The Capacity Building Special Alternatives Program, an Elementary and Secondary Education Act Title VII-funded project in its second year of operation, functioned at seven schools in a community school district of Manhattan (New York). The project served 195 students of limited English proficiency (LEP) whose native languages were Albanian, Chinese, Haitian, Polish, Russian, and Serbo-Croatian. The project also targeted non-Latino LEP students with an achievement gap of more than one year in one or more content areas. Participants received instruction in English as a Second Language (ESL) and content areas using an ESL methodology. An active parent component was included. The program met its objectives for English language development and content area instruction in science. It met four of five staff development objectives, and one of two parental involvement objectives. Data was not adequate to evaluate one staff development objective and one parent participation objective. Better data collection is recommended for program improvement, as is exploring additional techniques to improve student mathematics skills. Four tables present evaluation data. Appendixes list instructional materials and class schedules. (SLD)
Capacity Building Special Alternatives Program
Community School District 3
Special Alternatives Instructional Program Grant T003E20073
FINAL EVALUATION REPORT
1993-94
Capacity Building Special Alternatives Program
Community School District 3
Special Alternatives Instructional Program Grant T003E20073
FINAL EVALUATION REPORT
1993-94

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New York, NY 10025
(212) 678-2938
EXECUTIVE SUMMARY

The Capacity Building Special Alternatives Program, an Elementary and Secondary Education Act (E.S.E.A.) Title VII-funded project in its second year of operation, functioned at seven schools in Community School District (C.S.D.) 3 in Manhattan: P.S. 9, P.S. 75, P.S. 84, P.S. 87, P.S. 163, P.S. 165, and I.S. 44. The project served 195 students of limited English proficiency (LEP), whose home language was Albanian, Chinese, Haitian, Polish, Russian, or Serbo-Croatian. This constituted 56 more than last year.

The project targeted non-Latino LEP students who showed an achievement delay of more than one year in one or more content areas as measured by standardized achievement tests. Participating students received instruction in English as a second language (E.S.L.) and content area instruction using an E.S.L. methodology.

Teachers of participating students had the opportunity to attend weekly staff development meetings.

The project had an active parent component, which included E.S.L. classes, educational field trips, and activities and workshops that involved students as well as parents.

The Capacity Building Special Alternatives Program met its objectives for English language development, content area instruction in science, four of five staff development objectives, and one of two parental involvement objectives. The project failed to meet its objective for content area instruction in mathematics. The Office of Educational Research was unable to evaluate the staff development objective for mathematics and science instruction and the parental involvement objective for increased skills and knowledge because the project did not provide the necessary data.

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

- Provide the evaluator with all required data so that the project can be fully evaluated.

- Explore additional techniques to increase students' acquisition of skills in mathematics, possibly by initiating a peer tutoring component or using paraprofessionals to work with students during study halls or outside school hours.
ACKNOWLEDGEMENTS

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</tbody>
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I. INTRODUCTION

The Capacity Building Special Alternatives Program was in its second year of funding as an Elementary and Secondary Education Act (E.S.E.A.) Title VII project.

PROJECT CONTEXT

The project operated at P.S. 9, P.S. 75, P.S. 84, P.S. 87, P.S. 163, P.S. 165, P.S. 199, and I.S. 44 in Community School District (C.S.D.) 3 in Manhattan. C.S.D. 3 served a diverse population of Latino, African-American, European-American, and Asian-American students. All demographic data are from 1992-93, the last year for which such data are available.

Composition of the student body at the participating schools was similar to that of the district. Of the 707 students enrolled at P.S. 9 during the 1992-93 school year, 37 percent were Latino, 28 percent were African-American, 31 percent were European-American, and 4 percent were Asian-American. Of these students, 12 percent were limited English proficiency (LEP), and 49 percent were eligible for free lunch, an indication of low income.

Of the 669 students at P.S. 75, 40 percent were Latino, 34 percent were African-American, 22 percent were European-American, and 4 percent were Asian-American. Of these, 19 percent were LEP, and 65 percent were from low-income families.

Of the 644 students at P.S. 84, 54 percent were Latino, 35 percent were African-American, 9 percent European-American and 3 percent were Asian-American.* Of these students, 30 percent were LEP, and 65 percent were from low-income families.

*Percentages do not equal 100 because of rounding.
Of the 1,098 students at P.S. 87, 50 percent were European-American, 23 percent were Latino, 19 percent were African-American, and 8 percent were Asian-American. Of these, 8 percent were LEP, and 21 percent were from low-income families.

