This report describes and evaluates the bilingual program of the Auxiliary Services for High Schools (ASHS) Program in the New York City Schools for the 1974-75 school year. In 1974-75 there were 12 centers for this program distributed throughout all boroughs of New York City. Spanish was offered in nine of the programs, French in two, Greek in one, and Italian in one. The bilingual program provided for the development of increasing English skills through English as a Second Language (ESL) instruction. Beyond the ESL instruction, the bilingual program used the native or dominant language of the students to develop competencies in areas of reading development, math, science, social studies, and several other areas. Some students in Spanish were prepared for the General Education High School Equivalency Exam in English or Spanish versions. The program emphasized bilingual guidance and counseling for both academic and vocational needs of students. About 1,397 students were served by the bilingual program in the 1974-75 school year. Among the major findings of the evaluation are the following: 1) students for whom completed test results were analyzed showed significant gains in reading scores, 2) reading in native languages showed significant gains in each of the languages for which test results were completed, 3) achievement in mathematics among the 12 centers showed significant differences with the exception of one school, and 4) for those students whose results were known, over 80% of the students who took the high school equivalency examination passed. (Author/AM)
An evaluation of the New York City school district education project funded under Chapter 720 of the New York State Laws of 1973 performed for The Board of Education of The City of New York for the 1974-75 school year.

Dr. Anthony J. Polomeni, Director

BOARD OF EDUCATION OF THE CITY OF NEW YORK
OFFICE OF EDUCATIONAL EVALUATION
110 LIVINGSTON STREET, BROOKLYN, N.Y. 11201
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I. PROGRAM DESCRIPTION

This is a report of the evaluation of the specific objectives of the bilingual program of the Auxiliary Services for High Schools (ASHS) of New York City Schools. The ASHS constitutes a parallel or alternative educational system in New York City. It not only provides for those students who were former dropouts, potential dropouts, but increasingly the bilingual program has accepted students who were not achieving at grade level in secondary schools and were bilingual or non-English speaking in their dominant language.

Bilingual programs have developed in the regular high schools in New York City, but increasing flexibility was needed for those youth who may better be served in a non-traditional type of program. The bilingual program within Auxiliary Services for High Schools was established in 1972 in the Bronx and in Manhattan. The Bilingual Program in Auxiliary Services was extended so that by 1974-75 there are a total of twelve centers providing English as a Second Language (ESL) in a bilingual program. Of these there are four day centers: one in Brooklyn, two in Manhattan and one in the Bronx. There are eight evening Centers, one in Manhattan, one in the Bronx, two in Brooklyn and two in Queens and one on Staten Island. Spanish was offered in nine of the twelve centers and French in two centers. The program in Greek was held in Queens and one in Italian was held in Staten Island.

The bilingual program provided for development of in-
creasing English skills in English as a Second Language. Beyond the ESL however the bilingual program used native or dominant language to develop competencies in areas of reading development, math, science, social studies, and other areas. Some students in Spanish were prepared for the General Education High School Equivalency exam in English or Spanish versions. The program emphasized bilingual guidance and counselling for both academic and vocational needs of students.

The general objectives of a bilingual program within the auxiliary high school program are to bring about development of competency in reading, speaking, in both native language and English language and mathematical skills. In addition, it seeks to continue the overall education of youth through the dominant language whether it be Spanish, Italian, Greek or French.

The bilingual program is characterized by change and movement. The students are entering throughout the year and completing the high school equivalency at various examination times scheduled throughout the year. The flux of the program makes for some fluidity of student body. There are a core regular attending students much less than the official register or enrollment for the class.

In order to provide an overview of the variation among the twelve centers in this program a brief description of characteristics of each center will follow. No individual comments are made in these reports on staff commitment and dedication, yet the evaluator has found a general pattern of
high dedication and commitment throughout the program. Staff work long hours on creation of materials to carry out instructions and evaluation of results. The bilingual program has a group of highly dedicated teachers working to implement the philosophy of the program. The four day centers are presented first, followed by the evening centers. The material in these descriptions was based upon interviews with each center staff and a review of written reports.

THE COURT STREET SCHOOL

The Court Street School has been organized since 1973, and it provides bilingual programs in Spanish for those registered in the Court Street Center. There has been an average day attendance of 360, of these 40 are in the bilingual programs for Spanish dominant language students.

The organization of the program at the Court Street facility includes an emphasis upon diagnostic testing and placement with careful work toward continual development of mastery in the language, math and other areas. The organization of the testing program includes scheduled testing in the facility in a separate room with the ESL program for small groups carried out in an adjacent area.

The Court Street School program may be characterized by a smooth running operation which individualizes and personalizes the contact and familiarity with each student. Students are referred to this facility from all parts of Brooklyn and enter with some misgivings frequently. The counselling and orientation procedure is one which seeks to provide a period for getting acquainted and of becoming familiar with the kind of program being offered. The facility, the personnel and the equipment are used with a great balance and efficiency.
FORSYTH STREET DAY HIGH SCHOOL

The Forsyth Day High School began in November of 1972 in two rooms with two teachers. Since then the School has expanded to 12 full time teachers and a registration of 591 students with a daily attendance of 421. Of these, sixty students are in the Spanish bilingual program.

One of the special features of the Forsyth School is the school newspaper which is written and printed by the students. The lunch program for the needy students has been organized in this school. The bilingual program, the Spanish program, is augmented by the ESL classes and those who are working for the high school equivalency in Spanish. The program utilizes a combination of structured class work in group settings with alternatives available for special kinds of tutorial work as a choice for the students.

The Forsyth School acts as a clearing house for referrals from 11 High Schools. The guidance counsellor within the program will guide students to nearby Auxiliary Service programs.

NINETY THIRD STREET SCHOOL - MANHATTAN

The bilingual program for Auxiliary Services for High Schools (ASHS) at the 93rd Street Center began in February of 1973. Since that time 2,590 students have received services, of these eighty students were in the bilingual program. In this center two languages are offered, French and Spanish. There are 31 French students and 49 Spanish students. The total number of students registered for the center is 310 with an average daily attendance of 264. As of May 1975, 89 of the students have graduated with 92 per cent of these graduates going on to colleges within the University of the City of New York, SUNY and private colleges.

The range of instruction available includes both individualize and group approach. The bilingual program is provided in French and in Spanish. The support services include counselling, pre-employment, college preparatory, family counselling, legal assistance and health services as needed.

Observations indicate that the educational program and services provided within the 93rd Street Center have individualized the program in line with the pursuit of educational goals. However, the physical facility which houses the various programs is overcrowded. There is only about 1,000 square feet, in contrast to approximately 6,000 square feet among the other centers. The first floor is a large area with high ceilings and divisions of the room in ways for groups to work, but the overcrowded conditions in this facility are a matter that should receive some attention.
ROBERTO CLEMENTE CENTER IN 157TH STREET
BRONX

In what was designated to many as an abandoned building
the Roberto Clemente Center in the Bronx carries out a bilingual
program and auxiliary services. There are approximately 250
students registered and of these the average WADA attendance
is 180 or 72 percent. Of these, some 200 are in the Spanish bi-
lingual program.

