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Identifiers-*New York State

The New York State adult basic education program (funded under Title III, P.L.89-750) was studied during 1965-67 to ascertain whether the target population was being reached, compare effectiveness of different programs; estimate time expectancies needed by individuals to attain functional literacy, learn if sociological and physical variables of students affect academic growth, and determine operating costs through cost analysis. Data were obtained from local and state registration and test forms, including two forms of the Stanford Achievement Test. Results included the following: (1) students receiving programed instruction only had the best attendance; (2) the three special learning laboratories held were successful as demonstration centers and can serve as a guide for future centers; (3) increased enrollments at the 0-4 reading levels showed that the target population is being reached; (4) age, class level, attendance, and a schedule of 6-9 class hours weekly correlated significantly with reading achievement, but sex did not; (5) 80.27 of operating costs were directly related to instruction. (The document includes 33 tables.) (ly)

ADULT BASIC EDUCATION NEW YORK STATE

A TWO YEAR STUDY

TITLE III

P.L. 89-750

1965-67

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Bureau of Basic Continuing Education
Albany, New York 12224

ADULT BASIC EDUCATION

NEW YORK STATE

A Two Year Study

1965-67

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FOREWORD

The impetus given to adult basic education with the advent of Federal funding in 1964 made necessary the development of a statewide design for basic continuing education. Because of the dearth of research data in this area, the then Bureau of Adult Education developed a process for the collection of data for evaluation of the State's effort.

This report is the result of the combined efforts of the State Education Department's Division of Continuing Education, Division of Research, Division of Electronic Data Processing, and the Information Center on Education.

The Bureau of Basic Continuing Education wishes to express deep appreciation to the following: Carl E. Wedekind, Director of the Division of Research; John J. Stiglmeier, Director of Information Center on Education; and James Carter, Supervising Computer Programmer, Division of Electronic Data Processing, for their deep interest in the project and for their helpful suggestions in the processing of the data contained in this report.

The collection and compilation of the data was under the direction of Neil W. Carr, Associate in Basic Continuing Education, assisted by W. William Freeman, Assistant in Basic Continuing Education. The design of the project and the report were prepared by Neil W. Carr and Joseph A. Mangano, Supervisor, Basic Continuing Education.

A. T. Houghton, Chief
Bureau of Basic Continuing Education

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Division of Continuing Education

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I. INTRODUCTION

Historically, New York State has been active in providing programs to upgrade the educational levels of its adult population. These programs, utilizing state and local funds, have been offered by the larger communities of this state since at least 1847, when the State Legislature authorized appropriations for adult literacy education. The curriculum of the programs provided by this early legislation was intended to upgrade the reading, writing, and ciphering skills of the native-born English speaking population. The vast influx of European immigrants of the late nineteenth and early twentieth centuries caused a change in emphasis. From the turn of the century to the early 1960's, basic education in New York State could best be described as a program for Americanization of its immigrant population.

The curriculum for these Americanization and adult elementary education programs was dictated by the needs of the population. More often than not, the curriculum consisted of teaching English as a second language, civic education to aid aliens in becoming citizens, and socializing activities to provide students with opportunities to meet and socialize with other new arrivals to America. The students, for the most part, were highly motivated individuals who had strong family units in their cultural background and, while usually not affluent, were often skilled workers. However, the problem of reaching undereducated, unskilled native-born and recent migrants from Puerto Rico was growing and not being solved. An educational breakthrough came in 1963 when, taking advantage of the new federal amendments to the Social Security Act (PL 87-543), the New York State Education Department and the State Department of Social Welfare embarked on an adult basic education program for recipients of public assistance. This program, known as the Welfare-Education Plan, was designed for a population markedly different from those served in earlier years. It was apparent that many adults in this program were not as motivated to formal education as earlier populations, therefore, the curricula offerings to meet the educational needs for this segment of our society had to be adjusted and a new curriculum for this target population had to be instituted.

With the enactment of Title II-B of the Economic Opportunity Act of 1964, providing federal funding to develop educational opportunities for educationally disadvantaged adults, the State Education Department, utilizing experiences gained in the Welfare-Education Program, developed a program of basic education to be operated through the public schools for educationally disadvantaged adults who, unlike their predecessors prior to 1963, were primarily native-born adults or recent migrants from Puerto Rico.

This report is the accumulation of data and the evaluation of the program as it has operated in New York State since the advent of federal funding.

through Title II-B of the Economic Opportunity Act of 1964 and the Adult Education Act of 1966 (PL 89-750). These hard data are reported from a compilation of facts gathered over the 2-year period. This is in itself complete, however, as with any program dealing with the education of people, the many immeasurable benefits gained through educational experiences such as the self-confidence gain, the employment opportunities made available, the persons who graduated and went on to further educational and training opportunities, the number of persons who are no longer on the social welfare roles, and the behavioral changes which have taken place in the family life of the adults enrolled in this program were not in the scope of the evaluation and data collected.

Additionally, the many subtle differences in programming, the presentation of curricula material, and overall program format which vary from community to community have not been accounted for in this report. However, the report includes conclusions drawn from observations of supervisors in the Division of Continuing Education of three communities, in which a highly individualized approach to the teaching of the basic communication skills is being practiced, and compares the program in these communities with the statistics gathered from the other communities of the state which were more nearly comparable.

II. Scope of The Report

A. To ascertain the population of Adult Basic Education (ABE) participants to determine if target population is being reached

In compliance with the intent of the Federal legislation, the population to be recruited for this program was defined as those individuals who, because of lack of basic education skills, were economically disadvantaged, or the recipients of social welfare, or under the threat of becoming recipients of social welfare. Historically, this population had not sought adult education opportunities even in communities where such opportunities existed. Intensive recruiting efforts were designed and implemented to enroll these adults into the program.

B. To compare effectiveness of different programs in New York State

While the broad guidelines organized by the State Education Department are being followed in all communities funded under this act, individual communities, because of unique needs and special talents of personnel, have developed varied approaches and procedures. This study will investigate the effectiveness of these modes of operation.

C. To determine approximate time expectancies needed by individuals to reach a functional literacy level

Valid research to provide the educational leadership of ABE with projections concerning the expected rate of growth of this segment of our population in basic education programs is nonexistent. It is therefore necessary to develop some growth expectancies from data collected during the period 1965-67.

D. To determine if sociological and physical variables of students affect academic growth

The term adult basic education is all-inclusive. The population within New York State availing itself of adult basic education program offerings varies from section to section within the State with great variation even within given communities. It is therefore necessary to investigate implications of sociological and physical variables as they affect academic achievement.

E. To determine operating costs through cost analysis

With special projects within the overall ongoing program, a study of this magnitude should include cost analysis that will indicate implications for future expenditures.

III. METHODS FOR THE COLLECTION AND PROCESSING OF DATA

A. Local Level

1. Registration Form (Exhibit A)

A registration form for each individual enrolled in the program is completed during an entry interview. At registration, the prospective adult student has the program outlined to him, and an informal reading inventory is administered. Questions listed on the registration form are completed by the interviewer according to the student's statement. Any question the student does not wish to answer is completed by circling NR (no response).

Registration forms are sent by the local educational authority to the Bureau of Basic Continuing Education for processing after initial registration. Any late registrations in the program are forwarded to the Bureau at the completion of each 200 hours of instruction with the class test record forms.

2. Class Test Record Form (Exhibit B)

The class test record is a record of the testing results of each student enrolled in a class. These test results give the scores received by each student who takes an initial achievement battery in reading and arithmetic after 2 weeks of instruction. Students are then tested every 100 hours thereafter.

The form includes names of individuals, test used, test results at the initial, 100 hour and 200 hour levels, and student attendance for each 100 hours of classroom instruction. In the case of students leaving the program, a reason for termination of attendance is indicated. For students registered in the upper level of instruction (levels 7 & 8) a final examination is reported. The statewide test used for this final examination is the Minimum Competence Test in Reading for New York State Adults, developed by the New York State Education Department.

Also included on the class test record form are:

a. Percentage of time spent in reading instruction
b. Reading level of the class
c. Number of class hours of instruction per week
d. Identification of day or evening class

B. State Level

1. Registration Form

Registration forms received by the Bureau of Basic Continuing Education from the local communities are checked for completion. Incorrect or incomplete forms are returned to the local community for correction.

2. Class Test Record Form

The class test record form is also completed at the local level and sent to the Bureau of Basic Continuing Education at the end of each 200 hours of instruction. Upon receipt of the class test record, it too, is checked for completeness. Any class test record forms not correctly completed are returned to the local community for correction.

Two forms are then prepared for each student; one containing sociological data, the other academic achievement.

3. Individual Student Profile (Exhibit C)

An individual profile is filed for each 100-hour testing period. Listed on this profile is the achievement test used; reading growth; arithmetic growth; attendance; dropout data; and for those at the upper levels, a score for the Minimum Competence Test in Reading.

The reading and arithmetic growth are measured by taking the class test record and subtracting the initial score from the 100-hour achievement test score. This gives the amount of growth for each 100-hour period in both subject areas. The same is done for each subsequent 100-hour period.

The attendance for each 100-hour period is recorded in 25-hour segments of time. For instance, if an individual has attended for 90 hours of instruction, his profile sheet would be circled for 75 plus hours.

4. Individual Class Test Record Summary (Exhibit D)

For each 200 hours of instruction an individual summary sheet is completed listing the type of program (Title III or Welfare-Education); day or evening; number of hours per week; achievement test used; reading and arithmetic growth by 100-hour periods; Minimum Competence Test in Reading results for those taking the examination; attendance patterns for each 100 hours of instruction, and termination data for those students who discontinue attendance during the cycle.

5. Key Punching

The individual registration form, profile sheet, and summary sheet are coded to include a number for each school district as well as each individual enrolled in the program. The registration and individual summary are then sent to the Education Department key punching unit. The individual student profile is then filed for future use. The registration form is key punched on card #1; the summary is punched on card #2. Each subsequent period of instruction is then entered on a new card through the addition of an individual summary for each 200 hours of instruction.

6. Total Program Data

A Dictionary of Terms listing all items being processed for the matrix is prepared. Each item on the registration form and individual summary form is listed in this dictionary. Also listed, by code number, are all the communities involved and any special projects that have been given a special key punch on the Hollerith cards. A dictionary is then key punched with one item listed per card from the Dictionary of Terms. The Dictionary of Terms and all registration cards, as well as summary cards, are then transferred to tape. The tape is processed through computers and the subsequent printout or matrix gives the total program picture for the particular year. On the matrix each question is listed and compared against every other question in the matrix dictionary. Using this method, comparison will be made for those factors felt to be relevant to the evaluation of the program.

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Bureau of Basic Continuing Education
Albany, New York 12224

Adult Basic Education
REGISTRATION FORM

School District_____ Date_____19_____

Project No._____ Adult Education Act of 1966 ☐ Welfare Education Program ☐

This form should be filled out for each adult when he first registers in a basic education class. Please return to the Bureau of Basic Continuing Education.

Student's Name_____Address_____

For machine tabulation, please circle the correct code for each question. When information is not attainable, circle the number before NR (no response).

