

DOCUMENT RESUME

ED 372 634

FL 022 330

AUTHOR Lynch, Joanne  
 TITLE Excellence and Success through Career Understanding and Enriched Language Activities (Project ESCUELA). Community School District 14, Brooklyn. Final Evaluation Report, 1992-93. OER Report.  
 INSTITUTION New York City Board of Education, Brooklyn, NY. Office of Educational Research.  
 PUB DATE 13 Sep 93  
 CONTRACT T003A10250  
 NOTE 40p.  
 AVAILABLE FROM Office of Educational Research, Board of Education of the City of New York, 110 Livingston Street, Room 732, Brooklyn, NY 11201.  
 PUB TYPE Reports - Evaluative/Feasibility (142)  
 EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS Academic Achievement; Bilingual Education; \*Bilingual Education Programs; \*Career Education; Career Guidance; Computers; Elementary Education; English (Second Language); Instructional Materials; \*Limited English Speaking; Parent Participation; Program Descriptions; \*Program Effectiveness; \*Program Evaluation; Second Language Instruction; Spanish; Staff Development; \*Transitional Programs; Uncommonly Taught Languages; Yiddish  
 IDENTIFIERS New York City Board of Education; \*Project ESCUELA NY

ABSTRACT

This report presents an evaluation of the Excellence and Success through Career Understanding and Enriched Language Activities (Project ESCUELA), an Elementary and Secondary Education Act Title VII-funded project in its second year of operation at five schools in Brooklyn, New York. The project served 415 Spanish-speaking and 178 Yiddish-speaking students of limited English proficiency. Participating students received instruction in English as a Second Language (ESL), native language arts (NLA) and content subjects, as well as computer training and career education. Staff development programs, parent participation workshops and ESL instruction for parents were integral to the project. An evaluation of Project ESCUELA found that it met its objectives for Spanish NLA, Yiddish NLA, staff development, and parent involvement. It failed to meet its objectives for English development, the content area subjects of science and social studies, or mainstreaming. Recommendations on program improvement are included. Two appendixes include a list of instructional materials used and class schedules. (MDM)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED 372 634



# OER Report

Excellence and Success through Career Understanding  
 and Enriched Language Activities  
 (Project ESCUELA)  
 Community School District 14, Brooklyn  
 1992-93  
 Transitional Bilingual Education Grant T003A10250  
 Final Evaluation Report

U.S. DEPARTMENT OF EDUCATION  
 Office of Educational Research and Improvement  
 EDUCATIONAL RESOURCES INFORMATION  
 CENTER (ERIC)  
 This document has been reproduced as  
 received from the person or organization  
 originating it.  
 Minor changes have been made to improve  
 reproduction quality.  
 • Points of view or opinions stated in this docu-  
 ment do not necessarily represent official  
 OERI position or policy.

"PERMISSION TO REPRODUCE THIS  
 MATERIAL HAS BEEN GRANTED BY  
Robert Tebas  
 \_\_\_\_\_  
 TO THE EDUCATIONAL RESOURCES  
 INFORMATION CENTER (ERIC)."

FL022330

**BEST COPY AVAILABLE**



**Excellence and Success through Career Understanding  
and Enriched Language Activities  
(Project ESCUELA)  
Community School District 14, Brooklyn  
1992-93  
Transitional Bilingual Education Grant T003A10250  
Final Evaluation Report**

**Dr. William Picard, Project Director  
C.S.D. 14  
215 Heyward Street  
Brooklyn, NY 11206  
(718) 963-4800**



## **NEW YORK CITY BOARD OF EDUCATION**

**Carol A. Gresser**  
*President*

**Irene H. Impellizzeri**  
*Vice President*

**Victor Gotbaum**  
**Michael J. Petrides**  
**Luis O. Reyes**  
**Ninfa Segarra-Vélez**  
**Dennis M. Walcott**  
*Members*

**Andrea Schlesinger**  
*Student Advisory Member*

**Ramon C. Cortines**  
*Chancellor*

9/13/93

It is the policy of the New York City Board of Education not to discriminate on the basis of race, color, creed, religion, national origin, age, handicapping condition, marital status, sexual orientation, or sex in its educational programs, activities, and employment policies, and to maintain an environment free of sexual harassment, as required by law. Inquiries regarding compliance with appropriate laws may be directed to Mercedes A. Nanfield, Director, Office of Equal Opportunity, 110 Livingston Street, Room 601, Brooklyn, New York 11201, Telephone: (718) 935-3320.