There are three major premises of the Clemente bilingual
program. First, the entire staff is bilingual. Second,
the instructional program is organized along general education
lines rather than simply in terms of reading and math, including
social studies and science and English. Third there is a
commitment to guidance and individualizing the program for
each student. The commitment to counseling and education allows
for a wide range of individual difference for those who may
not pass the equivalency as well as those going on to college.

BRANDEIS EVENING BILINGUAL PROGRAM

The Brandeis High School evening program for Auxiliary
Services in Manhattan has a Spanish bilingual program with
150 students enrolled in the bilingual program with a smaller
core in regular attendance. The Brandeis program has a
combination of general education and advanced preparation
courses. The course work includes remedial work in reading
and math as well as typing and work towards the high school
equivalency. The courses attempt to care for individual needs
and special problems. Guidance and counseling in an attempt
to individualize a program, is central. The bilingual course
work in Spanish uses a guidance and counseling approach.
There is a primary phase class which serves to orient the
students to the program and engages the students in tutoring
and other types of work. A second phase is the advance prepa-
ration work for students who are concentrating on building
up areas of weakness and pursuing the high school equivalency.
In some cases these may be students who have failed the exam
previously and are emphasizing an area of weakness. There
are some students with very little prior education who re-
ceive counseling regarding their program.

The Brandeis School Evening Program has another pattern
of organization. Mondays and Wednesdays they have high school
equivalency preparation. Thursday is a day for individual
tutoring for slower students and absentees who can catch up as
well as reading comprehension with emphasis on science and
social studies and literature. Individualized reading and
advanced typing courses have been viewed as instrumental in
aiding individuals in securing jobs.
#6: RICHMAN HIGH SCHOOL
MANHATTAN

Richman High School on the East Side in Manhattan, serves a wide range of students. Some of the United Nations employees' children attend, in order to learn English in the ESL classes. The bilingual classes are directed toward the Spanish language students, but many other language backgrounds are attending programs.

The program at Richman provides for a number of courses such as typing and business skills as well as the regular bilingual program. There are over 50 students enrolled in the bilingual program.

#7: TAFT HIGH SCHOOL
BRONX

The program at Taft High School in the Bronx is Spanish bilingual with an effort to serve a range of individual differences in ability. The program has developed a number of modules in teaching and uses various levels in working with the students. The program has job development and counseling services along with the regular bilingual program.

There are 120 enrolled and there are 70 in regular attendance. The many levels of the program and the need for some regular testing pattern become apparent during the year. The emphasis on counseling and individualizing the program has been a main feature.

#8: PROSPECT HEIGHTS HIGH SCHOOL
BROOKLYN

Prospect Heights School began in July of 1974 with 1,000 target population of student between the ages of 16 and 21 who live in Bedford-Stuyvesant. 847 students have been served thus far with an expectation of serving 1,000 by June of 1975. The registry is approximately 250 with an average attendance of 180. There are 37 French Bilingual students. The general poverty of the Bedford-Stuyvesant area is well known. There are many West Indians in the area, predominantly French speaking, while in the Central Bedford-Stuyvesant area there are native black Americans.

The bilingual program is a small part of the evening program in the large school. News about the bilingual program is carried from one student to another. The instructional pro-
gram is organized around developing mastery of basic concepts and skills for various levels of achievement through the use of SRA learning laboratory materials. This individualizes the program and provides a clear view of accomplishments.

#9: MAXWELL EVENING GUIDANCE CENTER AUXILIARY SERVICES BROOKLYN

There are approximately 350 students registered in the Center with a nightly attendance of around 300, of which 140 are in the bilingual program in Spanish. The classes offered include remedial reading, English, math, as well as courses in typing and the use of business machines to aid in the development of employable skills. The program is conducted on an informal basis serving a wide range of abilities of young adults who attend. The program is organized so that a flow sheet depicts the initial referral and overall program. A counselor works with a given student over a long period of time in which results of testing and of progress in work are reviewed. The program is organized around remediation centers for those who need it in math and English reading and English as a second language for developing skills in this area. In addition the Center has services for job development and for skills relating to typing, key punch operation, beauty culture and other vocational areas. In terms of the high school equivalency unit, alternate nights are devoted to preparation for individuals in one two and three levels in line with their performance. Individual work is also provided to augment the group program. The usual cycle for the high school equivalency program to reach the third level is estimated to be three months.

#10: JAMAICA EVENING CENTER

Jamaica Evening Center is located in the old Jamaica Vocational High School. There are currently 290 students with an average attendance of 200, of which 50 are in the bilingual program. There are 2 bilingual teachers who specialize in reading and math. The location of the Jamaica program in the Center at Queens draws its clients from various areas of the borough. The program runs from 5:30 to 8:30 P.M., Monday through Thursday 12 months of the year. In addition to the regular auxiliary program, counseling, testing and basic education, remediation, typing, high school equivalency, the bilingual Spanish program is offered with high school equivalency preparation. For two evenings Spanish instruction and two evenings in English as a Second Language are given; 120 were expected to graduate from the school of which many are from the bilingual program; about half, 62 of the graduates have been admitted to college. Twenty-Seven enrolled are veterans.
In the summer of 1974 efforts were made to build the curriculum for a bilingual program to serve the large Greek community in the Astoria section of Queens. In the Fall of 1974 the program began with the enrollees looking forward to the program and to learning English. Since there is no high school equivalency in Greek, the students soon expressed their priorities on the value of learning more English.

The staff has found that as part of a new program it has spent considerable time searching for appropriate bilingual materials and constructing their own projects to develop materials. The cultural bias against the types of tests used has produced some resistance on the part of the student to the whole idea of testing. There are approximately 50 students enrolled with new students entering throughout the year.

The staff used Greek and English in reading fiction and non-fiction. The basic skills of arithmetic and general science were emphasized, and an introduction to social studies with a bilingual approach.

Class meetings; the program was individualized around tutorial and homework for each student during this first year.

In February of 1974 the Auxiliary Service Bilingual program for high schools introduced Italian-English courses at Richmond College. This program was originally designed for Italian students who had limited background in English. The program runs from Monday through Thursday.

In the series of centers in Staten Island there are 307 students, 200 average nightly attendance with approximately 50 to 60 in the bilingual Italian. The Italian program has served students with a considerable range of prior education and ability. Since there is no high school equivalency examination in Italian, efforts are made to concentrate on English. In this program the staff has spent considerable time searching for and developing project materials that are appropriate for Italian bilingual programs for high schools.
II. EVALUATION OBJECTIVES AND PROCEDURES

This section of the document describe the evaluation objectives, the evaluation methods used, the sample size and types of evaluation procedures used, and the time schedule.

