The LEP (limited-English-proficient) Students in Special High Schools Program, funded from a variety of sources, was partially implemented in 1987-88. The program's aim was to provide 277 LEP students, whose native languages were Chinese, Haitian Creole/French, and Spanish, with equal access to 8 educational-option and 5 vocational/technical high schools that no LEP students had previously attended. Students received instruction in English as a Second Language (ESL), content area subjects, vocational subjects, and native language arts at some sites. Those schools for which data were available met their instructional objective for the number of passing grades in courses that the program subsidized. However, program students' attendance rates were higher than those of mainstream students in only 6 of the 9 schools that provided data. Major program weaknesses included lower participation than anticipated, shortage of qualified bilingual teachers and counselors, and initial lack of support from school administrators and teachers. Major strengths included implementation of the ESL component, increased support for teachers and administrators at all sites, training and curriculum development activities, special activities for program students, and the eagerness of schools to expand their services to program participants. Specific recommendations for program improvement are made. (MSE)
EVALUATION SECTION REPORT

LEP STUDENTS IN SPECIAL HIGH SCHOOLS PROGRAM

1987-88
EVALUATION SECTION
John Schoener, Chief Administrator
June 1989

EVALUATION SECTION REPORT

LEP STUDENTS IN SPECIAL HIGH SCHOOLS PROGRAM

1987-88

Prepared by
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5/22/89
LEP STUDENTS IN SPECIAL HIGH SCHOOLS PROGRAM*
1987-88

SUMMARY

The LEP Students in Special High Schools program was partially implemented. During the 1987-1988 school year, project students received instruction in English as a second language (E.S.L.), content area subjects, vocational subjects, and at some sites, native language arts (N.L.A.).

Those schools for which there were data met their instructional objective for passing grades in courses that the program subsidized. However, program students' attendance rates were higher than those of mainstream students in only six schools of the nine schools that provided data.

The LEP Students in Special High Schools program was funded by tax-levy, P.C.E.N., and New York State Categorical Aid to Bilingual Education funds. The funds supported the E.S.L. and bilingual teachers and paraprofessionals. Since the program began in the spring of 1987, this was the first year of the program that involved students. The aim of the program was to provide 277 limited English proficient (LEP) students whose native languages were Chinese, Haitian Creole/French, and Spanish with equal access to eight educational-option and five vocational/technical high schools. Until the advent of this program, virtually no LEP students had attended these 13 schools.

The Bilingual/E.S.L. Program Unit of the Division of High Schools (D.H.S.) assigned staff development specialists to each school to help with staff recruitment and orientation and to provide assistance on an ongoing basis. An assistant principal at each site supervised the bilingual staff. Departmental chairpersons supervised academic and vocational teachers. A teacher coordinated the program on a part-time basis. There were few LEP students at each school and therefore few E.S.L. or bilingual staff.

All sites offered at least two levels of E.S.L., content area, and vocational courses. Educational-option schools offered N.L.A. as well.

The program met its objective for course passing rates in those schools for which data were available (four schools for both semesters and three additional schools for one semester).

*This summary is based on the final evaluation of the "LEP Students in Special High School Program 1987-88" prepared by the OREA Bilingual Education Evaluation Unit.
The program did not meet the attendance objective. In evaluating the program, OREA examined course passing and attendance rates, interviewed school and program personnel, and observed program-supported classes.

The major weaknesses of the program were: fewer students actually participated than had been anticipated; there was a shortage of qualified bilingual teachers and counselors; and there was an initial lack of support from school administrators and teachers. Major strengths of the program were: the implementation of the E.S.L. component; the increased support from administrators and teachers at all sites; the training and curriculum development activities, although these were not specifically funded; special activities for program students, such as trips, conferences, and parties; 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:

- Augment recruitment efforts in order to increase the number of program students.

- Hire bilingual teachers to work at more than one site, thereby permitting program students to receive a more comprehensive bilingual curriculum, despite the low numbers at each school.

- Report required student achievement and attendance data.