## EXECUTIVE SUMMARY

The Excellence and Success through Career Understanding and Enriched Language Activities (Project ESCUELA), an Elementary and Secondary Education Act (E.S.E.A.) Title VII-funded program, completed its second year in 1992-93. The project operated at P.S. 19, P.S. 84, J.H.S. 50, I.S. 71 and Beth Rachel School in Community School District (C.S.D.) 14 in Brooklyn. In the year under review, Project ESCUELA served 415 (70 percent) Spanish-speaking and 178 (30 percent) Yiddish-speaking students who scored at or below the 40th percentile on the Language Assessment Battery (LAB) and were thus categorized as being of limited English proficiency (LEP).

The project proposed to motivate students to stay in school, acquire English language proficiency, and learn fundamental academic skills. Students were offered English as a second language (E.S.L.) and native language arts (N.L.A.) instruction. Computer training and career education were infused into the content areas.

Staff development and parental activities took place throughout the year.

The project met its objectives for Spanish N.L.A., Yiddish N.L.A. staff development, and parental involvement. It did not meet its objectives for English development, the content area subjects of science and social studies, or mainstreaming. OREA could not evaluate the objective for mathematics because of a changeover in tests citywide that made the pre/post comparisons called for impossible to obtain.

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

- Examine ways to assist more students to achieve greater proficiency in English which will enable them to be mainstreamed into an English-only program.
- Identify ways to improve student learning in social studies and science.

## ACKNOWLEDGEMENTS

This report has been prepared by the Bilingual, Multicultural, and Early Childhood Evaluation Unit of the Office of Educational Research. Thanks are due to Ms. Joanne Lynch for collecting the data and writing the report.

Additional copies of this report are available from:

Dr. Tomi Deutsch Berney  
Office of Educational Research  
Board of Education of the City of New York  
110 Livingston Street, Room 732  
Brooklyn, NY 11201  
(718) 935-3790 FAX (718) 935-5490

## TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION	1
Project Context	1
Student Characteristics	2
Project Objectives	4
Project Implementation	5
Parent and Community Involvement Activities	8
II. EVALUATION METHODOLOGY	9
Evaluation Design	9
Instruments of Measurement	10
Data Collection and Analysis	12
III. FINDINGS	14
Participants' Educational Progress	14
Former Participants' Progress in English	
Language Classrooms	21
Overall Educational Progress Achieved Through Project	21
Case History	23
Staff Development Outcomes	23
Parental Involvement Outcomes	24
IV. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	25
Achievement of Objectives	25
Most and Least Effective Components	25
Recommendations to Enhance Project Effectiveness	25
APPENDIX A      Instructional Materials	26
APPENDIX B      Schedule of Instruction	30

## LIST OF TABLES

	<u>PAGE</u>	
TABLE 1	Number of Students in Project ESCUELA, by Site and Grade	3
TABLE 2	Students' Countries of Origin	3
TABLE 3	Project Staff Qualifications	7
TABLE 4	Non-Title VII Staff Qualifications	7
TABLE 5	Pretest/Posttest N.C.E. Differences on the Language Assessment Battery, by Grade	16
TABLE 6	Pretest/Posttest N.C.E. Differences on El Examen de Lectura en Español (ELE), by Grade	18
TABLE 7	Content Area Final Grades	20
TABLE 8	Attendance Rates	23



## I. INTRODUCTION

This report documents the Office of Research, Evaluation, and Assessment's (OREA's) evaluation of the Elementary and Secondary Education Act (E.S.E.A.) Title VII project, Excellence and Success through Career Understanding and Enriched Language Activities (Project ESCUELA).

### PROJECT CONTEXT

The project operated at P.S. 19 and P.S. 84, J.H.S. 50, I.S. 71, and a private school, Beth Rachel School. All were in Community School District (C.S.D.) 14 in Brooklyn. C.S.D. 14 is located in the Williamsburg-Greenpoint section, one of the most economically depressed areas in New York City. The population in the district was mostly Spanish- and Yiddish-speaking.

Of the 954 students at P.S. 19, 97.7 percent (932) were Latino, and 1.6 percent (2) were African-American. The rest were European- and Asian-American. All students at this site were eligible for the free-lunch program, and 25 percent were limited English proficient (LEP).

Of the 1,065 students at P.S. 84, 89 percent (949) of students were Latino, 8 percent (85) were African-American, and 3 percent (31) were European-American. Ninety percent of the students at this site were eligible for free lunch, and 19 percent were LEP.

