

DOCUMENT RESUME

ED 356 295

UD 029 112

AUTHOR Guadalupe, Deana R.
TITLE Dropout Reduction through Education, Achievement, and Motivation (Project DREAM). Transitional Bilingual Education, 1991-92. Final Evaluation Profile. OREA Report.

INSTITUTION New York City Board of Education, Brooklyn, NY. Office of Research, Evaluation, and Assessment.

PUB DATE Feb 93

CONTRACT T003A90063

NOTE 20p.

AVAILABLE FROM Office of Research, Evaluation, and Assessment, New York City Public Schools, 110 Livingston Street, Room 732, Brooklyn, NY 11201.

PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *Academic Achievement; Cultural Awareness; *Disadvantaged Youth; *Dropout Prevention; English (Second Language); High Schools; *High School Students; Immigrants; Interpersonal Relationship; *Latin Americans; Limited English Speaking; Program Evaluation; School Guidance; Self Concept; *Student Motivation; Urban Youth

IDENTIFIERS Language Minorities; Latinos; New York City Board of Education; *Project DREAM NY; Transitional Bilingual Education Programs

ABSTRACT

Dropout Reduction through Education, Achievement, and Motivation (Project DREAM) was designed to serve the needs of Latino immigrants who had scored at or below the 40th percentile on the Language Assessment Battery. The design-incorporating plans for group and individual guidance sessions to help students improve their interpersonal skills. It proposed to promote motivation through awarding honors such as "Most Improved Student," or "Student of the Month." Assemblies were to be arranged to promote cultural awareness, and field trips were planned as incentives for academic achievement. In 1991-92, Project DREAM enrolled 492 students in grades 9 through 11 at South Bronx High School in the Bronx (New York City). All participants were considered limited English proficient. The project carried out its planned activities and expanded on them. Individual and group guidance sessions for job placement, parenting, pregnancy services, and other needs were conducted by project staff. Student recognition awards were given out in assemblies, and several cultural awareness events were sponsored. In spite of program efforts, however, parent participation was low. Recommendations were made to increase achievement in English as a Second Language, reading in English, and other content areas. Student self-image should receive increased concern in program planning. Two appendixes discuss data collection and analysis and instructional materials. (SLD)

ED356295



OREA Report

Dropout Reduction Through Education,
Achievement, and Motivation
(Project DREAM)
Transitional Bilingual Education Grant T003A90063
1991-92

FINAL EVALUATION PROFILE

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 document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

R. Tobias
N.Y. Board of Education

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

**Dropout Reduction Through Education,
Achievement, and Motivation
(Project DREAM)
Transitional Bilingual Education Grant T003A90063
1991-92**

FINAL EVALUATION PROFILE



NEW YORK CITY BOARD OF EDUCATION

H. Carl McCall
President

Irene H. Impellizzeri
Vice President

Carol A. Gresser
Westina L. Matthews
Michael J. Petrides
Luis O. Reyes
Ninfa Segarra
Members

Keysha Z. McNeil
Student Advisory Member

Joseph A. Fernandez
Chancellor

DIVISION OF STRATEGIC PLANNING/RESEARCH & DEVELOPMENT

Robin Willner
Executive Director

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. Nesfield, Director, Office of Equal Opportunity, 110 Livingston Street, Room 601, Brooklyn, New York 11201, Telephone: (718) 935-3320.

ACKNOWLEDGMENTS

This report has been prepared by the Bilingual, Multicultural, and Early Childhood Evaluation Unit of the Office of Research, Evaluation, and Assessment. Thanks are due to Deana R. Guadalupe for collecting the data and writing the report.

Additional copies of this report are available from:

Dr. Tomi Deutsch Berney
Office of Research, Evaluation, and Assessment
New York City Public Schools
110 Livingston Street, Room 732
Brooklyn, NY 11201
(718) 935-3790 FAX (718) 935-5490

FOREWORD

The body of this report is preceded by an Extract which presents an overview of salient points of the project: funding cycle; enrollment figures; background of students served; admission criteria; and programming features, strengths, and limitations, including the outcome of all objectives. The extract also presents the conclusions drawn by the Office of Research, Evaluation, and Assessment (OREA) about the program and its recommendations for program improvement.

