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ABSTRACT

In its third year, Project CELSIM (Career Education and Learning Strategies Implementation Model) of the New York City Public Schools served 282 Hispanic high-school students with limited English proficiency. The project provided students with English-as-a-Second-Language and Native Language Arts instruction, bilingual instruction in content area subjects, career awareness instruction, and counseling services. The project also provided staff with a series of training conferences on teaching methodologies and learning styles. Strengths of the project included its information sharing with mainstream staff and its thrust toward placing students in mainstream bilingual activities. This report examines the project's staffing, implementation, outcomes by individual objectives, and a case history. Appendices describe data collection and analysis procedures and list instructional materials used in the project. (JDD)

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# OREA Report

Career Education and Learning Strategies  
Implementation Model  
(Project CELSIM)  
Grant Number: T003A0979  
1990-91

FINAL EVALUATION PROFILE

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**FINAL EVALUATION PROFILE**



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## 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  
**Career Education and Learning Strategies  
Implementation Model  
(Project CELSIM)**

Grant Number: T003A80979  
1990-91

**EXTRACT**

PROJECT DIRECTOR: Helen Corchado

FUNDING CYCLE: Year 3 of 3

SITE

<u>School</u>	<u>Borough</u>	<u>Program Service Category</u>	<u>Enrollment*</u>	
			(fall)	(spring)
Theodore Roosevelt High School	Bronx	BIS I, II	96	100
James Monroe High School	Bronx	BIS I, II	52	49
William H. Taft High School	Bronx	BIS I, II	60	59

\*The project enrolled 282 students (145 more than in the previous year), serving 208 in the fall and 208 in the spring.

STUDENT BACKGROUND

<u>Native Language</u>	<u>Number of Students</u>	<u>Countries of Origin</u>	<u>Number of Students</u>
Spanish	282	Puerto Rico	154
		Unites States	50
		Dominican Republic	45
		Mexico	3
		Guatemala	2
		Honduras	3
		Other countries	25

Mean Years of Education in Native Country: 3.9; in the United States: 5.8

Percentage of Students Eligible for Free Lunch Program: 81.9

ADMISSION CRITERIA

The project admitted bilingual special education students in BIS I and II who had not previously received services funded by Title VII and who had scored at or below the 40th percentile on the Language Assessment Battery (LAB), classifying them as limited English proficient (LEP). Project students also had gaps in their schooling.

PROGRAMMING

Features

Project CELSIM provided LEP special education students with English as a Second Language (E.S.L.), Native Language Arts (N.L.A.), bilingual instruction in the content area subjects, career awareness instruction, and counseling services. The project also provided staff with a series of training conferences on teaching methodologies and learning styles.

## Strengths and Limitations

Information-sharing with mainstream staff was a plus for the project, as was its thrust toward placing students in mainstream bilingual activities.

A limitation was the lack of a teacher trainer--the project director doubled in this capacity.

## CONCLUSIONS AND RECOMMENDATION

Project CELSIM was fully implemented. LEP Hispanic special education students at each of the three project sites received E.S.L., N.L.A., bilingual content areas, and career awareness instruction as well as counseling services. Program staff participated in a series of workshops and conferences on teaching techniques and learning strategies.

The project met its objectives for N.L.A. and guidance. For lack of time and staff, its objective for curriculum development was only partially met, although 10 of 12 projected instructional units were completed. It failed to meet its objectives for E.S.L., career awareness, and dropout rate. While it also failed to meet the content area objective, students showed improvement from fall to spring in all areas and did meet the objective in business. OREA was unable to evaluate the objective for staff development because the project did not provide the necessary data. OREA could not evaluate the objective for self-esteem because of the low number of scores submitted.

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

- If funds permit, recruit a teacher trainer.
- The program should provide OREA with data necessary to evaluate all objectives.
- Explore reasons why the percentage of students meeting the E.S.L. objective was less than half of what was expected.
- Explore more ways in which to achieve the content area objectives.
- Explore reasons why project students continue to drop out of school at the same or higher rate than mainstream students.



## PROGRAM ASSESSMENT

### STAFFING

#### Title VII Staff (Total 2)

<u>Title</u>	<u>Degree</u>	<u>Language Competencies</u>	<u>Funding</u>
Project Director*	M.A.	Spanish	Full time
Curriculum & Career Specialist	M.S.	Spanish	Part time

\*The project director also acted as the teacher trainer.

#### Other Staff Working With Project Students (Total 20)

<u>Degree</u>	<u>Certification*</u>	<u>Teaching/Communicative Proficiencies (TP/CP)*</u>
B.A. 2	Special Education	9 Spanish TP 13, CP 3
B.S. 2	Special Education Common Branches	7
M.A. 11	Bilingual Special Education	2
M.S. 5	High School English and E.S.L.	1
	Bilingual Special Education and Bilingual Common Branches	2

\* Certifications are not exclusive.