Of the 740 students at I.S. 71, 68 percent (506) were Latino, 24 percent (179) were African-American, 7 percent (55) were European-American and 1.0 percent

were Asian-American. Seventy-seven percent of students at this site were eligible for free lunch, and 17 percent were LEP.

Of the 982 students at J.H.S. 50, 94 percent (924) were Latino, 3 percent (29) were African-American, 2 percent (19) were European-American, and 1 percent (10) were Asian-American. Eighty-five percent of students at this site were eligible for free lunch, and 29 percent were LEP.

Data were not required from Beth Rachel School, since it is in the private sector.

### STUDENT CHARACTERISTICS

Project ESCUELA served Spanish- and Yiddish-speaking LEP students in grades four through nine. LEP status was determined by scores at or below the 40th percentile on the Language Assessment Battery (LAB).

The project served 593 students; male students numbered 194 (32.7 percent) and female 233 (39.3 percent); data were not reported for 166 (28 percent) of the students. (See Table 1.) Students whose home language was Spanish numbered 415 (70 percent); those whose home language was Yiddish numbered 178 (30 percent). A majority of students were born in the Dominican Republic. (See Table 2 for students' countries of origin.) Most students (69.5) came from low-income families and were eligible for the free-lunch program.

TABLE 1

Number of Students in Project ESCUELA, by Site and Grade

Site	4	5	6	7	8	9	Total
P.S. 19	37	33	54	--	--	--	124
P.S. 84	24	34	--	--	--	--	58
J.H.S. 50	--	--	--	80	60	70	210
I.S. 71	--	--	14	20	13	--	47
Beth Rachel	21	91	11	9	10	12	154
Total	82	158	79	129	83	82	593

TABLE 2

Students' Countries of Origin

Country	Number of Students
Dominican Republic	310
United States	170
Puerto Rico	46
Mexico	13
Ecuador	8
Honduras	5
Israel	3
Nicaragua	3
El Salvador	2
Costa Rica	1
Guatemala	1
Peru	1
Venezuela	1
Unreported	29
Total	593

## Needs Assessment

Before establishing Project ESCUELA, C.S.D. 14 conducted an extensive needs assessment. In recent years, there has been a tremendous influx of new immigrants into C.S.D. 14, and it was necessary to address the needs of these students and their families. Teachers working with these students needed training as well. Grades four through nine were targeted for service, because students at those grade levels had the greatest difficulties in making language and cultural adjustments.

This project marks the first time that Yiddish-speaking students were served under Title VII.

## PROJECT OBJECTIVES

### Student Objectives

- Eighty percent of the target students will demonstrate gains in achievement in listening, speaking, reading, and writing in English, or mean N.C.E. gains which are significant.
- Eighty percent of the target Spanish-speaking students will demonstrate gains in achievement in listening, speaking, reading, and writing in Spanish, or mean N.C.E. gains which are statistically significant.
- Eighty percent of the target Yiddish-speaking students will demonstrate gains in achievement in listening, speaking, reading, and writing in Yiddish.
- Eighty percent of the target students will demonstrate statistically significant gains in achievement in mathematics expressed in N.C.E. gains.
- Eighty percent of the target students will demonstrate improvement in their knowledge of social studies and science.

- Fifty percent of participating LEP students who entered in the 1991-92 school year and who were in attendance at least 80 percent of each school year and 25 percent of participating LEP students who entered in the 1992-93 school year and who were in attendance at least 80 percent of the school year will receive a score at or above the 40th percentile on the LAB, and thus exit from the program.

#### Staff Development Objective

- Eighty percent of participating teachers will demonstrate improved teaching methodologies acquired as a result of participating in the training program.

#### Parental Involvement Objective

- Eighty percent of participating parents will demonstrate improvement in English language proficiency.

### PROJECT IMPLEMENTATION

During the 1992-93 school year, Project ESCUELA provided instructional and support services to 415 Spanish-speaking and 178 Yiddish-speaking LEP students and their families. The project proposed to motivate students to stay in school, acquire English language proficiency, and learn fundamental academic skills. The project focused on improving achievement in mathematics and science. Students were trained in computer use and were offered career education through the content areas in addition to attending English as a second language (E.S.L.) and native language arts (N.L.A.) classes. Staff received instruction in the use of E.S.L. methodology and using computers in instruction. The district provided E.S.L. classes for parents of project students.

### Capacity Building

District 14 has been absorbing some of the costs of the project. For example, the district pays for staff development activities.