The extract is followed by the body of the report, titled Program Assessment. This includes such information as staffing, program implementation, and outcome and implementation objectives. Instructional objectives are presented first, followed by noninstructional objectives. The report then addresses those aspects of programming mandated by Title VII regulations that do not have specifically stated objectives. This may be information on attendance and dropout rate, grade retention, mainstreaming, referrals out of the program to meet special needs of the students, and withdrawals. A case history concludes the report.

Data for this profile were collected and analyzed using a variety of procedures, which are described in Appendix A following the text.

Office of Research, Evaluation, and Assessment
 New York City Public Schools
 E.S.E.A. Title VII Evaluation Profile
**Dropout Reduction Through Education,
 Achievement, and Motivation
 (Project DREAM)**

Transitional Bilingual Education Grant T003A90063
 1991-92

EXTRACT

PROJECT DIRECTOR: Ms. Sheila Fallick

FUNDING CYCLE: Year 3 of 3

SITES

<u>School</u>	<u>Borough</u>	<u>Grade Levels</u>	<u>Enrollment*</u>	
			<i>(fall)</i>	<i>(spring)</i>
South Bronx High School	Bronx	9-11	392	373

*The project enrolled 492 students (48 more than in the previous year), 351 of whom participated both semesters. Male students numbered 225, female 261; gender was not stated for 6.

STUDENT BACKGROUND

<u>Native Language</u>	<u>Number of Students</u>	<u>Country of Origin</u>	<u>Number of Students</u>
Spanish	488	Dominican Republic	226
Haitian	1	Puerto Rico	122
Unreported	3	Honduras	34
		Mexico	28
		United States	27
		Ecuador	23
		El Salvador	9
		Guatemala	9
		Colombia	3
		Nicaragua	3
		Other	6
		Unreported	2

Median Years of Education in Native Country: 7.0; in the United States: 4.0

Percentage of Students Eligible for Free Lunch Program: 100.0

ADMISSION CRITERIA

Project DREAM admitted students who had scored at or below the 40th percentile on the Language Assessment Battery (LAB) and were thus certified as being limited English proficient (LEP). Students also opted into the program through written parental request.

PROGRAMMING

Design Features

Project DREAM was designed to serve the needs of Latino immigrants. The design incorporated plans for group and individual guidance sessions to help students improve their interpersonal skills. The project proposed to promote motivation in students by awarding honors such as "Most Improved Student" and "Student of the Month." Assemblies were to be arranged to promote cultural awareness and a broad range of field trips were to be offered as incentives for academic achievement.

Capacity building. In the next (fourth) year of programming, South Bronx High School plans to take over funding for a resource teacher and a case manager, using tax-levy monies. An educational assistant will be funded by P.C.E.N./Chapter 1.

Strengths and Limitations

Project DREAM carried out the activities it had proposed in its design and expanded on them. Individual and group guidance sessions for job placement, parenting, pregnancy services, and other needs were conducted by the case manager and two bilingual guidance counselors. Assemblies were held at which student recognition awards were given. Four students, one in each grade, won a trophy for receiving the highest grades. A Bilingual Student Recognition Day, a Puerto Rican Discovery Day, Dominican Independence Day, and Pan-American Day were celebrated to promote greater understanding and appreciation of different cultures represented in the school's population. Trips to the American Museum of the Moving Image, AT&T Infoquest Center, and Ballet Hispanico of New York were provided as incentives for students who improved academically, passed all classes, or had excellent attendance.

In spite of the program's efforts, parental involvement was low.

CONCLUSIONS AND RECOMMENDATIONS

As in the previous year, Project DREAM was successful in meeting its objectives for passing grades in E.S.L. and E.S.L. reading, passing grades in N.L.A., content area subjects, Regents examinations, career education, attendance, and staff development. It also met the dropout prevention and six parental involvement objectives. Project DREAM partially met the R.C.T. objective and the decreased suspension/incidents objective. The project failed to meet the E.S.L. objective assessed by the LAB, which it met the previous year. Project DREAM had also met the N.L.A. language skills objective last year but did not do so this year. While OREA had been unable to evaluate the self-image objective last year, this year's results were available and indicated that Project DREAM had failed to meet this objective. The project director offered plans for meeting these objectives in the next year.