Of the 669 students at P.S. 163, 50 percent were Latino, 39 percent were African-American, 9 percent were European-American, and 2 percent were Asian-American. Of these students, 19 percent were LEP, and 72 percent were from low-income families.

Of the 586 students at P.S. 165, 88 percent were Latino, 7 percent were African-American, 3 percent were Asian-American, and 2 percent were European-American. Of these, 61 percent were LEP, and 93 percent were from low-income families.

Of the 1558 students at I.S. 44, 41 percent were African-American, 41 percent were Latino, 15 percent were European-American, and 3 percent were Asian-American. Of these students, 9 percent were LEP and 70 percent were from low-income families.

STUDENT CHARACTERISTICS

The project served 195 LEP students in kindergarten through eighth grade. (See Table 1.) This was 56 more students than were served last year. LEP status was indicated by Language Assessment Battery (LAB) scores at or below the 40th percentile. Students admitted into the program had to have a native language other than Spanish.
### Table 1

Number of Students in Capacity Building Special Alternatives Program, by Site and Grade

<table>
<thead>
<tr>
<th>Site</th>
<th>K</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.S. 9</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
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<tr>
<td>P.S. 75</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>4</td>
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<td></td>
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<td></td>
<td>33</td>
</tr>
<tr>
<td>P.S. 84</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>P.S. 87</td>
<td>12</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>8</td>
<td>13</td>
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<tr>
<td>P.S. 163</td>
<td>5</td>
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<tr>
<td>P.S. 165</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>P.S. 199</td>
<td>4</td>
<td>2</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>I.S. 44</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>37</td>
<td>30</td>
<td>33</td>
<td>19</td>
<td>17</td>
<td>13</td>
<td>25</td>
<td>5</td>
<td>10</td>
<td>195</td>
</tr>
</tbody>
</table>

Of the 195 LEP students, male students numbered 108 (55.4 percent) and female 87 (44.6 percent). Participating students came from many countries, the majority coming from China, Korea, and Russia. Over half the students (65.2 percent) came from low-income families and were eligible for free lunch.

### Needs Assessment

Before instituting the program, C.S.D. 3 conducted an extensive needs assessment of targeted students, their families, and the educational staff who would serve them. The data obtained indicated three primary needs: (1) to train a cadre of 25 kindergarten through ninth grade regular teachers and paraprofessionals in E.S.L.
instructional methodologies for the content areas and an enriched curriculum (especially in science and mathematics); (2) to teach English language skills to approximately 120 kindergarten through ninth grade non-Latino LEP students and to increase their academic skills in the content areas (especially science and mathematics); and (3) to train approximately 30 parents of kindergarten through ninth grade LEP pupils in areas such as E.S.L.; native language arts; high school equivalency; home-based remediation and enrichment; and basic, intermediate, and advanced conversational English.

PROJECT OBJECTIVES

Student Objectives

By the conclusion of the student instructional period, 120 K to 9th grade non-Hispanic LEP students will demonstrate 5 N.C.E. gains in

- English oral language, reading, and writing skills as measured by pre- and posttest scores on the LAB.
- the content areas of mathematics and science.

Staff Development

By the conclusion of the staff development period, 25 K to 9th grade teachers and paraprofessionals will engage in activities that will enable

- 15 percent of the trainees to complete at least 6 college credits (3 last year and 3 this year) in appropriate courses as assessed by an examination of college records.
- 15 percent of trainees to complete 3 college credits in appropriate courses as assessed by an examination of college records.
• 80 percent of the teacher trainees (not including those who achieved this criterion last year) to achieve scores of 90 percent or better on program-developed criterion referenced tests related to content area instruction in mathematics and science.

• 85 percent of the new teacher trainees to utilize E.S.L. content area-based instructional methodologies when working with target pupils as assessed by administrator and evaluator observation using program-developed checklists and by an examination of pre- and posttest scores on the New York City LAB test.

• 50 percent of the second year trainees to display further enhanced E.S.L. instructional skills assessed as indicated above.

Parental Involvement

By the conclusion of the parent development period, 30 parents of K to 9th grade non-Hispanic LEP students will engage in activities that will enable

• 70 percent of the parent participants to increase skills and knowledge in areas in which they took instruction, such as education; E.S.L.; native language arts; high school equivalency; computer learning; home-based remediation and enrichment for students; how to make instructional materials from household items; basic, intermediate, and advanced conversational English for adults; and citizenship education as assessed by program-developed questionnaires administered on a pre- and post-instructional basis and professional observations.

• 5 percent of the parent participants to master skills sufficient for them to work as effective school volunteers as assessed by principal observation.

