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ABSTRACT

The Bilingual Program in the James Monroe High School in the South Bronx in New York, was designed to offer bilingual instructional and supportive services to ninth through twelfth grade high school students under funding from Title VII of the Elementary and Secondary Education Act. The program was designed to provide a model for replication by other high schools with similar problems. It was distinctive in two ways: (1) it was to maximize use of existing tax levy and teaching personnel, and (2) Title VII funding was to be used only to provide supportive services for the program and for unique instructional resources. The program was organized in a bilingual mini-school in which non-English speaking pupils were offered academic, non-academic and skill subjects in their native language, (Spanish). In addition, these students were given extensive instruction in English. To reinforce the instruction, the bilingual students simultaneously took other required courses with English speaking pupils. The program also offered a bilingual career orientation course and business skill subjects. The target population consisted of approximately 250 Spanish-speaking males and females. Results indicated that while the students showed gains in reading in English, mathematics and in sciences, these gains were modest and were not statistically significant in line with criteria established for the evaluation. Some of the reasons for the performance on the tests used may be attributed to the tests themselves. (Author/AM)

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JAMES MONROE HIGH SCHOOL BILINGUAL PROGRAM

SCHOOL YEAR 1975-76

DR. STANLEY SOLES

An evaluation of the New York City school district educational project funded under Title VII of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1975-76 school year.

U S DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
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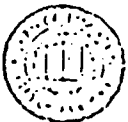


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Chapter 1. PROGRAM DESCRIPTION

New York City School 1975-76

The evaluation of the bilingual program for the Monroe High School in the Bronx took place within the context of the major fiscal and budgetary crisis of New York City. The dimensions of this crisis were broader than the schools in New York City and State.

The Bilingual Program was designed to offer bilingual instructional and supportive services to ninth through twelfth grade high school students under funding from Title VII in the period from September, 1975 through June, 1976. The geographical area of the activity is the South Bronx and the specific site is located in James Monroe High School.

The target population consists of approximately 250 Spanish-speaking boys and girls, who were provided instruction in a bilingual curriculum consisting of native language and English as a second language instruction.

As of September, 1974, fifty-eight percent of the students at James Monroe High School had Hispanic surnames. Of these students, over 300 were identified as needing bilingual assistance to overcome the impediments incurred as a result of their language handicap. This was identified by a New York City Board of Education survey as the highest concentration of students needing bilingual assistance in the Bronx.

The target population has a dropout rate in excess of fifty percent. Nearly all of these non-English speaking students are of low socio-economic status. Many of these students and their families are ineligible for and/or unaware of the various social and medical services available to their families. As a result, the group is characterized by high absenteeism.

The program was designed to provide a model for replication by other high schools with similar problems. It was intended to be distinctive in two ways:

1. It was to maximize use of existing tax levy and teaching personnel.
2. Title VII funding was to be used only to provide supportive services for the program and for unique instructional resources. The teaching components for Social Studies, Math and Science were to be supported from tax levy funds.

The program was organized in a bilingual mini-school in which non-English speaking pupils were offered academic, non-academic and skill subjects in their native language (Spanish). In addition these students were given extensive instruction in English (ESL component). To reinforce the instruction, the bilingual students simultaneously took other required courses with English speaking pupils. Additionally, the program offered a bilingual career orientation course and business skill subjects, so that the bilingual students will qualify for entry level positions and further career training. The program also offers bilingual pupils extra-curricular activities such as films, museum visits, plays, speakers, and student drama as a means of reinforcing their cultural heritage, while simultaneously introducing the new culture.

The Bilingual program provided classroom personnel as follows: three content area specialists and two family assistants. In support of these personnel were one counselor and one assistant coordinator all working under the supervision of a project director, with the assistance of a bilingual secretary.

Additional personnel, other than Title VII funded, consisted of one ESL teacher (Title I), three teachers and one counselor funded by tax levy.

In 1975-76 the opening of the school year was plagued with a series of new reversals. A series of cutbacks in teaching staff and materials had impact upon the program. Contract negotiation led to a teacher strike which delayed the opening of schools for five days. As a result of these considerations and other events throughout the school year, there were many repercussions of the fiscal and budgetary crisis. There were a number of changes of staff and program during the school year 1975-76. The tax levy elements of the program were hard hit by the fiscal and budget crunch. Some of the program consequences from the austerity program led to fewer licensed bilingual teachers and a delay in teaching and evaluation and reorganization of the bilingual program in line with remaining resources. It was in this socio-economic context that the program was carried out.

The revised program objectives for the Monroe High School Bilingual Program were as follows:

Program Objective #1: To increase the basic language skills in the expressive and receptive areas at least one level on the Puerto Rican scale of language fluency.\*



Program Objective #2: To improve the Spanish-dominant pupils reading ability level in English to a statistically significant degree.

Program Objective #3: To improve the reading ability of Hispanic pupils in the Spanish language to a statistically significant degree.

Program Objective #4: To increase the awareness and knowledge of Hispanic pupils in their cultural heritage and pride in their ethnic background.

Program Objective #5: To develop a positive self-concept and attitude toward learning in language-handicapped pupils.

Program Objective #6: To improve the percentage of attendance of participating pupils.

Program Objective #7: To increase the number of bilingual pupils who pass regular school subjects in: (a) mathematics, (b) social studies, and (c) science.

Program Objective #8: To assess the processes used in the project, and to observe the discrepancy between plans and the actual operation.

Chapter II. EVALUATION OBJECTIVES AND PROCEDURES

Evaluation Objectives

The evaluation objectives are parallel to the respective program objectives for the Bilingual Program of James Monroe High School. They may be listed precisely as follows:

Objective 1. To determine if there was a statistical significant improvement of Spanish speaking students in their ability to speak English. It was expected that 75-percent of the Bilingual program students will gain at least one scale rating in both the expressive and receptive modes when post test results of the New York City Language Fluency Scale are submitted to analysis. The treatment group consists of all Title VII pupils receiving instruction in English as a Second Language (ESL) in the Bilingual Program.

Objective 2. To determine if the Spanish speaking students demonstrated a statistical significant improvement in reading achievement in English. It was expected that the mean posttest reading score achieved by the treatment group will surpass their pretest score at the .05 level of statistical significance when results of the Stanford Achievement Test in Reading are submitted to analysis with a t-test for correlated groups. The treatment group consists of all Title VII pupils.