Code	Age
506	15 - 19 yrs.
507	20 - 24 yrs.
508	25 - 29 yrs.
509	30 - 34 yrs.
510	35 - 39 yrs.
511	40 - 44 yrs.
512	45 - 49 yrs.
513	50 - 54 yrs.
514	55 - 59 yrs.
515	60+
516	NR

Code	Sex
521	Male
522	Female

Code	Citizenship
680	Native
681	Native-Puerto Rican
682	Naturalized
683	Alien
684	NR

Code	Race
641	White
642	Negro
643	Other

Code	Children at Home
600	None
601	One
602	Two
603	Three
604	Four
605	Five or more
606	NR

Code	Marital Status
622	Married and living w/spouse
623	Married and not living w/spouse
624	Single
625	NR

Code	Language Spoken
651	English
652	Spanish
653	Other
654	NR

Code	Formal Schooling
200	None
201	One
202	Two
203	Three
204	Four
205	Five
206	Six
207	Seven
208	Eight
209	Nine
210	Ten
211	Eleven
212	Twelve
213	Twelve+
214	NR

Code	Area where Schooling Completed
631	Northeast
632	Middle West
633	South
634	Far West
635	Puerto Rico
636	Other Country
637	NR

Code	Present Occup.
701	Housewife
702	Clerical
703	Farm Labor
704	Domestic
705	Sales
706	Service Trades
707	Skilled Labor
708	Semi-Skilled
709	Unskilled
710	Other
711	Unemployed
712	NR

At what type of work was he employed for the longest period of time?_____

Was this student ever gainfully employed?

Code	
721	Yes
722	No
723	NR

If yes, circle year of most recent employ.

Code	
726	1968
727	1967
728	1966
729	1965
730	1964
731	1963
732	1962
733	1961
734	1960
735	1955 - 59
736	1950 - 54
737	Before 1950
738	NR

Public Assist. Category

Code	
671	ADC
672	HR
673	TADC
674	AD
675	Other
676	NR
677	Non-Welfare

Case No. _____

Instructional Level Assigned: ☐ Non-English ☐ Basic ☐ Primary ☐ Intermediate ☐ Upper
Code: 100 101 102 103 104

TEACHER: (See instruction #1)

% of time spent in the teaching of reading skills _____

CLASS TEST RECORD FORM

Return to the Bureau of Basic Continuing Education

CAREFULLY FOLLOW INSTRUCTIONS ON REVERSE SIDE

Title III ESEA PL 89-750 ☐

Welfare Education Program ☐

Day _____ # of hrs. per

Eve._____ week _____

School District _____ Project # _____ Teacher _____

Class Level: ☐ Non-English ☐ Basic ☐ Primary ☐ Intermediate ☐ Upper ☐ Mixed

Beginning Date of Class _____ Ending Date _____ Number of Hours _____

Alphabetical listing of Students Last Name First	Achiev Test Used	Level _____ Form _____ *1st Test Rdg. Arith.	100 HOURS Level _____ Form _____ *100 Hr. Test Rdg.	Arith.	Stud. Att. 100 hr Per.	200 HOURS Level _____ Form _____ *200 Hr. Test Rdg.	Arith.	Stud. Att. 100 hr Per	**N.Y.S. Minimum Comp. Test in Rdg. (%)	Remarks & Dropout Data

(Use extra sheet if necessary)

*Report all achievement test scores as grade equivalent scores or if no test, mark NR and reason why in the "Remarks" column

**Report Minimum Competence Test scores as percents. Minimum Competence Test in Reading for N.Y.S. Adults to be administered only to students achieving at the upper level.

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CLASS TEST RECORD FORM

This form is to be completed by the teacher at the end of each 200 hour instructional period.

The Class Test Record Form is to be returned to the Bureau of Basic Continuing Education at the completion of each 200 hour period.

Instructions for Use

1. Indicate percent of time during the 200 hour period that was designated specifically for reading skills instruction.

2. List by name, all students enrolled in the class during the 200 hour period.

3. Report in appropriate spaces the name of the achievement test used, the level of the test and the form of the test.

4. For students enrolled in the basic education program for the first time administer the first achievement reading and arithmetic test within the first 10 hours of instruction. Record the results of this test as grade equivalent scores in space marked First Test.

5. For students who were enrolled in the program previously, record in the space marked First Test the results of the last achievement test administered in the preceding instructional period. These results will be obtained from the students Individual Test Record Form.

6. Record in space marked 100 Hour Test the results achieved by the student on the achievement test administered after the class has been in operation 100 hours. This achievement test will be a different form of the same achievement test administered either at the end of the previous 200 hour program or at the beginning of this 200 hour program as described in 3 and 4 above.

7. Record in the appropriate space the actual hours of attendance of the student during the 100 hours immediately preceding the test.

8. Repeat steps 5 and 6 for recording the results achieved by the student on achievement test administered after 200 hours of classroom instruction.

9. Minimum Competence Test in Reading for New York State Adults (For upper level students only) Students completing the upper level will be given the Minimum Competence Test in Reading as a condition for "graduation". Record percentage results of this test in space provided. This test to be administered to ONLY those students who have achieved a reading score of at least 7.0 on the last standardized test.

10. In space marked Remarks record, for those students who leave the program, the date and reason for "dropout", for those students continuing in the program, any information the teacher feels will be helpful to users of this record form.

ADULT BASIC EDUCATION

Identification No:

School_____ ☐ EOA ☐ WEP Name_____

Individual_____

# of Hrs.	100	200	300	400	500	600	700	800	900	1000
Ach. Test Used										
ABLE (A)	106	106	106	106	106	106	106	106	106	106
California (A)	107	107	107	107	107	107	107	107	107	107
Follett (A)	108	108	108	108	108	108	108	108	108	108
NR	109	109	109	109	109	109	109	109	109	109
California	110	110	110	110	110	110	110	110	110	110
Iowa	111	111	111	111	111	111	111	111	111	111
Metropolitan	112	112	112	112	112	112	112	112	112	112
Stanford	113	113	113	113	113	113	113	113	113	113
Other	114	114	114	114	114	114	114	114	114	114

Reading

# of Hrs.	100	200	300	400	500	600	700	800	900	1000
NR	299	298	297	296	295	294	293	292	291	290
4+	309	319	329	339	349	359	369	379	389	399
4.0	308	318	328	338	348	358	368	378	388	398
3.5	307	317	327	337	347	357	367	377	387	397
3.0	306	316	326	336	346	356	366	376	386	396
2.5	305	315	325	335	345	355	365	375	385	395
2.0	304	314	324	334	344	354	364	374	384	394
1.5	303	313	323	333	343	353	363	373	383	393
1.0	302	312	322	332	342	352	362	372	382	392
0.5	301	311	321	331	341	351	361	371	381	391
0.0	300	310	320	330	340	350	360	370	380	390

Arithmetic

# of Hrs.	100	200	300	400	500	600	700	800	900	1000
NR	523	524	525	526	527	528	529	530	531	532
4+	409	419	429	439	449	459	469	479	489	499
4.0	408	418	428	438	448	458	468	478	488	498
3.5	407	417	427	437	447	457	467	477	487	497
3.0	406	416	426	436	446	456	466	476	486	496
2.5	405	415	425	435	445	455	465	475	485	495
2.0	404	414	424	434	444	454	464	474	484	494
1.5	403	413	423	433	443	453	463	473	483	493
1.0	402	412	422	432	442	452	462	472	482	492
0.5	401	411	421	431	441	451	461	471	481	491
0.0	400	410	420	430	440	450	460	470	480	490

NEW YORK STATE MINIMUM COMPETENCE TEST

CODE	8 0 0	8 0 1	8 0 2	8 0 3	8 0 4	8 0 5	8 0 6	8 0 7	8 0 8	8 0 9	8 1 0	8 1 1	8 1 2	8 1 3	8 1 4	8 1 5	8 1 6	8 1 7	8 1 8	8 1 9	8 2 0	8 2 1	8 2 2	8 2 3	8 2 4	8 2 5	8 2 6	8 2 7	8 2 8	8 2 9	8 3 0	8 3 1	8 3 2	8 3 3	8 3 4	8 3 5	8 3 6	8 3 7	8 3 8	8 3 9	8 4 0
RAW SCORE	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PERCENTAGE	0	3	5	8	10	13	15	18	20	23	25	28	30	33	35	38	40	43	45	48	50	53	55	58	60	63	65	68	70	73	75	78	80	83	85	88	90	93	95	98	100

ATTENDANCE

# of Hours	100 (909)	200 (916)	300 (923)	400 (930)	500 (937)	600 (944)	700 (951)	800 (958)	900 (965)	1000 (972)
75 +	910	917	924	931	938	945	952	959	966	973
50 - 75	911	918	925	932	939	946	953	960	967	974
25 - 50	912	919	926	933	940	947	954	961	968	975
Less than 25	913	920	927	934	941	948	955	962	969	976
Never Attended	914	921	928	935	942	949	956	963	970	977
NR	915	922	929	936	943	950	957	964	971	978

865 YES, completed program

866 NO, completed program

867 NR completed program

If NO, check reason for:

868 Poor motivation

869 Family reasons

870 Employment

871 Moved

872 Illness

873 Hostility

874 Other

875 NR

Identification #:

Individual_____

District_____

Name_____

Adult Basic Education

INDIVIDUAL CLASS TEST RECORD SUMMARY

Type of Program

12 WEP
12 EOA

13 Day
13 Eve.

Number of Hours Per Week

9__ Hours

Hours at End of this Period

751 100
752 200
753 300
754 400
755 500
756 600
757 700
758 800
759 900
760 1000

Achievement Test Used

106 ABLE (A)
107 California (A)
108 Follett (A)
109 NR
110 California
111 Iowa
112 Metropolitan
113 Stanford
114 Other

Growth in Reading

___ 100 hours
___ 200 "
___ 300 "
___ 400 "
___ 500 "
___ 600 "
___ 700 "
___ 800 "
___ 900 "
___ 1000 "

Growth in Arithmetic

___ 100 hours
___ 200 "
___ 300 "
___ 400 "
___ 500 "
___ 600 "
___ 700 "
___ 800 "
___ 900 "
___ 1000 "

Min. Comp. Test in Reading

8__ Raw Score (800-840)

9__ Hrs. Attendance

9__ 75+
9__ 50 - 75
9__ 25 - 50
9__ Less than 25
9__ Never Attended
9__ NR

9__ Hrs. Attendance

9__ 75+
9__ 50 - 75
9__ 25 - 50
9__ Less than 25
9__ Never Attended
9__ NR

865 Yes, Completed Program
866 No, Completed Program
867 NR

If no, check reason for

868 Poor motivation
869 Family reasons
870 Employment
871 Moved
872 Illness
873 Hostility
874 Other
875 NR

IV. ADMINISTRATIVE STRUCTURE

The following charts depict the administrative structure of the basic continuing education program for federally funded projects at the state level, community level, with a separate administrative structure chart for New York City.