PROJECT IMPLEMENTATION

During the 1993-94 school year, the project provided instructional and support services to 195 students and their families. The project's main goal was to promote LEP students' acquisition of English language skills.

The project also provided staff development and parental involvement activities.
Materials, Methods, and Techniques

All project classes were taught using an E.S.L. methodology. In the lower grades, teachers used cooperative learning groups, the whole language approach, and manipulative and hands-on activities.

For a list of instructional materials used in project classes, please see Appendix A.

Staff Qualifications

**Title VII staff.** The project director was fully funded by Title VII. She had a master's degree and teaching proficiency* in Spanish. Her responsibilities included supervising and coordinating project activities, selecting and training staff, and coordinating the project's evaluation. She assisted classroom teachers in the development and implementation of instructional activities, provided in-service activities and training to parents and teachers of participating students, and selected instructional materials.

**Other staff.** Seven classroom teachers participated in the project and provided instructional services to project students. All teachers held New York State Certification in E.S.L. For degrees, certification, and language proficiency, please see Table 2.

---

*Teaching proficiency (TP) is defined as the ability to use LEP students' native language in teaching language arts or other academic subjects.
### TABLE 2
Qualification of Non-Title VII Staff

<table>
<thead>
<tr>
<th>Position Title</th>
<th>Degree(s)</th>
<th>Certification</th>
<th>Language Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers (7)</td>
<td>M.A. (6)</td>
<td>E.S.L. (7)</td>
<td>French TP (5)</td>
</tr>
<tr>
<td></td>
<td>B.A. (1)</td>
<td></td>
<td>Italian TP (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Spanish TP (6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chinese TP (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hebrew TP (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>sign language TP (1)</td>
</tr>
</tbody>
</table>

**Staff Development**

Project teachers participated in a series of monthly and weekly activities. Workshops focused on the use of graphic organization in E.S.L. science instruction and the whole language approach. Other topics covered included E.S.L. from theory to practice, content-based E.S.L. science, and comics: communicating and organizing messages in cartoons. The project teachers attended on-site staff development sessions with project resource specialists.

**Length of Time Participants Received Instruction**

Students had a mean of 2.0 years (s.d. = 1.8) of education in a non-English-speaking school system and 2.9 years (s.d. = 1.9) of education in the United States. The median amount of time students participated in the project was 16 months.

**Instructional Time Spent on Particular Tasks**

See Appendix B for examples of class schedules.
Activities to Improve Pre-Referral Evaluation Procedures for Exceptional Children

At all three sites, E.S.L. teachers and counselors referred those students who were identified as being in need of special services to the School-Based Support Team (S.B.S.T.).

Gifted student at P.S. 9 and I.S. 44 were placed in separate groups and given more advanced assignments. The other sites did not place students in separate groups but did provide them with additional assignments.

PARENT AND COMMUNITY INVOLVEMENT ACTIVITIES

The project sponsored a wide variety of parent and community involvement activities that included weekly workshops, E.S.L. classes, and field trips. The workshops covered such topics as leadership for parents, understanding whole language, second language acquisition, and families reading together.
II. EVALUATION METHODOLOGY

EVALUATION DESIGN

Project Group's Educational Progress as Compared to That of an Appropriate Non-Project Group

The Office of Educational Research (OER) used a gap reduction design to evaluate the effect of bilingual language instruction on project students' performance on standardized tests. Because of the difficulty in finding a valid comparison group, OER used instead the groups on which the tests were normed. Test scores are reported in Normal Curve Equivalents (N.C.E.s), which are normalized standard scores with a mean of 50 and a standard deviation of 21.1. It is assumed that the norm group has a zero gain in N.C.E.s in the absence of supplementary instruction and that participating students' gains are attributable to project services.

Applicability of Conclusions to All Persons Served by Project

Data were collected from all participating students. (There were no pretest data on students who entered the program late; therefore, posttest data for them will serve as pretest data for the following year.) Instruments used to measure educational progress were appropriate for the students involved. The LAB and the California Achievement Test [CAT] are used throughout New York City to assess the growth of English and mathematics skills in populations similar to those served by the project.
INSTRUMENTS OF MEASUREMENT

OER compared pre- and posttest scores on the LAB to assess the E.S.L. objective. To assess the mathematics objective, the Concepts and Applications subtest of the CAT was used to assess the objective for mathematics.

All students were tested at the appropriate grade level. The language of the LAB was determined by the test itself and the CAT was given in English. The content area objective for science was assessed through final course grades.