The evaluation objectives are parallel to the program objectives and listed in the evaluation design developed by the Office of Educational Evaluation of the Board of Education. They were as follows:

Objective #1.
As a result of participation in the Bilingual Program, the reading grade of the participant will show a statistically significant difference between the real post-test score and the anticipated post-test score.

Objective #2.
As a result of participation in the Bilingual Program, the reading level of the participant in the Spanish, Italian, Greek or French language will show a statistically significant difference between the pre-test score and the post test score.

Objective #3.
As a result of participation in the Bilingual Program, the mathematics grade of the participant will show a statistically significant difference between the pre-rating and the post-rating.
Objective #4.

As a result of participation in the Bilingual Program, students will show a statistically significant difference between pre-test rating and post-test rating in their ability to speak English.

Objective #5.

As the result of participation in the Bilingual Program, at least 80 percent of the students enrolled in the bilingual preparation component for the high school equivalency examination (Spanish language form), will pass the High School Equivalency Examination in Spanish.

Objective #6.

To assess the discrepancy between the program as described in the proposal and the program planned and actually carried out, in the implementation.

Evaluation Instruments

The instruments used in the study include formal standardized instruments and project developed instruments. For Objective #1 the assessment of English language reading was obtained by using the Metropolitan Achievement Test Form H. For Objective #2, a number of different instruments were used for each respective language to assess the increase in competence in the student's respective native language. For Spanish, the InterAmerican Reading Test (Prueba de Lectura)
by Guidance Testing Associates was used, parts I and II on reading and vocabulary Level 3, Forms L3 CBS and L3 DES were used in pre- and post-tests. For French, the Science Research Associates Laboratoire des Lectures was used for pre- and post-testing. This is a complete reading kit with pre-test and post-test instructional materials. The grade equivalent conversion are established through communication with SRA. For the Greek program project developed tests were used since standardized tests are not available. The material used was adapted from Greek tests and textbooks. There is no claim to the reliability of this instrument used in pre and post testing. For the Italian Program a number of tests were developed. The pre- and post-tests relied upon Italian examinations in New York State Regents Examination for High School from previous years. Again, due to the lack of standardized instruments, the project staff developed these instruments. No claim is made for the reliability.

For Objective #3 the New York Arithmetic Computation Test Form D was used. This is a basic tool used for grade 7 - 12 mixed fundamental arithmetic skills, used by the Board of Education. Different versions for pre- and post-test were used.

For Objective #4, the assessment of the speaking and understanding English was made, using the New York City Board of Education's "Rating Scale of Pupils Ability to Speak English" on a pre- and post-test basis. The maximum score is
25 and the rating is made by the teacher, on student use of English vocabulary, structure, pronunciation and intonation. This measure produces ordinal data. The pre-test ratings were made in line with the Consent Decree and so post-test used the same instrument. Since that time the Consent Decree English Language Assessment Instrument (CDELAI) has been developed and could be an alternative in the future.

Size of the Bilingual Program and the Sample of Students Tested

There have been 1,397 students served by the bilingual program in the 1974-75 school year. Of those many have completed the program, some passed the high school equivalency. Some were discharged due to lack of attendance in order to make room for other students and some have entered the program recently. Of the 1,397, nearly 1,134 are Spanish, 113 are French, 90 are Italian and 60 are Greek. Partial test results were obtained from 997 students or over 70% of all the students in the bilingual program.

The number of students who completed each respective test varied; many completed only a pre test, but had no post test score data could not be included in the final sample for the analysis of that particular evaluation objective. Data was compiled by schools with a total of 397 overall complete sets of test data for all schools. The 397 completed responses for the entire battery of tests were made up of at least 397 Spanish dominant students from two centers; 63 Italian dominant language students from one center; 56 Greek dominant language students from one center; and 68 French dominant language students
from two centers. Table 1 below shows a frequency
distribution for each school. It shows the average attendance
in the bilingual program, the number for whom some test
results were recorded, and the number who completed a battery
of tests within each school.

TABLE I
SIZE OF THE BILINGUAL PROGRAM
AND SAMPLE OF RESPONSES

<table>
<thead>
<tr>
<th>Schools</th>
<th>Bilingual Average Attendance</th>
<th>Test Results*</th>
<th>Number who Completed Series of Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day Centers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#1 COURTSTREET</td>
<td>40</td>
<td>36</td>
<td>27</td>
</tr>
<tr>
<td>#2 FORSYTH</td>
<td>60</td>
<td>68</td>
<td>43</td>
</tr>
<tr>
<td>#3 93rd STREET</td>
<td>81</td>
<td>90</td>
<td>80</td>
</tr>
<tr>
<td>#4 CLEMENTE</td>
<td>200</td>
<td>93</td>
<td>20</td>
</tr>
<tr>
<td>Evening Centers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#5 BRANDEIS</td>
<td>150</td>
<td>105</td>
<td>40</td>
</tr>
<tr>
<td>#6 RICHMAN</td>
<td>57</td>
<td>68</td>
<td>37</td>
</tr>
<tr>
<td>#7 TAFT</td>
<td>120</td>
<td>138</td>
<td>20</td>
</tr>
<tr>
<td>#8 PROSPECT</td>
<td>50</td>
<td>53</td>
<td>37</td>
</tr>
<tr>
<td>#9 MAXWELL</td>
<td>150</td>
<td>145</td>
<td>140</td>
</tr>
<tr>
<td>#10 JAMAICA</td>
<td>34</td>
<td>67</td>
<td>21</td>
</tr>
<tr>
<td>#11 JR. HI #15</td>
<td>60</td>
<td>59</td>
<td>36</td>
</tr>
<tr>
<td>#12 RICHMOND</td>
<td>90</td>
<td>93</td>
<td>36</td>
</tr>
</tbody>
</table>

Methods and Procedures of Evaluation included formal and informal
methods of assessment. Site visits were made to every Center.
Inservice sessions and meetings with Center administrators,
teachers and students were held.

The methods of statistical analysis used relied upon the
correlative "t" test since we had a pre/post test with the same

*Test results for students from various cycles of the program
throughout the year in some cases are greater than average attendance.
in addition to the correlated _ test, the Wilcoxon Sign test was used for the assessment of the changes in speaking English and language skills since the data was ordinal. Additional statistical techniques included the use of percentage comparison for those who passed the high school equivalency from the bilingual program.

**Time Schedule**

The pre tests of the students began in September of 1974 and the post tests were given in May of 1975. Visits by the evaluator to the Center were made during the Spring semester and distributed to various centers and at different times. Some of the programs began in the Spring and therefore testing was held at that time. Students may enter the program at any time and therefore intake pre-testing is continually being scheduled.
III. FINDINGS

This section will report on the findings by describing the program in operation and then the specific findings for each respective evaluation objective for the program.