- If funds become available, use them to hire bilingual counselors who might divide their time among the various sites.
ACKNOWLEDGMENTS

We thank Margaret Scorza for coordinating production, and Milton Vickerman for analyzing the data. We appreciate the work done by Kristine Gatti and Betty Morales in typing the drafts and completed document.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Participating Students</td>
<td>1</td>
</tr>
<tr>
<td>Delivery of Services</td>
<td>4</td>
</tr>
<tr>
<td>Materials and Resources</td>
<td>5</td>
</tr>
<tr>
<td>Staff</td>
<td>5</td>
</tr>
<tr>
<td>Setting</td>
<td>6</td>
</tr>
<tr>
<td>History of Program</td>
<td>7</td>
</tr>
<tr>
<td>Report Format</td>
<td>8</td>
</tr>
<tr>
<td>II. EVALUATION METHODOLOGY</td>
<td>9</td>
</tr>
<tr>
<td>Evaluation Questions</td>
<td>9</td>
</tr>
<tr>
<td>Process/Implementation</td>
<td>9</td>
</tr>
<tr>
<td>Outcome</td>
<td>9</td>
</tr>
<tr>
<td>Evaluation Procedures</td>
<td>9</td>
</tr>
<tr>
<td>Sample</td>
<td>9</td>
</tr>
<tr>
<td>Instruments</td>
<td>10</td>
</tr>
<tr>
<td>Data Collection</td>
<td>10</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>10</td>
</tr>
<tr>
<td>Limitations</td>
<td>11</td>
</tr>
<tr>
<td>III. EVALUATION FINDINGS: IMPLEMENTATION</td>
<td>12</td>
</tr>
<tr>
<td>Noninstructional Activities</td>
<td>12</td>
</tr>
<tr>
<td>Student Recruitment and Enrollment</td>
<td>12</td>
</tr>
<tr>
<td>Student Placement and Programming</td>
<td>12</td>
</tr>
<tr>
<td>Staff</td>
<td>14</td>
</tr>
<tr>
<td>Staff Development</td>
<td>14</td>
</tr>
<tr>
<td>Extracurricular Activities</td>
<td>15</td>
</tr>
<tr>
<td>Support Services</td>
<td>16</td>
</tr>
<tr>
<td>Instructional Activities</td>
<td>17</td>
</tr>
<tr>
<td>English as a Second Language</td>
<td>17</td>
</tr>
<tr>
<td>Native Language Arts</td>
<td>19</td>
</tr>
<tr>
<td>Content Area Subjects</td>
<td>20</td>
</tr>
<tr>
<td>Vocational Subjects</td>
<td>22</td>
</tr>
<tr>
<td>IV. EVALUATION FINDINGS: OUTCOMES</td>
<td>24</td>
</tr>
<tr>
<td>Noninstructional Outcomes</td>
<td>24</td>
</tr>
<tr>
<td>Attendance</td>
<td>24</td>
</tr>
<tr>
<td>Staff Development</td>
<td>24</td>
</tr>
<tr>
<td>Support Services</td>
<td>25</td>
</tr>
<tr>
<td>Instructional Outcomes</td>
<td>25</td>
</tr>
<tr>
<td>Course Passing Rates</td>
<td>25</td>
</tr>
<tr>
<td>Attitudes Toward the Program</td>
<td>27</td>
</tr>
<tr>
<td>V. CONCLUSIONS AND RECOMMENDATIONS</td>
<td>28</td>
</tr>
</tbody>
</table>
LIST OF TABLES

TABLE 1: LEP Students in Special High Schools Program ........2

TABLE 2: Passing Rates in Program-Funded Courses, by School .........................26
I. INTRODUCTION

This report documents the Office of Research, Evaluation, and Assessment's (OREA's) evaluation of the LEP students in Special High Schools program. This program was funded by municipal tax-levy, State Pupil With Compensatory Educational Needs (P.C.E.N.), and New York State Education Department (S.E.D.) Categorical Aid to Bilingual Education. During the spring semester of the 1987-88 school year the project completed the first year of service to participating students. This program was intended to furnish instructional services to 277 students of limited English proficiency (LEP) by providing them with equal access to 13 high schools (eight educational-option and five vocational/technical). It provided English as a Second Language (E.S.L.), Native Language Arts (N.L.A.), content area, and vocational subject instruction.