According to the publishers' test manuals, all standardized tests used to gauge project students' progress are valid and reliable. Evidence supporting both content and construct validity is available for the LAB. Content validity is confirmed by an item-objective match and includes grade-by-grade item difficulties, correlations between subtests, and the relationship between the performance of students who are native speakers of English and students who are LEP. To support reliability, the Kuder-Richardson Formula 20 (KR20) coefficients and standard errors of measurement (SEM) are reported by grade and by form for each subtest and total test. Grade reliability coefficients, based on LEP students on the English version, ranged from .88 to .96 for individual subtests and from .95 to .98 for the total test.

For the Math Concepts and Applications subtest of the CAT, content validity was determined by comparing the content descriptions and the test items with particular curriculum objectives. The KR20 was used as a measure of internal consistency. The SEM is also reported in order to indicate the range within which students' true scores are likely to fall. For the Math Concepts and Applications subtest given in
second through eighth grade, the number of items ranged from 42 to 50. KR20 coefficients ranged from 0.88 to 0.91; SEM ranged from 2.55 to 3.14 raw score units.

DATA COLLECTION AND ANALYSIS

Data Collection

To gather qualitative data, an OER evaluation consultant carried out on-site and telephone interviews with the project director several times during the school year and also observed two classes on each of two visits. The project evaluator collected the data and prepared the interim evaluation report in accordance with the New York State E.S.E.A. Title VII Bilingual Education Final Evaluation Report format, which was adapted from a checklist developed by the staff of the Evaluation Assistance Center (EAC) East in consultation with the Office of Bilingual Education and Minority Language Affairs (OBEMLA).

Proper administration of instruments. Qualified personnel received training in testing procedures and administered the tests. Test administrators followed guidelines set forth in the manuals accompanying standardized tests. Time limits for subtests were adhered to; directions were given exactly as presented in the manual.

Testing at twelve-month testing intervals. Standardized tests were given at 12-month intervals, following published norming dates.

Data Analysis

Accurate scoring and transcription of results. Scoring, score conversions, and data processing were carried out by the Scan Center of the Board of Education of the City of New York. Data provided by the Scan Center were analyzed in the Bilingual,
Multicultural, and Early Childhood Evaluation Unit of OER. Data collectors, processors, and analysts were unbiased and had no vested interest in the success of the project.

*Use of analyses and reporting procedures appropriate for obtained data.* To assess the significance of students' achievement in English and mathematics, OER computed a correlated $t$-test on LAB and CAT N.C.E. scores. The $t$-test determined whether the difference between the pre- and posttest scores was significantly greater than would be expected from chance variation alone.

The only possible threat to validity of any of the above instruments might be that LAB norms were based on the performance of English Proficient (EP) rather than LEP students. Since OER was examining gains, however, this threat was inconsequential—the choice of norming groups should not affect the existence of gains.
III. FINDINGS

PARTICIPANTS' EDUCATIONAL PROGRESS

The project carried out all instructional activities specified in its original design.

Participants' Progress in English

Participating students had substantial opportunities to acquire and develop English language skills. Students received instruction in E.S.L. at the beginning level for 6 periods per week, and at the intermediate, advanced, and transitional levels for 5 periods per week. Students also received reading instruction in English for 5 periods per week.

All E.S.L. classes were taught with a content area approach. The goal of the program was for the participants to learn English while, at the same time, enhancing their knowledge in science and mathematics.

An OER evaluation consultant observed two E.S.L. classes at P.S. 87 and two at I.S. 44. Both schools integrated science topics with mathematical concepts. The first class observed at P.S. 87 was a second and third grade bridge class. There were six students present and the atmosphere was conducive to learning and creativity. The lesson was about the five senses and there were collages featuring each of the senses decorating the room. The students were working from handouts which they had for homework. The homework had consisted of a survey to collect data from their family members on eye color. Each student specified the eye colors they had found in their families and how many people had each color. They then calculated...
the number of people with each color eyes for the whole class and graphed their findings.

The lesson was teacher directed but the students were actively involved. The teacher was supportive and encouraging to each student. The room was furnished with round tables where the students sat in groups. During the second half of the class, they were given additional handouts of a graph with countries and numbers. The assignment was for each table to work together and graph how many were from each country. The students worked cooperatively on this assignment.

The next class observed was a fourth and fifth grade bridge class. There were five students present. The teacher again combined mathematical and scientific concepts into the lesson. The topic of the lesson was the human body's organs. Mathematics was integrated through a calculation of how large each organ was in comparison to the others and what percentage of the human body it comprised.

At I.S. 44, both of the classes observed were grades six through nine bridge classes. In the first class there were six students present. They sat at round tables. The room did not have any windows, although it was well lit. The teacher only used English to communicate with the students and utilized a content-based approach.