Figure 1

ADULT BASIC EDUCATION
NEW YORK STATE

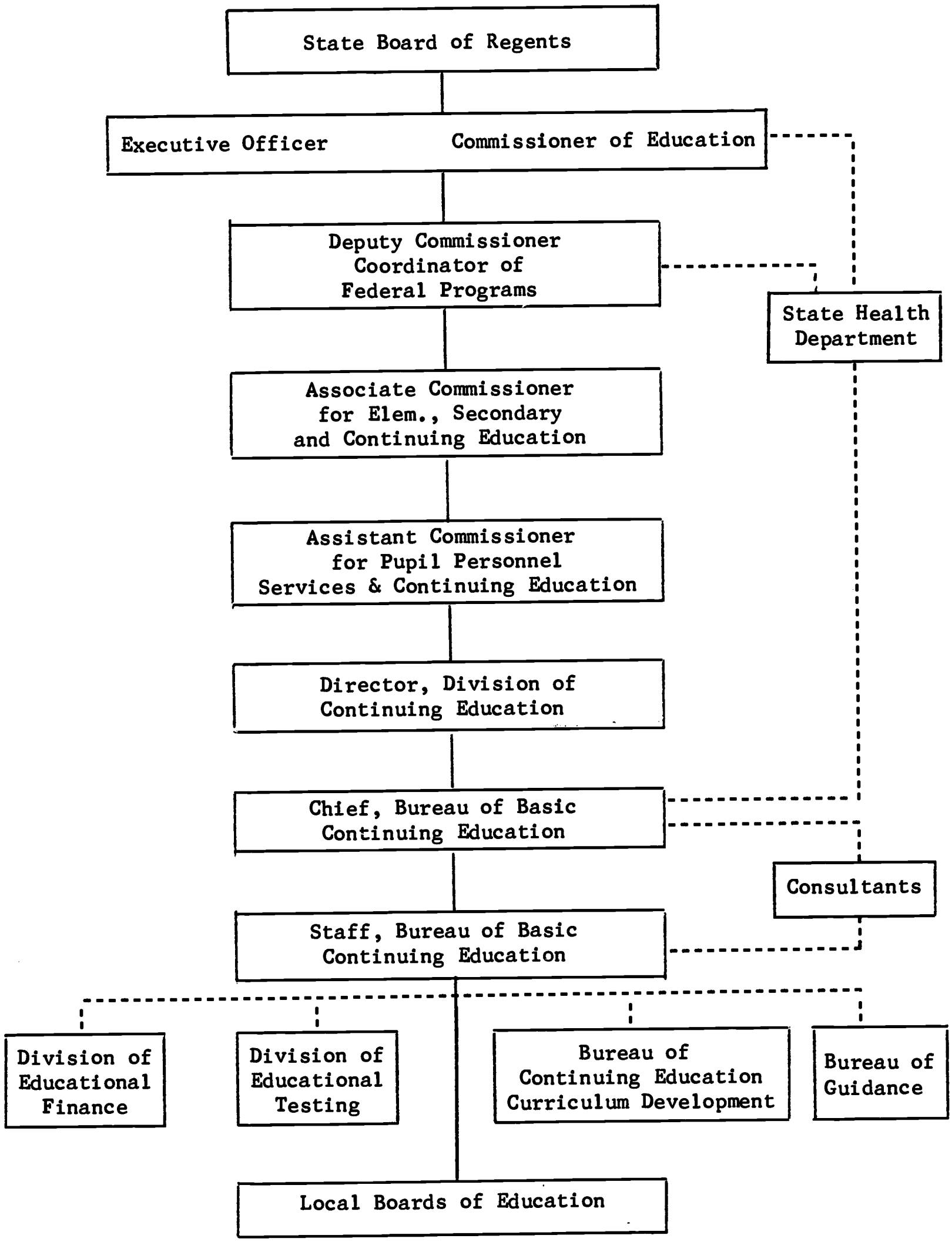
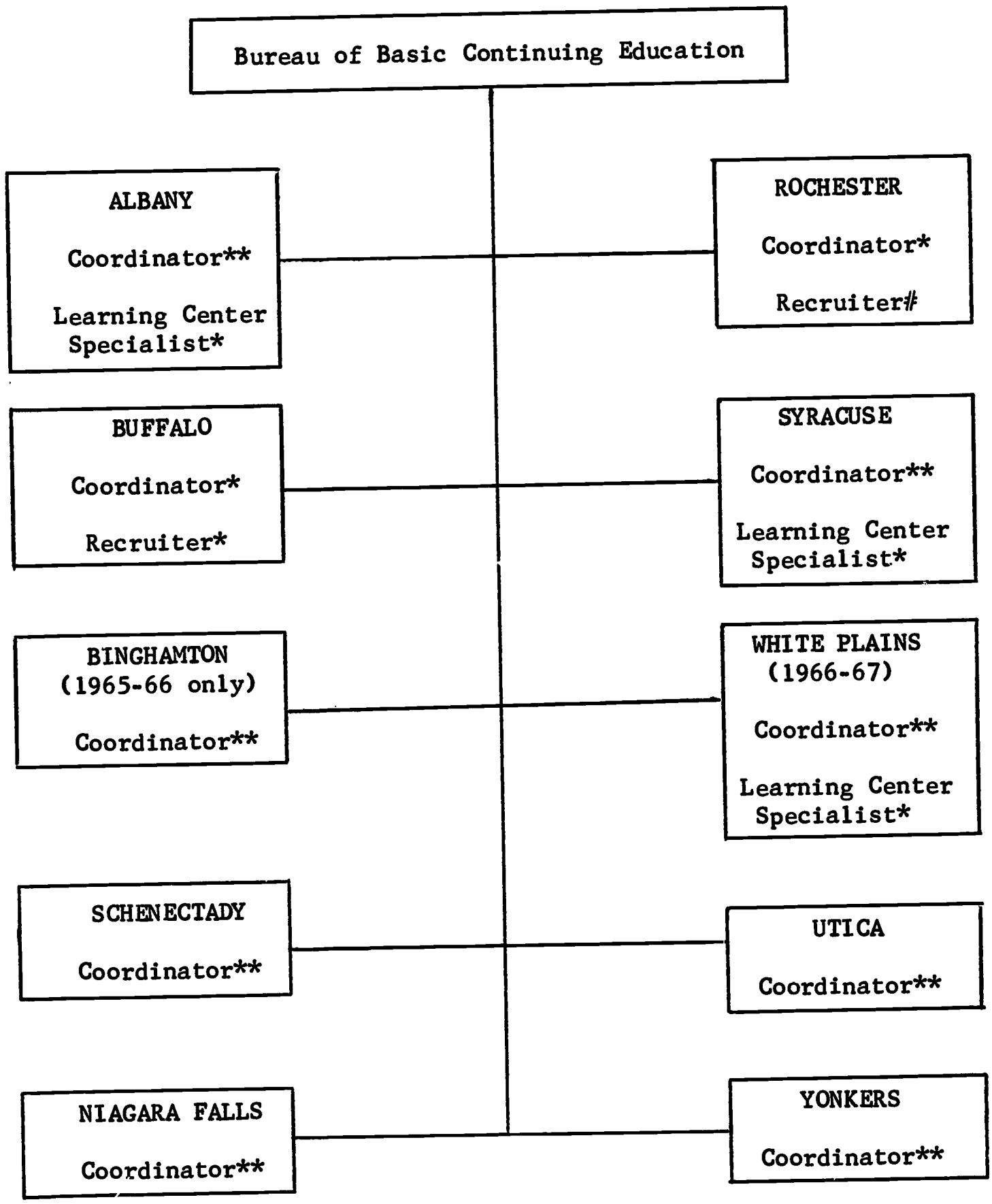


Figure 2

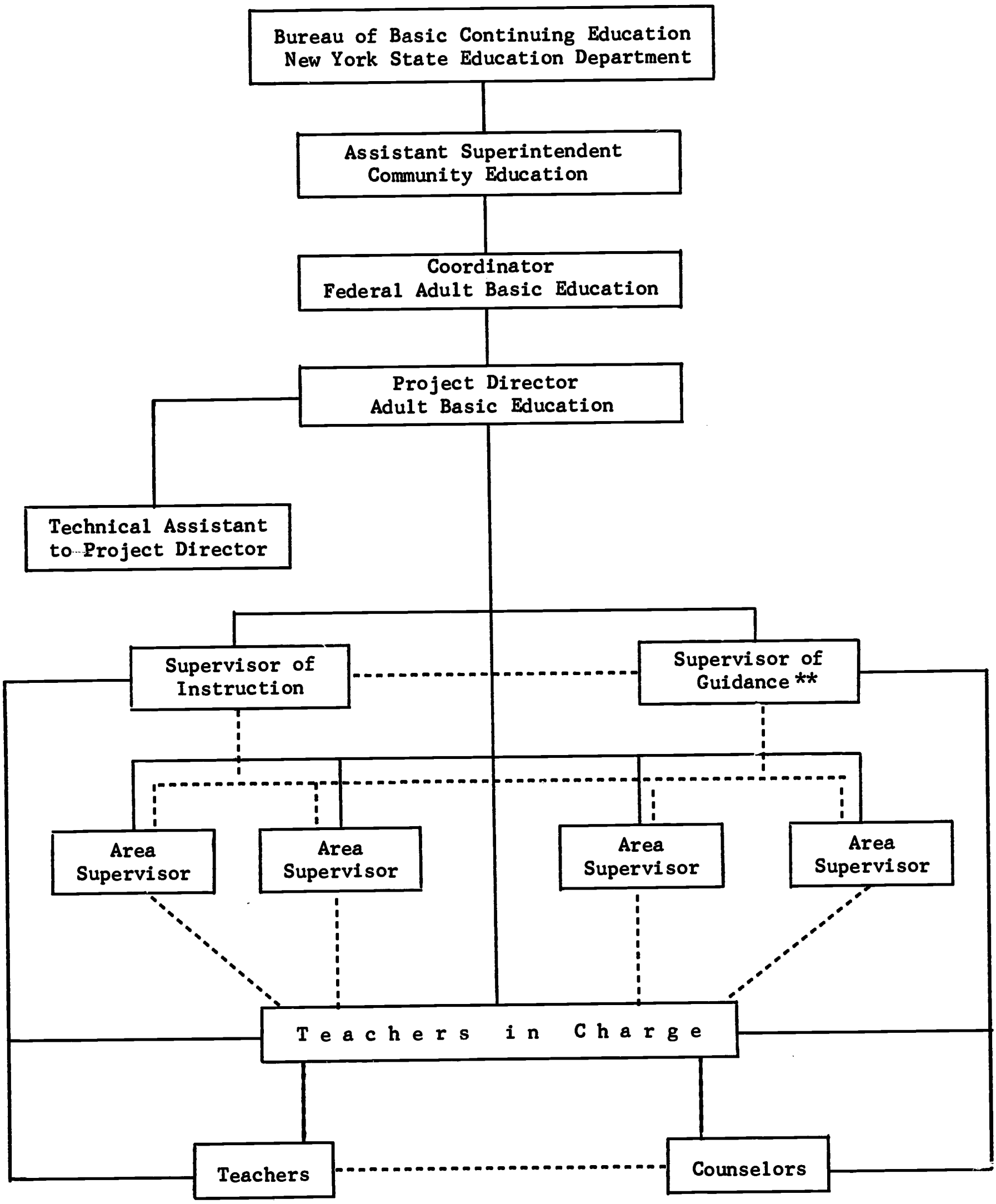
BIG CITY ADMINISTRATIVE UNITS
(Not including New York City)



*Full time
**½ Coordinator; ½ Recruiter
#Part time

Figure 3

NEW YORK CITY ADMINISTRATION



**½ time guidance

V. SOCIOLOGICAL CHARACTERISTICS

The tables included in this section were prepared and reported in the following matrices:

ADULT BASIC EDUCATION, New York State, 1965-66

ADULT BASIC EDUCATION, New York State, 1966-67

TABLES

Table I

NUMBER OF STUDENTS REGISTERED BY CLASS LEVELS

1965-66

	Total	NE	B	P	I	U	NR
Number	6,734	2,459	1,046	875	1,244	1,002	108
Percent	100.0	36.5	15.6	12,9	18.5	14.9	1.6

1966-67

	Total	NE	B	P	I	U	NR
Number	11,531	4,016	2,373	1,517	1,933	1,437	255
Percent	100.0	34.8	20.6	13.2	16.7	12.5	2.2

The class levels referred to in table above are designated as:

NE - Non-English
B - Basic (Reading levels 0-2)
P - Primary (Reading levels 3-4)
I - Intermediate (Reading levels 5-6)
U - Upper (Reading levels 7-8)

The figures for 1966-67 indicate an increase in the number of students (+58.4%) over 1965-66. However, it should be noted that there is a slight decrease in the number of adults enrolled at the upper and intermediate levels of the program. It appears that as the students increase their education, more job opportunities are available, and they leave the program. There has been a marked increase in enrollment at the basic level (+5%). This has been the result of increased recruiting of adults for classes at the basic level.