There are some reports of chaos in public schools, but the operation of the bilingual program among the 12 centers throughout New York City has served to indicate that purposeful meaningful programs attract and hold many students in New York City. In buildings that are old and dilapidated, in some of the poorer sections of the city, students who have dropped out, or quit school, or are newly arrivals to the United States many have entered into the ASHS program and the bilingual program. Although there is a turnover of students and not all who enroll continue or complete the high school equivalency; many do. The findings showed that the instruction was organized around the basic skills required for high school students from high school subjects in both the native or dominant language of the students as well as in English, as stated in the proposal.

As noted earlier, complete test results were obtained from a sample of students that totaled 564 sets upon which the basic analysis of the data consists. The 564 complete sets were made up of 397 Spanish dominant students from nine centers, 68 French dominant students from two centers; 63 Italian dominant language students from one center; and 36 Greek dominant
language students from one Center.

Evaluation Objectives of the Bilingual Program

Objective 1. As a result of participation in the Bilingual Program, the reading grade of the participants will show a statistically significant difference between post-test score and the anticipated post-test score. The assessment of this objective was made by reliance upon two types of measures, the Metropolitan Achievement Test in Reading Comprehension Form and the New York City Board of Education Ability to Speak English Language Assessment Scale.

This section will report on the results of the analysis of the Metropolitan Achievement Test (Mat) using grade equivalent pre-test and post-test scores from 58 students from four different Centers. As shall be noted, the differences were significant and the objective was attained for those students with completed test results. The evaluation design called for the use of the correlated "t" test in a real post-test and anticipated post-test design. In this design, the pre-test grade equivalent score was weighted by combining months of prior schooling and length of time in the program to produce the anticipated post-test score as a control, with the .05 level of significance used as a criterion in the evaluation design.

On the basis of combined scores among all schools for the 58 students, the mean pre-test score was 5.0356 and the mean post-test score was 6.8186 with a difference 1.783.

*Comments on the results of the language assessment scale will be reported to follow under Objective #4, page 20.
The difference between standard deviations was .138. The "t" test value on the MAT for all schools was 9.966 which is significant beyond the .05 level required by the design.

The school by school results indicate some variation. School #1 had a "t" value of 9.65. The mean pre-test score was 6.343 while the mean post-test score was 7.143 with a difference of .800, and the difference of standard deviations was 3.802. It should be noted that there were only seven pupils who completed the MAT in this school. School #3 reported 13 students with completed test results on the MAT. The mean pre-test score was 4.115 and the mean for the post test was 5.892, with a difference of 1.777. The difference of standard deviations was .8757. The "t" value was 7.32 which is significant beyond the .05 level required.

One of the new programs, the Italian language program, utilized the MAT as part of the intake and provided data on 38 students with pre and post test scores. The mean pre-test score reported was 5.23 and mean post-test score of 7.02 with a difference between means of 1.79 points. The difference of standard deviations was 1.248 and standard error of 2.023. The "t" value was 8.85 with 37 degrees of freedom which is significant beyond the .0001 level.

Many more students in the bilingual program took the MAT than are reported here, but as will be noted below under Discrepancy Analysis Objective #6, the MAT did not seem to be an appropriate pre-test instrument for the first testing of students.
It was decided not to use the MAT until stage in the progress of students was reached. For the total of 58 students who took the MAT for pre and post test, the results showed significant improvement in reading comprehension in English. From the sample who were tested it was found that the students did develop significant improvement in English reading comprehension. The objective was attained.

**Objective #2**

As a result of participation in the Bilingual Program, the reading level of the participant in the Spanish, Italian, Greek or French language will show a statistically significant difference between the pre-test score and the post test score, in the respective language.

The assessment of this objective was made by a number of steps in analysis. Overall results for each respective language are based upon completed pre-post test scores for 397 Spanish dominant students, 68 French dominant language students, 36 Greek dominant language students, and 63 Italian dominant language students.

**Spanish**

In regard to the Spanish Dominant Language students results were from 9 of the 12 Centers for 169 students showed pre test mean score of 49.53 and a post test mean score of 57.04 with a difference between means of 7.51. The difference of standard deviations equals 1.922. The overall "t" test
for Spanish dominant students was 50.81 which is significant beyond the .05 level.

The results of analysis, school by school, were as follows:

TABLE #2

TESTS OF SIGNIFICANCE FOR READING IN SPANISH FOR EACH SCHOOL

<table>
<thead>
<tr>
<th>School</th>
<th>N</th>
<th>Pre Test Mean</th>
<th>Post Test Mean</th>
<th>XD</th>
<th>SD</th>
<th>&quot;t&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>27</td>
<td>70.11</td>
<td>75.44</td>
<td>5.33</td>
<td>4.23</td>
<td>-6.55</td>
</tr>
<tr>
<td>#2</td>
<td>43</td>
<td>72.00</td>
<td>76.84</td>
<td>4.83</td>
<td>4.624</td>
<td>-6.86</td>
</tr>
<tr>
<td>#3</td>
<td>43</td>
<td>72.34</td>
<td>79.43</td>
<td>7.08</td>
<td>5.38</td>
<td>-9.21</td>
</tr>
<tr>
<td>#4</td>
<td>20</td>
<td>70.35</td>
<td>77.55</td>
<td>7.20</td>
<td>11.46</td>
<td>-2.81</td>
</tr>
<tr>
<td>#5</td>
<td>40</td>
<td>70.75</td>
<td>67.93</td>
<td>7.175</td>
<td>5.528</td>
<td>8.21</td>
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<tr>
<td>#6</td>
<td>37</td>
<td>62.95</td>
<td>67.865</td>
<td>4.92</td>
<td>7.78</td>
<td>3.85</td>
</tr>
<tr>
<td>#7</td>
<td>20</td>
<td>58.6</td>
<td>65.85</td>
<td>7.25</td>
<td>5.03</td>
<td>6.44</td>
</tr>
<tr>
<td>#9</td>
<td>140</td>
<td>32.80</td>
<td>41.54</td>
<td>8.74</td>
<td>6.58</td>
<td>15.70</td>
</tr>
<tr>
<td>#10</td>
<td>21</td>
<td>55.95</td>
<td>70.14</td>
<td>14.19</td>
<td>8.01</td>
<td>8.12</td>
</tr>
</tbody>
</table>

Results for the Spanish dominant students showed that the students have significantly improved in their reading and comprehension of Spanish. Two forms (DES, CES) of the Inter-American Reading Test, Prueba de Lectura, Parts I and II, were used. The students showed consistent gains between the pre and post test. The results of the correlated "t" test show significance beyond the .05 level stipulated in the evaluation design.

French

The results for some 68 students whose dominant language

School #11 had a Greek program and #12 an Italian Program, #8 has a French program.
is French came from two schools. In this case the same teacher conducts classes in the day and evening program respectively. Central use was made of the French version of the Science Research Associates Laboratoire des Lectures by Rene Serge Larouche. It was used for instruction, placement and pre and post testing of students. The language laboratory is comparable to the SRA Learning Skills Laboratory. The test is based upon a combination of speed, comprehension and vocabulary. The reading laboratory cuts across grade levels, but the color listing and steps may be related to grade equivalents based upon number of words, and length of sentences. A set of grade equivalents was developed for each color section of the SRA Laboratoire Des Lectures in consultation with the SRA publisher and the teacher of the course. These ratings were used to code student test results in terms of grade equivalents. A correlated "t" was conducted using anticipated post-test scores in relation to actual post scores design.