The first class's lesson was on the world's rain forests and their locations. The students were given a blank world map. The class assignment was to find all the rain forests in the world and mark them on the map. For this, the students used the Scholastic World Atlas.
In the second class observed at I.S. 44, there were five students in attendance. The lesson was on geometry and the students were learning about area and perimeter. The first half of the class was teacher directed and the lesson was presented in English. After reviewing the homework, handouts and manipulatives were distributed for an in-class assignment. The second half of the class used cooperative learning. Participating students sat at a round table and worked together to estimate the area and perimeter of different objects around the room. They then used square inch figures to correctly measure the areas and perimeters.

The evaluation objective for English-language development was:

- By the conclusion of the student instructional period, 120 K to 9th grade non-Hispanic LEP students will demonstrate 5 N.C.E. gains in English oral language, reading, and writing skills as measured by pre and posttest scores on the LAB.

There were complete pre- and posttest scores on the LAB for 137 students from grades one through eight. The mean for the pretest was 22.2 (s.d. = 13.3) and posttest was 36.7 (s.d. = 23.4). The students showed a mean gain of 14.4 N.C.E.s (s.d. = 20.8), which was statistically significant (p < .05). A breakdown of scores by each project site was not available.

The project met its objective for English-language development. In the year previous to the one under review, the project also met this objective.

**LEP Participants’ Academic Achievement**

Instruction in the content areas was entirely in English. Students also received additional periods of instruction using an E.S.L. approach in mathematics and science.
An OER evaluation consultant observed a social studies class at I.S. 44. There were 7 students present from grades six through eight. The class was studying the rainforests of the world. The teacher handed out a map of the world with trees signifying rainforests drawn in. The assignment for the class was to identify the countries the rainforest were located in. For this the students used an atlas.

The students worked in groups of three. When all had finished, the teacher picked students to point to the rainforest and identify the country in a large map posted on the blackboard. The second half of the class was teacher directed. The teacher gave a lesson on the contents of a rainforest and the purpose they serve in our environment.

For the most part, the class was relaxed. The students were very attentive and interested in the lesson.

Students were enrolled in each content area subject; mathematics, science, social studies, and reading in English, for 5 periods per week in English classrooms. They received three additional periods of mathematics using E.S.L. methodology and two additional periods of science using E.S.L. methodology per week. (See Table 3.)

The project proposed the following objective for content area subjects:

- By the conclusion of the student instructional period, 120 K to 9th grade non-Hispanic LEP students will demonstrate 5 N.C.E. gains in the content areas of mathematics and science.

CAT pretest and posttest scores were available for 35 students in grades 2 through 8. There was an overall loss of 0.31 N.C.E.s (s.d. = 2.22) which was not statistically significant (p > .05).
TABLE 3
Content Area Courses

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Grade</th>
<th>Periods per Week</th>
<th>Language of Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>K-8</td>
<td>5</td>
<td>English only</td>
</tr>
<tr>
<td></td>
<td>K-8</td>
<td>3</td>
<td>English with E.S.L. methodology</td>
</tr>
<tr>
<td>Science</td>
<td>K-8</td>
<td>5</td>
<td>English only</td>
</tr>
<tr>
<td></td>
<td>K-8</td>
<td>2</td>
<td>English with E.S.L. methodology</td>
</tr>
<tr>
<td>Social Studies</td>
<td>K-8</td>
<td>5</td>
<td>English only</td>
</tr>
</tbody>
</table>

The citywide science test is administered one time only to students in the fourth grade. It was therefore not possible to do a pretest/posttest analysis. In addition, the test is not used to assess individual student performance, but rather to evaluate programs. OER used final course grades to evaluate the science portion of the content area objective. Of the total number of project students, 184 (94.4 percent) received passing grades in their science courses. There was no data reported for 11 (5.6 percent) students.

The program did not meet its content area objective for mathematics as evaluated by the CAT. This objective was met last year. The project met its objective for content area instruction in science. Last year, OER had been unable to evaluate this objective.
FORMER PARTICIPANTS' PROGRESS IN ENGLISH LANGUAGE CLASSROOMS

There was no information available on former project students.

OVERALL EDUCATIONAL PROGRESS ACHIEVED THROUGH PROJECT

Mainstreaming

The project did not pose any objectives for mainstreaming. It also did not report the number of students mainstreamed during the year under review.

Grade Retention

The project did not propose any objectives for grade retention. Of the total number of students, 18 (9.2 percent) were retained in grade this year. In the year previous to the one under review, two project students (1.4 percent) were retained in grade.