PARTICIPATING STUDENTS

The LEP Students in Special High Schools program served students at 13 schools who spoke Spanish, Chinese (Mandarin and Cantonese), and Haitian Creole/French. (See Table 1.) Most program students had attended junior high school in the United States and all were in the ninth or tenth grade. To be eligible, students' fall 1986 scores had to be below the twenty-
TABLE 1

LEP Students in Special High Schools Program
(N = 236)

<table>
<thead>
<tr>
<th>School Location</th>
<th>Type</th>
<th>Career Area</th>
<th>Language</th>
<th>Number</th>
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</thead>
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<tr>
<td>Murry Bergtraun</td>
<td>Educational-option</td>
<td>Business occupations</td>
<td>Chinese</td>
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</tr>
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<td>Manhattan</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>Educational-option</td>
<td>Business occupations</td>
<td>Spanish</td>
<td>29</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>Chinese</td>
<td>33</td>
</tr>
<tr>
<td>Clara Barton</td>
<td>Educational-option</td>
<td>Nursing, health</td>
<td>Haitian Creole</td>
<td>33</td>
</tr>
<tr>
<td>Brooklyn</td>
<td></td>
<td></td>
<td></td>
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</tr>
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<td>Edward R. Murrow</td>
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<td>Communication arts</td>
<td>Spanish</td>
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<td>Telecommunication</td>
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<tr>
<td>Arts &amp; Technology</td>
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<td></td>
</tr>
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<td>John Dewy</td>
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</tr>
<tr>
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<td></td>
<td></td>
<td></td>
</tr>
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<td>6</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August Martin</td>
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<td>25</td>
</tr>
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<td></td>
</tr>
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<td>Art and Design</td>
<td>Vocational</td>
<td>Photography, commercial arts</td>
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</tr>
<tr>
<td>Manhattan</td>
<td></td>
<td></td>
<td>Spanish</td>
<td>8</td>
</tr>
<tr>
<td>Fashion Industries</td>
<td>Vocational</td>
<td>Textile design, jewelry design</td>
<td>Chinese</td>
<td>4</td>
</tr>
<tr>
<td>Manhattan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphic Communication</td>
<td>Vocational</td>
<td>Commercial graphics, printing</td>
<td>Spanish</td>
<td>12</td>
</tr>
<tr>
<td>Manhattan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Brooklyn</td>
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*Data were not available.

- The majority of program participants had Spanish as their native language.
- No speakers of Haitian Creole participated in vocational schools.
first percentile on the English version of the Language Assessment Battery (LAB). However, only those students who continued to be LEP when the program began in the fall of 1987 could participate. (In many instances, students who had been LEP when they were accepted for the program lost entitlement by fall 1987.)

Although limited proficiency in English was a necessary condition for admission, it was not sufficient. Participating high schools also examined attendance, overall grades, interest and performance in career-related subjects, and literacy skills.

While most program participants were in the ninth or tenth grade, some schools let a small number of eleventh grade LEP students attend E.S.L. classes with program students. LEP students who did not speak one of the target languages also attended the same E.S.L. classes.

Some program students worked in the afternoon or evening to help their families. This interfered with their academic performance and/or their ability to participate in extracurricular activities. A paraprofessional, for example, described some students as being sleepy because of their nighttime jobs. The socioeconomic levels of program and

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*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 nonnative speakers of English in order to determine whether their level of English proficiency is sufficient to enable them to 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.
mainstream students were similar.

Program administrators said that many students suffered from emotional problems with which the program was not equipped to deal. Most of the schools lacked bilingual counselors; there were few bilingual staff members; and those few counselors or staff members were not trained to deal with students' emotional problems.

DELIVERY OF SERVICES

Both the educational-option and the vocational/technical schools provided E.S.L., content area, and vocational courses taught bilingually or with an E.S.L. approach. Students at the eight educational-option schools received at least two periods per day of E.S.L.; students at vocational schools generally attended one E.S.L. class per day. The educational-option schools also provided native language arts instruction.

Program staff development specialists and project coordinators provided staff development activities for program staff. In addition, each school organized special staff development activities tailored to its needs. The staff development specialists visited classes, demonstrated teaching techniques, and advised program staff and administrators. Several programs conducted curriculum development activities and organized special activities for program students, such as trips, conferences, and parties. Program students frequently participated in a variety of clubs and sports, some exclusively for bilingual students, others for both mainstream and LEP
students.

MATERIALS AND RESOURCES

Although there were no funds for curriculum development, Fashion Industries teachers translated mathematics terminology into Chinese. Staff development specialists also made sure that materials developed elsewhere were made available to program personnel.

STAFF

At each school, an assistant principal had primary responsibility for supervising the program. One program teacher served as coordinator on a part-time (one period per day) basis. The program coordinators were experienced teachers, and in most cases, native speakers of the students' home language. They met with students individually and in groups; they met with parents/guardians individually and in groups to provide them with information on student progress; they acquired or developed content area and guidance materials and established a resource center; and they established a student-recruitment team and a recruitment plan.