Objective 3. To determine if there was statistically significant improvement in Spanish speaking students reading in Spanish. It was expected that the mean posttest reading score achieved by the treatment group will surpass their pretest score at the .05 level of statistical significance when results of the Cooperative Inter-American Series Reading Comprehension Test are submitted to analysis with a t test for correlated groups. The treatment consists of all Title VII pupils receiving subject matter instruction in their native language (Spanish).



Objective 4. To determine if the participants in the program demonstrate significant gain in their knowledge of ethnic heritage. It was expected that the mean posttest ethnic heritage and culture score achieved by 60 percent the treatment group will surpass their pretest score when results of a project developed instrument were submitted to analysis with a t test for correlated groups at the .05 level of statistical significance. The treatment group consists of all Title VII pupils receiving bilingual instruction.

Objective 5. To determine if the participants showed statistical significant improvement attitudes toward self and school. It was expected that (A) the mean posttest self esteem scores and (B) mean posttest school attitudes scores achieved by the Bilingual group will surpass their pretest score at the .05 level of statistical significance when results were submitted to analysis with a t test for correlated groups. The treatment group consists of all Title VII pupils receiving bilingual instruction.

Objective 6. To determine if the attendance rate for the participants in the Bilingual program was higher than the students in the regular program of the school. It was expected that the rate of attendance achieved by the Bilingual group would surpass overall rate of attendance for the regular school students at the .05 level of statistical significance when pupil attendance results were submitted to analysis with a t test for percentage difference for uncorrelated groups.

Objective 7. To determine if students in the Bilingual program attained achievement in school subjects of (A) Mathematics, (B) Social Studies, and (C) Science, at or above the standard established for the subjects. It was expected that a least sixty percent of the treatment group attained at least the criterion level set for passing subject content when post test results of teacher-made final examination in (A) Mathematics, (B) Social Studies, and (C) Science were submitted to analysis. 11

Objective 8. To determine how the program operations compared with program description. To assess the processes used in the project, and to report on the gaps between plans and operation. Among topics to be included are: bilingual philosophy and methodology, affective education, use of performance objectives, the extent of staff in service training and curriculum development.

The evaluator observed program operation activity, conducted interviews, and examined pertinent records to determine the extent of congruence between program proposal specifications and the actual implementation of the program; these data are included summarily in the final evaluation report.

Table # 1.

Overall Summary of Objectives, Testing Instruments, Test Dates, Target Groups Number For Bilingual Program for Monroe High School

| Objective Improvement of                                      | Testing Instrument  | Pre-Test | Post Test            | Target Groups Tested   | Number Pre-Tested |
|---|---|----------|----------------------|------------------------|-------------------|
| 1 Oral English  | New York City Puerto Rican Language Fluency Scales A & B  | Oct      | June                 | All Title VII Students | 262               |
| 2 Reading in English  | Stanford Achievement Test Primary I or II   | Oct      | June                 | All Title VII Students | 250               |
| 3 Reading in Spanish  | Cooperative Inter-American Tests LCES-4/or 2NLA   | Oct      | June                 | All Title VII Students | 250               |
| 4 Knowledge of Ethnic Culture                                 | Project-Developed Examination   | Dec      | June                 | All Title VII Students | 233               |
| 5A Self-Image   | Project translated into Spanish of Coppersmith Seale  | Nov      | June                 | All Title VII Students | 222               |
| 5B Attitude toward School and Education                       | Project translated into Spanish of Rivera Attitude Scales   | Nov      | June                 | All Title VII Students | 222               |
| 6 Attendance  | Bilingual vs. Regular Program Students Attendance Records   |          | June                 | All Title VII Students |                   |
| 7 School Subjects<br>Mathematics<br>Social Studies<br>Science | Teacher-made final exams:<br>A) General Math & Algebra<br>B) Social Studies<br>C) General Science & Biology |          | June<br>June<br>June |                        |                   |

### Methods of Analysis

The design stipulated the use of a series of statistical procedures for the analysis. These included: (1) the correlated t test between pre- and posttests with a level of significance of .05; for (2) the t test of differences between percentage or proportions comparing the Bilingual Program results with schoolwide norms; (3) the Wilcoxon Sign test of significance of differences between pre- and posttest ratings on the language rating scale; (4) compare the percentage distribution of the attendance rates in terms of percent of attendance rate for the Bilingual Program and the school as a whole. A summary of the types of statistical tests for each respective objective are depicted in Table # 2 .

In addition, informal methods of assessment were used by the evaluator individual interviews, observations, and analysis of records and documents of the Bilingual Program.

Table # 2

Objectives, Tests, and Statistical Analyses for School Bilingual Program

| Objective Improvement of                                      | Testing Instruments Used  | Analysis Used  |
|---|---|--|
| 1 Oral English  | New York City Puerto Rican Language Fluency Scales A & B  | Wilcoxon Sign Ranks  |
| 2 Reading in English  | Stanford Achievement Test Primary I or II   | Correlated T Test  |
| 3 Reading in Spanish  | Cooperative Inter-American Tests LCES-4/or 2NLA   | Correlated T Test  |
| 4 Knowledge of Ethnic Culture                                 | Project-Developed Examination   | Percent Passing Final and Correlated T Test  |
| 5A Self-Image   | Project translated into Spanish COPPERSMITH Scale   | Correlated T Test  |
| 5B Attitude toward School and Education                       | Two Scales Project translated into Spanish of Rivera attitude Scales  | Correlated T Test  |
| 6 Attendance  | Bilingual vs. Regular Program Students Attendance Records   | T Test for Difference in Percent   |
| 7 School subjects<br>Mathematics<br>Social Studies<br>Science | Teacher-made final exams:<br>A) General Math & Algebra<br>B) Social Studies<br>C) General Science & Biology | Distribution & Analysis of Percent Pass Final Exam in line Standard Criterion<br>" " " |

## Chapter III FINDINGS

There were eight evaluation objectives in this study of the Bilingual Program at Monroe High School in Bronx, New York for the school year 1975-76. The results are reported in this section for each respective evaluation objective as stated in the evaluation design.

Objective 1

It was expected that at least seventy-five percent of the entire treatment group would improve at least one scale rating in both the expressive and receptive modes when post test results of the New York City Language Fluency Scale\* were submitted to analysis. The treatment group were of all Title VII pupils receiving instruction in English as a Second Language (ESL).

Table 3.