Table II

AGE RANGE OF STUDENTS

1965-66

	Total	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60	NR
Number	6,734	677	1,145	1,095	908	861	620	446	352	228	243	159
Percent	100.0	1.04	17.0	16.3	13.4	12.7	9.2	6.6	5.2	3.4	3.5	2.3

1966-67

	Total	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60	NR
Number	11,531	1,241	1,669	1,893	1,617	1,485	1,058	843	593	418	628	86
Percent	100.0	10.8	14.5	16.4	14.0	12.9	9.2	7.3	5.1	3.6	5.4	.8

Age groups do not vary sufficiently to indicate any trends during the 2-year period. The total number of enrollees in the younger age groups has decreased minutely (-1%) with an increase of older persons (+2%). The median age lies within the 30-34 age group.

Table III

SEX

1965-66

	Total	Male	Female	NR
Number	6,734	2,885	3,848	1
Percent	100.0	42.9	57.1	0.0

1966-67

	Total	Male	Female	NR
Number	11,531	4,616	6,903	12
Percent	100.0	40.0	59.9	0.1

The decrease in the percentage of male enrollees (-2.9%) depicts a trend over 2 years. This may be caused by the attraction of females to the full-time day programs as they open in the larger cities of New York State. The female student increase (+2.8%) is expected to expand further as new full-time learning centers become operational. However, in areas where large numbers of unemployed males reside, an equally large increase is expected for adult males.

Table IV

RACE

1965-66

	Total	White	Negro	Puerto Rican	Other
Number	6,734	3,124	2,145	1,042	423
Percent	100.0	46.4	31.9	15.5	6.2

1966-67

	Total	White	Negro	Puerto Rican	Other
Number	11,531	5,531	3,352	2,101	547
Percent	100.0	48.0	29.1	18.2	4.7

There has been a slight increase in both white and Puerto Rican categories in 1966-67.

Table V

MARITAL STATUS

1965-66

	Total	Married with Spouse	Married not with Spouse	Single	NR
Number	6,734	3,226	858	2,507	143
Percent	100.0	47.9	12.7	37.3	2.1

1966-67

	Total	Married with Spouse	Married not with Spouse	Single	NR
Number	11,531	5,714	1,713	3,942	162
Percent	100.0	49.6	14.8	34.2	1.4

This table has been prepared from the same source data as all previous charts to illustrate further the components of the educationally disadvantaged population.

In comparing 1966-67 with 1965-66, it should be noted that there is a steady increase in those adults who are married (3.76%); inversely there is a decrease in the number of single adults enrolled (-3.1%). It should also be noted that there is an increase (+2.1%) in the number of those not living with their spouses.

Table VI

CHILDREN AT HOME

1965-66

	Total	None	1	2	3	4	5+	NR
Number	6,734	3,198	812	849	593	359	564	359
Percent	100.0	47.5	12.1	12.6	8.8	5.3	8.4	5.3

1966-67

	Total	None	1	2	3	4	5+	NR
Number	11,531	4,867	1,380	1,591	1,243	793	1,235	422
Percent	100.0	42.2	12.0	13.8	10.8	6.8	10.7	3.7

While the modal number of children at home remains "none" the median has changed from no children to one child at home during the 2-year period covered by this report. The percentage of students with no children at home has decreased (-5.3%), but for those with one at home it has decreased minutely (-1%). In keeping with the large increase in population, students with 2, 3, 4, and 5 or more children at home have increased (+1.2%, +2.0%, +1.5%, +2.3%), respectively.

Table VII

CITIZENSHIP

1965-66

	Total	Native	Native Puerto Rican	Naturalized	Alien	NR
Number	6,734	2,688	1,242	368	2,280	156
Percent	100.0	39.9	18.4	5.5	33.9	2.3

1966-67

	Total	Native	Native Puerto Rican	Naturalized	Alien	NR
Number	11,531	4,744	2,454	790	3,413	130
Percent	100.0	41.1	21.3	6.9	29.6	1.1

There has been an overall growth in the number of citizens (+5.5%). Inversely there has been a drop (-4.3%) in the number of aliens enrolled.

Table VIII

LANGUAGE SPOKEN AT HOME

1965-66

	Total	English	Spanish	Other	NR
Number	6,734	3,097	2,695	879	63
Percent	100.0	46.0	40.0	13.1	0.9

1966-67

	Total	English	Spanish	Other	NR
Number	11,531	5,515	4,500	1,459	57
Percent	100.0	47.8	39.1	12.6	0.5

Although the number in the sample is greater, the actual percentage of the non-English speaking has dropped (1-4%) over the 2-year period. This, of course, has come about by continued emphasis on the native-born undereducated rather than the non-English speaking alien who should attend Americanization and Citizenship classes.

Table IX

NUMBER OF YEARS OF PREVIOUS SCHOOLING OF ENROLLED ADULTS

1965-66

	Total	0	1	2	3	4	5	6	7	8	9	10	11	12	12+	NR
No.	6,734	181	106	192	343	425	542	706	700	919	606	570	374	467	393	210
Per-cent	100.0	2.7	1.6	2.9	5.1	6.3	8.0	10.5	10.4	13.6	9.0	8.5	5.6	6.9	5.8	3.1

1966-67

	Total	0	1	2	3	4	5	6	7	8	9	10	11	12	12+	NR
No.	11,531	358	196	367	657	806	987	1,256	1,207	1,642	1,029	922	592	777	544	191
Per-cent	100.0	3.1	1.7	3.2	5.7	7.0	8.6	10.9	10.5	14.2	8.9	8.0	5.1	6.7	4.7	1.7

The sample illustrates a steady increase in the number of adults enrolled with eighth grade or less attainment. However, the reverse is true when you compare grade 9 and above. The adults enrolled in grade 9 and above represent 35.2 percent of the 1967 sample as compared to 38.9 percent of the 1966 sample. All students included in the charts above scored below eighth grade reading level on initial placement test. It has been observed that many enrollees tend to exaggerate number of years of schooling when answering the questionnaire.

Table IXa

NUMBER OF YEARS OF PREVIOUS SCHOOLING VS. RACE

1965-66

	0-2		3-4		5-6		7-8		9-12+	
	No.	%	No.	%	No.	%	No.	%	No.	%
White	272	56.3	438	55.1	819	64.5	986	59.7	984	68.9
Nonwhite	211	43.7	357	44.9	451	35.5	666	40.3	897	31.1
Total	483	100.0	795	100.0	1,270	100.0	1,652	100.0	1,881	100.0

1966-67

	0-2		3-4		5-6		7-8		9-12+	
	No.	%	No.	%	No.	%	No.	%	No.	%
White	569	62.1	936	64.3	1,534	68.9	1,869	65.9	2,708	65.7
Nonwhite	347	37.9	520	35.7	694	31.1	967	34.1	1,413	34.3
Total	916	100.0	1,456	100.0	2,228	100.0	2,836	100.0	4,121	100.0

Comparing the white and nonwhite* adults in both years we find that the nonwhite make up a smaller proportion of the total in all grade levels. In grades 9 and above there is an increase in both white and nonwhite in 1966-67. The students in 1966-67 had completed more years of schooling. This data is based on verbal response of students at time of enrollment.

* Non-white indicates all races except Caucasian.

Table X

GEOGRAPHIC AREA WHERE PREVIOUS SCHOOLING COMPLETED

1965-66

	Total	North-East	Mid-West	South	Far West	Puerto Rico	Other Country	NR
Number	6,734	1,284	42	1,341	11	1,175	2,621	260
Percent	100.0	19.2	0.6	19.9	0.2	17.5	38.9	3.7

1966-67

	Total	North-East	Mid-West	South	Far West	Puerto Rico	Other Country	NR
Number	11,531	2,540	71	2,213	14	2,336	3,993	364
Percent	100.0	22.0	0.6	19.2	0.1	20.3	34.6	3.2

There has been a steady increase (+2.8%) over the 2-year period in the number of adults enrolled from the Northeast. Inversely, there has been a slight decrease (-0.7%) in those coming from the South and a marked decrease (-4.3%) in those coming from other countries.

Table XI

PRESENT OCCUPATION

1965-66

	Total	Housewife	Clerical	Farm	Domestic	Sales	Service Trade	Semi-Skilled	Skilled Labor	Unskilled	Other	Unemployed	NR
Number	6,734	1,330	126	12	496	62	316	1,183	694	1,116	210	925	264
Percent	100.0	19.7	1.9	0.2	7.4	0.9	4.7	17.6	10.3	16.6	3.1	13.7	3.9

1966-67

	Total	Housewife	Clerical	Farm	Domestic	Sales	Service Trade	Semi-Skilled	Skilled Labor	Unskilled	Other	Unemployed	NR
Number	11,531	2,923	180	34	718	90	415	1,741	970	1,826	458	1,930	246
Percent	100.0	25.4	1.6	0.2	6.2	0.8	3.6	15.1	8.4	15.8	4.0	16.8	2.1

In completing this category on the registration form it should be noted that there were 11 categories that could be checked. It is important to note that the range of unemployed was 13.7 percent - 16.8 percent. Although there is an increase of 3.1 percent from 1965 to 1966, that still leaves 83.1 percent of the adult student population employed.

Table XII

GAINFULLY EMPLOYED

1965-66

	Total	Yes	No	NR
Number	6,734	5,699	752	283
Percent	100.0	84.6	11.2	4.2

1966-67

	Total	Yes	No	NR
Number	11,531	9,265	1,746	520
Percent	100.0	80.4	15.1	4.5

The fact that there was an increase in the number of those never employed could be attributed to the increase in the number of welfare recipients enrolled in the program. Even with this increase (+3.9%), over 80 percent of the people enrolled in the program during the second year were employed.

Table XIII

DATE LAST EMPLOYED*

1965-66

	Total	1967	1966	1965	1964	1963	1962	1961	1960	1955-1959	1950-1954	Before 1950	NR
Number	5,699	3	745	3,565	358	163	138	81	94	207	106	119	120
Percent	100.00	0.06	13.08	62.56	6.29	2.87	2.42	1.42	1.64	3.63	1.85	2.08	2.10

1966-67

	Total	1967	1966	1965	1964	1963	1962	1961	1960	1955-1959	1950-1954	Before 1950	NR
Number	9,265	532	4,638	1,843	450	344	219	162	208	447	195	200	17
Percent	100.00	5.75	50.06	20.02	4.87	3.71	2.36	1.74	2.24	4.82	2.10	2.15	0.18

Of the adults enrolled in the program over the 2-year period 75+ percent were, or had been, employed since 1965. The remaining 25 percent are spread over the period "Before 1950" up to 1964. Indicates the same pattern in view of one year difference

*It should be noted that these figures reflect only those ever gainfully employed.