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

- Explore ways to increase achievement in E.S.L. Consider changing instructional materials and include a dual-literacy program and computer-assisted instruction.
- Initiate a more intensified N.L.A. reading program for those students most in need of acquiring skills in the native language.
- Seek ways to enable students to increase their skills in mathematics, science, and U.S. history using additional strategies in content area instruction such as peer tutoring and individual and small group assistance.
- Work with students on increasing their self-image. Consider having the guidance counselor schedule more frequent individual and small group meetings designed with this purpose in mind.
- Use the OREA-developed form to assess students' self-image.

PROGRAM ASSESSMENT

STAFFING

Title VII Staff (Total 6)

<u>Title</u>	<u>Degree</u>	<u>Language Competencies</u>	<u>Title VII Funding</u>	<u>Other Funding</u>
Project Director	M.A.	Spanish, French	Full time	
Resource Specialist	M.A.	Spanish	Part time	Tax Levy
Case Manager	M.A.	Spanish	Part time	Tax Levy
Educational Assistant	B.A.	Spanish	Part time	P.C.E.N.
Educational Assistant	B.S.	Spanish	Full time	
Educational Assistant	High School	Spanish	Full time	

Other Staff Working With Project Students (Total 30)

<u>Titles</u>	<u>Degrees</u>	<u>Certification</u>	<u>Language Competencies and Teaching Communicative Proficiencies (TP/CP)*</u>
Teachers 28	M.A. 16	E.S.L. 6	Spanish TP 17, CP 3
Guid. Counselors 2	M.S. 2	Spanish 4	
	B.A. 10	Mathematics 2	
B.S. 1		Bil. Math. T.P.D. 2	
		Soc. Stud. T.P.D. 2	
		Guidance 2	
		Bil. Sci. T.P.D. 1	
		English 1	
		Mathematics T.P.D. 1	
		Bil. Soc. Stud. T.P.D. 1	
		Emotionally Handic'd 1	
		Bil. General Sci. 1	
		Bil. Social Studies 1	
		Business 1	

Staff had certification in areas they served except for two teachers certified in mathematics, one certified in English, and another certified in social studies T.P.D., all of whom taught E.S.L.

*Teaching Proficiency (TP): Competent to teach in this language.
 Communicative Proficiency (CP): Conversational capability only.

IMPLEMENTATION AND OUTCOMES (Objectives prefaced by ●)

English as a Second Language (E.S.L.)

E.S.L. CLASSES

<u>Level</u>	<u>Periods Weekly</u>	<u>Students Enrolled</u>
Literacy	15	11
Beginning	15	72
Intermediate	15	107
Advanced	10	45
Transitional	5	137

Instructional strategies for E.S.L. included computer-assisted instruction and cooperative learning. Small group and individual instruction was provided to students by educational assistants.

For a list of instructional materials see Appendix B.

- Seventy-five percent of program students will continue to demonstrate gains in achievement in language skills (reading, writing, listening, and speaking) as measured by a gain of at least 1 N.C.E. per semester on the LAB.

Evaluation Instrument: Language Assessment Battery (LAB)*

Pretest: May 1991; posttest: May 1992.

Number of students for whom pre- and posttest data were reported: 334

Percent of students with pretest/posttest gains: 70.1

Mean gain: 8.0 N.C.E.s (s.d.=10.3)

Mean gain is statistically significant ($t=14.18, p<.05$).

The projected 75 percent of the students did not meet the objective, although the group as a whole demonstrated substantial gains in English proficiency. The project will try to meet the objective by changing instructional materials, increasing conversational skills, and including a dual-literacy program.

Project came close but did not meet E.S.L. objective assessed by gains on the LAB.

- Seventy percent of the program students will score at passing criterion of 65 in E.S.L. and E.S.L. reading.

Evaluation Indicator: final course grades.

*OREA used a gap reduction design to evaluate the effect of supplementary instruction on project students' performance on the LAB. Since all LEP students in New York City are entitled to such instruction, no valid comparison group exists among these students, and OREA used instead the group on which the LAB was 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 21.06. 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.

PASSING GRADES IN E.S.L. CLASSES

<u>Subject</u>	<u>Enrollment</u>		<u>Percent Passing</u>	
	<u>Fall</u>	<u>Spring</u>	<u>Fall</u>	<u>Spring</u>
E.S.L.	353	335	72.8	72.8
E.S.L. Reading	309	248	73.1	71.0

Project met objective in E.S.L. and E.S.L. reading.

Native Language Arts (N.L.A.)

Students lacking literacy skills in native language (estimated): 10 percent.