### Materials, Methods, and Techniques

Content area courses were taught at first in the home language with instruction in English increasing as students progressed.

Instructional techniques used in the program included computer-assisted instruction in E.S.L. and the content areas, small group instruction, and peer tutoring.

For a list of instructional materials, see Appendix A.

### Staff Qualifications

Title VII staff. The project's Title VII staff included the project director, a resource specialist, and two family workers. For a description of degrees held, certification, and language competencies (either communicative or teaching proficiency\*), see Table 3.

Other Staff. Tax-levy funds paid the salaries of other staff. All staff were certified in the areas in which they taught. For a description of degrees held, certification, and language competencies, see Table 4.

---

\*Teaching proficiency (TP) is defined as the ability to use LEP students' native language in teaching language arts or other academic subjects. Communicative proficiency (CP) is defined as a non-native speaker's basic ability to communicate and interact with students in their native language.

TABLE 3

Project Staff Qualifications

Title	Degree(s)	Certificate(s)/ License(s)	Language Proficiency
Project Director	Ph.D.	E.S.L. (Elementary)	Spanish (CP)
Resource Specialist	B.A.	E.S.L.	Yiddish (CP)
Family Worker	A.A.	--	Spanish (CP)
Family Worker	A.A.	--	Yiddish (CP)

TABLE 4

Non-Title VII Staff Qualifications

Title	Degree(s)	Certificate(s)/ License(s)	Language Proficiency
28 Teachers 3 Paraprofessionals	19 M.A. 10 B.A. 2 H.S.	12 Bilingual C.B. 14 C.B. 1 Health Ed. 1 Home Career Skills 1 Bil. Math	18 TP Spanish 3 TP Yiddish

Staff development. Staff development meetings took place throughout the year. Topics included E.S.L. methodology, developing comprehension skills, and the use of computers in content area instruction.

Instructional Time Spent on Particular Tasks

See Appendix B for examples of class schedules.

### Length of Time Participants Received Instruction

Students had a mean of 2.3 years (s.d.=3.1) of education in a non-English-speaking school system and 3.1 years (s.d. = 2.4) of education in the United States. The median amount of time students participated in Project ESCUELA was 15 months.

### Activities to Improve Pre-referral Evaluation Procedures for Exceptional Students

A computer program was offered to gifted and talented students at all sites. In addition, an art program was offered to gifted students at P.S. 19.

Teachers identified students thought to be in need of special education to the School-based Support Team (S.B.S.T.). All members of the S.B.S.T. were bilingual in the language of the students they served.

Counseling was available for program students in the home language as well as English. Disabled students used a resource room.

### PARENT AND COMMUNITY INVOLVEMENT ACTIVITIES

Parents were offered E.S.L. classes in the mornings at P.S. 19 and in the evening at I.S. 71, a more central location than last year's. Classes this year were also more social in nature. As a result of these factors, parent participation in E.S.L. classes greatly increased.

Other parental involvement workshops were held throughout the year and included topics such as English in everyday life, how to help children with their studies, and the goals and components of Project ESCUELA.



## II. EVALUATION METHODOLOGY

### EVALUATION DESIGN

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

OREA used a gap reduction design to evaluate the effect of language instruction on project students' performance on standardized tests. Because of the difficulty in finding a valid comparison group, OREA 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 for whom there were pre- and posttest scores. (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, El Examen de Lectura en Español (ELE), and the MAT-Math (replaced by the California Achievement Test [CAT] in spring 1993) are used throughout New York City to assess the growth of English, Spanish, and mathematics skills in populations similar to those served by Project ESCUELA.

## INSTRUMENTS OF MEASUREMENT

OREA compared pre- and posttest scores on the LAB to assess the E.S.L. objective, and the ELE to assess the Spanish N.L.A. objective. To assess the Yiddish N.L.A. objective, the locally-developed Beth Rachel (B.R.) test in Yiddish was used. The content area objective for science and social studies was assessed through course grades.

All students were tested at the appropriate grade level. The language of the LAB, ELE, and B.R. were determined by the test itself, whereas the language of the MAT-Math and Math Concepts and Applications subtest of the CAT was determined by the language in which the student received instruction in mathematics.

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. Validation 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 3.09 raw score units.

