The Bilingual Specialized Programs in New York City High Schools project was supported by tax-levy, Pupils with Compensatory Educational Needs, and state Categorical Aid to Bilingual Education funds. The program functioned in 15 high schools in Manhattan, Brooklyn, and Queens. The program's aim was to provide students of limited English proficiency with equal access to educational-option, academic comprehensive, and vocational/technical high schools. All sites offered English as a Second Language (ESL), content area, and vocational courses. The major program weakness was the shortage of qualified bilingual teachers and counselors. Major strengths included increasing administrator and teacher support at all sites and the eagerness of schools to expand their services to program students. Recommendations for program improvement include arranging for bilingual teachers and guidance counselors to work at more than one site to broaden service coverage, developing a cooperative program for on-the-job training, and increasing emphasis on speech in ESL classes. (Author/MSE)
EVALUATION SECTION REPORT
BILINGUAL SPECIALIZED PROGRAMS IN NEW YORK CITY HIGH SCHOOLS
1988-89
EVALUATION SECTION
John E. Schoener, Chief Administrator
April 1990

EVALUATION SECTION REPORT
BILINGUAL SPECIALIZED PROGRAMS IN
NEW YORK CITY HIGH SCHOOLS
1988-89

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BILINGUAL SPECIALIZED PROGRAMS IN NEW YORK CITY HIGH SCHOOLS
1988-89

SUMMARY

- Bilingual Specialized Programs in New York City High Schools was fully implemented. During the 1988-1989 school year, project students received instruction in English as a Second Language; content area subjects; career, technical, vocational, or special academic subjects; and (at some sites) Native Language Arts.

- The project met the 80 percent passing rate in program-subsidized courses in the fall but not in the spring. It fully met the attendance objective.

Bilingual Specialized Programs in New York City High Schools was supported by funds from tax-levy, Pupils with Compensatory Educational Needs (P.C.E.N.), and New York State Categorical Aid to Bilingual Education. The program functioned at 15 high schools in Manhattan, Brooklyn, and Queens. The aim of the program was to provide students of limited English proficiency (LEP students) with equal access to educational-option, academic comprehensive, and vocational/technical high schools.

All sites offered English as a Second Language (E.S.L.), content area, and vocational courses. Educational-option and academic-comprehensive schools offered Native Language Arts (N.L.A.) as well.

The program's objective of over 80 percent of the target students in program-subsidized courses achieving grades of at least 65 was met in the fall only. The attendance rate of program students was significantly higher than that of mainstream students, therefore the project met its attendance objective.

The major weakness of the program was the shortage of qualified bilingual teachers and counselors. Major strengths of the program included the increasing support from administrators and teachers at all sites and the eagerness of the schools to expand their services to program students.

The conclusions, based on the findings of this evaluation, lead to the following recommendations:

- Work out an arrangement with school administrators and program personnel for bilingual teachers and guidance counselors to work at more than one site so as to provide services, despite small numbers of program students at individual schools.
- Develop a cooperative program aimed at on-the-job training. This would benefit students financially as well as educationally.

- Put greater emphasis on speech in E.S.L. classes.
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I. INTRODUCTION

This report documents the Office of Research, Evaluation, and Assessment's (OREA's) evaluation of the second year of the project, Bilingual Specialized Programs in New York City High Schools. Municipal tax-levy monies, state Pupils With Compensatory Educational Needs (P.C.E.N.), and New York State Education Department (S.E.D.) Categorical Aid to Bilingual Education funded the project at 15 high schools in Brooklyn, Manhattan, and Queens.

The program provided instructional services to students of limited English proficiency (LEP students) by allowing them equal access to educational option, single unit trade, and academic/comprehensive high schools.

HISTORY OF PROGRAM

The 1987-88 Final Evaluation Report details the history of the program and its activities and outcomes for that year. In 1987-88, most programs served only ninth and tenth graders, for the year under review, eleventh grade LEP students were eligible to receive services.

SETTING

Fifteen high schools in Manhattan, Brooklyn, and Queens participated in the program. Eight were educational option, six were single unit trade, and one was academic/comprehensive. (See Table 1.)

