving centers had by far the largest percentage (63.6 per cent) of full-time teachers. In addition, high achieving centers employed a higher proportion of full-time teachers than low achieving centers (22.2 per cent as compared to 9.1 per cent).

TABLE 41.--Success of centers by previous experience of instructional staff in teaching adults

Center Achievement	Teachers			Teacher Aides		
	Number	Previous Experience	No Previous Experience	Number	Previous Experience	No Previous Experience
High	9	33.3	66.7	6	33.3	66.7
Medium	11	54.5	45.5	8	25.0	75.0
Low	11	63.6	36.4	8	12.5	87.5
Total	31	51.6	48.4	22	22.7	77.3

TABLE 42.--Success of centers by time commitment of instructional staff to adult education role

Center Achievement	Teachers			Teacher Aides		
	Number	Full-time	Part-time	Number	Full-time	Part-time
High	9	22.2	77.8	6	100.0	0.0
Medium	11	63.6	36.4	8	100.0	0.0
Low	11	9.1	90.9	8	75.0	25.0
Total	31	32.3	67.7	22	90.9	9.1

To gain further insight into the professional orientations of the instructional staff, they were asked to record their commitment to adult education as a career. Results of this inquiry as it relates to center achievement is reported in Table 43. A slightly smaller portion of teachers from high achieving centers (77.8 per cent) were committed to a career in adult education than were teachers from either the medium (90.9 per cent) of low centers (90.9 per cent). Excluding the medium centers from consideration, a similar tendency is revealed with reference to the commitment of teacher aides--66.7 per cent of the high center aides reported that they were committed as compared to 87.5 per cent of low center aides.

TABLE 43.--Success of centers by commitment of instructional staff to adult education as a career

Center Achievement	Teachers			Teacher Aides		
	Number	Committed	Not Committed	Number	Committed	Not Committed
High	9	77.8	22.2	6	66.7	33.3
Medium	11	90.9	9.1	8	62.5	37.5
Low	11	90.9	9.1	8	87.5	12.5
Total	31	87.1	12.9	22	72.7	27.3

A final measure of professional orientation was secured by administering a "forced-choice" philosophical inventory to the instructional staff. The inventory consisted of three groups of eight reaction-triggering statements (randomly ordered) designed to disclose the degree to which teachers agreed with three basic instructional philosophies. The three philosophic orientations together with the statements associated thereto are given below.

I. Academic Orientation

1. The individual must be disciplined if he is to become a civilized human being.

2. The curriculum should be centered around reading, arithmetic, spelling, history, language, science, and like subjects.

3. The individual should gain knowledge and thus will be educated.

4. Competition and rivalry are the best incentives to student achievement.

5. Good books are the best source of learning.

6. The study of geometry develops a logical mind.

7. Standard achievement tests are the best means of determining if an individual should advance to the next grade.

8. Understanding is best promoted by a logical development of the course of study.

II. Progressive Orientation

1. The individual is innately good and should be allowed to grow naturally.

2. The students should help the teacher plan their learning activities so they will be following their interest.

3. How an individual feels about what he learns is as important as what he learns.

4. Learning activities should be determined by, and centered around, student interests.

5. The evaluation of the individual's learning should be based on how well he is able to solve his daily problems.

6. A basic aim of education is to help individuals comprehend, understand, and express their feelings about their experiences.

7. The individual realizes his best self in situations where he can creatively express himself.

8. Education may be thought of as growth, especially in the ability to reconstruct past experiences to solve problems.

III. Community Orientation

1. Learning should be organized around the problems and learning processes of community living.

2. The individual is neither good nor bad, but may become either, depending on his experiences.

3. Teacher-student planning is necessary for the development of good citizenship in a democracy.

4. The community is a source of learning materials and experiences.

5. Students should have a part in activities to improve the community.

6. The educational institutions have a responsibility to help make the community a better place in which to live.

7. Any teacher must know the community thoroughly and be able to use its resources to be successful as a teacher.

8. The student should be encouraged to concern himself with important adult problems.

Each teacher and teacher aide recorded their reaction to each of the 24 statements on the five point scale illustrated below:

1	2	3	4	5
Full agreement				Full disagreement

By adding numerical reactions to three groups of statements and dividing each group sum by eight, three mean scores reflecting a degree of general agreement or disagreement with each of three philosophic orientations were secured. These mean scores are given in Table 44 for both teachers and teacher aides of high, medium and low achieving centers--to the end that any differences in staff philosophy associated with student achievement be detected. The most pervasive disclosure of Table 44 is the universal agreement with all three orientations expressed by both teachers and teacher aides--not one mean score reached even the neutral value of three. Within a limited range, however, an ordering of

orientations was established. Both teachers and teacher aides, whether from high, medium or low centers were in most agreement with the community orientation and in least agreement with academic orientation. A single exception is noted here with reference to low center teacher aides. Finally, teachers from high achieving centers exhibited somewhat higher levels of agreement with progressive and community oriented statements than did teachers from medium and low achieving centers.

Social Participation

The first index of social participation chosen was that of church attendance. There did not appear (Table 45) to be a relationship between church attendance pattern of teachers and achievement of their students. Teachers from high achieving centers were no more or no less likely to attend church frequently than were teachers from low achieving centers. Not-withstanding the small number involved, there did appear a relationship between the church attendance patterns of teacher aides and achievement of students. Aides from high centers were likely to be attending church more frequently, (88.3 per cent were attending either once or twice a week), than were aides from low centers (only 37.5 per cent were attending either once or twice a week).

Still another index of social participation, membership in secular organizations, appears in Tables 46 and 47.[1] It may be observed that teachers from low achieving centers, on the average, held more memberships in secular organizations (2.4) than did teachers from high achieving centers (2.1). Moreover, the largest differential appeared with reference to Lodge and Fraternal memberships--in which case, 45.5 per cent of the low center teachers as compared to only 22.2 per cent of the high center teachers were members. There were small differences between the high and low centers, however, in terms of per cent membership in the more professionally related organizations designated in the tables as "Professional" and "P.T.A." In each case, low center teachers displayed a 90.9 per cent membership while high center teachers displayed an 88.9 per cent membership. Teacher aide data are revealed in Table 47. Here the low achieving centers also displayed the lowest membership average (0.4). This is doubtless due to the relatively

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[1]The reader will note that row percentages when added together exceed one hundred. This is true since individual teachers and teacher aides may have been members of several different organizations and thus appeared in several different cells.