The mathematics objective posed special difficulties for evaluation. In the year under review, the Board of Education adopted the Concepts and Applications subtest of the California Achievement Test (CAT) as a citywide mathematics test. This instrument differs in approach and emphasis from the MAT, which students took the previous year. It is difficult to compare results from one instrument to the other. On account of language-specific adaptations in the versions of each test, these difficulties are particularly acute in the case of students who took the test in a language other than English. For the evaluation of bilingual programs in the year under review, therefore, OREA is reporting CAT scores without attempting to compute pre/post gains. In the following year, when both pre- and posttest scores will be fully comparable, the mathematics objective will be evaluated as written.

The B.R. test in Yiddish was determined to be valid and reliable by C.S.D. 14. A panel of experts from the district and local universities examined the test to analyze its content against that of the objectives of the native language component of the bilingual program. The instrument was judged to possess sufficient content

validity. In addition, teachers were trained in the precise administration and rating of the test and district staff reviewed the ratings to assure interjudge reliability.

In order to assess the staff development objective, OREA interviewed the project director.

To assess the parental E.S.L. objective, a locally-developed criterion-referenced test was used.

## DATA COLLECTION AND ANALYSIS

### Data Collection

To gather qualitative data, an OREA 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 final 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 accomplished electronically 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 OREA. Data collectors, processors, and analysts were unbiased and had no vested interest in the success of the project.

Use of analysis and reporting procedures appropriate for obtained data. To assess the significance of students' achievement in English and Spanish, OREA computed a correlated t-test on the LAB and ELE. 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 the 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 OREA 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

Project ESCUELA carried out all instructional activities specified in its original design. Students received computer training and career education in the content areas in addition to E.S.L. and N.L.A. classes.

#### LEP Participant's Progress in English

E.S.L. was offered five periods a week to all project students. The instructional strategies used for teaching E.S.L. included computer-assisted instruction (C.A.I.), small-group instruction, special writing groups, listening centers, videotapes, art, music, and drama.

An OREA evaluation consultant observed a fourth grade E.S.L. class at P.S. 84, where project students were predominately Latino. P.S. 84 is a large school with nicely decorated classrooms. The lesson observed by the OREA consultant was "Plants and How They Grow." Students listened to a tape and then read aloud from a companion book. Students then went to the blackboard and drew the parts of a plant. Each student had a cup of soil in which seeds had been planted in time to flower by Mother's Day. Students were well behaved and eager to participate in tending the plants.

The evaluation objective for English development was:

- Eighty percent of the target students will demonstrate gains in achievement in listening, speaking, reading, and writing in English, or mean N.C.E. gains which are significant.

There were complete pre- and posttest scores on the LAB for 312 students. (See Table 5.) Students showed a mean gain of 5.5 N.C.E.s (s.d. = 12.2), which was statistically significant ( $p < .05$ ). Overall, 45.2 percent of the students demonstrated an increase from pre- to posttest scores.

The project did not meet its objective for development of English language skills. Last year, the project met this objective.

#### LEP Participants' Progress in Native Language Arts

Project students received five periods of N.L.A. per week. The home language of students at P.S. 19, P.S. 84, and J.H.S. 50 was Spanish. At I.S. 71 and Beth Rachel School, the home language was Yiddish. The instructional strategies used included individual assistance, small groups, library resources, C.A.I., and peer tutoring. It was estimated that one-fifth of the project students lacked native language literacy skills.

The evaluation objective for Spanish language development was:

- Eighty percent of the target Spanish-speaking students will demonstrate gains in achievement in listening, speaking, reading, and writing in Spanish, or mean N.C.E. gains which are statistically significant.

TABLE 5

Pretest/Posttest N.C.E. Differences on the Language Assessment Battery, by Grade

Project Site	Total number of project students	Number of students for whom data were available	Pretest		Posttest		Difference		t value
			Mean	S.D.	Mean	S.D.	Mean	S.D.	
P.S. 19	124	95	7.8	8.7	14.0	15.9	6.3	10.9	5.59*
P.S. 84	58	40	13.0	12.3	21.1	20.1	8.2	16.8	3.07*
J.H.S. 50	210	161	7.8	11.3	12.9	14.1	5.1	11.5	5.63*
I.S. 71	47	16	6.9	7.0	6.3	10.1	-0.6	10.8	-0.23
Beth Rachel	154	--	--	--	--	--	--	--	--
Total	593	312	8.4	10.6	13.9	15.7	5.5	12.2	8.06*

\*p < .05

- Project ESCUELA students at three reporting sites, and overall, showed significant increases on LAB scores.