Academic/comprehensive high schools prepare students for college, or further training in technical subjects, or the job
<table>
<thead>
<tr>
<th>High School</th>
<th>Type</th>
<th>Career Focus</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art and Design</td>
<td>Single unit trade school</td>
<td>Graphic and visual communications, architectural drawing and design</td>
<td>Spanish, Chinese</td>
</tr>
<tr>
<td>August Martin</td>
<td>Educational option</td>
<td>Aviation</td>
<td>Spanish</td>
</tr>
<tr>
<td>Automotive Trades</td>
<td>Single unit trade school</td>
<td>Automotive services</td>
<td>Spanish</td>
</tr>
<tr>
<td>Aviation</td>
<td>Single unit trade school</td>
<td>Aviation</td>
<td>Spanish</td>
</tr>
<tr>
<td>Clara Barton</td>
<td>Educational option</td>
<td>Nursing, health</td>
<td>Haitian Creole</td>
</tr>
<tr>
<td>East New York School of Transit Technology</td>
<td>Single unit trade school</td>
<td>Transit technology</td>
<td>Spanish</td>
</tr>
<tr>
<td>Edward R. Murrow</td>
<td>Educational option</td>
<td>Communication arts</td>
<td>Spanish, Chinese</td>
</tr>
<tr>
<td>Fashion Industries</td>
<td>Single unit trade school</td>
<td>Fashion and design</td>
<td>Chinese</td>
</tr>
<tr>
<td>Graphic Communication Arts</td>
<td>Single unit trade school</td>
<td>Graphic communications</td>
<td>Spanish</td>
</tr>
<tr>
<td>High School of Telecommunication</td>
<td>Educational option</td>
<td>Telecommunication, technology communication</td>
<td>Spanish</td>
</tr>
<tr>
<td>John Dewey</td>
<td>Educational option</td>
<td>Experimental school</td>
<td>Chinese, Haitian Creole</td>
</tr>
<tr>
<td>Midwood</td>
<td>Academic/comprehensive option</td>
<td>Medical science</td>
<td>Haitian Creole</td>
</tr>
<tr>
<td>Murry Bergtraum</td>
<td>Educational option</td>
<td>Computer Science</td>
<td>Chinese</td>
</tr>
<tr>
<td>Norman Thomas</td>
<td>Educational option</td>
<td>Computer programming Secretarial studies Computers (Special Education)</td>
<td>Spanish, Chinese, Chinese</td>
</tr>
<tr>
<td>Paul Robeson</td>
<td>Educational option</td>
<td>Engineering computer science</td>
<td>Haitian Creole</td>
</tr>
</tbody>
</table>

Programs existed for speakers of Spanish, Chinese, and Haitian Creole.
market. They accept all students living within a particular zone or borough, giving priority to students who rank the school highest among their preferences. Educational option schools combine academic subjects, art, music, and gym with a variety of career-related programs. Single unit trade schools prepare students for jobs in trades or for admission to advanced technical schools and/or colleges. Educational option and single unit trade schools select applicants on a boroughwide or a citywide basis. They randomly admit half of the students and select the other half on the basis of a point system that rates potential students according to reading ability, demonstration of relevant skills, and attendance record.

PARTICIPATING STUDENTS

Program students spoke Spanish, Chinese (Mandarin and Cantonese), and Haitian Creole/French.

Students were frequently from disadvantaged socioeconomic backgrounds. Some worked after school to assist their families, and many dropped out for full-time jobs.

STAFF

Program staff at each school included an assistant principal, who had primary responsibility for supervising the program, and a program teacher who served part-time as coordinator. Staff members who taught program students were often monolingual, since schools reported difficulty in recruiting bilingual teachers for concentration-area courses.
Bilingual paraprofessionals often assisted monolingual teachers.

The coordinators recruited students, helped develop content area subjects and guidance materials and, in some cases, established a resource center.

Resource specialists assigned to each school by The Bilingual/E.S.L. Program Unit of the Division of High Schools (D.H.S.) helped with staff recruitment and orientation and provided assistance on an ongoing basis.

The assistant principal at each site supervised the bilingual staff. Department chairpersons supervised academic and vocational teachers.