TABLE 44.--Success of center by philosophic orientation of instructional staff

Center Achievement	Number	Teachers[a]			Number	Teacher Aides[a]		
		Academic	Progressive	Community		Academic	Progressive	Community
High	72	2.4	1.8	1.3	48	2.7	2.0	1.6
Medium	88	2.6	2.0	1.5	64	2.5	2.1	1.8
Low	88	2.5	2.1	1.5	64	2.4	1.8	2.0
Total	248	2.5	2.0	1.4	176	2.5	2.0	1.8

[a]Mean score derived from reactions (on five point scale - 1 = agreement; 5 = disagreement) to eight criterion statements for each of the three orientations.

TABLE 45.--Success of centers by frequency of church attendance of instructional staff

Center Achievement	Teachers Number	Teachers Twice/ Week	Teachers Once/ Week	Teachers Twice/ Month	Teachers Once/ Month	Teacher Aides Number	Teacher Aides Twice/ Week	Teacher Aides Once/ Week	Teacher Aides Twice/ Month	Teacher Aides Once/ Month
High	9	22.2	55.6	22.2	0.0	6	50.0	33.3	0.0	16.7
Medium	11	18.2	27.3	45.5	9.1	8	0.0	62.5	37.5	0.0
Low	11	27.3	45.5	27.3	0.0	8	12.5	25.0	62.5	0.0
Total	31	22.6	41.9	32.3	3.2	22	18.2	40.9	36.4	4.5

TABLE 46.--Success of centers by membership of teachers in secular organizations[a]

Center Achievement	Number	None	Labor Union	Prof.	Lodge and Fraternity	Civic	P.T.A.	Vet.	Political	Other	Mean Membership
High	9	0.0	0.0	88.9	22.2	11.1	88.9	0.0	0.0	0.0	2.1
Medium	11	0.0	0.0	81.8	45.5	9.1	45.5	18.2	9.1	9.1	2.2
Low	11	9.1	0.0	90.9	45.5	0.0	90.9	9.1	0.0	0.0	2.4
Total	31	3.2	0.0	87.1	38.7	6.5	74.2	9.7	3.2	3.2	2.2

[a]Percentages are not additive.

TABLE 47.--Success of centers by membership of teacher aides in secular organizations[a]

Center Achievement	Number	None	Prof.	Lodge and Fraternity	Civic	P.T.A.	Vet.	Political	Other	Mean Membership
High	6	50.0	0.0	0.0	0.0	50.0	0.0	0.0	33.3	0.8
Medium	8	25.0	25.0	25.0	0.0	50.0	0.0	0.0	0.0	1.0
Low	8	75.0	12.5	0.0	0.0	25.0	0.0	12.5	0.0	0.4
Total	22	50.0	13.6	9.1	0.0	40.9	0.0	4.5	9.1	0.8

[a]Percentages are not additive.

TABLE 48.--Success of centers by types of people visited by teachers[a]

Center Achievement	Number	Types of People Visited: Relative	Neighbors	Work Assoc.	Church Assoc	Org. Assoc.	Class Assoc.	Childhood Friends	Visitation Mean
High	9	88.9	100.0	88.9	55.6	33.3	33.3	33.3	4.3
Medium	11	63.6	63.6	27.3	63.6	27.3	27.3	18.2	2.9
Low	11	81.8	72.7	90.9	63.6	54.5	36.4	54.5	4.5
Total	31	77.4	77.4	67.7	61.3	38.7	32.3	35.5	3.9

[a]Percentages are not additive.

large portion (75,0 per cent) of aides in these centers reporting no membership. The Parent-Teachers Association appeared to be the only organization that attracted sizeable portions of aides from the various centers--and here it attracted only 25 per cent of the low center aides.

The instructional staff was next asked to reveal the types of people with whom they visited. This social participation indice has been related to center achievement in Tables 48 and 49. Table 48 discloses that low center teachers displayed the highest mean number of types of people visited (4.5) followed in order by higher centers (4.3) and medium centers (2.9). A more detailed study of Table 48 further reveals that teachers from high centers were somewhat more likely to visit relatives and neighbors than were teachers from low centers. They were however, somewhat less likely to visit church associates, organizational associates and childhood friends. When the visitation patterns of teacher aides were considered in Table 49 some reversals were noted. Aides from high centers were more likely than those from low centers to visit church associates and childhood friends. In addition, two other visiting patterns appeared. While only 33.3 per cent of high center aides visited work associates, 87.5 per cent of the low center aides engaged in such visitation. It was also found that 16.7 per cent of high center aides as opposed to 37.5 per cent of the low center aides visited class associates (students or other teachers).

Table 50 relates frequency of visitation to center achievement. Both teachers and teacher aides from high achieving centers more frequently visited than did their counterparts in low centers. To be more specific, 75.0 per cent of the teachers from high centers visited some "others" either once a week or twice a month as compared to 63.6 per cent from medium centers. A somewhat less striking differential was exhibited by teacher aides in which case 83.3 per cent from high centers as compared to 62.5 per cent from low centers visited "others" as frequently as once a week.

A final index of social participation, use of leisure time, is explored in its relationship to center achievement in Tables 51 and 52.[1] It may be observed in Table 51 that teachers from high achieving centers were somewhat more likely to utilize their leisure time by reading, watching television and visiting than were teachers from low achieving centers. In contrast, the former were somewhat less likely than the

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[1]Once again it is pointed out that row percentages in these tables do not add to one hundred since any given individual may appear in several cells.

TABLE 49.--Success of centers by types of people visited by teacher aides[a]

Center Achievement	Number	Types of People Visited							
		Relatives	Neighbors	Work Assoc.	Church Assoc.	Org. Assoc.	Class Assoc.	Childhood Assoc.	Visitation Mean
High	6	100.0	66.7	33.3	66.7	16.7	16.7	66.7	3.7
Medium	8	75.0	87.5	50.0	50.0	25.0	12.5	25.0	3.3
Low	8	100.0	50.0	87.5	37.5	12.5	37.5	25.0	3.5
Total	22	90.9	68.2	59.1	50.0	18.2	22.7	36.4	3.5

[a]Percentages are not additive.