The number of bilingual and E.S.L. teachers and paraprofessionals at each school was small, reflecting the small number of students enrolled during the program's first year. Paraprofessionals tutored students and provided individualized instruction in E.S.L., content area, and vocational classes. They also translated for monolingual teachers and other staff
members whenever needed. At some vocational schools, "bilingual supplementary vocational assistants" (i.e., school alumni enrolled in a special program to train bilingual vocational teachers) served as paraprofessionals.

In addition to school-based staff, five staff development specialists from the Division of High Schools participated in the program. They attempted to sensitize faculty to the linguistic, cognitive, and cultural needs of LEP students, surveyed current methodological trends in second-language teaching and learning, and taught faculty about second-language acquisition strategies and language development.

SETTING

Thirteen high schools in Manhattan, Brooklyn, and Queens participated in the program. Eight were educational-option schools and five were vocational/technical schools. (See Table 1.) Educational-option high schools prepare students for college or the job market. They combine academic subjects, art, music, and gym with a variety of career-oriented programs. Vocational/technical high schools prepare students for jobs in various trades and for admission to advanced technical schools and/or colleges. Unlike academic-comprehensive high schools, which accept all high school-eligible students living within a geographical zone, educational-option and vocational/technical schools select applicants on a boroughwide or a citywide basis. They randomly (by computer) admit half; they select the other half on the basis of a point system that rates potential
students according to Degrees of Reading Power (D.R.P.) score, demonstration of relevant skills, and attendance record.

There were at least three educational-option schools for each targeted language; no vocational schools provided instruction to Haitian Creole-speaking students.

HISTORY OF PROGRAM

While program implementation began in the spring of 1987, it did not begin to serve the student population until the fall of that year. The current program cycle, therefore, was the first year in which it operated.

Since the mid-1970s, when the New York City Public Schools began providing E.S.L. and bilingual content area instruction to LEP students, these students have been underrepresented in or excluded from educational-option and vocational/technical high schools. Two factors account for this: the requirement that applicants score satisfactorily on the English-language citywide reading test and a shortage of qualified teachers.

Federal regulations require LEP students to have equal access to every type of educational program, and in 1986 the federal government cited the New York City Board of Education's Division of High Schools for noncompliance in this area. To begin bringing the system into compliance, in 1987-88 the Division of High Schools inaugurated the LEP Students in Special High Schools program. None of the schools selected for participation had previously offered bilingual instruction in content area or vocational subjects; some, however, had provided
E.S.L. instruction to the few LEP students they accepted.

The three languages targeted during the year under review, Spanish, Chinese (Cantonese and Mandarin), and Haitian Creole/French, are the ones most widely represented in the city's schools."

REPORT FORMAT

This report is organized as follows: Chapter II describes the evaluation methodology; Chapter III presents an analysis of the qualitative findings of the evaluation; Chapter IV offers an analysis of the quantitative findings; Chapter V offers conclusions and recommendations based upon the results of the evaluation.

"Seventy percent of the city's 94,000 LEP students are Spanish speakers; 10 percent are Chinese speakers; and six percent are Haitian Creole/French speakers. (Source: Answers to Frequently Asked Questions about LEP Students and Bilingual/E.S.L. Programs, 1987-88, Office of Bilingual Education, N.Y.C. Board of Education, 1988).
II. EVALUATION METHODOLOGY

EVALUATION QUESTIONS

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

Process/Implementation

- Did the program recruit LEP speakers of Spanish, Chinese, and Haitian Creole for participation in the program?
- Did the project recruit qualified staff to teach program courses?
- Were the target students programmed for project participation according to their current level of performance?
- Did the project and/or the participating schools carry out any staff development activities?

Outcome

- What percentage of participating students passed their program-supported courses?
- How did the attendance rate of program students compare with that of mainstream students?
- What was staff attitude toward the program?

EVALUATION PROCEDURES

Sample

OREA field consultants visited three educational-option and two vocational/technical schools. At these schools they interviewed school administrators, teachers, and paraprofessionals. They observed E.S.L., content area, and
vocational classes. They also interviewed staff development specialists from the High School Bilingual/E.S.L. Program Unit.

**Instruments**

OREA developed an observation schedule to document the classroom environment, instructional activities, and materials. OREA also developed and used interview schedules for the program and school personnel whom they interviewed. Project personnel used OREA-developed data retrieval forms to report student attendance and achievement data. Program personnel completed OREA-developed staff development evaluation forms.