**DELIVERY OF SERVICES**

All schools offered English as a Second Language (E.S.L.). The educational option and academic/comprehensive schools also provided Native Language Arts (N.L.A.). Some of the schools also offered vocational and special concentration courses taught bilingually or using E.S.L. methodology.

Staff development specialists and coordinators provided limited staff development activities for program staff.

**REPORT FORMAT**

This report is organized as follows: Chapter II outlines the evaluation methodology; Chapter III describes the program activities; Chapter IV offers an analysis of program outcomes; and Chapter V suggests conclusions and recommendations based upon the results of the evaluation.
II. EVALUATION METHODOLOGY

EVALUATION QUESTIONS

The evaluation assessed two major areas: program implementation and outcomes. Evaluation questions include the following:

Process/Implementation

- Was the program able to recruit LEP students for program participation?
- Were the target students programmed appropriately in E.S.L. and the content areas?

Outcome

- What percentage of participating student passed their program-subsidized courses?
- How did the attendance rate of program students compare with that of mainstream students?

EVALUATION PROCEDURES

Sample

An OREA field consultant visited seven high schools, where she interviewed school administrators, teachers, and paraprofessionals, and observed E.S.L., content area, and vocational classes. She also interviewed the project director and resource specialists.

Instruments

The field consultant used OREA-developed observation and interview schedules. OREA also developed student questionnaires.
Data Collection

Interviews, observations, and administration of questionnaires took place during April and May of 1989.

Data Analysis

Using data supplied by D.H.S., OREA selected data on those students whose scores on the Language Assessment Battery (LAB)* fell below the twenty-first percentile. OREA analysts then calculated the percentage of students who achieved a grade of at least 65 in specific courses.

To assess comparative attendance rates, OREA compared the percentage of days present for both project and mainstream students and used a $z$-test for the significance of proportions to ascertain whether these were significantly different.

OREA computed frequencies on the data from student questionnaires.

Limitations

The data for passing rates in program-funded courses are approximate, since it is possible that non-program LEP students were included in the classes. For the same reasons, attendance data were also projections.

*The Language Assessment Battery (LAB) was developed by the Board of Education of the City of New York to measure the English-language proficiency of non-native speakers of English in order to determine whether they can participate effectively in classes taught in English. Students scoring below the twenty-first percentile on the LAB are entitled to bilingual and E.S.L. services.
III. EVALUATION FINDINGS: IMPLEMENTATION

Participants in the LEP Students in Special High Schools program received instruction in E.S.L.; N.L.A. where available; bilingual or E.S.L. content area subjects; and in vocational/technical, career, or specialty areas.

STUDENT PLACEMENT AND PROGRAMMING

The program selected participants on the basis of their designation as LEP, their attendance, overall grades, interest and performance in program-related subjects, and reading skills.

Schools had extensive recruitment programs: coordinators, assistant principals, and teachers visited junior high schools, and some schools held open houses during day and evening hours for prospective students and their parents. The schools publicized the recruitment programs in junior high schools, at parent-teacher associations, and in articles in Spanish- and Chinese-language newspapers.

There were some problems with placement and pace of instruction, because students had varying amounts of education and knowledge of the English language. The problems were exacerbated by the limited number of classes offered.

INSTRUCTIONAL ACTIVITIES

All students received full credit for tax-levy E.S.L., N.L.A., content area, and vocational courses and half a "miscellaneous" (discretionary) credit for funded E.S.L. classes.
English as a Second Language

Educational option and academic/comprehensive high schools scheduled LEP students for two E.S.L. classes per day. Single unit trade schools generally scheduled students for one E.S.L. class per day. The levels of E.S.L. available at a particular site depended on the English skills possessed by the population of the school. At some schools, program students attended E.S.L. classes with nonprogram students.

An OREA field consultant observed an intermediate E.S.L. class at Automotive Trades High School. The teacher read a short story and asked questions about it. Students copied sentences from their textbooks onto the chalkboard, replacing one word with another whose meaning was appropriate to the story they had just heard.

The OREA field consultant observed a beginning E.S.L. class at the High School of Telecommunications. Students read a story with the personal pronouns missing, then filled in the missing pronouns verbally.

Native Language Arts

Academic/comprehensive and educational option high schools offered native language instruction for LEP students. Some schools scheduled program students for native language classes structured exclusively for them. Other schools mixed native speakers with English proficient (EP) students who were first learning the language.