TABLE 50.--Success of centers by frequency of visitation of instructional staff

Center Achievement	Teachers					Teacher Aides					
	Number	Once/ Week	Twice/ Month	Once/ Month	Few Times/ Year	Never	Number	Once/ Week	Twice/ Month	Once/ Month	Few Times/ Year	Never
High	8	62.5	12.5	25.0	0.0	0.0	6	83.3	0.0	0.0	16.7	0.0
Medium	11	54.5	9.1	9.1	27.3	0.0	8	87.5	0.0	0.0	12.5	0.0
Low	11	27.3	9.1	27.3	36.4	0.0	8	62.5	25.0	0.0	0.0	12.5
Total	30	46.7	10.0	20.0	23.3	0.0	22	77.3	9.1	0.0	9.1	4.5

TABLE 51.--Success of centers by use of leisure time by teachers

Center Achievement	Number	Reading	Television	Fixing	Gardening	Play With Children	Resting	Thinking	Visiting	Recreation & Amusement
High	9	88.9	66.7	33.3	11.1	11.1	11.1	0.0	33.3	44.4
Medium	11	63.6	45.5	27.3	36.4	9.1	18.2	0.0	27.3	63.6
Low	11	81.8	54.5	54.5	9.1	18.2	0.0	0.0	18.2	54.5
Total	31	77.4	54.8	38.7	19.4	12.9	9.7	0.0	25.8	54.8

TABLE 52.--Success of centers by use of leisure time by teacher aides

Center Achievement	Number	Reading	Television	Fixing	Gardening	Play With Children	Resting	Thinking	Visiting	Recreation & Amusement
High	6	83.3	33.3	33.3	16.7	50.0	16.7	0.0	16.7	100.0
Medium	8	75.0	62.5	12.5	25.0	25.0	0.0	12.5	50.0	25.0
Low	8	75.0	62.5	12.5	0.0	12.5	37.5	12.5	25.0	62.5
Total	22	77.3	54.5	18.2	13.6	27.3	18.2	9.1	31.8	59.1

latter to be engaged in such leisure pursuits as fixing, playing with children and recreation-amusement. It should be recognized, however, that the differences alluded to above were, with the possible exception of those occurring in the realm of "fixing" and "visiting" not great. Finally, teacher aide data recorded in Table 52 tend to support some relationships found in Table 51 and refute others. Here again, a larger percentage of aides from high centers (83.3 per cent) spent leisure hours reading than did aides from low centers (75.0 per cent). Contrary to the teachers, aides from high centers, as compared with those from low centers, were less likely to be spending time watching television and visiting, and more likely to be spending time on recreation--amusement, fixing, and playing with children.

Perceptions Concerning Qualitative Aspects of Program

The final cluster of staff characteristics examined with reference to center achievement relate to perceptions of staff regarding various aspects of the program. The first of these, perceptions concerning class size, are presented in Table 53. These data suggest that teachers and teacher aides from high achieving centers were more likely to perceive their classes as being too large than were those from low centers--55.6 per cent of the teachers and 50.0 per cent of the aides from high centers as compared to 45.5 per cent of the teachers and 25 per cent of the aides from low centers. A converse of the above was true for perception of "about right"--44.4 per cent of the teachers and 50.0 per cent of the aides from high centers as compared to 54.5 per cent of the teachers and 75.0 per cent of the aides from low centers made explicit such a perception.

TABLE 53.--Success of centers by opinion of instructional staff concerning class size

Center Achievement	Teachers				Teacher Aides			
	Number	Too Large	Too Small	About Right	Number	Too Large	Too Small	About Right
High	9	55.6	0.0	44.4	6	50.0	0.0	50.0
Medium	11	63.6	0.0	36.4	8	25.0	0.0	75.0
Low	11	45.5	0.0	54.5	8	25.0	0.0	75.0
Total	31	54.8	0.0	45.2	22	31.8	0.0	68.2

Another criterion deemed to be of importance was staff perception of their students' progress. These data, presented in Table 54, disclose that there was little difference among teachers and aides from high, medium and low achieving centers. Moreover, the small difference that did occur between high and low centers was ordered differently for teachers and teacher aides. A slightly higher percentage of teachers from high centers (88.9 per cent) felt that their students were progressing satisfactorily than did teachers from low centers (81.8 per cent). Conversely, a slightly lower percentage of aides from high centers (83.3 per cent) were satisfied with student progress than were aides from low centers (87.5 per cent).

TABLE 54.--Success of centers by perceptions of instructional staff concerning student progress

Center Achievement	Teachers			Teacher Aides		
	Number	Satisfactory	Not Satisfactory	Number	Satisfactory	Not Satisfactory
High	9	88.9	11.1	6	83.3	16.7
Medium	11	81.8	18.2	8	87.5	12.5
Low	11	81.8	18.2	8	87.5	12.5
Total	31	83.9	16.1	22	86.4	13.6

Still a third concern was with the nature and intensity of program related problems perceived by teachers and teacher aides. Accordingly, the teaching staff was asked to identify, from a list of eleven problem areas, three which represented their largest problems and three which represented their smallest problems. The results of this inquiry are tabularly related to center achievement in Tables 55 and 56.[1] An overview of the data in Table 55 reveal that: 1) teachers from high achieving centers more so than those from low achieving centers were likely to identify as "largest" such problems as individualization of instruction and regularity of attendance; 2) teachers from low achieving centers more so than those from high achieving centers were likely to identify as "largest" such problems as pacing classes for

[1] Once again, it should be recognized that row percentages are non-additive.

TABLE 55.--Success of centers by nature and intensity of problems perceived by teachers[a]

Center Achievement	Density of Problem	Number	Nature of Problems										
			B	C	D	E	F	G	H	I	J	K	L
High	Largest	9	66.7	33.3	22.2	33.3	0.0	11.1	22.2	11.1	44.4	11.1	44.4
	Smallest	9	22.2	44.4	33.3	22.2	33.3	22.2	33.3	22.2	22.2	11.1	33.3
Medium	Largest	11	27.3	54.5	27.3	0.0	27.3	18.2	9.1	27.3	36.4	18.2	36.4
	Smallest	11	9.1	27.3	18.2	27.3	27.3	27.3	27.3	9.1	27.3	27.3	36.4
Low	Largest	11	18.2	63.6	18.2	27.3	18.2	0.0	27.3	18.2	54.5	9.1	45.5
	Smallest	11	0.0	18.2	45.5	27.3	18.2	27.3	36.4	27.3	18.2	54.5	18.2
Total	Largest	31	35.5	51.6	22.6	19.4	16.1	9.7	19.4	19.4	45.2	12.9	41.9
	Smallest	31	9.7	29.0	32.3	25.8	25.8	25.8	32.3	19.4	22.6	32.3	29.0

[a]Respondents were asked to designate their three largest and three smallest problems--the percentage in each cell is based on the total number of teachers employed by each group of centers typed according to achievement level of their students.