**Data Collection**

OREA staff interviewed school and program staff and observed classes during the spring of 1988. They distributed student data forms in the fall of 1987 and again in the spring of 1988 and collected them after the end of each semester. Program personnel completed staff development forms during the spring of 1988.

**Data Analysis**

OREA evaluated achievement data by calculating the percentage of students who achieved a grade of at least 65. It evaluated attendance data by comparing the percentage of days present for both project and mainstream students. It examined attitudes toward staff development activities by computing an average rate (on a scale of one to five) on a five-item rating scale.
Limitations

The data for passing rates in program-funded courses is based on data from only seven sites (54 percent). The remaining six sites did not supply the necessary data, therefore the base for determining whether or not the program met its objective was very small. Similarly, attendance data were only available for two semesters from two schools and for one semester from seven schools. Evaluations of staff development were based upon the responses of 11 staff members.
III. EVALUATION FINDINGS: IMPLEMENTATION

LEP Students in Special High Schools program provided 277 LEP students with E.S.L. instruction; N.L.A., where available; and bilingual or E.S.L. content area and vocational instruction. The project's noninstructional component included student recruitment and programming, extracurricular activities, and curriculum and staff development.

NONINSTRUCTIONAL ACTIVITIES

Student Recruitment and Enrollment

Because this was the program's first year of operation, few people knew about it and applications were low at several sites. In addition, by the time classes began, many schools had fewer LEP students than they had anticipated. Some prospective participants were no longer eligible because scores on the LAB indicated that they were not LEP; other students decided to attend nonprogram schools.

Student Placement and Programming

While some schools were able to provide more than one E.S.L. level and others intended to do so in 1988-89, the small program size at several schools made it necessary for them to combine more than one E.S.L. level into a single class.

Because students' levels of academic preparation and the amount of time they had spent in the United States varied widely, and again because of the program's small size, there
were problems with placement in content area classes. Schools sometimes had to place more advanced students in mainstream subject area classes because the only bilingual class that could be offered in a given subject was at too low a level. This was frequently the case with the placement of Chinese students in mathematics classes at Fashion Industries and of Spanish students at Aviation.

Since the primary goal of vocational schools was to provide training for vocations, scheduling students for job-related courses received higher priority than academic courses. Schools periodically grouped program students with nonprogram IEP students in both content area and mainstream classes.

Program administrators predicted that student placement and programming would improve once they admitted additional students to the program, making it possible for them to hire more E.S.L. and bilingual teachers. They also felt that their first year's experience would enable them to anticipate scheduling conflicts better. Some schools were changing their entire programming structure to facilitate the programming of LEP students. For example, Fashion Industries planned to divide the school day into two parts, one for academic instruction and the other for vocational instruction. By doing this they felt they would be able to program LEP students into both areas.


Staff

At many schools, bilingual content area teachers often had to teach two or more subjects, sometimes out of license; at other schools, bilingual content area teachers were unavailable. When there was no bilingual teacher, a monolingual teacher assisted by a bilingual paraprofessional taught content area subjects using an E.S.L. approach. English or foreign language teachers taught E.S.L. Some had E.S.L. teaching experience; others did not.

Since many administrators reported that their schools lacked bilingual teachers, they enlisted the aid of staff development specialists in recruiting them. As a result of their joint efforts, they had adequately staffed the program in most areas by the end of June 1988. Guidance, science, and mathematics remained areas of continuing need.

Staff Development

The Bilingual/E.S.L. Program Unit of the Division of High Schools assigned staff development specialists to each participating school in spring 1987. Their first tasks were to sensitize administrators and teachers to LEP students' special needs and to help school administrators recruit staff.

During the program's start-up and early implementation phases, a staff development specialist visited each school weekly. After the program was underway, the visits took place every two or three weeks. The staff development specialists continued to provide assistance as needed. Although they had
other responsibilities they said they devoted much of their time to the program perceiving its needs as greater.

Participating schools organized other staff development activities as well, even though program funds could not support such endeavors. At Telecommunication Arts and Technology, E.S.L. teachers and paraprofessionals learned to use the computer; at Edward R. Murrow, program teachers participated in the school's "mentor program," which paired a new teacher with an experienced one for eight periods each week. At Fashion Industries, a new E.S.L. teacher met weekly with the program coordinator to discuss E.S.L. teaching. Aviation organized a workshop on how to use English in vocational training. Several mathematics teachers who taught program students participated in ten workshops on teaching mathematics to LEP students.