At Midwood High School the OREA consultant observed a
Haitian Creole/French class comprised exclusively of program students. The lesson covered verb tenses.

Content Area Subjects

The project's bilingual content area and vocational courses paralleled those in the mainstream. However, schools typically offered only one or two bilingual courses in the content areas because of a lack of bilingual teachers, especially in mathematics and science.

The amount of English used by teachers depended on how they assessed their students' needs. Teachers who were able to do so presented content area courses using E.S.L. methodology, while others used more of the students' native language.

Vocational Subjects

Vocational courses also paralleled the mainstream. Some schools had teachers who could provide vocational instruction in the students' native languages. Other schools used a bilingual paraprofessional to assist the teachers. Sometimes nonprogram LEP students were enrolled in the same vocational classes as were program students. In addition to regular daytime classes, some of the schools provided credit-bearing bilingual vocational courses after school hours.

At Automotive Trades High School, the OREA field consultant observed a class of 15 tenth graders in "Wheel Alignment." First the teacher projected transparencies onto a draped blackboard and asked questions in English and Spanish. The students answered in
English, sometimes with a clarification in Spanish. The students then broke into groups to work on cars. The textbooks were in English, supplemented by a publication in Spanish by the same author.

At Norman Thomas High School, the consultant observed an eleventh grade computer programming class for Chinese students. The teacher spoke only a little Chinese and was assisted by a paraprofessional fluent in the language. Pairs of students wrote programs in COBOL, following the instructions to write the shortest program accomplishing the specified task. One student worked in an adjoining room on the only computer that was operative. The teacher said that all the other computers (15) in the classroom were broken and were not being fixed because the school was getting new computers in the coming year.

The consultant also observed an accounting class at Norman Thomas High School. A monolingual teacher and a Chinese-speaking paraprofessional taught a class of Chinese-speaking students. The lesson was on writing a check and keeping a checking account.

**NONINSTRUCTIONAL ACTIVITIES**

The project's noninstructional component included counseling services and staff development.

**Counseling Services**

The program received additional funds for bilingual counseling services that enabled one counselor to advise and track the progress of all the participants in the bilingual
cluster. In several schools where the small number of program students precluded hiring a bilingual counselor, staff suggested that other programs serving the same language group might share services.

**Staff Development**

A resource specialist visited each school biweekly and provided support. The resource specialists reported having achieved success in dispelling initial resistance to the program among school staff.
IV. EVALUATION FINDINGS: OUTCOMES

INSTRUCTIONAL ACTIVITIES

The project proposed a single instructional objective, for course passing rates.

Course Passing Rates

The evaluation objective for course passing rates was:

- At least 80 percent of the LEP students pursuing bilingual specialized and/or occupational cluster content classes funded by the program will achieve final course grades at the passing criterion of 65 or higher in each of the semesters of the 1988-89 school year.

Passing rates for program-subsidized courses ranged from a low of 59 to a high of 100 percent. (See Table 2.) The mean number of students passing these courses was 81 percent in the fall and 73 percent in the spring. Bilingual Specialized Programs in New York City High Schools achieved this objective in the fall only; in the spring, only eight of the participating schools met the objective.

NONINSTRUCTIONAL ACTIVITIES

The outcome objective for noninstructional activities was in student attendance.

Attendance

The evaluation objective for attendance was:

- Students participating in the program will have attendance rates that are significantly higher than those of mainstream students.
### TABLE 2
Passing Rates in Program-Subsidized Courses, by School