Mann-Whitney Sign Test of Significance for Students of Monroe High School for Ability to Speak English on New York Language Fluency Scales A & B

| Scale | N   | Students' Results on Pre-Post Ratings |                            |                            |
|-------|-----|---------------------------------------|----------------------------|----------------------------|
|       |     | Gain of One or More Levels            | Loss of One or More Levels | Remained on the Same Level |
| A     | 262 | 223                                   | 3                          | 36                         |
| B     | 262 | 215                                   | 2                          | 45                         |

For Scale A for the 262 students who were rated in pre-test Scale A, only three declined at the posttest while 223 gained one or more levels. Sum of positive ranks 25367.5 and sum of negative ranks

\*also known as Puerto Rican Scale of Language Fluency.



was equal to 282.5 and the obtained Wilcoxon Sign R was -12.73 which was significant at the .05 level. Of the twenty students who pre-tested at lowest score of "F" on Scale A, eighteen or 81 percent gained two or more scale levels by the end of the semester.

For Scale B the results for the 262 responses to pre- and post-testing ratings for Scale B, the R for Wilcoxon Sign Test was -12.576 which was significant at the .05 level. The sum of positive ranks equal to 2345, while the negative ranks were 168. Of the 262 students 215 or 82 percent gained one or more levels while only two students declined one or more levels. Of the 45 students who were rated on the lowest level of Scale B at pre-test, 22 or 48.8 percent gained two or more levels at post-test. The results are depicted in the previous Table. It is concluded that the objective was attained, since in ratings for both scales the obtained R was found to be less than the Tabled R which shows that in ability to speak English the difference between the pre-test and post-test showed significant gain.

## Objective 2

It was expected that the mean post test reading score achieved by the treatment group would surpass their pretest score at the .05 level of statistical significance when results of the Stanford Achievement Test in Reading (Level II and III Form A and B) were submitted to analysis with a t test for correlated groups. The treatment group consisted of all Title VII pupils.

The mean pretest grade equivalent score on the Stanford Reading Achievement Test for the Bilingual students was 2.58 and the mean post test grade equivalent score was 3.02 with a difference of 0.44 between means. The standard deviations was .649, the sum of differences was 91.83 and the square of the sum of differences was 8432.7. The correlated t test was 13.52 for 205 degrees of freedom and was significant at the .05 level.

Table 4.

Test of Significance for High School Bilingual Program's Spanish Dominant Students in Stanford Achievement Test in English

| N    | Pretest Mean | Posttest Mean | $X_D$ | $S_D$  | <u>t</u>  |
|------|--------------|---------------|-------|--------|-----------|
| 206* | 2.5789       | 3.0247        | 91.83 | 8432.7 | -13.52239 |

\* Of the 250 students pre tested, 206 also completed valid post test are are reported in this analysis.

### Objective 3

It was expected that the mean posttest reading score achieved by the treatment group would surpass their pretest score at the .05 level of statistical significance when results of the Cooperative Inter-American Series Reading Comprehension Test were submitted to analysis with a t test for correlated groups. The treatment group consisted of all Title VII pupils receiving subject matter instruction in their native language (Spanish).

For the 212 students who completed the pre-- and posttests on the Inter-American Preuba de Lectura (OES and CES), the mean was 28.259 for the pretest, and the posttest mean was 39.46. The sum of differences was 2376 and the sum of the square of differences 46786 with the standard deviation of 14.855. The correlated T test of 16.696 with 211 df was significant at the .05 level with the two-tail test.

Table 5.

#### Test of Significance for Monroe High School Bilingual Program's Spanish Dominant Students Reading in Spanish

| N    | Pretest Mean | Posttest Mean | $X_D$ | $S_D$ | <u>t</u> |
|------|--------------|---------------|-------|-------|----------|
| 212* | 28.259       | 39.467        | 2376  | 46786 | 16.696   |

\* Of the 250 students who completed the pre-test, 212 students completed valid post tests and are reported in these findings.

#### Objective 4

To increase the awareness and knowledge of Hispanic pupils in their cultural heritage and pride in their ethnic background.

It was expected that the mean posttest ethnic heritage and culture score achieved by the treatment group would surpass their .05 level of statistical significance when results of a project developed instrument were submitted to analysis with a t test for correlated groups. The treatment group consisted of all Title VII pupils receiving bilingual instruction.

Of the 233 who took the pre-test, 208 students completed valid post tests and are included in the analysis of results on the project developed test of Hispanic culture.\* The mean pretest was 71.2 and the mean posttest score was 79.2 with a difference of 8.04. The sum of the square of the differences 43,125 and the standard deviation was 14.399. The T test was 9.689 which was significant at the .05 level for 207 degrees of freedom. Of the 208 students, 181 or eighty-seven percent attained posttest final exam scores that were at or above the standard for passing.

Table 6

Test of Significance for Knowledge of Hispanic Culture/Spanish Dominant Students Monroe High School Bilingual Program

| N    | Pretest Mean | Posttest Mean | $X_D$ | $S_D$ | <u>t</u> |
|------|--------------|---------------|-------|-------|----------|
| 208* | 71.2         | 79.2          | 1676  | 43125 | 9.689    |

\* Of the 233 who took the pre-test, some 208 completed valid post tests on the Hispanic Culture.

Objective 5

It was expected that the mean posttest self-esteem and school attitudes score achieved by the Bilingual students would surpass the pretest score at the .05 level of statistical significance when results of a project translated instruments were submitted to analysis with a t test for correlated groups. The treatment group consists of all Title VII pupils receiving bilingual instruction.

The Coopersmith test for self esteem was used. Of the 222 students in the Bilingual program who completed the pre-test, 197 completed both the pre- and posttest. The mean for the pre-tests was 34.25 and the posttest mean score was 34.9. The sum of differences was 128 and the sum of square of differences was 8430 with a standard deviation of 6.54. The t-test score of 1.397 which was not significant at the .05 level with 196 degrees of freedom.

Table 7

Test of Significance for Self Esteem Test in Spanish Dominant Students on Coopersmith Scale at Monroe High School Bilingual Program

| N    | Pretest Mean | Posttest Mean | $X_D$ | $S_D$ | $t$   |
|------|--------------|---------------|-------|-------|-------|
| 197* | 34.25        | 34.90         | 128   | 8430  | 1.397 |

Of the 222 students who completed the pre test, some 197 were used in the analysis and with valid post tests.

### Attitude Toward School-Scale I

The Rivera School Attitude Scale was used. One scale measures attitudes toward school and the other toward education. The results showed that the bilingual students generally have very positive attitudes toward school and education as measured on these scales. Of the 196 students\*who-completed the tests, the mean pretest score was 87.76 and the mean posttest score was 94.86 with a difference of 7.097. The sum of squares of differences was 75,725 and the standard deviation was 19.655, with a t-Test of 5.406 which was significant at .05 level for 195 df. To give an idea of the highly positive attitudes expressed by the students there were 129 of the 196 students, or 65.8 percent, who scored 90 or above on the pretest rating; and 81 or 41 percent who scored 100.