B - Individualizing Instruction.
C - Pacing Class for Fast and Slow Learners.
D - Application to Life of Student.
E - Recruitment of Students.
F - Dropout.
G - Regularity of Attendance.
H - Determining Grade Level.
I - Measuring Student Progress.
J - Selecting Suitable Materials.
K - Preparing Materials.
L - Helping Students With Personal Problems.

TABLE 56.--Success of centers by nature and intensity of problems perceived by teacher aides[a]

Center Achievement	Density of Problem	Number	Nature of Problems										
			B	C	D	E	F	G	H	I	J	K	L
High	Largest	6	66.7	50.0	33.3	16.7	0.0	16.7	16.7	0.0	33.3	16.7	50.0
	Smallest	6	0.0	16.7	16.7	33.3	50.0	16.7	33.3	33.3	16.7	50.0	33.3
Medium	Largest	8	12.5	87.5	50.0	0.0	12.5	0.0	12.5	12.5	37.5	25.0	25.0
	Smallest	8	25.0	12.5	0.0	37.5	25.0	25.0	50.0	50.0	0.0	50.0	25.0
Low	Largest	8	37.5	50.0	12.5	25.0	37.5	0.0	25.0	12.5	12.5	12.5	25.0
	Smallest	8	12.5	0.0	25.0	0.0	25.0	0.0	12.5	50.0	37.5	62.5	37.5
Total	Largest	22	36.4	63.6	31.8	13.6	18.2	4.5	18.2	9.1	27.3	18.2	31.8
	Smallest	22	13.6	9.1	13.6	22.7	31.8	13.6	31.8	45.5	18.2	54.5	31.8

[a]Respondents were asked to designate their three largest and three smallest problems--the percentage in each cell is based on the total number of teachers employed by each group of centers typed according to achievement level of their students.

B - Individualizing Instruction.
C - Pacing Class for Fast and Slow Learners.
D - Application to Life of Student.
E - Recruitment of Students.
F - Dropout.
G - Regularity of Attendance.
H - Determining Grade Level
I - Measuring Student Progress.
J - Selecting Suitable Materials.
K - Preparing Materials.
L - Helping Students With Personal Problems.

fast and slow learners, student drop out, and selecting suitable materials; 3) there were very small differences between teachers of high and low achieving centers in terms of their identification as "largest" such problems as application of subject matter to life problems of student, recruitment of students, preparation of materials, determination of grade level, measurement of student progress, and helping students with their individual problems. It was true, however, that the first three of these problems were favored slightly by high center teachers and the latter three by low center teachers; 4) teachers from high achieving centers more so than those from low achieving centers were likely to identify as "smallest" such problems as individualization of instruction, pacing classes for fast and slow learners, student dropout, and helping students with personal problems; 5) teachers from low achieving centers more so than those from high achieving centers were likely to identify as "smallest" such problems as application of subject matter to life problems of student and preparation of materials; and 6) there were very small differences between teachers of high and low achieving centers in terms of their identification as "smallest" such problems as recruitment of students, selection of suitable materials, regularity of attendance, determination of grade level, and measurement of student progress. The first two of these five problems were favored slightly by the high center teachers while the latter three were favored slightly by the low center teachers.

In addition to the above overview, it would appear appropriate to single out for special attention a few of the more extreme irregularities present in Table 55. For instance, a relatively large percentage of teachers from high achieving centers rated individualization of institution as one of their largest (66.7 per cent) as well as smallest (22.2 per cent) problems. The portion of low center teachers (63.6 per cent) who identified pacing classes as a large problem was approximately twice that displayed by high-center teachers (33.3 per cent). None of the high center teachers identified "dropout" as a large problem. Similarly, none of the low-center teachers identified regularity of attendance as a large problem. The portion of low center teachers (54.5 per cent) who identified preparation of materials as a small problem was approximately five times greater than the portion of high center teachers (11.1 per cent) who delivered such an identification. Selection of suitable materials and helping students with their personal problems were identified as large problems by a similarly large portion of teachers in both high and low achieving centers.

Reference to Table 56 discloses that the trends disclosed in Table 55 for teachers were generally repeated for teacher aides. Where differences occurred they were generally ones of degree rather than kind. Problems which teachers of high, medium or low centers identified tended also to be the problems which teacher aides from those same centers also identified.

The final teacher related variable which was judged to be potentially associated with center achievement was identified as the perceptions of staff concerning both present and ideal emphases of the program. Each staff member completed an instrument on which he was asked to identify the degree of program emphasis 1) "presently being given" and 2) "should be given" various content areas. The six content areas of central concern were left unidientified. Instead, seven criterion statements for each content area (for a total of 42) were randomly presented for emphasis judgments. Reported below are the six content areas and the related criterion statements presented to the instructional staff.

I. Basic Language Skills

1. Improved their enunciation and pronounciation
2. Improved their writing skills
3. Improved their listening skills
4. Improved their oral and written grammar
5. Learned to use words more correctly
6. Enlarge their vocabulary
7. Increased competency to give oral contributions to group activities.

II. Reading Skills

8. Improved their reading comprehension
9. Developed word recognition skills
10. Improved their reading vocabulary
11. Developed reading habits to gain information
12. Developed skill in the use of dictionary, encyclopedia, other references, appendices
13. Developed recreational reading habits
14. Become more able to function effectively in society through reading ability (read signs, ads, newspapers, labels, etc.).

III. Mathematical Concepts

15. Developed understandings of the number system
16. Learned to do mental arithmetic problems, especially involving dollars and cents
17. Developed functional mathematical understandings (distance, speed, time, volume, size, proportions, inches, feet)
18. Improved addition and subtraction skills
19. Made practical application of mathematics to employment and shopping (1/2 off, time-and-a-half, $2 down and $2 per week)
20. Improved multiplication and division skills
21. Utilized formulae for understanding credit or other uses.

IV. Citizenship Concepts

22. Developed understanding of organization and functions of different levels of government
23. Become familiar with the services available from governmental and non-governmental sources in community
24. Become more familiar with current events, and issues affecting nation, State and locality
25. Increased their understanding of principle upon which our democracy was founded
26. Developed a sense of responsibility for well-being of the community
27. Have become familiar with parliamentary procedure and its proper use
28. Become aware of the rights, duties and privileges of themselves as citizens.