There were complete pre- and posttest scores on the ELE for 342 students. (See Table 6.) Students showed a mean gain from pretest to posttest of 3.4 N.C.E.s. (s.d. = 22.5), which was statistically significant ( $p < .05$ ). Overall, 57.0 percent of the students demonstrated an increase from pre- to posttest scores.

Project ESCUELA met its Spanish native language arts objective. This objective was not met last year.

The evaluation objective for Yiddish language development was:

- Eighty percent of the target Yiddish speaking students will demonstrate gains in achievement in listening, speaking, reading, and writing in Yiddish.

Project ESCUELA provided OREA with 140 matched scores for its Yiddish native language arts objective, all from Beth Rachel School. Of these, 131 (93.6 percent) demonstrated gains from the previous year.

The project met its objective for Yiddish N.L.A., as was the case last year.

#### LEP Participant's Academic Achievement

Content area instruction was primarily in the home language, with the use of English increasing as students progressed. The project used C.A.I., audiovisual materials, and literature to facilitate achievement in the content areas. Peer tutoring was used in mathematics courses.

TABLE 6

Pretest/Posttest N.C.E. Differences on  
El Examen de Lectura en Español (ELE), by Grade

Project Site	Total number of project students	Number of students for whom data were available	Pretest		Posttest		Difference		t value
			Mean	S.D.	Mean	S.D.	Mean	S.D.	
P.S. 19	124	64	60.2	16.4	59.7	13.5	-0.47	11.25	-.33
P.S. 84	58	29	49.5	12.6	49.2	12.1	-0.35	12.9	-.14
J.H.S. 50	210	107	52.9	20.5	56.5	22.5	3.6	16.8	2.2*
I.S. 71	47	16	51.8	18.2	54.1	15.1	2.3	18.7	.49
Beth Rachel	154	126	45.8	21.8	51.9	21.7	6.1	31.4	2.17*
Total	593	342	51.3	20.2	54.7	19.9	3.4	22.5	2.75*

\*p < .05

- Project ESCUELA students showed significant increases on ELE scores.

An OREA consultant observed a fifth grade social studies class at P.S. 34. The class was taught completely in English. The teacher distributed a sheet to each student with a paragraph about traveling by train, boat, car, or airplane. Each student read one sentence aloud, and the class then discussed the exercise. Using a map, the class discussed where they were born, where they had lived, and where major cities were located. The teacher then named two states at a time and asked the students whether it would be best to take a boat, car, or airplane there. The class was well-behaved and seemed to enjoy the lesson and respect the teacher.

A computer class with Yiddish-speaking students was observed at I.S. 71. The students were from various grades. Students worked on different lessons, all of which reinforced concepts learned in other classes. For example, a few students were working on a matching game that reinforced mathematical concepts. All instruction was in English.

The evaluation consultant also observed a reading class at I.S. 71. One student read a story from a children's magazine while the rest followed along. Students used a computer program which dealt with reading compound words. All instruction took place in English, and students worked at their own pace.

The project's objective for mathematics skills development was:

- **Eighty percent of the target students will demonstrate statistically significant gains in achievement in mathematics expressed in N.C.E. gains.**

CAT scores were available for 30 students in grades seven through nine. The mean N.C.E. score for all project students was 36.13 (s.d.=19.38). For reasons

explained in the chapter on Evaluation Methodology, OREA did not attempt to compute pre/posttest gains.

OREA was unable to evaluate the objective for mathematics skills development this year, but will be able to do so next year.

The project's objective for science and social studies was:

- Eighty percent of the target students will demonstrate improvement in their knowledge of social studies and science.

Final course grades were used to evaluate this objective. Data was provided for 382 students in social studies and 385 students in science. Overall, 60.7 percent (social studies) and 59.7 percent (science) of project students showed an increase in scores from the previous year. (See Table 7.)

The project did not meet its objective for improvement in science and social studies, as was also the case last year.

TABLE 7  
Content Areas Final Grades

Subject Area	Mean Grade June 1992	Mean Grade June 1993	Number of Students Showing Improvement	Percentage Showing Improvement
Science	73.5	75.0	230	59.7
Social Studies	72.9	74.7	232	60.7

## Career Development

The intent of Project ESCUELA was to provide a comprehensive career education instructional program with an emphasis on mathematics and science. Teachers infused career education into the content areas. For example, in a mathematics class students studied income taxes and the role of the accountant. Computer skills were also an important part of the curriculum.

## FORMER PARTICIPANTS' PROGRESS IN ENGLISH LANGUAGE CLASSROOMS

Eight students were mainstreamed in the 1991-92 school year. No information was available on their performance.