### Attitude Toward Education-Scale II

The results of the 194 students\*\*who completed the Rivera School Attitude Scale II on Education revealed a mean pretest score of 81.96 and a mean posttest score of 90.489 with difference between means of 8.5200. The sum of differences was 1653 and the sum of the square of differences was 97117 with a standard deviation of 22.37, and a T-test score of 5.7217 which was significant at the .05 level for 193 d.

The attitudes of bilingual Program students toward education were not as high as school attitudes on Scale I, but they were still high. Of 194 who completed Scale II, 97 or fifty percent started the pretest with a score of 90 or higher, while 47 or 24 percent rated their attitudes toward education at the 100 percent level of the scale.

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\*Of the 222 who completed the pre-test, 196 students completed valid post-tests for Scale I

\*\*Of the 222 pupils who completed the pre test, 194 students completed valid post tests for Scale II.

Table 8

Correlated T Test of Significance for School Attitude in Spanish Dominant Students Monroe High School Bilingual Program

| N   | Scale | Pretest Mean | Posttest Mean | $X_D$ | $S_D$  | $t$   |
|-----|-------|--------------|---------------|-------|--------|-------|
| 196 | I     | 87.76        | 94.86         | 1,391 | 75,725 | 5.406 |
| 194 | II    | 81.96        | 90.489        | 1,653 | 97,117 | 5.721 |

#### Objective 6

It was expected that the rate of attendance achieved by the treatment group would surpass the comparison group at the .05 level of statistical significance when pupil attendance results were submitted to analysis with a  $t$  test for percentage difference for uncorrelated groups. The treatment group consisted of all Title VII participants in the program. The comparison group consisted of all pupils in the school. The aim was to find out if students in the Bilingual Program had a higher daily attendance rate than the rate established for the entire student body at Monroe High School. The special nature of the Bilingual Program was expected to provide added incentives to students for attending school. It was expected that the program holding power would be reflected in terms of better daily attendance in the Bilingual Program than in the regular program.

The assessment of the attendance was based upon school records for attendance pertaining to students in the Bilingual Program as well as those within the regular program. The procedures used included the attendance for the students in the Bilingual Program during the first five grading periods and the attendance for the student body as a whole during the first five grading periods (September 1974 - May 1975).

A review of attendance records revealed that the attendance criteria was exceeded by the students in the Bilingual Program. The results are depicted in Table #9 and clearly show the objective was achieved. A detailed analysis of results showed the outstanding attendance record for the various subgroups in the Bilingual Program.

Using the 165 days of school attendance for the nine-month period as a basis, a summary of number of days present and days absent for each student in the Bilingual Program was collected and the data were analyzed.



It was reported that the mean percent of those present for the school year 1975-76 for Monroe High School students in the regular program was 65 percent. The mean percent present for the school year 1975-76 for the Bilingual Program students was 83 percent which was higher than the school mean. The difference in mean attendance was between the bilingual and regular program students was 18 percent. A test for the significance of the differences between percent of uncorrelated program groups was made. The z score was 5.16 which was significant beyond the .05 level with a two tail test.

Table 9

Monroe High School Attendance of Students from Bilingual Program and Students for Regular Program

| N   | Bilingual Program<br>Percent Present | N    | Regular Program<br>Percent Present | Difference | <sup>z</sup><br>Score |
|-----|--------------------------------------|------|------------------------------------|------------|-----------------------|
| 240 | 83                                   | 3200 | 65                                 | 18         | 5.16                  |

Table 10

Distribution of Students and School Attendance Monroe High School

| Percent Present | Number of Bilingual Program Students |
|-----------------|--------------------------------------|
| 95-100          | 46                                   |
| 90-94           | 58                                   |
| 85-89           | 49                                   |
| 80-84           | 18                                   |
| 74-79           | 8                                    |
| 70-74           | 17                                   |
| 65-69           | 5                                    |
| 60-64           | 9                                    |
| 55-59           | 8                                    |
| 50-54           | 4                                    |
| 45-50           | 6                                    |
| 40-45           | 4                                    |
| 35-40           | 2                                    |
| 30-35           | 4                                    |
| Below 30        | 2                                    |

Objective 7

It was expected that at least 60 percent of the Bilingual Program students will attain at least the criterion level of a score of 65 or higher set for passing in the teacher-made final examinations in (A) Mathematics; (B) Social Studies and (C) Sciences when the data were analyzed.

Objective 7 (A) Mathematics -- Algebra, Geometry, and General Mathematics

It was expected that at least 60 percent the the Bilingual Program students would attain at least the criterion level set for passing subject content in Mathematics when posttest results of teacher-made final examinations were submitted to analysis. The results for students who took Algebra showed that of the 100 students tested in January, 50 passed the final examinations with a score of 65 or higher, which was less than the criterion of 60 percent. In June 52 students took Algebra final examinations and 27 passed or 52 percent which is less than the criterion of 60 percent. For results see Table 11 to follow.

Table 11

Distribution of Final Examination Scores in Algebra-1 for Students in the Bilingual Program at Monroe High School for January

| Final Examination Score | Students in Bilingual Program |
|-------------------------|-------------------------------|
| 100-95                  | 14                            |
| 95-90                   | 2                             |
| 90-85                   | 7                             |
| 85-80                   | 6                             |
| 80-75                   | 3                             |
| 75-70                   | 2                             |
| 70-65                   | 16                            |
| Below 65                | 50                            |
| Total                   | 100                           |

Two students did, however, take and pass geometry with scores of 87 and 68. In terms of the results of students from the Bilingual Program in Algebra, it is clear that the criterion of 60 percent passing was not achieved.