Staff development specialists noted that training bilingual teachers who themselves had not been educated in the United States was a major challenge. Such teachers, they said, tended to have an authoritarian teaching style that was very different from the participatory strategies typically used in North American education.

Extracurricular Activities

Several programs organized special activities for participating students. Students at Graphic Communication Arts made several excursions to places and events relevant to Hispanic or mainstream cultural themes. The bilingual Spanish
program at that school hosted a flamenco performance and invited the entire school to attend.

Program students at Telecommunication Arts and Technology attended a performance of the Broadway show *Cats* and participated in an international lunch that the program's two paraprofessionals had organized. During the luncheon, students read Spanish poems they had written.

Students at Edward R. Murrow attended one of two career conferences: one at Kingsborough Community College for Spanish-speaking students or one at Long Island University for Asian students.

Program students also had the opportunity to participate in a variety of clubs and sports, some only for bilingual students and others were open to the entire student population.

**Support Services**

Several program administrators said that they would have liked better guidance services for LEP students. Since few sites had bilingual counselors, program coordinators provided a great deal of the counseling to LEP students. While they could deal with problems relating to school, they clearly felt less able to deal with personal psychological and family problems. Some program coordinators did not even speak the students' native language. In such cases, they sought help from other school personnel or students, a method with which they were not at all satisfied.
At some schools, program staff engaged in activities designed to increase staffs' understanding of program participants' needs. At John Dewey, the Haitian teacher wrote a short manual on Haitian culture and values. At Edward R. Murrow, representatives from the Asian-American Society visited the school to speak to the faculty about the special problems facing Chinese students.

While they acknowledged that the small number of LEP students at each school made it impossible to hire one bilingual counselor per school, several program staff members suggested that counselors be assigned to serve several different schools on a part-time basis so as to better serve the needs of LEP students.

**INSTRUCTIONAL ACTIVITIES**

All students received full credit for tax-levy E.S.L., N.L.A., content area, and vocational courses; they received only half a miscellaneous credit for funded E.S.L. classes. Students who attended optional afternoon vocational courses funded by the federal government's Vocational Education Act received half credit.

**English as a Second Language**

Every school offered E.S.L. The levels of E.S.L. available at a particular site depended on its students' levels of proficiency in English. At some schools, low program enrollments necessitated that more than one level be taught in
the same classroom. Program students attended E.S.L. classes with nonprogram students.

**Aviation.** This school offered three intermediate-level E.S.L. classes. An OREA field consultant observed an E.S.L. class attended by 19 registered students, about half of whom were program participants. Before the beginning of the lesson, a paraprofessional collected the previous day's homework, student interviews of peers and school personnel. Later, these were to be printed in a magazine format. The teacher assigned the next day's homework: to write a paragraph describing a party the students had attended. The teacher suggested some questions to help them focus their writing.

The students then discussed a short story they had read. She helped them relate what they had read to their own experiences. The teacher then worked on vocabulary which was directly related to something in the story. The students read the story aloud, changing verb tense from present to past. The teacher interrupted to correct pronunciation, but involved the entire class, not just the student who was reading. The class completed a written exercise and some true/false questions, and corrected the exercises they had just completed.

**Telecommunication Arts and Technology.** All program students attended a minimum of two periods of E.S.L. per day; beginning students attended a third period. All of them spent one period per day in a special self-paced class which combined writing with keyboarding and word processing. Since all E.S.L.
classes were beginning or intermediate level, the few advanced students were placed in intermediate-level classes. An OREA field consultant observed one of these classes, attended by 11 program students who were using IBM Writing Assistant software. A paraprofessional walked from desk to desk, offering individual assistance. Students were engrossed in their work, and their teacher was very pleased with their performance.

Native Language Arts

Only educational-option schools offered classes in program students' native languages. Some, such as Telecommunication Arts and Technology, offered classes exclusively for native speakers; others, such as Edward R. Murrow, mixed native speakers with American-born students who were learning the language for the first time.

Telecommunication Arts and Technology. Twenty-five students were present; five were English proficient native speakers of Spanish. All explanations and conversations were in Spanish. The students watched part of a film which was in Spanish with English subtitles. The teacher interrupted the movie to discuss alternate meanings of Spanish words and cultural implications of the action and dialogue. After the film ended, the teacher asked questions designed to help the students relate their own experience to what they had just seen. Students volunteered answers and had a lively discussion.