The results were as follows: A total of 69 students whose dominant language is French mean pre-test score was 6.101 while the mean post-test score was 8.81 grade equivalent indicating a 2.7 difference of means. The difference of standard deviations was .016 with a very large "t" value of 14.02 which is significant beyond the .05 level. The results were similar for the two schools; the same instructor taught both. In school #3, there were 31 French dominant students, while in school #8 there were 37 French dominant students reported.

* See Appendix for SRA conversion to Grade Equivalents.
In school #3 the mean pre-test score was 5.59 and the post-test mean score was 8.7 grade equivalent with a difference between means of 3.12. The difference of standard deviations is 1.17. The "t" value was 1.48 with 30 degrees of freedom which is significant beyond the .001 level. In school #8 the pre-test mean score was 6.53 and post test mean score was 8.37 with a difference between means of 2.35, a SD of .699 and a "t" value of -2.04 with 36 degrees of freedom which is significant to the .0001 level. Therefore it is clear that the French dominant language students tested showed significant gain in reading in French and attained the objective.

Greek

In September of 1974, the bilingual program designed to serve the large Greek population in Queens began. Project development of curriculum materials and assessment tools was necessary given the paucity of resources in Greek available. The staff constructed project developed tests for Greek students. Using a variation of the pre test in the post test for 36 students, the pre-test mean score was 12.13 and post test mean score was 14.8 with a difference between means of 2.67, SD of 3.77 and SE of .629; the correlated "t" value was 4.24 with 35 df and significant beyond the .001 level. This result showed support for changes in the reading comprehension in Greek for those who took both tests, however it should be noted that some of the students in the program did not take post tests. The Greek students, at first, reacted negatively to the
whole idea of testing in terms of multiple choice questions and time pressures.

Italian

In the Spring of 1975 in February, on the campus of CUNY Richmond College, the ASHS bilingual Italian program began and enrolled over 90 students. Similar to the bilingual Greek program, the staff of the Italian program found few appropriate materials and tests for this special high school program. Consequently, much of the curriculum and instructional materials were developed by the staff. Project developed tests included adaptation of tests in Italian.

The pre test and post test used for this objective was a variation of New York State Regents Examination in Italian for high school seniors used in previous years.

There were complete test results for 63 students. The mean pre-test score was 73.98 and mean post test score was 83.44 with a difference between means of 9.46 and SD of 5.67 with a standard error of .714. Using the correlated "t" the value was 13.24 with 62df which is significant beyond the .001 level.

In line with these results it is clear that the students in the Italian bilingual program as tested showed significant gain in reading in Italian while in this program. Again it should be noted that there was resistance to the formal testing procedures, the multiple choice questions, the time pressure, etc., but the staff found that it was possible to use a variety of tests as exercises and practice in test taking with the
students who eventually became accustomed to test taking "American style".

Objective #3

As a result of participation in the Bilingual Program, the mathematics grade of the participant will show a statistically significant difference between the pre-rating and the post-rating.

The New York Arithmetic Computation Skills test was used in alternative pre and post test forms for the assessment of this objective. Results reported here are based upon completed tests for 558 students in the Bilingual program. The overall pre test mean score was 6.27 grade equivalent with an overall post test mean score of 7.05 grade equivalent. The difference between overall means was 0.7759. The difference of standard deviations was .3763. The overall 't' value for math was 4.870, which is significant beyond the .05 level.

The results of the students' achievement in mathematics by school are depicted in Table #3 below.
Table # 3
TESTS OF SIGNIFICANCE FOR MATHEMATICS FOR EACH SCHOOL

<table>
<thead>
<tr>
<th>Center</th>
<th>N</th>
<th>Mean Pre-Test Grade Equiv.</th>
<th>Mean Post-Test Grade Equiv.</th>
<th>Xd</th>
<th>Sp</th>
<th>&quot;t&quot; Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>27</td>
<td>5.52</td>
<td>5.78</td>
<td>2.67</td>
<td>1.84</td>
<td>.75</td>
</tr>
<tr>
<td>#2</td>
<td>43</td>
<td>5.33</td>
<td>6.20</td>
<td>8.72</td>
<td>1.76</td>
<td>3.24*</td>
</tr>
<tr>
<td>#3</td>
<td>80</td>
<td>5.77</td>
<td>6.53</td>
<td>7.57</td>
<td>1.43</td>
<td>4.71*</td>
</tr>
<tr>
<td>#4</td>
<td>20</td>
<td>6.32</td>
<td>7.16</td>
<td>8.35</td>
<td>.778</td>
<td>4.79*</td>
</tr>
<tr>
<td>#5</td>
<td>40</td>
<td>6.12</td>
<td>6.62</td>
<td>.507</td>
<td>.577</td>
<td>5.56*</td>
</tr>
<tr>
<td>#6</td>
<td>33</td>
<td>6.35</td>
<td>6.88</td>
<td>.536</td>
<td>.972</td>
<td>3.17*</td>
</tr>
<tr>
<td>#7</td>
<td>20</td>
<td>5.85</td>
<td>6.15</td>
<td>.350</td>
<td>.412</td>
<td>3.31*</td>
</tr>
<tr>
<td>#8</td>
<td>36</td>
<td>6.98</td>
<td>8.04</td>
<td>1.06</td>
<td>1.00</td>
<td>6.29*</td>
</tr>
<tr>
<td>#9</td>
<td>137</td>
<td>7.19</td>
<td>8.17</td>
<td>9.69</td>
<td>1.22</td>
<td>9.31*</td>
</tr>
<tr>
<td>#10</td>
<td>21</td>
<td>5.98</td>
<td>5.98</td>
<td>.509</td>
<td>.437</td>
<td>5.34*</td>
</tr>
<tr>
<td>#11</td>
<td>36</td>
<td>6.06</td>
<td>5.83</td>
<td>.769</td>
<td>.956</td>
<td>4.83*</td>
</tr>
<tr>
<td>#12</td>
<td>59</td>
<td>6.2</td>
<td>7.61</td>
<td>1.36</td>
<td>1.17</td>
<td>8.96*</td>
</tr>
</tbody>
</table>

* Significant at .05 level or beyond.

The results of this analysis show clearly that only one school, (#1) had math test results that were not significant, while three schools (#2, #6, #7) had results that were significant near the .005 level of probability, and eight of the schools' results were significant far beyond the .001 level of probability. (#3, #4, #5, #8, #9, #10, #11, #12). Therefore, it is possible to conclude that the students in the bilingual program have been attaining significant gains in mathematics as measured results were significant except in one school.
Objective #4

As a result of participation in the Bilingual Program, students will show a statistically significant difference between pre-test rating and post-test rating in the ability to speak English.