Table 12

Distribution of Final Examination Scores in Algebra-2 for Students in the Bilingual Program at Monroe High School for June.

| Final Examination Score | Students in Bilingual Program |
|-------------------------|-------------------------------|
| 100-95                  | 3                             |
| 95-90                   | 2                             |
| 90-85                   | 5                             |
| 85-80                   | 1                             |
| 80-75                   | 7                             |
| 75-70                   | 1                             |
| 70-65                   | 8                             |
| Below 65                | 25                            |
| Total                   | 52                            |

Objective 7 (B) General Mathematics

It was expected that at least 60 percent of the Bilingual Program students would attain at least the criterion level set for passing subject content in General Mathematics when posttest results of teacher-made final examinations were submitted to analysis. The results for the 75 students from the Bilingual Program who took the final examinations in January were analyzed and showed that 45 students or 60 percent passed with a score of 65 or higher, while 30 or 40 percent did not pass the final examination in General Mathematics. In June of the 40 students who completed the final examinations, 23 passed or 58 percent with a score of 65 or higher. The distribution of students final examination scores for January and June are depicted on Tables 13 and 14 to follow. Since 60 percent did pass the final examination in January and 58 percent passed in June it may be said that the objective in part was attained in General Mathematics for the students in the Bilingual Program.

Table 13

Distribution of Final Examination Scores in January 1976 in General Mathematics for Monroe High School Bilingual Program

| Final Examination Scores | Students in Bilingual Program |
|--------------------------|-------------------------------|
| Between 95 and 100       | 10                            |
| 90 and 95                | 4                             |
| 85 and 90                | 10                            |
| 80 and 85                | 4                             |
| 75 and 80                | 7                             |
| 70 and 75                | 3                             |
| 65 and 70                | 7                             |
| Below 65                 | 5                             |
| Total                    |                               |

Table 14

Distribution of June 1976 Final Examination Scores in General Mathematics for Students in the Bilingual Program at Monroe High School

| Final Examination Score | Students in Bilingual Program |
|-------------------------|-------------------------------|
| 100-95                  | 0                             |
| 95-90                   | 3                             |
| 90-85                   | 4                             |
| 85-80                   | 3                             |
| 80-75                   | 7                             |
| 75-70                   | 3                             |
| 70-65                   | 3                             |
| Below 65                | 17                            |
| Total                   | 40                            |

#### Objective 7 (B) Social Studies

It was expected that at least sixty percent of the treatment group would attain at least the criterion level set for passing subject content when posttest results of teacher-made final examinations in Social Studies were submitted to analysis.

The courses in Social Studies included American Studies, Eastern Civilization, Economics and for some students the Citywide Examination in Social Studies given in January and June were analyzed. The results for the social studies courses examinations for January for 51 students indicate that 32 passed or 63 percent at or above the criterion level score of 65. The results for 78 students who took examinations in June revealed that 48 passed or 62 percent and of the 25 who took the Citywide examinations in Social Studies 18 students or 72 percent passed. This means that the objective for Social Studies for the students from the Bilingual Program is attained. For a distribution of test scores in Social Studies see Tables 15 and 16 to follow.

Table 15

| Distribution of Final Examination Scores in the Bilingual Program at Monroe High School | Number of Students |
|---|--------------------|
| 100-95  | 0                  |
| 95-90   | 1                  |
| 90-85   | 1                  |
| 85-80   | 3                  |
| 80-75   | 10                 |
| 75-70   | 11                 |
| 70-65   | 19                 |
| Below 65  | 19                 |
| Total   | 51                 |

Table 16

Distribution of Final Examination Scores in Social Studies for Monroe High School Bilingual Program - June 1976

| Final Examination Score | Students in Bilingual Program |
|-------------------------|-------------------------------|
| Between 95 and 100:     | 1                             |
| 90 and 95:              | 1                             |
| 85 and 90:              | 3                             |
| 80 and 85:              | 7                             |
| 75 and 80:              | 12                            |
| 70 and 75:              | 8                             |
| 65 and 70:              | 10                            |
| Below 65:               | 30                            |
| Total                   | 78                            |

### Objective 7 (C) Science

It was expected that \_\_\_\_\_ percent of the treatment group would attain at least the \_\_\_\_\_ level set for passing subject content when posttest results of \_\_\_\_\_ the final examinations in Science were submitted to analysis.

The results for each set of final examinations for students from the Bilingual Program in General Science courses are to follow. In January from 39 students, 10 students or 25 percent passed, while in June of 38 students who took General Science courses 24 students or 63 percent passed the final examination in General Science. The distribution of results are depicted in Tables 17 and 18 to follow.

Table

Distribution of Final Examinations Scores in General Science for Monroe High School Bilingual Program - January

| Final Examination Score | Students in Bilingual Program |
|-------------------------|-------------------------------|
| Between 95 and 100:     |                               |
| 90 and 95:              |                               |
| 85 and 90:              |                               |
| 80 and 85:              |                               |
| 75 and 80:              |                               |
| 70 and 75:              |                               |
| 65 and 70:              |                               |
| Below 65                | 19                            |
| Total                   | 39                            |

Table 18

Distribution of Final Examinations Scores in General Science for Monroe High School Bilingual Program in June

| Final Examination Score | Students in Bilingual Program |
|-------------------------|-------------------------------|
| Between 95 and 100:     | 1                             |
| 90 and 95:              | 2                             |
| 85 and 90:              | 2                             |
| 80 and 85:              | 2                             |
| 75 and 80:              |                               |
| 70 and 75:              |                               |
| 65 and 70:              | 12                            |
| Below 65                | 3                             |
| Total                   | 25                            |

The results for 56 students in Biology class from the Bilingual Program in January that 26 or 46 percent passed the final examinations. In June of the 76 students who took Biology final examinations some 38 students, or 50 percent passed. The results for the school year were for 132 students in Biology who took final examinations, some 64 students or 48 percent passed Biology final examinations. This figure was below the criterion of 50 percent established for this objective, and therefore the objective was not attained for Biology in the Bilingual Program. The results are depicted in the Tables 19 and 20 to follow.

Table 19

Distribution of Final Examination Scores in Biology for Students at the Bilingual Program at Monroe High School - January 1976

| Final Examination Score | Students in Bilingual Program |
|-------------------------|-------------------------------|
| 100-95                  | 0                             |
| 95-90                   | 1                             |
| 90-85                   | 2                             |
| 85-80                   | 6                             |
| 80-75                   | 3                             |
| 75-70                   | 6                             |
| 70-65                   | 8                             |
| Below 65                | 30                            |
| Total                   | 56                            |

Table 20

Distribution of Final Examinations Scores in Biology for Monroe High School Bilingual Program in June 1976

| Final Examination Score | Students in Bilingual Program |
|-------------------------|-------------------------------|
| Between 95 and 100:     | 2                             |
| 90 and 95:              | 0                             |
| 85 and 90:              | 2                             |
| 80 and 85:              | 3                             |
| 75 and 80:              | 4                             |
| 70 and 75:              | 4                             |
| 65 and 70:              | 23                            |
| Below 65                | 38                            |
| Total                   | 76                            |



The overall results for Objective 7 in school subjects of (A) Mathematics, (B) Social Studies, and (C) Sciences for the Bilingual Program indicated that only in Social Studies did the students attain the criterion level of sixty percent or more passing on the final examinations. Fifty percent of the students did attain a passing score in final examinations in Algebra and General Mathematics for the year, and in General Science and Biology for the Spring Semester. Scores for General Science were lowest in January when only 25 percent of those tested passed. While performance of the students from the Bilingual Program was not at the sixty percent level of the criterion, it did attain the 50 percent level in all but the General Science and the Biology test results in January, however, when one considers students semester test scores another pattern emerged.