Table XIV

PUBLIC ASSISTANCE CATEGORY

1965-66

	Total	ADC	HR	TADC	AD	Other	Non-Welfare	NR
Number	6,734	261	86	82	24	54	2,946	3,281
Percent	100.0	3.9	1.3	1.2	0.4	0.8	43.7	48.7

1966-67

	Total	ADC	HR	TADC	AD	Other	Non-Welfare	NR
Number	11,531	853	296	407	61	166	6,526	3,222
Percent	100.0	7.4	2.6	3.5	0.5	1.5	56.6	27.9

The absolute number as well as the percentage of adults (+6.4%) on Public Assistance has gone up. This can be explained by the decline in the number of communities participating in the New York State Welfare-Education Plan. With the advent of ABE, districts enrolled in Welfare-Education dropped the Welfare-Education, which pays only for welfare recipients, whereas ABE will pay for all.

Table XV

NUMBER OF STUDENTS PER 100 HOUR CYCLES

1965-66

	Total	100	200	300	400	500	600	700	800	900	1000	1100	1200
Number	8,612	4	8,028	541	0	39	0	0	0	0	0	0	0
Percent	100.0	0.05	93.22	6.20		0.45							

1966-67

	Total	100	200	300	400	500	600	700	800	900	1000	1100	1200
Number	13,480	255	9,780	170	2,427	370	380	13	69	0	15	0	1
Percent	100.0	1.89	72.55	1.26	18.00	2.74	2.82	0.10	0.51		0.11		0.01

As can be expected with only 1 year's operation, 1965-66, 93.22 percent of the group fell into the 200 hour category. However, during the second year there is a greater spread of students over each 200 hour period. This is illustrated by 72.55 percent - 200 hours; 18.00 percent - 400 hours; and 2.82 percent - 600 hours. This total 93.37 percent which compares favorably with 1965-66 200 hour total.

Table XVI

STANDARDIZED TESTS

1965-66

	Total	California	Iowa	Metropolitan	Stanford	Other	NR
Number	6,734	72	404	3,047	1,142	1,269	800
Percent	100.0	1.1	6.0	45.2	17.0	18.8	11.9

1966-67

	Total	California	Iowa	Metropolitan	Stanford	Other	NR
Number	11,531	104	1,496	4,137	1,934	564	3,296
Percent	100.0	0.9	13.0	35.9	16.8	4.9	28.5

The standardized tests used were of the type used in public schools. There was a definite increase in the use of the Iowa (+7.0%) and a definite decrease in all others ranging from 0.2 percent to 13.9 percent.

Table XVII

SUMMARY OF STUDENTS
COMPLETING - NOT COMPLETING - RECYCLING

1965-66

	Total	Completed	Not Completed	Recycling
Number	6,734	311	1,476	4,947
Percent	100.0	4.7	21.9	73.4

1966-67

	Total	Completed	Not Completed	Recycling
Number	11,531	551	4,442	6,538
Percent	100.0	4.8	38.5	56.7

A greater number of enrollees graduated in 1966-67 than in 1965-66. The increase in the percentage of students not completing the program (+16.6%) is somewhat attributable to the large number who left for employment, change of residence, and illness. (This grouping encompassed 34.7 percent of the 1965-66 enrollees not finishing, and 49.7 percent of the 1966-67 students who did not complete the program.) Recycling denotes students reassigned to another class. Although the percentage has decreased (-16.7%), nearly 1,600 more enrollees were recycled in 1966-67 than in 1965-66.

Table XVIII

REASONS FOR NOT COMPLETING PROGRAM

1965-66

	Total	Poor Motivation	Family Reasons	Employment	Moved	Illness	Hostility	Unknown
Number	1,476	54	80	240	166	107	4	825
Percent	100.0	3.7	5.4	16.3	11.2	7.2	0.3	55.9

1966-67

	Total	Poor Motivation	Family Reasons	Employment	Moved	Illness	Hostility	Unknown
Number	4,442	299	373	831	810	570	48	1,511
Percent	100.0	6.7	8.4	18.7	18.2	12.8	1.1	34.1

Small increases were noted among students who dropped out for hostility (+0.8%) and insufficient motivation (+3.0%). Family reasons (+3.0%) include persons leaving because of marital problems or to care for ailing children, spouses, or parents. Enrollees who move (+7.0%) sometimes change to improved housing conditions or to a spouse's new location of employment. Among persons leaving for employment (+2.4%) are those who have found new jobs, changed shifts, moved to the location of a new job, or received sufficient education to satisfy the needs of their employers. The large decrease (-21.8%) in the category "unknown" indicates that program personnel at the local level have instituted improved techniques in locating and interviewing persons absent for 2 or more successive sessions.

Table XIX

NUMBER OF CLASS PARTICIPANTS
BY HOURS OF SCHEDULED INSTRUCTION PER WEEK

1965-66

	Total	6	9	10	12	15	20	25	Other	NR
Number	6,734	944	933	517	585	3,022	50	296	387	
Percent	100.0	14.0	13.9	7.7	8.7	44.9	0.7	4.4	5.7	

1966-67

	Total	6	9	10	12	15	20	25	Other	NR
Number	11,531	3,622	1,817	734	263	3,564	13	812	704	2
Percent	100.0	31.4	15.8	6.4	2.3	30.9	0.1	7.0	6.1	0.0

The median number of hours of instruction per week has changed from 15 hours per week to 10 hours per week. The reasons for this are twofold. First, in checking hours per week against reading achievement, it was found that after 15 hours per week there was very little growth. The second reason was a lack of funds that forced a reduction in the number of instructional hours per week.

VI CHI SQUARE

Tables of Chi Square Relating Various Factors to Reading Achievement

The following tables report the reading achievement of the enrolled adults relating achievement with various factors tabulated from the data reported on the sociological data report form.

SUMMARY TABLE - CHI SQUARE ANALYSIS

Table	Variable	Level of Significance
1	Sex vs. Reading Achievement (1st 100 Hrs.)	N.S.
2	Sex vs. Reading Achievement (2d 100 Hrs.)	N.S.
3	Age vs. Reading Achievement (1st 100 Hrs.)	<.05
4	Age vs. Reading Achievement (2d 100 Hrs.)	<.10
5	Class Level vs. Reading Achievement (1st 100 Hrs.)	< .001
6	Class Level vs. Reading Achievement (2d 100 Hrs.)	< .001
7	Attendance vs. Reading Achievement (1st 100 Hrs.)	< .001
8	Attendance vs. Reading Achievement (2d 100 Hrs.)	< .001
9	Hours Per Week vs. Reading Achievement (1st 100 Hrs.)	< .001
10	Hours Per Week vs. Reading Achievement (2d 100 Hrs.)	< .001
11	Sex vs. Attendance (1st 100 Hrs.)	< .001
12	Sex vs. Attendance (2d 100 Hrs.)	< .001
13	Sex vs. Class Levels	< .001
14	Sex vs. Class Levels	< .001

Table 1
SEX VS. READING ACHIEVEMENT
(1st 100 hours)

	Sex	Reading Growth							Totals Observed
		0.0	0.5	1.0	1.5	2.0	2.5	3.0+	
$(O-E)^2/E$	Males	.70	.10	.69	.30	1.50	.02	.02	2,430
Observed		916	945	309	128	46	42	44	
Expected		891	955	324	122	54	41	43	
$(O-E)^2/E$	Females	.49	.07	.47	.20	.82	.00	.01	3,562
Observed		1,282	1,409	489	174	86	61	61	
Expected		1,307	1,399	474	180	78	61	62	
Totals Observed		2,198	2,354	798	302	132	103	105	5,992

df = 6
$\chi^2 = 5.39$
N.S.

Table 2
SEX VS. READING ACHIEVEMENT
(2d 100 hours)

	Sex	Reading Growth							Totals Observed
		0.0	0.5	1.0	1.5	2.0	2.5	3.0+	
$(O-E)^2/E$	Males	1.37	.00	1.34	1.38	.40	.00	.22	1,882
Observed		731	747	251	77	37	19	20	
Expected		700	746	270	88	41	19	18	
$(O-E)^2/E$	Females	.94	.00	.91	.95	.27	.00	.15	2,759
Observed		995	1,092	415	139	64	29	25	
Expected		1,026	1,093	396	128	60	29	27	
Totals Observed		1,726	1,839	666	216	101	48	45	4,641

df = 6
$\chi^2 = 7.93$
N. S.

There is no significant relationship between sex and reading achievement during the first or second hundred hours of instruction. This distribution is such that it would be expected on the basis of chance alone.

Table 3

AGE VS. READING ACHIEVEMENT
(1st 100 hours)

	Age	Reading Growth					Totals Observed
		0.0	0.5	1.0	1.5	2.0+	
$(O-E)^2/E$	18 - 24	.04	.00	.20	.06	.83	1,351
Observed		490	532	173	71	85	
Expected		496	531	179	69	77	
$(O-E)^2/E$	25 - 34	1.77	.02	6.85	.58	1.05	1,672
Observed		581	653	261	92	85	
Expected		614	657	222	85	95	
$(O-E)^2/E$	35 - 49	.57	.23	.78	.84	.01	1,903
Observed		718	734	238	106	107	
Expected		698	747	252	97	108	
$(O-E)^2/E$	50+	.92	.64	2.65	6.94	.16	1,022
Observed		394	417	117	33	61	
Expected		375	401	136	52	58	
Totals Observed		2,183	2,336	789	302	338	5,948

$df = 12$

$\chi^2 = 25.14$

$p < .05$

There exists a significant relationship between age and reading achievement during the first hundred hours of instruction. The relationship is such that more people than expected by chance in the 25-34 age group gained a full year in reading. A tendency exists for older (50+) people to exhibit lower achievement levels than would be expected by chance.

Table 4

AGE VS. READING ACHIEVEMENT
(2d 100 hours)

	Age	Reading Growth					Totals Observed
		0.0	0.5	1.0	1.5	2.0+	
$(O-E)^2/E$	18 - 24	4.86	1.37	1.61	.36	.00	975
Observed		405	363	125	41	41	
Expected		363	386	140	45	41	
$(O-E)^2/E$	25 - 34	.01	.07	.02	.02	.17	1,262
Observed		468	494	191	60	49	
Expected		470	500	181	59	52	
$(O-E)^2/E$	35 - 49	.02	.06	.38	.13	.15	1,493
Observed		559	598	205	66	65	
Expected		556	592	214	69	62	
$(O-E)^2/E$	50+	5.60	1.64	1.33	.88	.00	886
Observed		287	375	140	47	37	
Expected		330	351	127	41	37	
Totals Observed		1,719	1,830	661	214	192	4,616

$df = 12$

$\chi^2 = 18.68$

$p < .10$

Not Significant

There exists no significant relationship between age and reading achievement levels during the second 100 hours of instruction. However, a trend may be noted depicting the youngest group achieving less, and the oldest age group achieving more, than expected.

Table 5

CLASS LEVEL VS. READING ACHIEVEMENT
(1st 100 hours)

	Class Level	Reading Growth					Totals Observed
		0.0	0.5	1.0	1.5	2.0+	
$(O-E)^2/E$	Upper	1.76	11.32	1.71	7.74	58.14	1,130
Observed		387	374	166	78	125	
Expected		414	445	150	57	64	
$(O-E)^2/E$	Intermediate	.03	.28	.84	1.05	.41	1,524
Observed		555	587	215	86	81	
Expected		559	600	202	77	87	
$(O-E)^2/E$	Primary	.96	1.81	1.44	.07	6.90	1,022
Observed		356	429	150	49	38	
Expected		375	402	136	51	58	
$(O-E)^2/E$	Basic	3.39	1.40	1.04	5.23	16.75	1,223
Observed		488	507	149	44	35	
Expected		449	481	162	62	69	
$(O-E)^2/E$	Non-English	.32	2.40	6.67	1.96	.02	1,020
Observed		385	432	105	41	57	
Expected		374	401	135	51	58	
Totals Observed		2,171	2,329	785	298	336	5,919

$df = 16$

$\chi^2 = 133.64$

$p < .001$

Persons assigned to the upper level of instruction show significantly better achievement than those students assigned to the lower and non-English levels. Those making no gains tend to be distributed as expected by chance.