N.L.A. CLASSES

<u>Level</u>	<u>Periods Weekly</u>	<u>Students Enrolled</u>
Literacy	10	17
Intermediate	5	135
Advanced	5	192
Advanced Placement	5	15

Instructional strategies for N.L.A. included computer-assisted instruction and cooperative learning. Educational assistants instructed small groups and individuals in need of assistance. To increase students' knowledge of their native language as well as English, the school held spelling bees.

For a list of instructional materials see Appendix B.

- Seventy-five percent of the target students will demonstrate statistically significant gains in Spanish-language skills of reading and writing.

Evaluation Instrument: Pretest, Reading Subtest of Spanish LAB, May 1991; posttest, Examen de Lectura en Español (ELE), May 1992.*

Number of students for whom pre- and posttest data were reported: 63

Percent of students with pretest/posttest gains: 38.1

Project did not meet objective for Spanish language skills. The project plans to provide an intensified literacy course.

- Seventy percent of the target students will score at or above the passing criterion of 65 in Native Language Arts each semester.

Evaluation Indicator: final course grades.

*Details for the evaluation design using the spring 1991 Spanish LAB administration as a pretest and the spring 1992 ELE administration as a posttest will be forthcoming.

PASSING GRADES IN NATIVE LANGUAGE ARTS

<u>Enrollment</u>		<u>Percent Passing</u>	
<u>Fall</u>	<u>Spring</u>	<u>Fall</u>	<u>Spring</u>
354	327	81.6	82.6

Project met objective for passing grades in N.L.A.

Content Area Subjects

Students took classes in science, mathematics, and social studies in their native language five times per week. Many seniors in the program took content area courses in the mainstream. Students also had the opportunity to take mainstream physics, an advanced course that was not taught bilingually. The program used computer-assisted instruction, small group, and individual instruction.

For a list of instructional materials see Appendix B.

- Students participating in the program will score at or above the passing criterion of 65 in bilingual mathematics, science, and social studies classes at a rate that is equal to that of non-program students in comparable mainstream classes.

Evaluation Indicator: final course grades.

PROJECT STUDENTS' PASSING GRADES IN CONTENT AREA COURSES

<u>Subject</u>	<u>Fall</u>		<u>Spring</u>	
	<u>Enrollment</u>	<u>Percent Passing</u>	<u>Enrollment</u>	<u>Percent Passing</u>
Mathematics	349	59.3	310	64.8
Science	311	65.9	282	66.3
Social Studies	364	82.1	341	71.6

The passing rates for mainstream students were: mathematics 55 percent (291 students), science 67 percent (303 students), and social studies 63 percent (458 students).

The percentage of project students with passing grades was higher than for mainstream students in mathematics and social studies and approximately equal to mainstream students in science.

Project met objective for passing grades in content area subjects.

- The percentage of target students passing the Regents examinations in Sequential Math and Biology will be equal to that of mainstream students.

PERCENT OF STUDENTS WITH PASSING GRADES ON REGENTS EXAMS

<u>Subject</u>	<u>Project Students</u>	<u>Mainstream Students</u>
Sequential Mathematics I	100.0 (17 students)	19.0 (21 students)
Sequential Mathematics II	67.0 (8 students)	62.0 (13 students)

The Biology Regents was not given to project students because the New York State Education Department did not offer it in Spanish. A higher percentage of project students than mainstream students passed both sequential math Regents exams.

Project met content area subject objective for the Sequential Mathematics I and II Regents exams.

- The percentage of target students passing the Regents Competency Tests (R.C.T.s) in reading, writing, mathematics, science, and global history will be equal to that of mainstream students.

PASSING GRADES ON REGENTS COMPETENCY TESTS

<u>Subject</u>	<u>Project Students</u>	<u>Mainstream Students</u>
Mathematics	44 students (39 percent)	97 (53 percent)
Science	15 students (31 percent)	103 (45 percent)
Global History	40 students (69 percent)	209 (52 percent)
U.S. History	29 students (56 percent)	151 (82 percent)

Only in global history did a higher percentage of project students than mainstream students pass the R.C.T.s. The project did not provide R.C.T. scores for reading and writing.

Project partially met objective for passing grades on the R.C.T.s. The project plans to provide more assistance in the classrooms through the use of computers and educational assistants.

Career Education

- Students will set obtainable goals for their future through career education infusion in E.S.L. classes and guidance sessions with the case manager.