## OVERALL EDUCATIONAL PROGRESS ACHIEVED THROUGH PROJECT

### Mainstreaming

The project's objective for mainstreaming was:

- Fifty percent of participating students who entered in the 1991-92 school year and who were in attendance at least 80 percent of the school year, and 25 percent of participating LEP students who entered in the 1992-93 school year and who were in attendance at least 80 percent of the school year, will receive a score at or above the 40th percentile on the LAB, and thus exit from the program.

OREA had data for 37 students who entered the program in the 1991-92 school year and were in attendance for at least 80 percent of the school year. Of those students, six (16.2 percent) scored at or above the 40 percentile on the LAB.

OREA had data for 182 students who entered the program and were in attendance for at least 80 percent of the year under review. Five (3.3 percent) of these students were mainstreamed.

The project did not meet its objective for mainstreaming, as was also the case last year.

Grade Retention

Project ESCUELA did not propose any objectives for grade retention. 45 project students (7.6 percent) were to be retained in grade this year. In the previous year, 18 students (3.5 percent) were retained in grade.

Attendance

Project ESCUELA did not propose any objectives for attendance. The overall project attendance rate for the year under review was 94.4 percent. For each site, project students' attendance was higher than that of mainstream students.

(See Table 8.)

TABLE 8  
ATTENDANCE RATES

Project Site	Attendance Rates	
	Project Students	Schoolwide
P.S. 19	95.5	93.1
P.S. 84	93.6	89.7
J.H.S. 50	90.7	84.7
I.S. 71	95.9	89.9
Beth Rachel	97.8	--

### Placement in Gifted and Talented Programs

No students were placed in gifted and talented programs. Special computer projects were available for these students at all sites and, in addition, an art program was offered at P.S. 19. No project students were referred to gifted and talented programs last year.

### CASE HISTORY

J.R. came to the United States from the Dominican Republic three years ago. He was in the sixth grade bilingual class at P.S. 19. He made great progress in English and was expected to show improvement on the English LAB. His mother attended E.S.L. classes regularly and was making an effort to work with her son at home. Project ESCUELA provided mother and son with materials in career education.

### STAFF DEVELOPMENT OUTCOMES

- Eighty percent of participating teachers will demonstrate improved teaching methodologies acquired as a result of participating in the training program.

Teachers of participating students participated in a series of meetings throughout the school year. These meetings focused on E.S.L. training, including developing oral competency, and the use of computers in content area instruction.

As per the project director's report, all teachers who participated in the training program showed improvement in their teaching methodologies.

Project ESCUELA met its objective for staff development, as was also the case in the previous year.

#### PARENTAL INVOLVEMENT OUTCOMES

- Eighty percent of participating parents will demonstrate improvement in English language proficiency.

E.S.L. classes were provided for parents at P.S. 19 in the morning and I.S. 71 in the evening. Last year, the morning classes were offered at P.S. 84. P.S. 19 was used this year because it was more centrally located. In addition, classes this year focused on more social activities. As a result, parental participation increased.

The project administered a criterion-referenced test to parents on a pre/post basis. The results indicated that parents demonstrated improvement in their English language skills (pretest mean raw score = 0, posttest mean raw score = 37).

Project ESCUELA met its objective for parental involvement. Last year, OREA could not evaluate this objective.



#### IV. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

##### ACHIEVEMENT OF OBJECTIVES

The project met its objectives for Spanish N.L.A., Yiddish N.L.A., staff development, and parental involvement. It did not meet its objectives for English development, content areas (science and social studies), or mainstreaming. OREA could not evaluate the objective for mathematics.

##### MOST AND LEAST EFFECTIVE COMPONENTS

The project director indicated that the E.S.L. component for parents was well received. E.S.L. workshops were more social in nature, and parents enjoyed attending. Parents were encouraged to speak to their children in English at home and thus play a more active role in their children's education.

The project director felt that the staff development component was least effective, since it was difficult to pull teachers out of classrooms for workshops.