Table 6

CLASS LEVEL VS. READING ACHIEVEMENT
(2d 100 hours)

	Class Level	Reading Growth					Totals Observed
		0.0	0.5	1.0	1.5	2.0+	
$(O-E)^2/E$	Upper	.01	2.04	.23	2.78	4.50	771
Observed		285	281	115	26	44	
Expected		287	306	110	36	32	
$(O-E)^2/E$	Intermediate	.58	2.91	5.29	2.62	2.47	1,185
Observed		425	433	200	67	60	
Expected		441	470	170	55	49	
$(O-E)^2/E$	Primary	7.20	3.90	3.19	.68	.27	791
Observed		248	349	132	32	30	
Expected		294	314	113	37	33	
$(O-E)^2/E$	Basic	4.00	.26	8.32	.20	3.03	970
Observed		399	395	105	42	29	
Expected		361	385	139	45	40	
$(O-E)^2/E$	Non-English	2.31	.76	3.28	4.90	2.31	850
Observed		343	353	102	26	26	
Expected		316	337	122	40	35	
Totals Observed		1,700	1,811	654	213	189	4,567

$df = 16$

$\chi^2 = 68.04$

$p < .001$

A highly significant relationship between class level and reading achievement is most evident at the upper and intermediate class levels. Significant, but smaller, gains are shown at the primary level. High gains at the basic and non-English levels tend to be far less than expected by chance alone.

Table 7

ATTENDANCE VS. READING ACHIEVEMENT
(1st 100 hours)

	Hours of Attendance	Reading Growth					Totals Observed
		0.0	0.5	1.0	1.5	2.0+	
$(O-E)^2/E$	75+	42.48	257.27	32.14	6.67	3.65	2,137
Observed		1,205	151	448	165	168	
Expected		999	515	343	135	145	
$(O-E)^2/E$	50 - 75	30.59	208.33	16.59	4.68	18.89	1,791
Observed		677	732	218	90	74	
Expected		837	432	287	113	122	
$(O-E)^2/E$	25 - 50	2.52	18.13	7.83	1.42	2.52	715
Observed		305	229	85	37	59	
Expected		334	173	115	45	48	
$(O-E)^2/E$	Less than 25	1.79	.87	.74	.05	9.33	306
Observed		126	82	43	20	35	
Expected		143	74	49	19	21	
Totals Observed		2,313	1,194	794	312	336	4,949

$df = 12$

$\chi^2 = 666.49$

$p < .001$

A pattern showing gains of 1.0, 1.5, and 2.0+ is evident for persons in attendance 75+ hours. Although a very significant relationship between attendance and achievement is exhibited by persons gaining 0.5 in 50-75 hours of attendance, other gains at this attendance level are less than expected on the basis of chance. Enrollees who have attended fewer than 50 hours show a relationship such as might be expected on the basis of chance alone. Gains of 2.0+ for adult students with fewer than 25 hours of attendance are probably attributable to initial placement at a lower-than-necessary level of instruction and hence may account for poor attendance.

Table 8

ATTENDANCE VS. READING ACHIEVEMENT
(2d 100 hours)

	Hours of Attendance	Reading Growth					Totals Observed
		0.0	0.5	1.0	1.5	2.0+	
$(O-E)^2/E$	75+	.57	4.94	1.15	1.83	1.83	2,927
Observed		1,074	1,277	328	124	124	
Expected		1,099	1,200	348	140	140	
$(O-E)^2/E$	50 - 75	1.58	3.79	.00	3.63	.17	1,137
Observed		453	424	135	68	57	
Expected		427	466	135	54	54	
$(O-E)^2/E$	25 - 50	.07	5.85	9.01	.03	3.33	635
Observed		242	221	101	31	40	
Expected		238	260	75	30	30	
$(O-E)^2/E$	Less	.13	.12	.58	.04	.64	518
Observed	than	190	217	56	26	29	
Expected	25	195	212	62	25	25	
Totals Observed		1,959	2,139	620	249	250	5,217

$df = 12$

$\chi^2 = 39.29$

$P < .001$

Persons with fewer than 25 hours of recorded attendance display a relationship between attendance and reading achievement which may be expected on the basis of chance during the second 100 hours of instruction, but greater gains than expected were made by persons in attendance between 25 and 75 hours. At the highest attendance level, small gains are significant and there is also a significant relationship denoting that higher gains were made by fewer students than expected on the basis of chance alone.

Table 9

HOURS OF INSTRUCTION PER WEEK VS. READING ACHIEVEMENT
(1st 100 hours)

	Hours Per Week	Reading Growth					Totals Observed
		0.0	0.5	1.0	1.5	2.0+	
$(O-E)^2/E$	6	2.94	14.37	17.22	16.41	20.78	1,695
Observed		585	583	269	126	132	
Expected		628	682	209	88	89	
$(O-E)^2/E$	9	.02	11.97	13.71	2.38	2.35	1,365
Observed		508	467	216	84	90	
Expected		505	548	168	71	72	
$(O-E)^2/E$	10	.33	3.31	.09	.21	6.72	817
Observed		312	296	104	45	60	
Expected		302	329	101	42	43	
$(O-E)^2/E$	12	2.40	6.56	.13	5.14	.03	546
Observed		224	182	70	40	30	
Expected		202	220	67	28	29	
$(O-E)^2/E$	15	.72	67.23	43.73	175.11	67.35	2,538
Observed		966	1,283	196	54	39	
Expected		940	1,021	313	130	134	
$(O-E)^2/E$	20	.17	.00	.13	16.33	.00	65
Observed		22	26	7	10	0	
Expected		24	26	8	3	3	
$(O-E)^2/E$	25	.03	.02	.00	.00	.05	558
Observed		191	213	72	33	49	
Expected		207	224	69	29	29	
Totals Observed		2,808	3,050	934	392	400	7,584

$df = 24$

$\chi^2 = 497.94$

$p < .001$

Persons enrolled in classes meeting 6 and 9 hours per week display significantly higher gains than expected by chance. Enrollees attending 10, 12, 20, and 25 hours per week tend to show gains primarily as might be expected on the basis of chance. Noteworthy are the 15-hour-per-week groups which exhibit far less gain than expected. Strong indications exist in favor of classes meeting fewer rather than greater numbers of hours per week. This might be construed to favor distributed rather than mass learning. Opportunity to practice may also be a significant factor here.

Table 10

HOURS OF INSTRUCTION PER WEEK VS. READING ACHIEVEMENT
(2d 100 hours)

	Hours Per Week	Reading Growth					Totals Observed
		0.0	0.5	1.0	1.5	2.0+	
$(O-E)^2/E$	6	1.25	9.14	10.77	4.38	21.81	1,432
Observed		515	495	252	83	87	
Expected		541	567	205	66	53	
$(O-E)^2/E$	9	1.53	.19	1.45	3.38	.63	1,082
Observed		384	420	170	63	45	
Expected		409	429	155	50	40	
$(O-E)^2/E$	10	.25	2.17	6.44	.13	1.96	673
Observed		262	242	122	29	18	
Expected		254	266	97	31	25	
$(O-E)^2/E$	12	1.44	7.76	.06	10.22	1.47	470
Observed		194	148	69	37	22	
Expected		178	186	67	22	17	
$(O-E)^2/E$	15	.00	35.88	28.12	25.04	14.03	2,008
Observed		760	965	198	44	41	
Expected		759	796	288	92	73	
$(O-E)^2/E$	20	2.46	6.26	1.60	.33	.00	68
Observed		34	14	14	4	2	
Expected		26	27	10	3	2	
$(O-E)^2/E$	25	1.60	.89	.13	.41	1.39	479
Observed		198	177	66	25	13	
Expected		181	190	69	22	18	
Totals Observed		2,347	2,461	891	285	228	6,212

$df = 24$

$\chi^2 = 204.57$

$p < .001$

The very significant relationship between hours of instruction and achievement is further evidenced by the large number of 15-hour-per-week students with gains of 0.5 years. However, students enrolled in classes scheduled for 12 hours per week show significant gains of 1.0, 1.5, and 2.0+ years. Beyond 12 hours per week, however, gains are far less dramatic.

Table 11

SEX VS. ATTENDANCE
(1st 100 hours)

	Sex	Hours Attended					Totals Observed
		75+	50-75	25-50	< 25	Never Att.	
$(O-E)^2/E$	Males	5.50	1.98	.01	1.57	2.88	6,705
Observed		2,288	1,700	1,232	1,392	93	
Expected		2,402	1,643	1,235	1,346	78	
$(O-E)^2/E$	Females	3.86	1.39	.01	1.10	2.01	9,553
Observed		3,538	2,283	1,763	1,872	97	
Expected		3,423	2,340	1,760	1,918	112	
Totals Observed		5,826	3,983	2,995	3,264	190	16,258

$df = 4$

$\chi^2 = 20.31$

$p < .001$

The highly significant relationship between sex and attendance during the first 100 hours of instruction is best shown by the proportionately larger number of women whose attendance exceeds 75 hours. Among those persons who had registered and had never attended classes, there were far more males than would be expected by chance alone. Fewer women than expected by chance were listed in the "never attended" category.

Table 12

SEX VS. ATTENDANCE
(2d 100 hours)

	Sex	Hours Attended					Totals Observed
		75+	50-75	25-50	< 25	Never Att.	
$(O-E)^2/E$	Males	7.67	.10	2.49	3.72	1.48	5,003
Observed		2,007	1,018	787	779	412	
Expected		2,135	1,008	744	727	388	
$(O-E)^2/E$	Females	6.88	.08	1.92	2.87	1.05	6,487
Observed		2,896	1,298	922	891	480	
Expected		2,768	1,308	965	943	503	
Totals Observed		4,903	2,316	1,709	1,670	892	11,490

$df = 4$

$\chi^2 = 28.26$

$p < .001$

Females continue during the second 100 hours of instruction to maintain attendance patterns superior to males enrolled in the same classes. This relationship is highly significant.

Table 13

SEX VS. CLASS LEVELS

	Sex	Class Level					Totals Observed
		Non-Eng.	Basic	Primary	Interm.	Upper	
$(O-E)^2/E$	Males	11.04	.51	2.02	4.77	27.57	9,193
Observed		3,283	1,618	1,138	1,713	1,441	
Expected		3,479	1,647	1,187	1,625	1,255	
$(O-E)^2/E$	Females	12.36	.57	2.26	5.33	30.86	8,215
Observed		3,305	1,501	1,110	1,364	935	
Expected		3,109	1,472	1,061	1,452	1,121	
Totals Observed		6,588	3,119	2,248	3,077	2,376	17,408

$df = 4$

$\chi^2 = 97.29$

$p < .001$

A highly significant relationship exists between sex and class level. More males than expected on the basis of chance are enrolled in the higher class levels. A greater proportion of females tend to be enrolled at the non-English, Basic and Primary class levels.