Teachers discussed career education in their classes. Individual and group guidance was offered by the case manager. The total number of students interviewed by the case manager on an individual basis was 241. Staff reported that students were setting realistic career and educational goals.

Project met objective for career education.

Self-Image

- Seventy percent of the program students will develop a more positive self-image.

Evaluation Instrument: School/Student Attitude Measure.

The project submitted to OREA an analysis performed by a private evaluator from Lehman College aimed at showing improvement levels in five dimensions of self-image.

Pretest: September 1991; posttest: June 1992.

Number of students for whom pre- and posttest data were reported: 169

Percent of students with pretest/posttest gains: 51

The School/Student Attitude Measure was only partly a measure of self-image. Attitude toward school was also a part of the test and obscured self-image results. Therefore, a different, discrete instrument should be used to measure this objective in the future.

Project did not meet objective for self-image. The project plans to schedule more group and individual counseling sessions to increase self-esteem.

- Students will improve their interpersonal skills which will result in fewer suspensions and incident reports for program students.

PERCENTAGE OF INCIDENT REPORTS AND SUSPENSIONS FOR PROJECT STUDENTS

	<u>1991-92</u>	<u>1990-91</u>
Incident Reports	2.0	2.0
Suspensions	5.0	6.0

The number of suspensions of project students decreased; the number of incidents reported remained the same.

Project partially met meet objective for incident reports and suspensions.

Attendance

Assemblies were conducted during which students with outstanding attendance were presented with awards. The names of students with perfect attendance were posted on a bulletin board in each classroom. Commendation letters were sent to parents whose child had outstanding attendance.

- Students in the program will maintain a higher rate of attendance than that of mainstream students.

ATTENDANCE RATES

<u>Project Students</u>	<u>Mainstream Students</u>	<u>Difference</u>
86.7	73.0	13.7

Last year the attendance rate for program students was 89.2 percent.

Project met objective for attendance.

Dropout Prevention

- The dropout rate of program students will be lower than that of mainstream students.

DROPOUT RATES

<u>Project Students</u>	<u>Mainstream Students</u>	<u>Difference</u>
5.1	5.7	0.6

In the previous year, the dropout rate for program students was 2.5 percent. While the rate went up this year, it was still below that of the mainstream students.

Project met objective for dropout prevention.

4/4

Grade Retention

One hundred and fifteen project students (23.4 percent of participants) were retained in grade. Last year, 57 students (12.6 percent) were retained in grade. Not all students are retained in grade because of failing grades; some have not accumulated enough credits to advance to the next grade.

The project did not formulate a specific objective to reduce grade retention.

Enrollment in Post-secondary Institutions

The project does not record this information because it does not serve grade 12.

Students With Special Academic Needs

Referral to special education. As in the previous year, no students were referred to special education. Teachers and guidance counselors would have made such referrals to the School-based Support Team (S.B.S.T.). The S.B.S.T. had an educational evaluator who was fluent in Spanish.

Remedial programs. No students were referred to remedial programs this year as was the case in the previous years.

Gifted and talented programs. As in the previous year, no students were referred to programs for the gifted and talented.

Mainstreaming

Project DREAM mainstreamed 14 students (2.8 percent of participants). This was similar to the previous year's 17 students (3.8 percent).

Academic achievement of former project students in mainstream. The academic performance of former project students in the mainstream is tabulated below.

<u>Mainstream Subject</u>	<u>Students Enrolled</u>	<u>Students Achieving Passing Grades</u>
English	6	4 (66.7 percent)
Mathematics	5	1 (20 percent)
Science	6	4 (66.7 percent)
Social Studies	6	4 (66.7 percent)
Business/Vocational	3	2 (66.7 percent)

Other Activities

Project students wrote and published a bilingual newspaper called *El Vocero Bilingüe*. The newspaper discussed upcoming events; presented announcements; and published students' poems, short stories, interviews, pictures, and puzzles in Spanish and English.

The school's valedictorians both terms were project students.

Staff Development

- All staff members will be fully trained in educational aspects related to E.S.L., bilingual education, native language arts, and bilingual content areas through college courses, workshops, seminars, and conferences.