The Director of the Bilingual Program questioned the use of the final examination score as the sole criterion of achievement of objectives and suggested that the school semester test scores be used to augment the data from final examinations for Objective 7.

In order to provide some comparison, data from the overall test scores for each subject were compared with the final examination results. In this way the student's overall performance for the school year was compared with the final examination test score. Analysis of the data showed that the overall school semester scores were higher than the final examination scores in all subjects except Algebra. In General

Table 21

Comparison of Final Examination Mean Scores with Total Test Score Mean for Semester in General Mathematics, Algebra, Social Studies, Biology, and General Science for January and June 1976

| Subject             | Final Examination<br>January | Final Examination<br>June | Semester Total Test Scores<br>January | Semester Total Test Scores<br>June |
|---------------------|------------------------------|---------------------------|---------------------------------------|------------------------------------|
| General Mathematics | 60                           | 58                        | 70                                    | 85                                 |
| Algebra             | 50                           | 48                        | 46                                    | 71                                 |
| Social Studies      | 63                           | 62                        | 72                                    | 62                                 |
| Biology             | 48                           | 50                        | 84                                    | 90.5                               |
| General Science     | 25                           | 63                        | 90                                    | 100                                |

Mathematics, Semester scores were 70 and 85 percent. Algebra was 71 percent in June with only 46 percent passing during the shorter Fall Semester. The results in Social Studies were 72 percent and 62 percent passing. In Biology the results were 84 and 90.5 percent, which was considerably higher than the final examination results. General Science, again the school semester scores were much higher than the final examination scores with 90 and 100 percent passing as reported.

The results of the school semester mean scores for General Science were higher for the students from the Bilingual Program than were the normal semester mean scores of 72 percent attained by the students in General Science in the regular program. With the exception of one semester of Algebra, all of the results for school total test scores were above passing. These results

completed at Table 21.

Objective 8. To determine how the program operations compared with program description. To assess the processes used in the project, and to report on the gaps between plans and operations. Among topics to be included are: bilingual philosophy and methodology, effective education, use of performance objectives, the extent of staff in-service training and curriculum development.

The evaluator observed program operation activity, conducted interviews, and examined pertinent records to determine the extent of congruence between program proposal specifications and the actual implementation of the program; these data are included summarily in this report.

Comparisons are reported in terms of eight major program components, as follows: (1) Context of the Program, (2) Philosophy (3) Curriculum Development, (4) Staff Development, (5) Testing and Evaluation, (6) Number of Students Tested, (7) Parents and Community Involvement, (8) Student Developments

#### Context of the Bilingual Program

The physical location of the Bilingual Program within Monroe High School operated from an annex, a block from the main building. As will be noted the program staff worked toward integration within the larger school throughout the year. At the end of the school year the Bilingual Program office was shifted back into the main building to a wing of the fifth floor. The annex location of the program is

and many classrooms, and offices had the advantage of serving as a "home base" for students in the program. The shift to the main building will further integrate the Bilingual Program within the mainstream of the main program of the school.

It should be noted that the 1975-76 school year has been a year of major fiscal crisis for New York City. The impact of the fiscal crisis was felt by all programs within New York City Schools. The special effects of the fiscal crisis for Bilingual Programs included personnel shifts and the delay in the opening of the school year. One result was a shorter school year especially for Fall Semester 1975-76. Some of the other effects of the larger fiscal crisis have been noted elsewhere in this report.

#### Philosophy of the Bilingual Program

On the basis of interviews with the director and key staff, and an examination of materials and records, one may conclude that the Bilingual Program at Monroe High School has an organic humanistic philosophy of Bilingual education. This outlook is central to the entire range of curriculum and work of the teachers in the program.

The outlook serves to guide the program. It provides co-curricula experiences within the school and field trips that link the students' home and school experiences, link the school and larger city experiences, link student's own personal affective domain with larger cultural heritage and the events from the larger community. Learning is viewed functionally. It brings together art and music in the learning as well as the cognitive areas. Although there was no direct separate course on ethnic heritage and school attitude, these factors were pertinent in the program. The scores on measures showed attitude changed over the course of the school year. (See Objectives 4 and 5). The co-curricula emphasis of the program provided a central focus for many of the common activities for the students in the program. They included the Bilingual Program Newsletter (bi-monthly), vocational guidance through guest speakers and visits to and from agencies in the community. Objectives from English and Spanish language, Science and Social Studies courses were an integral part of field trips.

The organic functional view of the curriculum in the Bilingual Program led to drawing upon objectives from English Science and Social Studies in connection with the many field trips. These trips included the following: New York "Experience", Museum of American Indians, Museum of the City of New York, Circle Liner Tour around Manhattan Island and then on to Bear Mountain. Other trips were to Radio City Music Hall, New York University, ASPIRA (College Fair) - Montefior Hospital (Health Center) Greenwich Village. The trips included visits to agencies, offices and job sites. The art and music provided included Hispanic Ballet, Salsa Festival, Jose Coronado-Ballet night and the City-Wide Bicentennial.

### Curriculum Development

During the school year the staff developed bilingual curriculum in General Science, Biological Science, Indoor Gardening, Media and ESL, Spanish version of IBM keypunch course, Spanish version of Accounting Workbook, and translation of many materials into Spanish for use in the program. In addition the Newsletter was produced on a bi-monthly basis with three special Newsletter reports to parents for each marking period. Curriculum work included reorganizing and conversion of ESL courses into a tax levy pattern and the development of ESL levels 4, 5 and 6. This provides a sample of the range of curriculum development that took place.

### Staff Development

There were many events that contributed to staff development during the school year. It was expected that the link with universities would be increased for the faculty. Only one student teacher was placed within the program in Business and Office Skills from Lehmann College of CUNY during the Fall semester, but the link with the universities did not develop. Manhattanville College provides Bilingual IBM key punch courses and efforts were made to develop an avenue for graduates to attend. The staff took courses at Hunter College, New School for Social Research, and New York University.