Edward R. Murrow. Chinese LEP students attended Mandarin classes with American-born Chinese students. While there were
four levels of courses with a fifth due to be added in September 1988, most program students were enrolled in the most elementary level. The teacher was a native Chinese speaker who selected and adapted most course materials himself. Most of the materials contained both the written Chinese character and the phonetic pronunciation in Mandarin.

**Content Area Subjects**

Content area and vocational courses paralleled mainstream ones. Because of the small number of program students, each school could offer only a few bilingual content area classes. A lack of bilingual teachers, especially in mathematics and science, further reduced the program's ability to provide bilingual content area courses. To overcome these problems, bilingual teachers often had to teach more than one subject. As a result, some bilingual teachers felt extremely overworked because they had to prepare for classes in as many as four different subjects. Program staff or student peers provided bilingual tutoring when needed.

There was no clearly defined language-use policy at each school. The amount of English used in teaching a particular course depended on how individual teachers assessed their students' needs. Some teachers presented content area courses using an E.S.L. approach. The language policy was least clear at schools serving Haitian students, because of the shortage of Haitian Creole-speaking teachers and because the issue of French versus Haitian Creole has divided the Haitian community for
years. Teachers chose French or Haitian Creole as the language of instruction based on their own linguistic abilities, on their personal preference, or those of their students.

**Aviation.** A ninth grade bilingual general science class had eight of its register of ten students present. The students were preparing for the Regents Competency Test (R.C.T.). Although the teacher used Spanish predominantly during regular classes, she conducted this preparation class mainly in English in order to allow the students to decide whether to take the English or Spanish version of the R.C.T. Most of the class time was spent with the teacher asking students questions in English from an R.C.T. review book. If they had difficulty understanding a question, the teacher then translated and explained it in Spanish.

**John Dewey.** The bilingual (Haitian Creole/English) social studies class on the Indian nationalist movement used an English textbook, as did the other bilingual content area classes. The teacher encouraged, sometimes required, his students to use English. Students had to write their answers, in English, to a series of questions, also written in English. Similarly, when verbally giving answers, the teacher encouraged them to do so in English. He said his goal was for students to do 80 percent of their speaking and writing in English by the end of the school year, and enter the mainstream rapidly.
Vocational Subjects

Some schools had teachers who could provide vocational instruction in the students' native languages; others provided teachers with a bilingual paraprofessional. At some schools, nonprogram LEP students were enrolled in the same vocational classes as were program students. In addition to regular daytime classes, all 13 schools provided credit-bearing bilingual vocational courses after school hours.

Aviation. Students had at least two periods a day of vocational instruction. During the classroom observation, a bilingual teacher and a paraprofessional were present. All twelve students were native Spanish speakers. In a shop class they were using various machines to build small metal airplane parts. The teacher said that he regularly used both English and Spanish in the classroom; translating technical terms was a big problem. A staff development specialist pointed out that since aircraft terminology was new to the students they might as well learn the terminology in English but get their explanations in Spanish to ensure comprehension.

Edward R. Murrow. Thirteen Chinese- and Spanish-speaking program students attended the keyboarding/word processing class. A monolingual English-speaking teacher taught the class with the assistance of a Chinese-speaking paraprofessional. Each student used an IBM personal computer and teacher-developed software and text. The text, How to Master Touch Typing, Step by Step,
included 22 lessons and was available in 14 languages on 12 grade levels.
IV. EVALUATION FINDINGS: OUTCOMES

NONINSTRUCTIONAL OUTCOMES

Attendance

- Students participating in the program will have attendance rates that are significantly higher than those of mainstream students.

Only two of the 13 schools, Murry Bergtraum and Paul Robeson, provided attendance data for both semesters. Clara Barton, Graphic Communication Arts, Art and Design, and Fashion Industries, did not provide any data or provided insufficient data. The remaining seven schools provided data for one semester. Attendance rates for program students ranged from 79 to 98 percent. Those for mainstream students ranged from 74 to 90 percent.

The program only partially met this objective. Target students in six of the nine schools for which there were data (Norman Thomas High School, the High School for Telecommunications Arts and Technology, Edward R. Murrow High School, John Dewey High School, August Martin High School, and Aviation High School) exhibited statistically significant higher attendance rates than the mainstream students in the same schools.