The Sign test for ranked data was used for the analysis of the data from 518 students for whom teachers completed pre-test rating and post-test rating on the New York City Board of Education Rating Scale of Pupils' Ability to Speak English. This teacher rating instrument was used since a pre-test had been given at the beginning of the academic year in the Fall of 1974 or upon entry into the program. It has a maximum score of 25. Each student was measured twice, pre and post test, upon entry and again in May of 1975. The evaluation objective was to determine if there were significant differences gained in their ability to speak English. Findings showed that 96 percent of the students gained while only 3.5 percent either remained the same or declined during the year.

The evaluation design called for a Sign test (Wilcoxon) and included the calculation of the difference scores between pre and post tests for the 518 pairs. There were ten pairs that remained the same -- showed no change -- and are eliminated from further analysis. Eight showed loss or decline from pre to post test; some 500 students showed gain in rating on the Ability to Speak English Scale. By taking into account the direction and the amount of changes, and then ranking the differences by absolute size of number from smallest to largest
the ranking of values from least change to largest change was carried out. Rank values were added for negative changes or loss and the rank differences for positive changes were added and results checked in the R Tables for Sign Tests to determine critical values.

By following the same procedure for each school, the Critical value for R was found for the number of students from each respective school. In all cases the obtained R was found to be less than the Table which showed that the difference from pre to post test gain was significant. Therefore the objective to improve ability to speak English was attained for a significant number of students who were tested.

The school by school tally of the frequency of difference between pre and post test rating on Ability to Speak English is depicted in Table #4 to follow.

---

Table 4.4

FREQUENCY OF DIFFERENCE SCORES at SCHOOL
for ABILITY TO SPEAK ENGLISH RATING
SCALE

(For Sign Wilcoxon Test)

<table>
<thead>
<tr>
<th>Positive or Gain in Pre Post Rating</th>
<th>Coded Schools</th>
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<th>$#2$</th>
<th>$#3$</th>
<th>$#4$</th>
<th>$#5$</th>
<th>$#6$</th>
<th>$#7$</th>
<th>$#8$</th>
<th>$#9$</th>
<th>$#10$</th>
<th>$#11$</th>
<th>$#12$</th>
<th>Totals</th>
</tr>
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<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
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</tr>
</tbody>
</table>

GR 7 24 13 4 13 10 1 11 47 7 10 18 524
Table 5

FREQUENCY OF NEGATIVE AND TIE SCORES BY CODED SCHOOLS FOR ABILITY TO SPEAK ENGLISH RATING SCALE

<table>
<thead>
<tr>
<th>Coded Schools</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>#4</th>
<th>#5</th>
<th>#6</th>
<th>#7</th>
<th>#8</th>
<th>#9</th>
<th>#10</th>
<th>#11</th>
<th>#12</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Scores</td>
<td>-1</td>
<td>-3</td>
<td>-1</td>
<td>-1</td>
<td>-8</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tie Scores</td>
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<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
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<td>3</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>

Objective #5

As the result of participation in the Bilingual Program, at least 80 percent of the students enrolled in the bilingual preparation component for the high school equivalency examination (Spanish language form), will pass the High School Equivalency Examination in Spanish.

One of the objectives of the Bilingual Program is to provide the knowledge and skills necessary to gain a high school diploma for students. The high school equivalency examination is available in an English form and in a Spanish form.

The number of students who took the Spanish high school equivalency examination in school year of 1974-75 from the bilingual program whose results are known was a total of 209. Of these, a total of 188 passed, or ninety percent of those whose results are known at this writing. This is above the criterion of eighty percent, so clearly the objective was attained.
The distribution of the results of schools may be depicted in Table #6 as follows:

**TABLE #6**

<table>
<thead>
<tr>
<th>Center</th>
<th>Number who Completed the Test</th>
<th>Number who Passed</th>
<th>Percent who Passed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day Centers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#1 Court Street</td>
<td>15</td>
<td>11</td>
<td>73%</td>
</tr>
<tr>
<td>#2 Forsyth</td>
<td>13</td>
<td>13</td>
<td>100%</td>
</tr>
<tr>
<td>#3 93rd Street</td>
<td>13</td>
<td>13</td>
<td>100%</td>
</tr>
<tr>
<td>#4 Clemente</td>
<td>17</td>
<td>17</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Evening Centers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#5 Brandeis</td>
<td>49</td>
<td>45</td>
<td>92%</td>
</tr>
<tr>
<td>#6 Richmar</td>
<td>18</td>
<td>18</td>
<td>100%</td>
</tr>
<tr>
<td>#7 Taft</td>
<td>33</td>
<td>27</td>
<td>82%</td>
</tr>
<tr>
<td>#8 Prospect</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#9 Maxwell</td>
<td>55</td>
<td>48</td>
<td>87%</td>
</tr>
<tr>
<td>#10 Jamaica</td>
<td>8</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>#11 Jr. High, #10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#12 CUNY College</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

In the light of these results it is clear that over 80 percent of these students from the Bilingual Program who took the High School Equivalency Examination and for whom results were available at the time of this report, More results are expected in the near future, but it is not anticipated that the trend of performance will change. It is clear that the students in the Bilingual program who have taken the High School Equivalency Examination exceed the criterion established for the evaluation objective.
The objective of passing the high school equivalency has central emphasis for many of the students in the program. But there are some students who may not be able to pass the examination with repeated efforts, to whom the counselors may offer just guidance. Other students who are French or Greek or Italian and there is little prospect for them to take the high school equivalency examination in a form in their native language. It was hoped that the recently developed French version of high school equivalency developed by Educational Testing Service and the American Council on Education would be approved for the students whose dominant language is French. This did not happen, which means that the students in the Bilingual program must prepare to take the equivalency examination in either English or Spanish at the present time, or in some cases attempt to pass some college entrance without a high school equivalency diploma.

The students who are Italian, French or Greek must take the examination in English. The implication for the program is a pervasive concentration upon ESL in and through the various bilingual classes in order to develop English language knowledge for the students.
Objective #6

To assess the discrepancy between the program as described in the proposal and planned and actually carried out in the implementation.

There have been many accomplishments of the Bilingual Program for Auxiliary Services during school year 1974-75. It has long been part of the rhetoric of many educational programs to claim to provide an ongoing continuous program with individualized programs for each student. The Bilingual Program has not realized these goals for every student.

In it there are many consistent efforts to use counseling along with instruction so as to individualize the actual educational objectives for each pupil. Although such a practice varies from center to center, the approach is a main thrust of the program. The bilingual classes are not merely classes for students to attempt to "learn English", but many of the teachers take time to get to know each student.

In terms of counseling students, the program, while it varies from center to center, has made this a central ingredient of the program. As one student interviewed put it to the evaluator:

"Teachers here don't hassle you or bug you the way they did in the other schools. They are here to help me learn and get my diploma. They help me set goals for my work. After my diploma I am going to college. I already have a part time job."