An important effort was made during the school year to integrate the Bilingual Program staff with the mainstream or regular program faculty. This was salient at a time when anti-Bilingual teacher feelings were being expressed in other programs. In October, at a faculty meeting, the Bilingual Program presented a skit and then engaged in a discussion on some of the more controversial aspects of the Bilingual Program. This effort to openly

discuss the program improved the situation and was rated as a "success" by over 80 percent of the faculty in an evaluation sheet used as a follow up. The action by the Bilingual Program to communicate directly with the larger faculty may have been one of the critical events in integrating the faculty. Another consideration at Monroe High School was that Bilingual Program staff faculty were drawn from existing personnel within the school with the exception of Science (Bilingual) and the project secretary.

Special staff meetings for the Bilingual Program were held monthly and more as necessary. Topics included: Title VII and the Program, college orientation planning, planning Pan American Day, planning field trips, planning parents advisory meetings, planning various musical and cultural events, guidance services and vocational plans, testing and evaluation schedule curriculum development review, and program planning for 1976-77.

The staff attended a number of professional meetings and conferences during the year including the Rochester ESL and Bilingual Coordinators meeting, New York City Bilingual office meetings and the five ESL meetings held during the year. Faculty meetings on Title VII were held on a regular basis.

#### Testing Program and Evaluation

The overall testing program used within the school is larger than the special testing required by the evaluation. There were about six and one half hours of pre and post testing required for the evaluation. That amount of testing required organization, scheduling and time of the

the part of not only teachers but the students themselves. There developed, to some extent, a saturation with tests and an anti-test bias developed among the students. Some seemed to give up and turn off to the test so that the staff expressed concern that some of the tests did not reflect the learning nor the potential of the students tested. This concern over the time taken for testing within the program has not led to an abandonment of testing, but a search for alternatives. As noted elsewhere in this report the Director of the Bilingual program stated her reservations about the standard or criterion of 60 percent rather than the 50 percent of the group as passing in course. Further, the Director raised question about the use of final examination in the evaluation rather than final semester test scores as she had proposed. As a compromise, this evaluation has included both sets of data. Lastly, the evaluation had included in addition to cognitive tests, tests in the affective domain and attitude tests, since these were vital to the philosophy of the program (See Objective 4 and 5). The testing program was carried out with efficiency, care, and a tremendous amount of work, some balance between the significant areas to be assessed and the reasonable amount of time.

#### Number of Students Tested

All students in the Bilingual Program were tested. The variation of the number of students tested for the various objectives in the evaluation may be explained in a number of ways. First the teachers were able to rate each child in English speaking ability on the basis of direct knowledge of the students (Objective 1) therefore, the full number of students in the Bilingual Program were tested. Some tests were found to be incomplete or invalid, but more than 75 percent of the students in the program were tested in reading tests in



English (Objective 2) and Spanish (Objective 3). The school placed main emphasis upon English as a second language. The number of students who took each of the various academic school subjects in Mathematics, Social Studies, and Sciences varied in line with their respective performance and scheduling. Students were scheduled for two ESL classes and with other required courses fewer students were scheduled into the academic subject areas and therefore the number of students tested was based upon the smaller enrollment into these classes. It was reported to the evaluator that 30 students dropped from the program over the school year. The reasons for withdrawal from the program were as follows: marriage, pregnancy, moving, relocation due to fires. Some of the students shifted to the high school equivalency program for youth with full time jobs. The specific data loss for each objective is cited on pages 13-17.

#### Parents and Community Involvement

The Bilingual Program provided a number of ways for parent and community involvement in the school year. A parents advisory board met on a regular monthly basis with more meetings as needed; these meetings not only reviewed the substance of the Bilingual Program proposals, but aided directly and indirectly in planning and carrying out various school functions, community events, field trips, parents nights (four open school meetings), plus Ballet night and College Orientation night meetings. This year parents and students aided in the development of a Student Scholarship Fund. Parents aided in contacting agencies, arranging for speakers, and arranging field trips.

#### Student Development

The students in the Bilingual Program at Monroe High School participated directly in the program and through various student activities of the school at large. During the year they were active in student

organization, they conducted Cake Sales for the Student Welfare Fund, and Scholarship Fund, and other events. Students aided in planning various events of the school year including the Dominican Musical Shows, Pan American Day, Bicentennial Sing, College Orientation Day, and Graduation (about 25 students from the Bilingual Program graduated). The school Soccer team members were predominately students from Bilingual Program.

IV. SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONSFindings Summarized

There were eight objectives to the evaluation of the Bilingual Program at Monroe High School. The findings for each objective will be listed in summary fashion along with brief discussion to be followed by conclusions and recommendations.

Objective 1. To determine if the Spanish speaking students in the Bilingual Program showed significant improvement in ability to speak and to understand English. Results showed that a significant number of students showed gain of one or more levels in the rating used and therefore one may infer that the objective was achieved.

Objective 2. To assess changes in reading English for the Spanish speaking students in the Bilingual Program. The results showed that the students in the Bilingual Program did not show significant gains in their reading in English during the School year as measured by the Stanford Achievement Test in reading. The objective of gain in reading in English was not achieved by the students this year.

Objective 3. To determine if the Spanish speaking students showed significant improvement in their reading in Spanish. Results showed that the students did show significant improvement in reading Spanish. The objective was achieved.

Objective 4. To increase the awareness and knowledge of Hispanic pupils in their cultural heritage and pride in their ethnic background. The results showed that the students did increase significantly in their knowledge of their cultural heritage during the school year. The objective was achieved.

Objective 5. To determine if students showed statistical significant improvement in their attitudes toward self and toward school. The results on the self esteem test showed significant improvement between the beginning and end of school. In addition the two measures of attitude toward school and attitude toward education did show a significant gain between the beginning and end of the school year. The objective was attained. The scores were remarkably high or very positive ratings given by the students in the Bilingual Program.

Objective 6. To find out if the attendance rate of students in the Bilingual Program was higher than the students in the regular program at the school. Results showed that the students in the Bilingual Program did have a significantly better record of attendance than the students in the regular school. The objective was obtained.

Objective 7. In the Bilingual Program, students were expected to attain achievement in regular school subjects (A) Mathematics, (B) Social Studies, and (C) Science at or above the standard established of sixty percent for passing these subjects.

The results for General Mathematics final examinations were below the established criterion. In January, 25 percent of the students passed, while in June 63 percent passed. The objective was not attained.