Staff Development

OREA asked program staff to rate the staff development activities on a scale of one to five, with one being a low score and five being high. The 11 progra staff members were very
positive in their evaluation of the activities. The average rating was over four for such areas as how much they had learned about coordinating the bilingual program; the staff development specialist's organization in providing technical assistance, instructional training, and support; the applicability of the staff development component to the classroom; and their overall assessment of the staff development effort.

Support Services

Few sites had bilingual counselors who spoke the targeted students' native languages. Program staff felt ill-equipped to handle the numerous nonacademic concerns of students. Several staff members suggested hiring itinerant bilingual counselors to help alleviate the perceived problem.

INSTRUCTIONAL OUTCOMES

Course Passing Rates

Seventy percent of the target students in program-subsidized courses will achieve a grade of 65 percent or higher.

This objective could be assessed for both fall and spring semesters at only four schools, and for one semester at three others. Six schools did not supply OREA with the data necessary for assessing the accomplishment of this objective. The schools that did report data on student grades achieved this objective. (See Table 2.) However, one should use caution in interpreting the results because of the incomplete data.

25
TABLE 2
Passing Rates in Program-Funded Courses, by School
(N = 206)*

<table>
<thead>
<tr>
<th>School</th>
<th>Subject</th>
<th>FALL</th>
<th>SPRING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent Passing</td>
<td>Number</td>
<td>Percent Passing</td>
</tr>
<tr>
<td>Art and Design</td>
<td>Business</td>
<td>86.0</td>
<td>14</td>
</tr>
<tr>
<td>Telecom-Munication</td>
<td>Math/Social Studies</td>
<td>83.0</td>
<td>15</td>
</tr>
<tr>
<td>Aviation</td>
<td>Science/Social Studies</td>
<td>83.0</td>
<td>44</td>
</tr>
<tr>
<td>Fashion</td>
<td>Math/Social Studies</td>
<td>80.0</td>
<td>12</td>
</tr>
<tr>
<td>Norman Thomas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murray Bergtraum</td>
<td>Science/Social Studies</td>
<td>77.0</td>
<td>25</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Because of missing data, the number of students whose grades were included in this table is smaller than the total number of students who participated in the program.

All reporting schools met the criterion that 70 percent of the target students would achieve a grade of 65 percent or higher in program-subsidized courses.
Program-subsidized courses included mathematics, science, social studies, business, and native language arts. Each semester the program subsidized two subjects per school. Some schools reported data for nonsubsidized courses. OREA did not include these in the analysis.

ATTITUDES TOWARDS THE PROGRAM

There was an initial lack of support for the program from school administrators and teachers. Vocational teachers were the least supportive because they felt students needed to know English to operate machinery safely. To overcome this resistance, the staff development specialists spent a great deal of time explaining the role of bilingual education theory in program activities. It was apparent that an understanding of and support for the program increased at all sites during the school year. All of the schools appeared eager to expand their services to program students.
V. CONCLUSIONS AND RECOMMENDATIONS

During its first year of operation, the LEP Students in Special High Schools program served 277 Chinese-, Haitian Creole/French-, and Spanish-speaking LEP students at eight educational-option and five vocational/technical high schools in New York City. Staff development specialists from the Division of High Schools regularly visited the participating schools to conduct staff development activities. All personnel recognized guidance as being a weak area that needed strengthening, since few schools had bilingual counselors and the program students evidenced a need for counseling.

Fewer students enrolled in the program than had been expected. Some prospective participants no longer had LEP status when the program began and some chose to attend non-program schools. The small number of program students limited the number of bilingual courses that the schools could offer.

An initial lack of support from school personnel changed as they became more knowledgeable about bilingual education and the aims and practices of the program.

The E.S.L. component of the program was probably the most successful since it did not suffer from a shortage of qualified bilingual teaching staff as did other components.

The program partially met its attendance objective but since data were incomplete, it was difficult to draw any inferences from the results. Analysis of student achievement in
program-subsidized courses revealed that for those courses on which there were data, at least 70 percent of the students achieved a passing grade. Unfortunately, there were data from only four schools for two semesters and from three schools for one semester, limiting the implications of the findings.

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

- Augment recruitment efforts in order to increase the number of program students.
- Hire bilingual teachers to work at more than one site to permit program students to receive a more comprehensive bilingual curriculum, despite their sparse numbers at each school.
- Report required student achievement and attendance data.
- Use funds (if they become available) to hire bilingual counselors who might divide their time among the various sites.