Attendance

The project did not propose any objectives for attendance. The overall attendance for project students was 91.2 percent, based on 137 students. (See Table 4.) In five of the participating schools, the project students had a higher attendance rate than the schoolwide rate. In those schools where the rates were lower for project students, they differed by no more than six percentage points.

Placement in Gifted and Talented Programs

In the year under review, 6 students (3.1 percent) were placed in specific programs for the gifted and talented.
TABLE 4
Attendance Rates for Participating and Non-Participating Students

<table>
<thead>
<tr>
<th>Site</th>
<th>Attendance Rate</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Participating Students</td>
<td>Schoolwide</td>
<td></td>
</tr>
<tr>
<td>P.S. 9</td>
<td>93.9</td>
<td>91.7</td>
<td></td>
</tr>
<tr>
<td>P.S. 75</td>
<td>98.1</td>
<td>90.4</td>
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<tr>
<td>P.S. 84</td>
<td>86.3</td>
<td>90.0</td>
<td></td>
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<tr>
<td>P.S. 87</td>
<td>88.2</td>
<td>93.9</td>
<td></td>
</tr>
<tr>
<td>P.S. 163</td>
<td>91.2</td>
<td>89.6</td>
<td></td>
</tr>
<tr>
<td>P.S. 165</td>
<td>92.1</td>
<td>89.4</td>
<td></td>
</tr>
<tr>
<td>P.S. 199</td>
<td>91.5</td>
<td>91.3</td>
<td></td>
</tr>
<tr>
<td>I.S. 44</td>
<td>80.1</td>
<td>83.9</td>
<td></td>
</tr>
</tbody>
</table>

CASE HISTORY

W., a student from China, had received a high level of education in her native country. However, she had difficulty adjusting to English and recently entered the project. Her E.S.L. teacher was able to give W. two periods of E.S.L. instruction daily and has been getting additional individual attention from her teachers. She is now almost able to keep up with her classmates in mathematics and science.

STAFF DEVELOPMENT OUTCOMES

The project proposed the following objectives for staff development:

- By the conclusion of the staff development period, 25 K to 9th grade teachers and paraprofessionals will engage in activities that will enable 15 percent of the trainees to complete at least 6 college credits (3 last year and 3 this year) in appropriate courses as assessed by an examination of college records.
During the 1993-94 school year, 3 (43 percent) of the total number of project teachers completed six college credits in E.S.L. and bilingual education. During the 1992-93 school year, 11 (44 percent) of the teachers completed three college credits. As it did last year, the project met its staff development objective for ongoing education.

- By the conclusion of the staff development period, 25 K to 9th grade teachers and paraprofessionals will engage in activities that enable 15 percent of trainees to complete 3 college credits in appropriate courses as assessed by an examination of college records.

The project met its staff development objective for completion of 3 college credits. This had not been a project objective last year.

- By the conclusion of the staff development period, 25 K to 9th grade teachers and paraprofessionals will engage in activities that enable 80 percent of the teacher trainees (not including those who achieved this criterion last year) to achieve scores of 90 percent or better on program-developed criterion referenced tests related to content area instruction in mathematics and science.

No test information was available to evaluate this objective.

As had occurred last year, OER was unable to evaluate the staff development objective for instruction in mathematics and science.

- By the conclusion of the staff development period, 25 K to 9th grade teachers and paraprofessionals will engage in activities that enable 85 percent of the new teacher trainees to utilize E.S.L. content area-based instructional methodologies when working with target pupils as assessed by administrator and evaluator observation using program-developed checklists and by an examination of pre- and posttest scores on the New York City LAB test.
All teachers carried out content area instruction using an E.S.L. methodology. Teachers had successfully incorporated what they had learned through their training. Observations by project administrators and the OER evaluation consultant support this. In addition, the significant gain ($p<.05$) shown by their students on the LAB indicates that teachers were effective in instilling English skills.

As it did last year, the program met its staff development objective for using E.S.L. content area-based instructional methodologies.

- By the conclusion of the staff development period, 25 K to 9th grade teachers and paraprofessionals will engage in activities that enable 15 percent of the second year trainees to display further enhanced E.S.L. instructional skills assessed as indicated above.

The project director reported that all second year trainees used E.S.L. instructional methodologies in all content areas.

The project met its objective for second year trainees to use E.S.L. instructional methodologies. This had not been a project objective last year.

**PARENTAL INVOLVEMENT OUTCOMES**

The project offered numerous weekly workshops and activities for parents of participating students. Some of the issues covered in the sessions included: leadership for parents, second language acquisition, understanding whole language, and talking with your adolescent. In addition to workshops, on-going classes for parents were held. E.S.L. classes for parents were held at P.S. 84, 163, and 165. Nearly 20 parents participated in them. Classes for parents who wanted to take the
general education diploma (G.E.D.) were held at P.S. 163. Nine parents participated in these courses.