V. Occupational Concepts

29. Become aware of personal abilities and limitations influencing job qualifications
30. Become aware of types of jobs on the market and requirements needed to fill these jobs
31. Become aware of reasons why people sometimes fail to get the jobs they seek, or why they often lose their jobs
32. Learned techniques for getting a job (where to locate possible jobs, how to complete job application forms, how to interview, etc.)
33. Improved necessary personal attributes needed to impress employers, customers, fellow workers
34. Developed an attitude of responsibility toward fellow workers and employers
35. Developed familiarity with kinds of tests used by employers.

VI. Family and Community Living Concepts

36. Improved social skills and personal appearance
37. Learned how to budget income for home and family living
38. Improved their understanding of health problems and safety in the home
39. Acquired skill in selection, alteration, care and repair of clothing
40. Learned concepts and skills needed to plan wholesome meals
41. Become familiar with family planning
42. Developed understanding of need for satisfactory parent-child relationships in family.

A measure of "current" and "ideal" emphasis was secured from each staff member for each criterion statement by using the reaction continuum given below.

1	2	3	4	5
None	Little	Moderate	Much	Very much

All of this made possible the securing of mean "current" and "ideal" emphasis scores for each of six content areas which were, in turn, associated with high, medium and low achieving centers. The results of these efforts appear in Tables 57 and 58. An examination of Table 57 reveals that all emphasis scores exceeded the "moderate" index of "three" and that without exception teachers from high achieving centers gave all content areas higher "present" emphasis ratings than did teachers from low achieving centers. This pattern did not hold, however, when attention was shifted to the ideal. Here, Reading, Citizenship and Family were given higher emphasis ratings by low center teachers than were given by high center teachers.

It is also noted that the highest "present" emphasis rating (3.8) was given by high center teachers to content areas of language and math and lowest (3.3) to content areas of citizenship and occupation. The highest "present" emphasis rating (3.5) was also given to math by low center teachers, but in this instance language received a relatively low rating (3.2). Finally, relatively low "present" emphasis ratings were given to occupational and citizenship areas by low and high center teachers alike.

Table 58 reveals that perceptual trends for teachers are not necessarily shared by teacher aides. In several instances (language, math, occupation and family) the "present" emphasis ratings of aides from low centers exceeded

TABLE 57.--Center success by teacher perception of both present and ideal program and content emphases

Center Achievement	Perception	Number	Content Emphases[a]					
			Language	Reading	Math	Citizenship	Occupation	Family
High	Present	63	3.8	3.6	3.8	3.3	3.3	3.5
	Ideal	63	4.6	4.5	4.7	4.5	4.5	4.6
Medium	Present	77	3.4	3.0	3.6	3.1	3.1	3.1
	Ideal	77	4.5	4.4	4.5	4.4	4.4	4.5
Low	Present	77	3.2	3.4	3.5	3.2	3.1	3.3
	Ideal	77	4.6	4.7	4.6	4.6	4.5	4.7
Total	Present	217	3.4	3.3	3.6	3.2	3.2	3.3
	Ideal	217	4.6	4.5	4.6	4.5	4.5	4.6

[a]Mean score derived from reactions (on five point scale reflecting degree of emphasis - 1 = no emphasis; 5 = very much emphasis) to seven criteria statements for each content area.

TABLE 58.--Center success by teacher aide perception of both present and ideal program content emphases

Center Achievement	Perception	Number	Content Emphases[a]					
			Language	Reading	Math	Citizenship	Occupation	Family
High	Present	42	4.1	4.0	3.9	3.6	3.4	3.4
	Ideal	42	4.7	4.6	4.6	4.4	4.4	4.5
Medium	Present	56	4.1	4.0	3.9	3.6	3.6	3.4
	Ideal	56	4.8	4.5	4.4	4.4	4.1	4.4
Low	Present	56	4.3	4.0	4.0	3.5	3.6	3.8
	Ideal	56	4.8	4.7	4.6	4.6	4.3	4.5
Total	Present	154	4.2	4.0	3.9	3.6	3.6	3.5
	Ideal	154	4.7	4.6	4.5	4.5	4.3	4.5

[a]Mean scores derived from reactions (on five point scale reflecting degree of emphasis - 1 = no emphasis; 5 = very much emphasis) to seven criterion statements for each content area.

that recorded for aides from high centers. This was also true for "ideal" emphasis ratings. Teachers and teacher aides (whether from high or low centers) were similar, however, in that they tended to rate relatively high the areas of language, reading and math, and relatively low citizenship, occupation and family. Moreover, it was observed that "ideal" emphasis ratings tended to be ordered in the same way as "present" emphasis rating.

Summary of Staff Characteristics and Program Success

In summation, it may be observed that instructional staff (primarily the teachers rather than teacher aides) of "high" achieving centers as compared to staff of "low" achieving centers were:

1. On the average somewhat younger (reversed slightly for aides).
2. More likely to be female.
3. More likely to be married.
4. Somewhat less likely to have secured formal education beyond the bachelor's degree.
5. Less likely to have had previous experience in teaching adults (reversed for aides).
6. More likely to be employed full-time in the program.
7. Less likely to have committed themselves to a career in adult education.
8. More likely to be progressive and community oriented in their instructional philosophy as opposed to being academic oriented (in the case of aides increased likelihood was restricted to community orientation).
9. As likely to attend church frequently (in the case of aides, more likely to attend church frequently).
10. Less likely to be members of lodges or fraternal organizations, but as likely to be members of professional organizations and Parent-Teacher Associations.

11. More likely to visit relatives and neighbors, but less likely to visit church associates, organizational associates and childhood friends. (In the case of aides, more likely to visit neighbors, church associates and childhood friends, but less likely to visit work associates and classroom associates.)

12. More frequent in their visitation.

13. More likely to use leisure time to read, watch television and to visit; but less likely to use it for activities classified as either "fixing" or "recreation." (In case of aides, more likely to use leisure time to read, fix, work in garden, play with children, and for recreation; but less likely to use it to watch television or to rest.)

14. More likely to perceive their classes as being too large.

15. Slightly more likely to be satisfied with progress of their students (reversed for aides).

16. More likely to consider individualization of instruction and regularity of attendance to be "large" problems; but less likely to consider pacing classes for fast and slow learners, student dropout and selection of suitable materials to be large problems.

17. More likely to consider individualization of instruction, pacing of classes to fast and slow learners, student dropout and helping students with their personal problems to be "small" problems; but less likely to consider application of subject matter to problems of the student and preparation of materials to be "small" problems.

18. More likely to perceive greater present program emphasis in all six content areas, but particularly so in the language area.