Workshops were offered to program staff in E.S.L., N.L.A., and bilingual education. Topics included responding to literature, preparing LEP students for R.C.T.s, lesson planning, integration of English language skills with an emphasis on conversation and writing. Teachers attended monthly department meetings and conferences on multiculturalism, linguistics, and a City University of New York (CUNY) E.S.L. conference. Staff also participated in Staff Development Day held in June. Five teachers enrolled in college courses at City College, Adelphi University, and Teachers College of Columbia University. Educational assistants also enrolled in college courses.

Project met staff development objective.

Curriculum Development

Project staff adapted a course outline for Spanish literacy. The project did not formulate a specific objective for curriculum development.

Parental Involvement

- Parents of the target students will establish regular contact with the school and bilingual program through the services of the case manager and her educational assistant.

The case manager made phone calls, conducted individual interviews, and sent letters on a regular basis to parents of students in the program. The educational assistants telephoned parents, and the family assistant made home visits as needed.

Project met objective for establishing regular contact with parents.

- Parents of the target students will be fully informed of the relevant aspects of the N.Y.C. school system, requirements for graduation, and the bilingual program through meetings and telephone calls.

The parents of program students were informed of the relevant aspects of the New York City school system, requirements for graduation, and the bilingual program through a bimonthly newsletter, monthly Parent Association meetings, the Parent Advisory Committee (PAC) meetings, and regular phone calls from the project. Parent meetings discussed topics such as a Title VII progress report on Project DREAM and provided orientation on Open School Day/Evening.

Project met objective for disseminating information to parents.

- Parents of the target students will participate in the Bilingual Parent Advisory Committee.

Project parents participated in the bilingual PAC meetings in November and in April.

Project met objective for PAC participation.

- A course in English as a Second Language will be offered to parents of program students.

Two levels of E.S.L. instruction were offered to parents and out-of-school siblings of project students. The classes began in September and met twice a week until June. The school also offered a pre-General Equivalency Diploma (G.E.D.) course for parents of bilingual program students.

Project met objective for parents' E.S.L. classes.

- A parent support group for parents of program students will be established by the case manager. They will hold monthly meetings on a specific topic.

Parent support group meetings met monthly after the Parent Association meetings and discussed the project, domestic violence, the school HIV/AIDS plan, and immigrant women's rights.

Project met objective for parent support groups.

- A one-page bimonthly parent newsletter will be sent to parents of program students keeping them informed of all program and school activities.

Four issues of the bimonthly newsletter were sent to the parents of project students.

Project met objective for newsletter.

CASE HISTORY

Fifteen-year-old V.M. arrived at South Bronx High School in September 1990, after immigrating from the Dominican Republic. She was extremely shy and withdrawn and had difficulty coping with her frustrations over the language and cultural barriers she encountered. With much perseverance, V.M. became involved in school activities. She participated in assemblies, the school science fair, and contributed to the student-produced newsletter. She won first place in the South Bronx High School E.S.L. Spelling Bee in 1991 and the Spanish Spelling Bee for two years in a row. She was also a finalist for the Spanish Citywide Spelling Bee. After receiving an achievement award and maintaining an 80 average as an honor roll student, she tested out of the program and will be fully mainstreamed in September 1992.

APPENDIX A

DATA COLLECTION AND ANALYSIS

COLLECTION

OREA evaluation consultants visit sites and interview key personnel. The project director gathers data and, with the consultant, completes forms (as shown below) as necessary.

Student Data Form

This one-page form is filled out by staff for each participating and mainstreamed student. OREA gathers data from this form on backgrounds, demographics, academic outcomes, attendance, referrals, and exit from the program.

Project Director's Questionnaire

The Project Director's Questionnaire includes questions on staff qualifications, program implementation, periods of instruction, and instructional materials and techniques.

Project Director's Interview

The interview gathers information on program and student or staff characteristics not supplied by the Project Director's Questionnaire. The interview also allows project staff to offer qualitative data or amplify responses to the questionnaire.

Citywide Test Scores

OREA retrieves scores centrally from the Language Assessment Battery (LAB) and other citywide tests. For evaluation purposes, these test scores are reported in Normal Curve Equivalents (N.C.E.s). N.C.E.s are normalized standard scores with a mean of 50 and a standard deviation (s.d.) of 21.06. They constitute an equal-interval scale in which the distance is the same between any two adjacent scores. A gain of 5 N.C.E.s is the same whether it is at the lower or the higher end of the scale. N.C.E.s can be used in arithmetic computations to indicate group progress. (Percentile scales, although more familiar to many, are unsuitable for such computations since they are not equal-interval.)