##### RECOMMENDATIONS TO ENHANCE PROJECT EFFECTIVENESS

- **Examine ways to assist more students to achieve greater proficiency in English which will enable them to be mainstreamed into an English-only program.**
- **Identify ways to improve student learning in social studies and science.**

## APPENDIX A

Instructional Materials

## E.S.L

Title	Author	Publisher/Date
Cookie Monster's Blue Book	Jones	Oxford, 1985
Language Treasure Chest	Wycoff	Treasure Chest, 1984
Open Sesame Series	Zion	Oxford, 1985
Oxford Picture Dictionary	Zevin, Parnwell	Oxford, 1986
Photo Dictionary		Longman, 1987
Turning Points, 1-3	Iantorno, Papa	Addison Wesley
Practical English, 1-3	Harris	Coronado, 1980
Odyssey, 1-4	Kimbrough	Longman, 1983
Beginning Writing Task	Markstein	Regents, 1985
Stories from Latin America	Myers	Regents, 1987
Everyday English	Krulik, Zafran	National Testing Company, 1977
English for a Changing World		Scott Foreman
Spanish/English E.S.L		
Vocabulary Games (Computer Software)		
Children's Publishing (Computer Software)		

N.L.A.

Title	Author	Publisher/Date
Campeones	Barrera	Houghton, Mifflin, 1987
Ciudades	Crawford	Houghton, Mifflin, 1987
Carreteras	Crawford	Houghton, Mifflin, 1987
Barreras	Crawford	Houghton, Mifflin, 1987
Merrill Phonics		Merrill Publications
Programa de lectura		Houghton, Mifflin, 1987
Multiple Skills Series	Boning	Minerva, 1979
La Pata Pita	Perera, Fraga	Minerva, 1979
Mi primera fonética	Bishop	National Text Company, 1976
Prácticas de ortografía	Díaz Cubero	Comp. Cult. Tex., 1974
Ortografía funcional	Anorga	Minerva, 1984
Español estructural	Gonzalez	Cultura Puertorriquena, 1987
Elementario gramatical	Anorga	Minerva, 1967
Yiddish Leinbuch	Weinstock	
Shprach Ibungen	Wertzberger	Basis Rocher Publications, 1988
Spanish Core Reading (Computer Software)		
Spanish Hangman (Computer Software)		

**Mathematics**

Title	Author	Publisher/Date
Matemáticas para las educacion primaria		Fondo Education, Inc., 1968
Matemáticas sin límite		Holt, Rinehart, Winston, 1987
Houghton Mifflin Math	Cole, Quast	Houghton, Mifflin, 1988
Invitation to Mathematics	Hamada	Scott Foreman, 1985
The Marketplace (Computer Software)		
Mathshop (Computer Software)		

### Science

Title	Author	Publisher/Date
Ciencia de Holt	Abuscato	Holt, Rinehart, Winston, 1985
English for Science	Zimmerman	Prentice Hall, 1989
La materia y la energía	Heimler, Price	Merrill, 1985
La ciencia de la tierra y espacio	Heimler, Price	Merrill, 1985
Los seres vivos	Heimler, Price	Merrill, 1985
Silver Burdett Series	Mallison, Smallwood, Valentina	Silver Burdett

### Social Studies

Title	Author	Publisher/Date
El mundo y su gente	Cooper	Silver Burdett, 1984
Cuaderno de estudios sociales		Cultura Puertorriquena, 1987
Geografía de EE.UU.		Silver Burdett, 1989
Comunidades de nuestro país	Liftin	Silver Burdett, 1988
Europa, Africa, Asia y Australia		Silver Burdett, 1984
Our Nation's History	Martinez	Trilla, 1988
Nueva historia de los EE.UU.	Baker/Hall	Minerva, 1986
Historia del pueblo de los EE.UU.	Díaz Cubero	Comp. Cult P., 1981
The U.S. and Other Americas	Jarolimek	Macmillan, 1987
Sefer Haluchos	Herskowitz	T. Shabbas, 1988
Yumim Tolvim	Spitzer	Bais Rachel Publications, 1981
The Marketplace (Computer Software)		
Community Helpers, Public and private (Computer Software)		

## Career Education/Keyboarding

Assessing Employability
Sticy Bear Typing (Computer Software)
Type! (Computer Software)

APPENDIX B

Schedule of Instruction

Period

Day	1	2	3	4	5	6	7	8
Mon	E.S.L.	Math	Reading	Soc. Stud.	Sci.	L	Gym	N.L.A.
Tues	E.S.L.	Math	Soc. Stud.	Reading	Sci	U	Gym	N.L.A.
Weds	E.S.L.	Reading	Gym	Math	Soc. Stud.	N	Sci.	N.L.A.
Thurs	E.S.L.	Math	Reading	Guidance	Soc. Stud.	C	Sci.	N.L.A.
Fri	Auditorium	Gym	E.S.L.	Math	Soc. Stud.	H	Sci.	N.L.A.