19. Likely to possess very similar perceptions of what "ought to be" the content emphasis of the program.

CHAPTER V

GENERAL IMPRESSIONS, INTERPRETATIONS AND IMPLICATIONS

The objectives of this evaluative study of adult basic education in a Southern rural community were to determine:

1. The social, economic, and educational characteristics of both students and instructional staff;

2. The success of the program via the use of such criteria as grade level progression, rate of dropout, student satisfactions, and appraisals of instructional staff.

3. The relationship between program success and both student characteristics and instructional staff characteristics.

To accomplish the above, data were collected via questionnaires, standardized tests and interview schedules from a one-third random sample of students (305 persisters and 116 dropouts) and a universe of instructional staff (77 teachers and teacher aides). Data thus secured were coded and placed on data processing cards for subsequent tabulation and statistical analysis. The central findings of this analysis together with interpretations and implications follow.

Student Characteristics

In summation it was observed that students enrolled in the adult basic education program:

1. tended to be older, middle-aged adults (40 to 59)

2. were about as likely to be female as male

3. were not likely to be aware of having any physical defects

4. were very likely to be married

5. were as likely to have six or more dependents as they were to have five or fewer dependents

6. were likely to have an annual family income of less than $1,000

7. were likely to have terminated their formal schooling at the 4th grade level between 1930 and 1960

8. were likely to perform below the 3rd grade level as measured by achievement tests

9. aspired to work in the field of mechanics (males) or in the field of dressmaking (females)

10. were presently, or last, employed as farm laborers (males) or in domestic services (females).

A sizeable proportion of the students enrolled in the program were under 40 years of age (42.3 per cent) and presumably represent those adults who could profit most from the pre-vocational purposes of the program. It should be pointed out, however, that an even greater percentage of the students were over 40 years of age (27.9 per cent 40-49 years of age and 29.8 per cent 50 years of age and over) and consequently had less opportunity for employment and fewer years in which to become established and proficient in the world of work.

One might seriously question the admission of the older students into the program under existing conditions of limited financial, physical and human resources in adult basic education.

That this reservation also exists in the minds of the students was indicated during an oral interview when a 53 year old student was asked: "How do you feel about the things that you are learning in the program?" His reply: "sad." The interviewer asked, "Why do the things you are learning make you feel sad?" He answered, "Because for the first time I know how much I don't know, and I have so little time left to use all the things I am learning."

That students over 50 years of age are in need of (and perhaps entitled to) adult basic education is not being questioned here. What is being questioned is the acceptance of older students into a pre-vocational program which is a prelude to vocational training designed to impart new job skills to untrained adults.

It is recommended that older students (50 and above) not be admitted to adult basic education which is oriented toward vocational training and future employment; but that special basic education programs be designed for them which focus on the objectives of consumer education, health education, citizenship education, and home and family life education.

Overlooking the factor of age, the findings that most of the students had not completed more than four years of schooling, tested below the third grade level, had incomes of less than $1,000 per year, and were or had been employed as seasonal farm workers establish the fact that the program was successful in reaching the audience it had been designed to reach.

It is obvious that teachers and counselors cannot rely upon prior grade level achieved as an indicator of present achievement level of students. A majority of adult basic education students will not be functioning at their highest grade level attained and many will be functioning considerably below this level. Consequently, an adequate program of pre-testing and continuous evaluation of student achievement is highly important if students are to be effectively grouped, and if instruction is to be geared to the ability level of the students.

On the basis of observations of the investigators and an examination of medical reports, it is concluded that the extent of actual physical disability among students is much greater than they themselves perceived it to be. Consequently, students' knowledge of visual, auditory, and other deficiencies cannot be substituted for thorough medical examinations in determining the existence of disabilities which may interfere with learning or subsequent employment.

Instructional Staff Characteristics

It was found that teachers employed in the adult basic education program which was studied were:

1. likely to be 45 years of age or younger (63.9 per cent fell in this range).

2. more likely to be female than male (58.3 per cent were female).

3. likely to be married (58.3 per cent).

4. likely to have secured no more than a bachelor's degree (61.1 per cent).

5. likely to be certified as teachers.

6. as likely as not to have possessed previous experience in teaching adults.

7. very likely to have had some academic training (credit or non-credit) in adult education (86.1 per cent).

8. somewhat more likely to be part-time than full-time employees.

9. very likely to have committed themselves to adult education as a career (88.9 per cent).

10. very likely to be church members (97.2 per cent).

11. likely to be attending church at least once a week (61.1 per cent).

12. likely to be members of professional organizations and Parent-Teacher Associations (83.3 per cent and 66.7 per cent respectively).

13. more likely to visit relatives, neighbors, occupational associates and fellow church members than organizational associates, class members, and childhood friends.

14. likely to visit at least once a month (55.6 per cent).

15. likely to use their leisure time in reading (75 per cent), watching television (55.6 per cent) and recreation and amusement activity (50.0 per cent).

Teacher aides generally displayed characteristics much like those of teachers. It was found, however, that teacher aides as contrasted with teachers were:

1. somewhat younger (72 per cent were 35 y3ars of age or younger).

2. more likely to be female (88.0 per cent).

3. more likely to be single (48.0 per cent).

4. likely to have fewer years of formal schooling (none had secured the Bachelor's Degree, but 64.0 per cent had some college).

5. likely not to be certified teachers (96.0 per cent were not certified).

6. more likely not to have had previous experience in teaching the adult (72.0 per cent had no experience).

7. much more likely to consider their ABE job full-time (92.0 per cent were full-time).

8. less likely to be members of secular organizations (48.0 per cent report no membership at all--44.0 per cent reportedly were members of P.T.A.).

9. more frequent visitors (76.0 per cent visited once a week or more).

Although a relatively large portion of teacher aides have a full-time commitment to adult basic education, relatively few have girded this commitment with what may be deemed adequate academic background. None of the aides had Bachelor's Degrees. It seems sound, therefore, to recommend that a special teacher-aide's in-service training program be designed to "blend" what is often a "rich" and "human" experiential background with academic "know how"--to the end that each aide may contribute to the extent of his potential. It also seems reasonable to suggest that the more highly qualified teachers of the program be used as resource people in the in-service program recommended for teacher aides.

Program Success

Criteria for determining program success included: change in grade level score, rate of dropout, student satisfaction, and instructional staff members' perception of the program. In general the program was found to be a successful one in terms of the criteria applied.

Student gains in terms of grade level score were significant beyond the .001 level of confidence. A majority of the students were functioning below the 4th grade level at the outset of the program and by the end of the program a majority of them were functioning above the 4th grade level. The overall mean gain was 2.6 grade levels with 17 per cent of the students gaining four or more grade levels and more than eight per cent of the students gaining five or more grade levels during the course of the program.