Many of the centers do set individual program objectives, others do not.
The attempt to keep the doors open has at times led to a great fluidity and a lack of a clear core of regular students. To have a self-paced program requires a considerable technology of instruction which is lacking in most of the Bilingual programs. What individualization there is remains the result of the keen clinical judgment and professional dedication of the teachers who have secured the resources of materials for bilingual programs. This, however, is not a self-paced, graded learning program such as is found in the Science Research Associate Language Reading Laboratory. In other words, the curriculum and instructional materials by and large are still lacking in systematic development.

In regard to the high school equivalency program, there are a number of target groups being served in the Bilingual Program. One group is clearly after the high school equivalency diploma, but find that it is available only in English or Spanish. This means that the Italian and Greeks and French must concentrate on English. However, there is a second part of this group who may bypass the high school equivalency diploma itself and take college work if their own prior education is of sound quality and they enter college on a special program. The ASL Bilingual Program serves as a college preparation for them, and the purpose of the program is basically an economic one.
In addition to the overall testing used, the curriculum and instructional models ought to be examined. One basic model that was given some review by the staff and the director was found in the English Series by Robert Lado et al. #1 and #2 as well as some parts of level #3. It was found to have a basic sequence of content, with skill development and scope that could be applied to both Greek and Italian and was similar to the curriculum in French. In this connection the Iowa Test for Educational Development (ITED) was found to have some value for both normative testing and diagnostic purposes. Further investigation by the staff committees ought to be encouraged.

Of the nearly 1400 students served by the Bilingual program during the 1974-75 school year, some tests results were obtained from over 70 percent of the students. As noted earlier in many cases these results were haphazard and incomplete. In one case out of 90 names with partial results only 39 were completed in valid form. The 564 complete sets of responses for the entire series of tests reflects many more students than 564, nearly 997 partial responses which is over 70 percent of the 1400 served during the school year. This gap may be reduced further by more organized recording of tests, selection and scheduling procedure for standardized tests. This matter has been brought to the attention of the director of the program and steps to bring about changes have already been undertaken.

One matter that is not clear is the actual "holding power" of the Bilingual program. The overlap of data from the Bilingual

program students and those in the regular Auxiliary Services for High Schools program has become a matter of interpretation by the Center administrator. In some cases various students are in ESL, but not in the Bilingual program for various reasons. Therefore, the reporting on the overall program may vary until program definition is clarified among the Center administrators.

The students in the Bilingual program have access to the series of special services for all Auxiliary Services for High School students, these include (1) job placement and follow-up; (2) vocational and educational counseling; (3) remedial aid in arithmetic and English; (4) preparation for High School Equivalency Diploma (in English or Spanish); (5) typing and/or business subjects; and (6) college preparation and college assistance information. These services are provided in addition to the regular bilingual education. The Centers vary in the degree to which they carry out the above services. Many of the Centers have bilingual counselors, other centers do not. Some Centers have greater emphasis on typing and business subject than others. Few Centers have job developers on staff, and these services must be provided for a number of Centers. The current recession has made job placement especially difficult, but has provided another reason for youth to get a diploma and further their education. On the basis of the observations and information obtained by the evaluator, the Bilingual program students has full access to the special services of the regular Auxiliary Services for High Schools. Suggestions were made by the evaluator that brochures and handouts be translated into the various languages served rather than only in English. These suggestions have been followed.
IV. SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The Bilingual Program of Auxiliary Services for High Schools has had a year of expansion and change. The program has grown considerably over the last three years. In general, the results of the evaluation showed that the program did achieve the basic evaluation objectives for the students who completed the respective tests. After presentation of an overview of the program, this section will summarize the results briefly for each respective evaluation objective, and then draw inferences and conclusions that suggest recommendations.

Overall Structure of the Auxiliary Bilingual Program

The twelve centers for the bilingual program are distributed in all boroughs of New York City, with four day centers and eight evening centers. Manhattan has two day and two night centers (Spanish and French) while Brooklyn has three day centers (Spanish) and one night center (French). The Bronx has a day and a night program (Spanish). Queens has two night programs (Greek and Spanish). One night program is on Staten Island (Italian).

The bilingual program is only part of the responsibility of each center administrator for the Auxiliary Services for High Schools. The citywide coordinator for the Bilingual Program ASHS must relate to all twelve centers, the resources, the teachers, the administrators. During the school year in March of 1975 there was a change in the citywide coordinator of the Bilingual Program. The coordinator was asked to become
the Deputy to the director of the Department of Bilingual Education. The new coordinator gradually took over the responsibilities. This shift in the top produced some adjustments in program among all personnel. The new coordinator has developed the programs in similar directions. The expanded Bilingual program has called for a number of new procedures. These were developed in line with suggestions made from staff, the various center personnel and the evaluator. The change in administration contributed to some of the unevenness of test administration and the reporting from the various centers. New procedures have been instituted, for example, so that the collection of post test data went much smoother, than did the collection of pre test data. The reporting requirements for the program call for a number of records to be maintained on an ongoing basis. These have been revised recently. At the suggestion of the evaluator a format for cards was established with essential testing data, entry, background data on each student.

Overall Organization of the Twelve Centers

The twelve centers in the bilingual program are organized around a basic model. The staffing structure and curriculum organization, the testing and evaluation, and the instructional modes used within each respective center reflect many considerations. These variations reflect not only the languages taught, but the staff, the size of the program, the state of program development and cycle, surrounding community, the context and the traditions and originating or
beginning stages of the respective programs, the facilities themselves, the availability of relevant curriculum bilingual materials and resources, instructional and evaluation aids for respective areas. Each of the centers, while carrying out the basic model of the program, reflect the influence of the above factors in the implementation of the model program.

Staff variation and experiences and skills in implementing a given philosophy of education is evident from center to center. In the case of newer programs, the staff concentrated upon curriculum development. There were relatively few relevant resources for curriculum in Italian and Greek. The staff of the newer program, therefore, concentrated upon the basic formative curriculum development concerns. The Italian program began in February developed curriculum materials during Fall semester to play for the opening of the new program in Staten Island, Spring semester. The Greek program in Queens at Junior High #10 staff began the curriculum development during the summer, 1974. It launched the program for students in the Fall, 1974. In both cases these newer programs are focused around curriculum development; securing instructional materials appropriate for the range of students.

French is provided in Manhattan and in Brooklyn, 93rd Street and Prospect Heights, but here again there are relatively few available curriculum materials. As in the cases of Greek, Italian, and French, the teachers have to search out and
develop and devise many teacher made materials. The teachers work constantly on translation and adapting other materials for foreign texts for use in the program. In Spanish, while there are materials to select from, many more resources are needed. There are still many gaps between what is expected and that which is available on the commercial market.

Summary of Major Findings of the Evaluation Objectives

Objective #1.