The project posed the following objectives for parental involvement:

- By the conclusion of the parent development period, 30 parents of K to 9th grade non-Hispanic LEP students will engage in activities that enable 70 percent of the parent participants to increase skills and knowledge in areas in which they took instruction such as: education; E.S.L.; native language arts; high school equivalency; computer learning; home-based remediation and enrichment for students; how to make instructional materials from household items; basic, intermediate, and advanced conversational English for adults; and citizenship education as assessed by program developed questionnaires administered on a pre- and post-instructional basis and professional observations.

In order to assess increased skills and knowledge, the project distributed questionnaires developed by C.S.D. 3. No completed questionnaires, however were returned to OER.

As had occurred last year, OER was unable to evaluate the parental objective for increased skills and knowledge because it lacked the necessary data.

- By the conclusion of the parent development period, 30 parents of K to 9th grade non-Hispanic LEP students will engage in activities that enable 5 percent of the parent participants to master skills sufficient for them to work as effective school volunteers as assessed by principal observation.

The project director reported that two project parents (6 percent) had served as school volunteers during the school year.

The project met its parental involvement objective for school volunteers. Last year, OER was unable to evaluate this objective.
IV. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

ACHIEVEMENT OF OBJECTIVES

The Capacity Building Special Alternatives Program met its objectives for English language development, content area instruction in science, four of five staff development objectives, and one of two parental involvement objectives. The project failed to meet its objective for content area instruction in mathematics. The Office of Educational Research was unable to evaluate the staff development objective for mathematics and science instruction and the parental involvement objective for increased skills and knowledge because the project did not provide the necessary data.

Participating students showed academic progress in English language development and science. Of the 195 participating students in kindergarten through eighth grade, 177 were promoted to the next grade. The students showed significant gains in English-language skills as indicated by their gains on the LAB.

Project services benefited teachers, who attended college courses in E.S.L. instruction. In-service workshops proved useful to teachers and project staff in their project-related responsibilities.

MOST AND LEAST EFFECTIVE COMPONENTS

The project was very successful with English-language instruction and staff development activities. All teachers participated in the activities and workshops
offered by the project. Feedback from the project director attested to the strength of the staff development portion of the project.

Mathematics instruction was not very effective. The project students did not make gains on the CAT.

RECOMMENDATION TO ENHANCE PROJECT EFFECTIVENESS

- Provide the evaluator with all required data so that the project can be fully evaluated.

- Explore additional techniques to increase students' acquisition of skills in mathematics, possibly by initiating a peer tutoring component or using paraprofessionals to work with students during study halls or outside school hours.
### APPENDIX A

**Instructional Materials**

#### E.S.L.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>Date of Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-8</td>
<td>All About the USA</td>
<td>M. Broukal &amp; P. Murphy</td>
<td>Longman</td>
<td>1991</td>
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<tr>
<td>2-4</td>
<td>Aesops Fables</td>
<td>--</td>
<td>Modern Curriculum Press</td>
<td>1992</td>
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<tr>
<td>3-8</td>
<td>Side by Side</td>
<td>Molinsky, Bliss</td>
<td>Prentice Hall Regents</td>
<td>1989</td>
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<tr>
<td>2-8</td>
<td>Lado Picture Dictionary</td>
<td>Robert Lado</td>
<td>Prentice Hall Regents</td>
<td>1986</td>
</tr>
<tr>
<td>5-8</td>
<td>Stories we Brought With us</td>
<td>Kasser, Silverman</td>
<td>Prentice Hall Regents</td>
<td>1986</td>
</tr>
<tr>
<td>2-5</td>
<td>Hi!</td>
<td>Elizabeth Claire</td>
<td>Minerva Books</td>
<td>1985</td>
</tr>
<tr>
<td>6-8</td>
<td>Skill Sharpeners</td>
<td>DeFilippo, Skidmore</td>
<td>Addison-Wesley</td>
<td>1991</td>
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#### Mathematics