Ten per cent of the students tested below the first grade level at the beginning of the program, whereas none of the students were below the first grade level at the end of the program. Where 80 students tested below the second grade level on the pre-test, only six students tested below grade two on the post-test. Two-thirds of the enrollees tested below the fourth grade at the outset, whereas only 28 per cent were below this level toward the end of the program. In terms of grade level advancement, students showed significant achievement.

That adult basic education students can and do effectively learn the content of adult basic education and the accompanying skills of reading and computation has been amply demonstrated by the results of this study. In fact the acquisition of basic literacy skills up to the high school level seems to be much more efficient (in terms of time, energy and money invested) in adult education than is the case during childhood education.

On the negative side, only three per cent of the students achieved the program goal of advancing to the 10th grade level or beyond. This suggests that a projected mean gain of 7 or 8 grade levels is at present an unrealistic goal in an adult basic education program of this duration.

It is recommended that provisions be made for students who are making satisfactory progress to continue their studies through a second year. The findings of this study also suggest that much experimental research is needed to discover more effective ways of shortening the time required for students to move from grade levels 1 or 2 to grade levels 9 or 10 in adult basic education.

The program was considered to be successful in terms of student persistence and dropout. Nearly three-fourths of the students enrolled stayed in the program. This represents a lower rate of dropout than what is ordinarily found among high school and college students and considerably lower than what is ordinarily reported in the field of adult education.

Although it is fair to assume that the weekly stipend contributed to the maintenance of student enrollment, it should be noted that students were found to be as likely to remain in the program during the part-time phase when no stipend was provided as they were during the full-time phase when they were on stipends. It is the investigators' opinion that the relatively low dropout rate can be accounted for by a combination of factors including student stipends, dedicated and competent staff members, adequate adult level materials, and able and motivated students.

When asked about their satisfaction with the program, a large majority expressed that they were satisfied with their rate of progress and a slight majority were very satisfied in this regard. Apparently, the students believed that their time spent in the program was a good investment, they were aware of their progress, they enjoyed the experience, and as a consequence they tended to remain in the program. In fact, all students that were interviewed said that they hoped to go on to higher levels of learning and into vocational training programs at the conclusion of the project.

Since most of the students were unaware of having problems in relation to learning or in the home, it cannot be assumed that they enrolled or stayed in the program in order to acquire information that would immediately help them solve such problems. Quite the contrary, personal interview data suggests that students enrolled and remained in the program for the sake of learning itself rather than for what the learning could do for them.

The members of the instructional staff were generally well satisfied with student progress. Teachers were concerned over the matter of class size (classes were considered too large) and along with teacher aides, experienced problems in pacing students, helping them with personal problems and individualizing instruction. Teachers expressed that they had considerable difficulty in identifying appropriate learning materials, and teacher aides felt that a major problem was that of making the instruction relevant to the lives of the students.

It was also found that the instructional staff have greatest emphasis to the academic areas of reading, language, and mathematics and least emphasis to the content areas of family-life, citizenship and occupational education.

The foregoing findings appear to cluster about the problem of "functionalizing the curriculum" to make it relevant to the needs, interests, problems and lives of the students.

To functionalize a curriculum requires small classes and much individualized instruction. To be meaningful to the lives of the learners, materials and content must be directly relevant to life as the students know it. Rather than teach mathematics so that students can use it to calculate a clothing bill, students should learn to calculate clothing bills and as a by-product learn mathematics.

Similarly, rather than teach students to read so that they can keep up with community happenings, students should learn about their community (historically, socially, politically, and economically) and as a by-product learn to read. Such an approach requires that teachers must prepare and adopt materials for the students rather than trying to adapt students to the materials.

It is recommended that a major part of the in-service training program for the instructional staff be devoted to: (1) procedures for individualizing instruction, (2) preparation of materials and (3) adaption of materials to the needs of students.

Student Characteristics and Program Success

Program success for purposes of analysis was further defined as student gain score from pre-test to post-test and rate of student dropout. Subsequently, a determination was made of the degree to which the two criteria were related to various student characteristics via the use of percentages and the Chi square test of significance.

It was found that six of the twenty-one student characteristics were significantly related to at least one of the success criteria. These six relationships, complete with indications of direction are as follows:

1. Age - negatively related to dropout; older students were less likely to drop out.

2. Pre-test score - negatively related to gain score.

3. Post-test score - positively related to gain score.

4. Duration of vocational interest - non-lineally related to dropout; students with vocational interests lasting from six to fifteen years were less likely to drop out than students with vocational interests lasting for either more than fifteen years of less than six years.

5. Perception that program could help resolve program related problems - positively related to drop out; students who felt that the program could help them were more likely to drop out.

6. Perception that program could help resolve home related problems--positively related to dropout; students who felt that the program could help them were more likely to drop out.

In addition to the above, percentage computations did disclose several associational tendencies which, though not statistically significant, are worthy of some attention. These tendencies are as follows:

1. Age - students 31-39 years of age were more likely to be among the very high achievers than were either older or younger students and students 30 and under were more likely than older students to be very low achievers.

2. Sex - a slightly greater portion of males dropped out than did females. Also, females tended to achieve at somewhat higher levels than did males.

3. Residence - a higher percentage of rural students than urban students achieved at the "very high" level.

4. Residence and sex - a higher percentage of the rural males than urban males achieved at the "very high" level.

5. Self reported physical disabilities - a smaller portion of students reporting disabilities dropped out than did those not reporting disabilities. Also, a larger portion of students reporting disabilities achieved at a "high" level than did those not reporting disabilities.

6. Marital status - a higher portion of the divorced students dropped out than did students of any other marital status category. Also, a disproportionate share of divorced students were "very high" achievers and a disproportionate share of single students were "very low" achievers.

7. Prior school attendance - a higher percentage of students with no prior schooling were found in the "very high" achievement range than were students with prior schooling.

8. Last year of school attendance - a slight tendency appeared for students who had been out of school the longest to have the lower dropout rate. Also, students who had been out of school the least number of years were more likely to be either high or low in achievement than were those who had been out of school for longer periods of time.

9. Highest grade level completed - a disproportionate share of students who had completed only one grade were "very low" achievers.

10. Present or most recent job held - there existed a slight tendency for students employed in domestic services to be less likely to drop out than those employed in other occupational areas. Domestic workers also tended to achieve more highly than did other workers.