Table 14

AGE VS. CLASS LEVELS

	Age	Class Level					Totals Observed
		Non-Eng.	Basic	Primary	Interm.	Upper	
$(O-E)^2/E$	18 - 24	61.58	22.61	17.36	13.64	1.78	4,219
Observed		1,783	671	445	675	645	
Expected		1,481	806	542	778	612	
$(O-E)^2/E$	25 - 34	8.07	.22	.47	4.39	5.38	4,752
Observed		1,784	924	593	814	637	
Expected		1,668	908	610	876	689	
$(O-E)^2/E$	35 - 49	2.16	1.16	3.90	4.83	.29	4,601
Observed		1,456	911	639	912	683	
Expected		1,615	879	591	848	667	
$(O-E)^2/E$	50+	87.13	.09	15.61	25.95	.03	2,176
Observed		506	503	345	503	319	
Expected		764	416	279	401	316	
Totals Observed		5,529	3,009	2,022	2,904	2,284	15,748

$df = 12$

$\chi^2 = 276.65$

$p < .001$

The highly significant relationship between age and class levels is shown most dramatically in classes for non-English speaking adults. It is such that a far greater number of young people are enrolled than could be expected on the basis of chance. Among students above the age of 34, fewer than expected by chance alone were enrolled in classes for non-English speaking adults. At other class levels, a tendency exists for fewer young people and a greater number of persons above the age of 34 to be enrolled.

VII

Report of communities operating adult basic education programs in Adult Learning Centers utilizing laboratory facilities.

EVALUATION OF NEW YORK STATE ADULT BASIC LEARNING LABORATORIES

I. INTRODUCTION

Purposes

Observation indicated that many undereducated adults did not want to return to the traditional, child-like school situation in which they had experienced failure. Therefore, we constructed an adult learning laboratory in which the physical facilities and the educational program would be unlike a traditional class situation. The facility consisted of 24 individual carrels similar to those found in language laboratories. The intent was to maximize individualization of instruction with heavy emphasis on programmed materials.

Many adults in our target population cannot attend the conventional class because of inflexible class schedules. Our students have family and work commitments which make it difficult, at times, to attend the regularly scheduled classes. Often it is impossible to make up missed work and the adult loses interest and drops out. We believe part of the solution is the use of a flexible schedule which is not dependent upon the meeting of a class at a certain time. The student, in this situation, could reserve a time in the learning center which was convenient for him.

For the past two to three years, much current research has implied the feasibility of programmed and self-directed materials for the teaching of reading and arithmetic to adults. We believed the programmed materials could allow the students to learn at their own rate and not lose interest.

It was our main purpose to test the feasibility of programmed and self-directed reading materials with adults keeping in mind the previously mentioned purposes.

Description of the Three Participating Communities

The learning centers are located in Syracuse, Albany and White Plains. The Adult Basic Education Programs in these three cities are representative of the on-going ABE program in New York State.

According to the U.S. census of 1960, the populations of the communities were the following: Albany - 129,726; Syracuse - 216,038; White Plains - 50,485. All are urban and face the typical problems of the on-going State programs such as recruiting and retention of the students, reading achievement, and limited funds. We selected these communities to participate in the research project because of their proven ability to operate a successful ABE program. The participating communities had a core of trained ABE personnel including administrators, teachers, guidance counselors, secretaries, and recruiters. However, each community was unusual in that it had a school building devoted solely or primarily to full-time use by adult students.

During the fiscal year of 1966-67 the three communities operated the following number of Adult Basic Education classes: Albany - 52; Syracuse - 137; White Plains - 66. We believe the selection of these communities has not only assisted us with the research but the results will have implications for ABE programs throughout the nation.

II. PROJECT DESIGN

Objectives

The objective of this research was to test the effectiveness of a reading program utilizing only programmed instruction by contrasting it with a program incorporating the use of programmed instruction with traditional instruction and a third program that was completely traditional and excluded all programmed materials.

In order to test the effectiveness of non-traditional physical facilities, a learning lab was designed.

Lab Description

Facilities

Each learning center room was provided with 24 carrels designed to fit the average adult comfortably and provide privacy. Each carrel was equipped with optimum lighting and with sufficient electrical outlets to provide individual use of "hardware". Adequate shelving space for the materials was incorporated into each of the three centers.

Materials

The materials used in the lab were either completely programmed or highly self-directed. The basic reading materials were: 1. Reading for Understanding Kit, SRA; 2. Reading Laboratory IIa, SRA; 3. Reading Series I and II, Behavorial Research Laboratories. After the students had become familiar with the basic material, the learning center specialist began to introduce supplementary material. A bibliography of the materials provided each center is found at the end of this section. In addition to the "software" described in the bibliography, each center had an initial allotment of the following machines: 1. Honor Teaching Machine, 2. SRA Reading Accelerator, 3. Language Master (Bell and Howell).

The variety of materials at different reading levels provided for individualization of instruction and learning. To make sure the students were

properly placed they were pre-tested with the Stanford Achievement Test and then tested with placement tests designed for the programmed materials. They received detailed instructions in the use of each book from the learning center specialist and his aide. The chalkboard and overhead projector were used in the specialist's presentation. Students were given an opportunity to practice with the programmed material and individual attention was given at this point so the student would know how to use the material properly. There was regular evaluation of students' progress in the program and interpretation of test results to the students.

Program - Time, Intensity, Duration

In each community, three ABE classes operated especially for the evaluation of the research project. The chart below describes the time allotment in each of the three communities. In each community the students were grouped 12 to 24 per group with an average of 15 in a group. New students were allowed to replace dropouts during the first month of the project and thus the group size was constantly changing.

Time Allotment - 3 Hour Session, 3 Sessions per Week
Total Reading Instruction
(80 minutes per session)

Group	Conventional Reading Instruction* (min. per session)	In Learning Center (min. per session)	Math and Other Curricular Areas (min. per session)
Programmed Group (averaging 15 students)	0	80	100
Programmed and Traditional Group (averaging 15 students)	40	40	100
Traditional Group (averaging 15 students)	80	0	100

*Conventional teacher administered classroom methods and materials. (no programmed materials.)

Time

Standarized achievement tests were administered at the completion of 50 and 100 hours of actual reading instruction.

Intensity

One group which will be referred to as the "programmed group" received 80 minutes of programmed reading instruction in the learning center three times a week. The second group, the "programmed and traditional group" received 40 minutes of conventional reading instruction with a teacher and 40 minutes of programmed reading instruction in the learning center three times a week. The final group, the "traditional group", received 80 minutes of conventional reading instruction with a teacher three times a week.

Duration

The project was funded for a total of 227 hours of instruction. The students received a total of 100 hours of reading instruction during the life of the project. The remaining time in each session was devoted to the development of arithmetic and social living skills. The research project began September 19, 1966 and ended June 30, 1967.

Population

When the project began, the three groups in each of the three participating communities were relatively comparable in numbers, age, sex, and reading level of the students. The students assigned to the research project were sociologically similar to the population in the on-going State program. One major exception was that all the students in the research project were English speaking.

The primary (3-4) and intermediate (5-6) class levels were used as the target population for the research project.

Personnel

Learning Center Specialist - Qualifications

Each center was directed by a learning center specialist. The qualifications for this position, as recommended by the State Education Department, were:

1. Holder of a Baccalaureate Degree.
2. A college major in psychology and/or reading.
3. Knowledge of or experience with programmed instructional materials.
4. Knowledge in area of test and measurements.
5. Experienced in dealing with the culturally disadvantaged.

Learning Center Specialist - Job Description

1. Orientation and correct placement of adult students by the use of suitable tests. Regular evaluation of student progress by the examination of diagnostic tests and interpretation of test results to the students.

2. Orientation and supervision of learning center aide.

3. Verify the accuracy of necessary reports for the project and the State Education Department.

4. Give encouragement and guidance to the students and follow up on potential dropouts.

Learning Center Aide - Qualifications

Each center was alloted one and one-half learning center aides.

1. Have a background in business education.

2. Be knowledgeable about office procedures.

3. Be a high school graduate.

4. Have the characteristics of a mature adult with an empathy for problems of the disadvantaged.

Learning Center Aide - Job Description

1. General office work such as typing, answering telephone, filing and preparing reports.

2. Under the direction of the specialist, administer placement and diagnostic tests.

3. Assist in the scheduling of students' use of learning center.

4. Assist in the record keeping of the learning center.

Population Selection - Curriculum Management

The students in the three groups in each community were screened and selected on the basis of their reading ability, measured by the Stanford

Achievement Test. This population had a measured reading ability ranging from 3.5 to 6.0. Previous to this the students were given an informal reading inventory such as the Gray Oral to expedite the screening process and make it appear less threatening.

Group instruction was given initially in the learning center to explain the programmed material. The social living area of the curriculum for all groups was implemented through the use of group discussion, audio-visual presentations, role playing and other methods, without emphasis on the teaching of reading. Arithmetic skills were taught using conventional methods and programmed materials. This gave all the groups an opportunity to use programmed materials.

Testing

A vital aspect of the research project was the testing. The students were initially screened by the Stanford Achievement Test, Form X. At the completion of 50 hours of reading instruction they were tested with Form Y of the same test. At the end of 100 hours, they took Form Z. The adults were oriented to the test-taking process and had the results explained to them by the staff. The atmosphere was kept as relaxed as possible, however, all the directions, including time allotments, were carefully observed. Students who did not advance from one level of the Stanford Test were given another form of the same test at the same level. All three groups were tested by qualified personnel.

Local Staff Evaluation of the Lab

The learning center lab approach had many apparent advantages such as the following:

1. Adult centered facility especially geared for his learning and comfort. This center is designed for the ABE students and has comfortable seating and adequate lighting. The adult appreciates a learning center that is designed for his needs.

2. Removes time restrictions imposed by regular classroom procedure. Arrangements are made for a student to attend the lab at his convenience.

3. Gives students a feeling of dignity and independence. Adults work on their own and assume responsibility for what they can accomplish. Thus, the students are intrinsically motivated.

4. Provides a quiet atmosphere conducive to learning with no fear of failure.

5. Students progress at their own pace without fear of being left behind or the boredom that can discourage faster students. After any absence a student is able to begin work where he left off and does not worry about being behind in any assignment.

6. Provides a large variety of materials for reinforcement.

7. Can provide for numerous activities and different subject matter taking place at the same time.

8. Periodic individual evaluation of work accomplished by pupil is built into the learning lab.

There are also some disadvantages to the present learning labs:

1. Lack of variety of instructional materials for pupils on lower levels.

2. Some students find the carrels too confining.

3. Limited oral instruction to help students who cannot distinguish vowel sounds.

IV. SUMMARY AND CONCLUSIONS

Keeping the objectives of the research project in mind and using the data collected the following conclusions were reached:

1. More information is needed to permit an accurate assessment of the ultimate effectiveness of the three methods. However, some interesting trends have been observed and it is hoped that these initial findings will be used as a guide for further study. This study could serve as a pilot study for an expanded study in which the total sample size and the size of the individual cells will be increased.

2. The group which received programmed instruction only had the best attendance.

3. Summary of comments from the staff indicates that many of the adults involved in the research project, especially those using the programmed materials were guided into a regular schedule of successful learning, and thus, for the first time many of these ABE students became independently responsible for their learning.

4. Based upon the foregoing, the learning labs designed for the research project were successful demonstration centers and can serve as a guide for future centers.

5. It appears that the learning center specialists and aides became enthusiastic about and knowledgeable in the use of programmed material. This has implications for future teacher training programs.