The students for whom completed results were analyzed did show significant gain in their reading scores. However, as it was noted, the use of the Metropolitan Reading Test was not used except for a few of the participants. As reported in the Findings, the reason was that it was considered too difficult and produced a negative reaction among the students. There are other tests such as the California Achievement Test that have more diagnostic value, as well as having norms based upon large cities. In the absence of pre-post test measures for the other participants of the program, one is left not knowing how much they have improved in the reading of English.
Objective #2.

Reading in native languages did show significant gain in each of the languages for whom test results were completed. The tests used have certain limitations. The tests for Spanish, while standardized and widely used, lack basic norms to enable grade equivalents to be used. The test used for the French language* has the advantage of being linked directly with the language reading development laboratory in French. This directly links evaluation to instructional tools. However, we do not know such the meaning of the post test except as a gain. Another independent test would augment the measure. The tests for Greek and Italian were project developed teacher constructed tests. The reliability of these instruments cannot be indicated until further refinement is made. Regardless of the limitations of the various tests, the results showed there were gains that were significant statistically and the objective was realized.

Objective #3.

Achievement in mathematics among the 12 centers show significant difference with the exception of one school. The gain for students in basic math skills was assessed on an irregular basis; however, among the various centers. The variation in the use of parts of test by teachers, and adding items to the standardized tests reflect some misunderstanding of the nature of normative based testing and confused the initial attempts at data analysis. The administrator of the program is clear about the testing requirements and has provided clear guides to the staff of the center for the future. Nonetheless the results of student achievement in basic skills in math are encouraging and the objective may be regarded in general as achieved.

Objective #4.

The results of the language assessment rating by teachers of student ability to speak English show significant improvement in terms of the rating scale. Many of the students began at the lower levels of the rating with little or no English and have acquired more skills in speaking and understanding English, however it is clear that the bulk of the students in the program still have not mastered the skills of speaking English. While there has been progress that is significant there is more development needed. The rating
scale itself has been the subject of severe criticism and resistance on the part of teachers and others. This rating scale relies upon teachers' judgement and is highly subjective and general in its categories. As noted earlier in the report, the Board of Education has recently developed a new battery of tests that will no doubt be used in the future.

Objective #5.

For those students whose results are known, over 80 percent of the students who took the high school equivalency examination passed. The high school equivalency as stated above is available in English and in Spanish. A French version of the GED has been prepared but its use is not authorized in New York State at this time. The criterion of 80 percent for this objective was exceeded since 90 percent of the youth have passed. The present reporting system for the results of the high school equivalency made securing data rather difficult. The high school equivalency is one major goal for many of the students in the program, but since it is not available in Greek, Italian, or French at this time, these programs have of necessity concerned themselves with the learning of English.

Future of Bilingual Education

This program deserves continuation. It has expanded. This has been a year with many changes and with current budget restraints this program may be under pressure. It is a program that not only serves many bilingual potential and real drop-outs, but many who are new to this country.
One closing caveat, in innovative programs like this Bilingual program, the new programs require from teachers tremendous commitment of time and energy to create and build it and sustain it. Administrators should be aware of the demands upon the time of teachers in translating materials, building instructional materials and other matters. There is a tendency for innovative programs of this type to burn up the energies of staff after three years.

It is recommended that the Bilingual Program keep a low profile with its new programs until the curriculum and instructional is developed. Reliance upon media for programs attracts many and builds up hopes. Keeping a program of high quality with a core of students going requires the full energies of staff. The premises of bilingual programs over radio, television and through churches have been found to be effective, but less so than the counselors and the word of mouth of graduates. Each center should continue to maintain its waiting lists, and follow up on those students who start, then discontinue. Many of the students were not in regular attendance, yet the program has to serve over a thousand youths during the school year.

The staff required for the Bilingual Program for Auxilia: Services must be much more than merely bilingual. The philosophy of the program calls for teachers who have qualifications similar to the middle grade certification. These include more than bilingual, knowledge of the native culture, techniques of teaching, that take into account range of individual differences with special attention to needs remediation. At a time of budget crisis, it would be a grave
mistake to shift orthodox foreign language teachers into this program without regard to the philosophy. Such action could be counter productive.

Testing

The whole area of formal testing within the Bilingual Program needs to be strengthened and more understanding of its functions and its limitations is necessary. Some progress has been made.

The pro test is to establish a base-line, not to attempt to become a comprehensive diagnostic and placement tool. The haphazard manner in the Bilingual Program at present and in the past has been changing to a more organized structure. Further attention should be given to defining roles and responsibilities for testing, recording results, transmitting results. It is recommended that a committee be established for a review of tests within given languages and a determination of tests to be used and an overall school year schedule be formulated. The committee ought to include resources from the Office of Bilingual Education and perhaps from the local university. The teachers need for diagnostic information may be met by other forms of testing. Teacher made tests are relevant to the curriculum, but their reliability is very low. Profession developed tests require careful development, analysis and revision. The instruments in many instances this year were crude attempts at assessment.
It is recommended that the Bilingual Program establish a city wide curriculum, instruction and testing committee. As noted earlier such a committee could review a number of matters that currently produce some confusion. Some clarification may be accomplished without a committee, but staff implementation is necessary. The fact that the High School Equivalency is available in Spanish and English has implications for the emphasis upon English in the French, Greek and Italian programs. The Bilingual program does not mean just teaching in a foreign language! The Bilingual program relies upon its staff to bring English into every area, and yet to recognize the special contribution of the ESL teachers; this matter is not always clear. The entire staff function to provide some counseling services, but bilingual counselors are not available in all Centers. This is due to staffing limits.

A final recommendation is that the entire Bilingual and Auxiliary Services Program be viewed in systems terms and a series of flow charts and visual displays be developed. From such an analysis not only wall charts for each Center, but brochures and booklets for students could be developed and used during orientation, intake, and during conferences in progress. Many of the conferences with students essentially repeat the same information. The display charts could depict intake, registration, interviews, testing, pre-tests, placement, guidance, classes and levels, assessment, job placement, remedial aid, tutorial services, post testing, high school equivalency information, and other services.
APPENDIX
The Laboratoire de Lecture of Science Research Associates is a French language reading development series. The kit is designed for grades 7-10. In consultation with the publisher, the teacher and the evaluator established the following criteria for grade equivalent ratings: (1) The number of words in the comprehension and power or rate sections; (2) The number of words per sentence; (3) The types of questions asked. A review of each of the six color coded sections or levels indicated the following grade equivalent ratings that were used in the analysis of test results.

- **Violet** — 9.0-10.0 grade equivalent, 8 sections
- **Rose** — 8.0-8.5 grade equivalent, 16 sections
- **Blue** — 7.0 grade equivalent, 16 sections
- **Green** — 6.0 grade equivalent, 16 sections
- **Yellow** — 5.0 grade equivalent, 8 sections
- **Red** — 3.5-4.0 grade equivalent, 8 sections

The pre and post test ratings in terms of grade equivalents were made in line with the above scales. In this way both the color and section were used in the determination of grade equivalent.