11. Year of last employment - students with a longer history of unemployment were somewhat less likely to drop out than those with shorter histories of unemployment or those who were employed. It was also found that the long-time unemployed were disproportionately represented in the "very low" achievement range.

12. Vocational aspiration - students who reported that they would work at "anything" recorded a higher dropout rate than those who were more selective. Also, those who aspired to semi-professional careers were least apt to be found in the "very high" achievement range.

In interpreting the foregoing findings, several distinguishing patterns of student characteristics appear to be related to success in the program.

The high achieving student can be generally characterized as:

1. having a relatively low pre-test grade level score.

2. being between 31 and 39 years of age.

3. having a rural residence.

4. more likely to be female than male and work in domestic services.

5. being aware of having certain physical disabilities.

6. having had no prior school attendance or more than one year of prior school attendance.

Obviously the lower the pre-test score, the greater the potential for grade level gain. However, not only did the low pre-test score students show the most gain, in general they ended up with the highest grade level scores.

Difficult as this finding is to explain, it is clear that no student should be barred from the program because of a low grade level entrance score. Contrary to popular opinion, students testing at the lowest grade levels appear to be the ones who become the more effective learners in adult basic education.

Motivation to succeed, perception of the program as a means to fulfillment of family responsibilities, and a realistic perception of attainable goals may be factors which can explain the relatively higher achievement found among middle aged adults (30-39 years) than found among younger or older adults.

The tendency for females to achieve at slightly higher levels than males is frequently observed among children and youth until college age. The fact that females were over-represented on the instructional staff suggests that there would be greater congruence between the teachers' values and the students' values when the students were women. It has long been known that when teacher values are congruent with student values, student achievement is relatively high.

In summary, it can be said that being middle aged, having had no prior school experience, and being of rural residence are factors which favored achievement among the students in this sample. Much research on middle-class adult learners has bound support for the opposite characteristics.

A characterization of the dropout in this study suggests that he:

1. is relatively young.
2. has held a vocational interest for less than 6 years.
3. believes that the program can help solve program and home related problems.
4. likely to be male.
5. is not aware of his physical disabilities.
6. is likely to be single or divorced.

The foregoing characteristics seem to describe a somewhat mobile person--e.g., relatively young, not burdened with family responsibilities, not too committed to a particular line of work or job and in a sense "free to travel."

Although this study did not follow through on any of the dropouts, it is quite possible that many of the younger dropouts (especially males) did so because they (for one reason or another) moved out of the community. Perhaps some married and/or found employment and consequently dropped because of new demands on their time or because of added responsibilities. Perhaps some were inducted into the armed services, perhaps some were simply dissatisfied with the program.

The significant finding that dropouts were more likely than non-dropouts to believe that the program would help solve thier "problems" might suggest that these persons came into the program with the unrealistic perception that it would be the panacea to all their problems--became disillusioned when they discovered that this was not the case--and as a consequence dropped from the project.

It may well be that the young, lower achieving dropout prone student in adult basic education needs a specially designed program and that he should not be placed in a group of older, more serious minded adult learners who are in a different stage of the life cycle and who have different needs, interest, and motives.

Instructional Staff Characteristics and Program Success

To relate instructional staff characteristics and program success, it was deemed desirable to 1) exclude dropout as a success criterion, thus, focusing exclusive attention on the gain score criterion and, 2) establish center staff characteristics and center mean gain as the two units of analysis.

With the aid of percentage computation, it was found that instructional staff (primarily teachers) of "high" achieving centers to be more likely than staff of "low" achieving centers to be characterized as follows: young (reversed slightly for aides); female; married; employed full-time in program; progressive and community oriented in their instructional philosophy; visitors of relatives and neighbors (in the case of aides, neighbors, church associates and childhood friends); frequent visitors; read, watch television and visit during leisure hours (in the case of aide, read, "fix," work in garden, play with children, and recreate); perceive classes as too large; perceive individualization of instruction and regularity of attendance to be "large" problems; perceive individualization of instruction, pacing of classes to fast and slow learners, student dropout

and helping students with personal problems to be "small" problems; and perceive greater "present" emphasis in all six content areas (particularly language).

Contrary to the above, instructional staff (primarily teachers) of "high" achieving centers were less likely than staff of "low" achieving centers to be characterized as follows: recipient of formal education beyond the bachelor's degree; experienced in teaching adults (reversed for aides); committed to a career in adult education; members of lodges and fraternal organizations; visitors of church associates, organizational associates and childhood friends (in the case of aides, work associates and classroom associates); "fix" and "recreate" during leisure hours (in the case of aides, watch television and rest); perceive pacing classes for "fast" and "slow" learners, student dropout and selection of materials to be "large" problems; and perceive application of subject matter to problems of student and preparation of materials to be "small" problems.

Finally, staff from "high" achieving centers were as likely as those from low achieving centers to attend church frequently, be members of professional organizations and Parent-Teacher Associations, be satisfied with progress of their students and to have a given set of ideals concerning what the content emphasis of a program "ought to be."

The most extreme recommendation which can be generated from the findings above is that those responsible for selecting and/or training teachers consider fully the implications of those staff characteristics which appear to "go along with" high student achievement. Some of these characteristics are static in nature (sex, marital status, etc.) and could thus be considered in teacher selection. Still other characteristics are dynamic in nature (instructional philosophy, problem perception, etc.), and as such may constitute focal points for in-service training programs. It is recognized, however, that many of the staff characteristic differences between "high" and "low" achieving centers were slight and thus could have been due to sampling error. It is also quite possible that factors more over-riding than staff characteristics were at work in the "high" and/or "low" achieving centers. For instance, facilities of high centers may have been much superior to those of low centers and, as such, would constitute still another rationale for achievement differentials.

There was one finding, which appeared on the surface to be contradictory, that deserves special attention. Teachers from "high" achieving centers were more likely to perceive

individualization of instruction as both a "large" and a "small" problem than were teachers from low achieving centers. In other words, a disproportionate share of "high" center teachers felt that individualizing their instruction was a "large" problem and a disproportionate share also felt that it was a "small" problem. It may be hypothesized here that both extremes ("large" and "small") are in fact an expression of concern for the problem of individualization and it is this concern that is associated with high achievement.

If this hypothesis be sound, then one may further suggest that those teachers who perceived individualization as a "small" problem do so not because of a lack of concern, but because they in fact individualized their instruction. Likewise, one may suggest that those teachers who perceive individualization as a "large" problem do so out of a concern which has resulted in them becoming engaged in a struggle to individualize their instruction. In either case, the student is the benefactor.