<table>
<thead>
<tr>
<th>High School</th>
<th>Fall Number of Students</th>
<th>Fall Percent Passing</th>
<th>Spring Number of Students</th>
<th>Spring Percent Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art and Design</td>
<td>31</td>
<td>88.0</td>
<td>31</td>
<td>86.7</td>
</tr>
<tr>
<td>August Martin</td>
<td>18</td>
<td>59.0</td>
<td>18</td>
<td>62.7</td>
</tr>
<tr>
<td>Automotive Trades</td>
<td>69</td>
<td>65.3</td>
<td>65</td>
<td>59.4</td>
</tr>
<tr>
<td>Aviation</td>
<td>86</td>
<td>79.3</td>
<td>84</td>
<td>72.0</td>
</tr>
<tr>
<td>Clara Barton</td>
<td>104</td>
<td>80.8</td>
<td>104</td>
<td>85.2</td>
</tr>
<tr>
<td>East New York School of Transit</td>
<td>27</td>
<td>74.0</td>
<td>22</td>
<td>83.4</td>
</tr>
<tr>
<td>Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edward R. Murrow</td>
<td>143</td>
<td>100.0</td>
<td>131</td>
<td>100.0</td>
</tr>
<tr>
<td>Fashion Industries</td>
<td>92</td>
<td>67.1</td>
<td>88</td>
<td>62.9</td>
</tr>
<tr>
<td>Graphic Communications</td>
<td>22</td>
<td>80.6</td>
<td>22</td>
<td>81.5</td>
</tr>
<tr>
<td>High School of Telecommunication</td>
<td>43</td>
<td>96.2</td>
<td>42</td>
<td>76.5</td>
</tr>
<tr>
<td>Arts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Dewey</td>
<td>105</td>
<td>72.0</td>
<td>105</td>
<td>75.6</td>
</tr>
<tr>
<td>Midwood High School</td>
<td>78</td>
<td>90.1</td>
<td>75</td>
<td>83.5</td>
</tr>
<tr>
<td>Murry Bergtraum</td>
<td>78</td>
<td>89.0</td>
<td>75</td>
<td>80.4</td>
</tr>
<tr>
<td>Norman Thomas</td>
<td>111</td>
<td>76.1</td>
<td>104</td>
<td>75.4</td>
</tr>
<tr>
<td>Paul Robeson</td>
<td>25</td>
<td>75.2</td>
<td>25</td>
<td>86.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,032</td>
<td>81.2</td>
<td>991</td>
<td>72.8</td>
</tr>
</tbody>
</table>

Eighty percent of targeted students passed these courses in the fall, partially meeting the objective.
To evaluate this objective, a $z$-test for the significance of proportions was employed. The attendance rate of mainstream students was 87.8 percent and that of program students was 98.8 percent. The $z$-test result ($z=1.8$) indicated that the difference was statistically significant ($p<.05$). Thus, the program met the attendance objective.

**ATTITUDES TOWARD THE PROGRAM**

**Staff**

Most school principals indicated their support for subject area courses taught with E.S.L. methodology. All appeared eager to expand their services to program students.

One program coordinator recommended instituting a cooperative or part-time work program that would allow students to earn both credits and money. He saw this as an effective way to retain students and at the same time give them work experience.

**Students**

The Chinese-speaking students tended to shy away from taking classes in their native language. Some indicated that they had difficulty in understanding the language in these classes, perhaps referring to dialect differences or regional accents. When questioned about the learning of English, they frequently said that pronunciation or speech drills were particularly helpful for them.
Spanish-speaking students preferred learning in both languages.
V. CONCLUSIONS AND RECOMMENDATIONS

During its second year of operation, Bilingual Specialized Programs in New York City High Schools served LEP students at fifteen high schools: one academic/comprehensive, eight educational option, and six single unit trade schools. Participating students spoke Chinese, Haitian Creole, and Spanish. The project provided them with instruction in E.S.L., content area subjects, vocational subjects, and N.L.A. when available.

The program met its course passing rate objective in the fall but not in the spring. In the fall semester, 81 percent of the students passed program-subsidized courses; in the spring, 73 percent passed. The program met its attendance objective, as the attendance rate of program students was significantly higher than the attendance rate of mainstream students.

Resource specialists from the D.H.S. regularly visited the participating schools to offer support. There was a shortage of qualified bilingual teachers, and counseling was still a weak component of the program.

Program personnel recommended that a cooperative program be initiated to allow the students to earn school credits, money, and work experience.

The conclusions, based on the findings of this evaluation, lead to the following recommendations:
• Work out an arrangement with school administrators and program personnel for bilingual teachers and guidance counselors to work at more than one site so as to provide services despite small numbers of program students at individual schools.

• Develop a cooperative program aimed at on-the-job training. This would benefit students financially as well as educationally.

• Put greater emphasis on speech in E.S.L. classes.