Likert-Type Surveys

Likert-type surveys, in which respondents mark their opinions on a scale from one to five, are used in a variety of ways. They examine student attitudes (i.e., toward school and career, native language use, and native and mainstream cultures). They also assess staff and parent attitude and reactions to workshops and other activities.

ANALYSIS

Gap Reduction Evaluation Design

OREA uses a gap reduction design for measuring changes in standardized tests. Since no appropriate non-project comparison group is available in New York City, where all students of limited English proficiency (LEP) are entitled to receive supplementary services, OREA compares the progress of participating students with that of the group on which the test was normed. It is assumed that the norm group would show a zero gain in the absence of instruction, and gains made by project students could be attributed to project services. 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 21.06. (See "Citywide Test Scores" above.)

To test whether pre/posttest gains are greater than could be expected by chance alone, OREA uses a *t*-test. To test whether a difference between two proportions (e.g., program and mainstream attendance rates) is

greater than could be expected by chance, OREA uses a z-test and reports the differences between the two proportions. The level of significance is set at .05 for all tests.

Techniques For Minimizing Error

The evaluation procedures minimize error by providing for proper administration of evaluation instruments through a combination of testing at 12-month intervals, appropriate analysis procedures and reporting.

Instruments of measurement include the LAB (see above), the Degrees of Reading Power (D.R.P.) test, the Metropolitan Achievement Test--Mathematics (MAT-Math), El Examen de Lectura en Español (ELE), Likert-type scales (see above), and project-developed tests. Except for Likert scales and project-developed tests, these instruments are scored on a citywide basis at the Scan Center of the New York City Public Schools.

APPENDIX B

INSTRUCTIONAL MATERIALS

E.S.L. All E.S.L. books used in Grades 9-12.

<i>Pathways to English, Books 1-4</i>	N.C.T.E.	McGraw Hill
<i>Gallery</i>	Fassman	Oxford Univ. Press
<i>Ready to Write</i>	Blanshard/Root	Addison Wesley
<i>Oxford Picture Dictionary</i>	Parnell	Oxford Univ. Press
<i>Line By Line</i>	Molinsky/Bliss	Prentice Hall
<i>Longman Structural Readers</i>	Harmer	Longman
<i>America's Story, Books 1-2</i>	Vivian Bernstein	Steckman Vaughn
<i>A New Beginning</i>	Church/Hyzer/Neidermeyer	Prentice Hall
<i>React Interact</i>	Byrd	Prentice Hall
<i>Facts & Figures</i>	Ackert	Newbury House
<i>CLOZE Connections, Books C-E</i>	Boning	Barnell Loft
<i>Moby Dick</i>	Melville	Prentice Hall
<i>Respected Rebels</i>	Kearny	Prentice Hall

N.L.A.

Grades

<i>Multivista cultural</i>	Heptner and Sternburg	Allyn & Bacon, Inc.	9
<i>Por fronteras culturales</i>	Mendoza	Amsco	9
<i>Español para los Hispanos</i>	Baker	Nat'l Textbook Co.	9-11
<i>Segundo libro</i>	Nassi and Bernstein	Amsco	10
<i>El Cuento</i>	Crow/Dudley	Holt, Rinehart & Winston	10
<i>Galería Hispánica</i>	Adey, Albinil, Lado	McGraw Hill	10-11
<i>Mejora tu español</i>	Portilla and Varela	Prentice Hall	10
<i>Workbook in Spanish, 3 years</i>	Nassi and Bernstein	Amsco	10-11
<i>Bodas de sangre</i>	Federico García Lorca	Cátedra	11-12

Mathematics

<i>Fundamentos Matemáticas</i>	E. Mejía et al.	NYC Board of Ed.	9
<i>Repaso matemático</i>	Stein	Silver Burdett	9-10
<i>Matemática comercial</i>	Rodriguez	Southwestern	9-10
<i>Matemática Vocacional</i>	Rodriguez	Southwestern	9-11

Science

<i>La materia y la energía</i>	Heinter-Price	Merrill	9
<i>Biología</i>	Oxenhorn	Publisher Cultural	10

Social Studies

<i>La historia de la humanidad I and II</i>	Roselle	Editorial Norma	9-10
<i>La historia del pueblo de los Estados Unidos</i>	Cubero	Compañía Cult. Editorial	11