6. The learning center gave increased status to adult education in the community by attracting attention and served as a magnet for adults.

RECOMMENDATIONS

This pilot study has permitted an exploration of techniques and tools for measuring teaching effectiveness. It also has permitted the identification of other variables which can be included in subsequent studies. Some of the variables which seem worthy of further exploration are: length of instruction, the effect of sex differences upon learning, the effect of age differences upon learning, and the effect of previous years of schooling upon learning. A continued analysis of these variables in the learning centers will be of significant importance in the formulation of future programs in adult basic education.

Since the programmed group and the programmed and traditional groups both made extensive use of programmed materials in the learning lab and had the best retention of students we can logically make the following recommendations:

1. Adult interest in programmed instruction encourages attendance and should be considered when instructing disadvantaged students.

2. Those teaching ABE classes from the 3.5 reading level and above should make use of programmed materials.

3. Pre-service and in-service teacher training should include programmed instruction as an integral part of the training program. ABE administrators should be knowledgeable about the use of programmed material.

4. The adult learning center and a flexible schedule should become a part of the on-going ABE State program in all large urban communities.

5. Eighty minutes of programmed instruction is not too long a period of time for the adults to spend in a learning lab and should be continued.

The following recommendations are for the improvement of future learning centers:

1. Add educational hardware such as controlled readers, tachistoscopes, reading accelerators, language masters, and tape recording equipment.

2. The learning center ideally should consist of one main room for individual self-directed work, and other smaller rooms, or sound proof cubicles for small groups, or individual work where audio equipment can be used. The center should include a separate room for interviewing, testing, and counseling.

3. The learning center should have carpeting to reduce noise and air conditioning for use during summer programs.

4. Make maps, globes and other reference materials available to the learning lab.

5. Make provisions for high school equivalency and high school subjects in a learning lab situation.

BIBLIOGRAPHY

Adult Basic Learning Laboratories

Honor Learning System. Honor Products Company. Cambridge, Massachusetts. 1963. (Levels, 5-8). Subject Rolls - $2.50; Honor Teaching Machine - $15.

This system has two parts: The Honor machine, a push button, battery operated teaching machine; and the Honor subject rolls, programs in a variety of subjects. Information is given in sequential order. The rolls which involve reading skills are: Spelling Magic, Spelling Power, Fun with Words, Building Words, Persuasive Words, and Word Clues. The approximated reading level of the explanations on the rolls would make these rolls suitable for practice and review at the 5th to 8th grade level.

Language Master. (Bell & Howell)

This machine has a combination of auditory and visual discrimination whereby the student has the opportunity to orally reproduce the message which he heard. A comparison is then made between the instructor's response and his own. If the response is identical, the student has then read the passage correctly. This passage has been placed on a card which has an audio tape and space for visual discrimination.

Reading for Understanding Kit, Jr. Edition, SRA. Thelma G. Thurstone. Science Research Associates. 259 East Erie Street, Chicago, Illinois. 1959. (Levels, 5-12).

This kit of materials is a multi-level learning system comprising 4,000 practice paragraphs arranged in a graduated sequence of difficulty. The students may work individually at their own level and answer the questions which deal with main ideas, details and reasoning. Following the practice exercise, the students answer questions, correct the exercises, and record their scores on progress charts in order to stimulate self-evaluation.

Reading Series I and II, Behavorial Research Laboratories

Programmed material on an individual student basis with instruction by the teacher as to the mechanics of the operation and skill, thus producing reinforcement.

SRA Reading Accelerator

A mechanical device that is pre-set to determine exposure time to a segment of a written passage, thus increasing reading speed.

VIII. COST ANALYSIS

The following section deals with a cost analysis of the program for fiscal 65-66. A report of fiscal 66-67 is not at this time possible since many Final Claims for Reimbursement have not yet been received by the Department. The reason for this is a ruling by Educational Finance in which the local educational agency has 14½ months following the close of the fiscal year in which the encumberance was established to file a final claim.

Cost per 200 hour class	$2,895.67
Cost per instructional hour	.84
Cost per 200 hour registrant	168.73

In reviewing the 1965-66 year we find the following percentages as they relate to the on-going program.

Teachers salaries	48.2
Administration & Supervision	25.7
Secretarial & Clerical	4.6
Custodial	3.0
Consultants, Professional	.1
Recruiters, sub-professional	3.1
Travel, professional	.1
Travel, student	.03
Rental	1.1
Instructional Equipment	1.3
Instructional Supplies	4.8
Instructional Equipment Maintenance	.2
Office Equipment	.5
Office Supplies	.6
Heat and Light	.5
Fixed Charges	6.2
Total	100.03%

As can be observed, 80.2% of cost are directly related to instruction. Other cost total only 19.8%.

IX. CONCLUSIONS AND RECOMMENDATIONS

From the data presented in this report the following conclusions are drawn:

1. During the years 1965-67 the increase of the number of enrollees in the 0-4 reading levels indicates that the New York State Adult Basic Education Program is reaching its target population. (Table I)

2. Approximately 85 percent of the enrollees during the 2-year period were below 50 years of age, the median age level for all enrollees falls in the 30-34 year category. Recruitment efforts are reaching the target population. (Table II)

3. The number of males enrolled in the ABE program was less than the number of females in 1965-66. This pattern was repeated during fiscal year 1966-67 indicating a need to increase efforts to enroll undereducated males in the ABE programs. The recent trend to couple ABE programs with jobs and job training may assist in recruiting more males into the program. (Table III)

4. Although the number of non-white population of the classes shows continued growth the percentage of increase indicates continued efforts are necessary to enroll more non-whites into the program. (Tables IV & IVa)

5. During the year 1966-67 it is indicated that more married adults than single adults enrolled in ABE programs throughout the state. This is the result of increased efforts on the part of local administrators to enroll adults responsible to family units into ABE programs in order to provide opportunities for family life education. (Tables V & VI)

6. More recent data indicates that the percentage of aliens enrolled has decreased. It is believed that this is a direct result of the efforts of the State Education Department to enroll aliens in "Maintenance of Effort" classes designed for Americanization and English Citizenship of alien populations. (Table VII)

7. The increased efforts to enroll native born adults into the federally funded ABE classes and direct recently arrived aliens into locally funded Americanization and English Citizenship classes has had a marked effect on the number of English speaking enrollees entering the program. This trend has had a marked effect on curriculum development and modification. More recently the major emphasis has been the development of methods and techniques for upgrading reading skills. (Table VIII)

8. The number of years of schooling reported by enrollees at the time of registration continues to indicate that the skill competency level of ABE students entering the program lags far behind the number of years of previous schooling reported by them. (Table IX)

9. The increase in the number of enrollees reporting their previous schooling was completed in the northeast would indicate that the program is attracting the adult undereducated who has lived in New York State most of his life and not the recent migrants from the south. It is believed that many unskilled, undereducated southern migrants are being served by the Welfare Education Program which is serving undereducated recipients of social welfare. The decrease in the number of enrollees from other

countries is reflective of the emphasis being placed on serving aliens in Americanization classes rather than in the federally funded ABE classes. (Table X)

10. Excluding housewives, 57.7 percent of the students enrolled who can be counted in the work force are employed. This again is a reflection of the services being offered by the Welfare Education Program in the larger communities of the state in which recipients of social welfare, the cronically unemployed, are receiving literacy training leaving a percentage of only 16.8 percent of the enrollees of ABE funded programs under Title III listed as unemployed. This 16.8 percent is being served in communities where there are no Welfare Education classes and, therefore, are enrolled in the Title III program. (Tables XI & XIV)

11. The data would indicate that the adults enrolled in this program can be considered as cronically underemployed rather than unemployable inasmuch as in 1965-66 and 1966-67 the median adult had been recently employed. (Tables XII & XIII)

12. The data indicates that many adults enrolled in this program continue to seek education beyond a single cycle (200 hours) which would indicate that in spite of the fact that no stipends are awarded many adults are motivated to the degree that they will seek education over extended periods of time. (Table XV)

13. It is indicated that the Metropolitan Achievement test is the test most commonly used in both years. This is due to the fact that New York City, in which over 50 percent of the enrolled students are served, used the Metropolitan Achievement Test in these years. (Table XVI)

14. A survey of the cause of the students not completing the program indicates that short-term goals of the students were reached prior to the completion of the program, i.e., 8th grade competency certificate. This would indicate that the goal of the student is the prime motivation for attendance rather than the receiving of a certificate of competency. Additionally, many of the students who, because of increased literacy competency, receive jobs conflicting with class schedules is a factor for leaving the program. (Tables VII & XVIII)

15. The data would indicate that limited federal funding and the ensuing policy established by the Department to extend existing funds over as long a period as possible has forced programs to operate fewer hours per week. (Table XIX)

16. While it is generally accepted that female children in the primary grades learn reading more quickly than do boys at this age level, this is not indicated in the case of male and female adults. (Chi square I & II)

17. Data indicates that there is a definite correlation between reading achievement and age of student. Students in the 25 - 34 year age category indicated the greatest gain in reading as measured by achievement testing. (Chi square I & II)

18. It is indicated that adults entering a literacy program with a measurable reading level of 6th grade will progress more rapidly toward functional literacy than total illiterate adults or adults with very low reading levels. (Chi square I & II)

19. There is a direct relationship between regular systematic attendance and reading achievement. The irregularity of attendance of adults because of the many causes which would keep adults from attending class is detrimental to reading achievement growth. (Chi square I & II)

20. Data indicates that the optimum hours per week for programs when measured against reading achievement is from 9 to 12 hours per week. It is recommended, therefore, that when considering reading achievement as the major goal of this program that programs running 9 to 12 hours per week be encouraged. (Chi square I & II)

21. It is indicated that the attendance patterns for females attending classes was better than for the males registered. Further study is needed to ascertain the causes of this finding, however, observation indicates that part-time employment by males was a factor in poor attendance patterns. (Chi square I & II)

22. The data indicates that a greater percentage of males entering the program entered at the upper reading levels (5 - 8) while females entering the program entered at lower reading levels in larger numbers. This may be explained by the fact that recruitment through employment services and through personnel directors in business and industry referred employees with greatest potential for job upgrading and job placement. Recruitment efforts have not reached the totally illiterate male as efficiently as it has females. (Chi square I & II)

23. In that area of the program where English as a second language is the major program offering, there seems to be a larger proportion of young adults (age group 18 - 34 years) which would indicate that non-English speaking adults in this age group are seeking assistance to develop English language skills. Since the median age group for the total program is 30 - 34 years (Table II) this would indicate that a larger proportion of the adults in the basic through upper levels would be older than the median as indicated in Table II. (Chi square I & II)

24. The reading growth for the population contained in this report would indicate that reading growth as measured by traditional standardized reading achievement tests within a 200 hour program cycle falls between a year and a year and a half. Using presently employed methods and materials of instruction the development of functional literacy cannot be expected to be a short-term accomplishment. (Chi square I & II)

25. Since the Adult Learning Centers operating in selected communities indicate through observation a greater holding power, higher motivation, and increased learning on the part of students, it is suggested that an indepth study of these learning centers be implemented to measure statistically the effects of the learning center concept on achievement of ABE students. (page 54-65)

26. Average cost per student per 200 hour cycle is approximately $169 which compares favorably with estimates projected in early planning for expenditure of federal funds for literacy programs. Limited funding prohibits, in many cases, the addition of supportive services which should be added. (Cost Analysis Section, page 66-67)