In Algebra, the results for January showed that 50 percent passed which was below the criterion and in June 52 percent of the students passed the Algebra final examination and Citywide Examination. These results showed that the objective was not achieved.

In Social Studies the results of the students from the Bilingual Program in Social Studies were more encouraging. In January 63 percent of the students attained passing scores on the final examination while in June, 62 percent of the students passed the final examination. These results were above the criterion of sixty percent for passing and it is clear the objective was achieved for Social Studies in the Bilingual Program.

In Sciences the students from the Bilingual Program took a number of different types of General Science courses. Of those tested, 25 percent passed their final examinations in January and 63 percent passed in June. One may say that the objective was not entirely achieved in General Science.

In Biology courses, there were 46 percent who passed in January and 50 percent who passed in June. The criterion of sixty percent was not attained and so the objective was not achieved.

Objective 8. To determine how the program operations compared with the program description. The evaluator assessed the Bilingual Program so as to determine gaps between the program as described and as actually carried out and studied the various processes used in program operation. The evidence indicated that the program operations did carry out the major program elements as described.

The program goals as described in the proposal include a number of basic components that go beyond the specified evaluation objectives. The evaluator observed program activity, conducted interviews, and examined pertinent records to determine the extent of congruence between program proposal specifications and actual implementation of the program.

## Conclusions

On the basis of the findings from this evaluation it is possible to describe a number of conclusions that emerge directly from the findings.

The Bilingual Program at Monroe High School developed its major objectives within the context of the larger social, economic, and fiscal crisis of New York City in 1975-76. The effects of the major crisis were felt in terms of delays in opening of the school year, shifts in staff patterns, and reassignment of various personnel, with resulting difficulties for the overall curriculum.

Nonetheless, there were major accomplishments evident in the work and progress of the Bilingual Program and Monroe High School. The accomplishments may be viewed in both relative and in absolute terms. In terms of the evaluation objectives, there was evidence that the students gained in language development in both Spanish and in English. There was evidence that the students gained in the self esteem, and in their attitudes toward school and education and in their knowledge of their ethnic heritage. The students showed that the Bilingual Program had greater meaning to them by their better attendance record than the students in the regular school.

Some of the gains in terms of progress in language and knowledge about culture and social studies were offset by the relative gains in other areas that were less than the program and evalua-

tion objectives specified. While the students showed gain in reading in English, in Mathematics, and in Sciences, these gains were modest and were not statistically significant in line with criteria established for the evaluation. Some of the reasons for the performance on the tests used may be attributed to the tests themselves, but the program itself must accept the results as a challenge to the staff next year and strive to improve results. When the results of students' performance on final examinations were compared with students' school year total test scores, the Bilingual Program students were above the criterion acceptable for passing.

It is clear from the evidence gathered during this evaluation that the Bilingual Program of Monroe High School has a clear philosophy of Bilingual Education that pervades its operation and planning of experiences. The philosophy infuses the work not only in the classroom with students, but the field trips, the relationship with the larger regular school program and the faculty relationships. But philosophy alone, is no guarantee for pupil performance and the students in the Bilingual Program have a long way to go in arriving at grade level norms for a number of areas of study.

On the basis of the evaluation conducted, it was apparent that some of the staff and students developed a negative reaction to the extensive formal testing. There were some indications in this evaluation that some of the testing periods extended over long periods of time and were conducted in very large groups in order to

complete the battery of tests. In these situations the program and the students were penalized, since under such circumstances neither their actual knowledge nor their potential would be assessed. The entire testing program was carried out with cooperation and efficient administration and produced excellent results.

In relation to the Office of Educational Evaluation, the Director of the Bilingual Program raised a question about the change recommended by the Office of Educational Evaluation from program objectives with special attention to "Passing grade" to evaluation objectives shift to passing final examinations (Objective #7) and the recommendation to shift away from the affective domain objectives, i.e. (#5) Self Esteem and School Attitude. The Director resisted since they were central to the philosophy of the Bilingual Program.\* There are valid reasons for the positions taken by the Office of Educational Evaluation as well as the Bilingual Program.

\* This evaluation has included both final examinations and total semester test scores.



### Recommendations

The recommendations made for the Bilingual Program of Monroe High School are based upon the findings of the evaluation during the school year 1975-76. These recommendations pertain to the evidence gathered directly for each of the evaluation objectives and the broader goals of the program assessed during the school year. These recommendations have special relevance to the current operations and have implications for next year's bilingual program.

It is recommended that the philosophy of bilingual Program at Monroe High School with its emphasis upon the organic and humanistic elements be continued. The program has given attention to the affective domain this year. It is not necessary to include as many tests in the evaluation as were used in 1975-76. The attitude measures used in the evaluation for 1975-76 were useful but perhaps they may be omitted next year. The scores of students showed that their attitudes were very positive toward school, but their gains were not significant. It is possible to keep the assumptions of the philosophy of the Bilingual Program without testing every assumption in the evaluation.

It is clear that there have been major gains by the Bilingual Program within Monroe High School during 1975-76 while operating within the annex building. Next year the program will operate from the fifth floor of the main building. It is recommended that the shift into the main building be used as an opportunity for further integration of the Bilingual Program with the regular or mainstream program of Monroe High School. The implications of this recommendation include curriculum as well as staff development and student involvement from both programs.

The Bilingual Program constitutes to some extent a parallel system, within Monroe High School.

It is recommended that the inservice staff training give some attention to the uses of test results for diagnostic and prescriptive teaching purposes. In addition, it is recommended that the teachers would benefit from knowledge of normative based testing as well as criterion reference testing. More than knowing how to give different tests, it is important to know how to use test results informally for more effective instruction.

It is recommended that care should be taken to balance the continual assessment and the amount of actual class time taken for the testing. The conditions of testing students should be consistent with the type of test and not mass testing far beyond the endurance of the pupils. It is recommended that the student be given practice in the format of each type of standardized test used, prior to actual test situation (without using actual items from the tests). The anti-test reaction that developed may have been in part due to unfamiliarity with the form of test items and the responses required.

It is recommended that special instructional efforts be made in the Fall semester 1976 to concentrate on pupil performance. In 1975, the performance record was weakest during the Fall semester. Some explanations were given for performance in terms of the shorter school semester that was due to the fiscal crisis and the delay in school opening, but special attention could be given to the Fall semester pupil performance.

It is recommended that the Bilingual Program for Monroe High School be funded for the school year 1976-77, on the basis of the evidence reviewed in this evaluation.