<table>
<thead>
<tr>
<th>Grade</th>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>Date of Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-2</td>
<td>Ten, Nine, Eight</td>
<td>Molly Bang</td>
<td>Scholastic</td>
<td>1983</td>
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<tr>
<td>K-2</td>
<td>Ten Little Ducks</td>
<td>Franklin Hammond</td>
<td>Scholastic</td>
<td>1987</td>
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<tr>
<td>K-3</td>
<td>The Doorbell Rang</td>
<td>Pat Hutchins</td>
<td>Scholastic</td>
<td>1986</td>
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<tr>
<td>K-3</td>
<td>Ten for Dinner</td>
<td>Jo Ellen Bogart</td>
<td>Scholastic</td>
<td>1989</td>
</tr>
<tr>
<td>1-5</td>
<td>How Much is a Million</td>
<td>David Schwartz</td>
<td>Scholastic</td>
<td>1985</td>
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<td>1-5</td>
<td>Bunches and Bunches if Bunnies</td>
<td>Louise Mathews</td>
<td>Scholastic</td>
<td>1978</td>
</tr>
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</table>
# APPENDIX A

## Instructional Materials

### Science

<table>
<thead>
<tr>
<th>Grade</th>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>Date of Publication</th>
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</thead>
<tbody>
<tr>
<td>1-7</td>
<td>Concept Science</td>
<td>C. Walker &amp; J. Hollaway</td>
<td>Modern Curriculum Press</td>
<td>1988</td>
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<tr>
<td>2-8</td>
<td>The Magic School Bus Inside the Human Body</td>
<td>J. Cole</td>
<td>Scholastic</td>
<td>1989</td>
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<tr>
<td>6-8</td>
<td>Discovering Electricity</td>
<td>Rae Bains</td>
<td>Troll Associates</td>
<td>1982</td>
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<td>6-8</td>
<td>Discovering Earthquakes and Volcanoes</td>
<td>L. Damon</td>
<td>Troll Associates</td>
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<tr>
<td>2-5</td>
<td>Trees</td>
<td>R. Kirkpatrick</td>
<td>Steck Vaughn</td>
<td>1991</td>
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<td>4-8</td>
<td>Discovering Trees</td>
<td>Keith Brankt</td>
<td>Troll Associates</td>
<td>1982</td>
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<td>K-3</td>
<td>What Will the Weather be Like Today?</td>
<td>P. Rogers</td>
<td>Scholastic</td>
<td>1898</td>
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### Social Studies

<table>
<thead>
<tr>
<th>Grade</th>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>Date of Publication</th>
</tr>
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<tbody>
<tr>
<td>5-8</td>
<td>Content Area E.S.L. Social Studies</td>
<td>Dennis Terdy</td>
<td>Linmore Publisher</td>
<td>1986</td>
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<td>5-8</td>
<td>Language Development Through Content: America the Early Years</td>
<td>Anna Uhl Chamor</td>
<td>Addison Wesley</td>
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<td>6-8</td>
<td>Number The Stars</td>
<td>Lowy</td>
<td>Dell</td>
<td>1989</td>
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<td>6-8</td>
<td>In 1495</td>
<td>Marzollo</td>
<td>Scholastic</td>
<td>1991</td>
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<td>3-8</td>
<td>Eyewitness Series</td>
<td>--</td>
<td>Knopf</td>
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<td>2-8</td>
<td>Multicultural Celebrations Set</td>
<td>Various</td>
<td>Modern Curriculum Press</td>
<td>1992</td>
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## APPENDIX B

### Class Schedules

#### Grades 3, 4, and 5

<table>
<thead>
<tr>
<th>Period (5 days per week)</th>
<th>Subject</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Mathematics</td>
</tr>
<tr>
<td>2</td>
<td>Reading</td>
</tr>
<tr>
<td>3</td>
<td>Communication Arts (Writing)</td>
</tr>
<tr>
<td>4</td>
<td>E.S.L. Mathematics/Science</td>
</tr>
<tr>
<td>5</td>
<td>Science/Social Studies</td>
</tr>
<tr>
<td>6</td>
<td>LUNCH</td>
</tr>
<tr>
<td>7</td>
<td>Music, Art, Gym, or Library</td>
</tr>
<tr>
<td>8</td>
<td>E.S.L.</td>
</tr>
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</table>

#### Grades 6, 7, and 8

<table>
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<th>Period (5 days per week)</th>
<th>Subject</th>
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<tbody>
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<td>1</td>
<td>E.S.L.</td>
</tr>
<tr>
<td>2</td>
<td>E.S.L. Mathematics/Science</td>
</tr>
<tr>
<td>3</td>
<td>Mathematics</td>
</tr>
<tr>
<td>4</td>
<td>Science</td>
</tr>
<tr>
<td>5</td>
<td>LUNCH</td>
</tr>
<tr>
<td>6</td>
<td>Social Studies</td>
</tr>
<tr>
<td>7</td>
<td>Communication Arts (Writing)</td>
</tr>
<tr>
<td>8</td>
<td>Gym, Music, or Art</td>
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