### IMPLEMENTATION AND OUTCOMES (Objectives prefaced by ●)

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

E.S.L. was offered on the beginning, intermediate, and advanced levels five times a week at both sites. All levels used several instructional strategies, including the communicative and whole-language approach, content-based E.S.L., and the assistance of a bilingual paraprofessional. Teachers were encouraged to focus on student-centered activities.

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

- By the last year of the program, 65 percent of the students will make meaningful gains in English language achievement.

**Evaluation Instrument: Language Assessment Battery (LAB)\***

Pretest: March 1990; posttest: March 1991

Number of students for whom pre- and posttest data were reported: 112

Percentage of students showing gain: 27.7

**Project did not meet objective.**

**Native Language Arts**

Students lacking literacy skills in their native language: 20 percent (estimated).

All native language instruction used the whole language approach, the language experience chart (students were asked to make up a story), phonetics, and the read-response method (in which students related stories to their personal life).

Students were offered five periods of N.L.A. a week on the beginning and intermediate level at William Taft and James Monroe High Schools and on the beginning, intermediate, and advanced levels at Theodore Roosevelt High School.

- As a result of participating in the program, students will show meaningful gains in Spanish reading achievement.

**Evaluation Instrument: La Prueba de Lectura**

Number of students for whom pre- and posttest data were reported: 28

Mean gain = 1.4 N.C.E.s (s.d. = 3.0) and was statistically significant ( $t=2.43$ ,  $p<.05$ ).

**Project met objective.**

**Content Area Subjects**

Project students took courses in mathematics, science, social studies, and business. All courses were taught in Spanish except for fundamentals of mathematics, which was taught in English supplemented by Spanish. It was difficult for students to understand abstract concepts in mathematics. The project director reported that she had trouble finding other content area materials at the reading level of the students and relied on teacher-made materials.

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\*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.

For a list of instructional materials used, see Appendix B.

- At least 70 percent of the students enrolled in content area classes (science, mathematics, social studies, and business) will score at or above the passing criterion of 65.

Evaluation Indicator: Final course grades.

#### Passing Grades in Content Area Courses

	<u>Fall</u>		<u>Spring</u>	
	<u>Number of Students</u>	<u>Percentage</u>	<u>Number of Students</u>	<u>Percentage</u>
Mathematics	177	58.2	141	63.8
Science	127	59.1	85	64.7
Social studies	140	50.7	110	58.2
Business	122	59.8	78	70.5

**Project did not meet objective except for business in the spring.** (However, there was noticeable improvement from the fall to the spring semesters.)

#### Career Awareness

- As a result of participating in the career awareness/exploration class, 80 percent of the participating students will show significant improvement in occupational aspiration.

Evaluation Instrument: Maier Occupational Aspiration Scale.

The proposed instrument does not exist, and the project developed its own test to measure career awareness and occupational aspirations and administered it on a pre-/posttest basis.

Number of students for whom pre- and posttest data were reported: 27

Mean gain = 4.8 scale points (s.d. = 18.9) and was not statistically significant ( $t=1.32$ ).

**Project did not meet objective.**

#### Guidance

- The bilingual counselor will have developed a cognitive map for each participating student.

Evaluation Indicator: Individual Educational Plan (I.E.P.).

The School-Based Support Team (S.B.S.T.) developed an I.E.P. (or cognitive map) for each of the project students. The project's part-time bilingual counselors did not participate in this, since they were unable to provide the necessary time. They did, however, participate in student evaluation.

**Project met objective.**

#### Self-Esteem

- As a result of participating in the program, 80 percent of the target students will show a statistically significant growth in self-esteem.

Evaluation Instrument: Self-Perception Inventory Form.



The program distributed the Self-Perception Inventory Form in Spanish and English on a pre- and post-test basis.

Number of students for whom gain or loss were reported: 21

Mean gain = 14.52 points (s.d. = 10.1)

Greatest reported loss = -4 points

Greatest reported gain = 28 points

OREA could not evaluate this objective as stated because of the low number of scores submitted.

### Dropout Rate

- Program students will have a significantly lower dropout rate than similar non-program students.

Evaluation Indicator: School records.

### Dropout Rate

	<u>Program Students</u>		<u>Mainstream Students</u>	
	<u>Number of Students</u>	<u>Percentage</u>	<u>Dropout Rate</u>	<u>Difference</u>
Theodore Roosevelt High School	18	14.4	7.6	6.8
James Monroe High School	7	9.1	9.8	-0.7
William H. Taft High School	5	6.3	8.2	-1.9

The dropout rate of project students was not significantly lower than that of mainstream students and at one site, Theodore Roosevelt High School, the dropout rate was much higher.

Project did not meet objective.

### Staff Development

- Ninety percent of the project staff members attending teacher training conferences and workshops will show a statistically significant increase in knowledge relating to career infusion techniques and learning strategies.

Evaluation Indicator: Project-developed teacher skills questionnaire.

Project CELSIM presented demonstration classes in E.S.L. that were videotaped for discussion and review. The project also held seven teacher training conferences, covering the following: "Using Video for Language Development," "E.S.L. Methodology in the Math Class," "Learning Styles in the E.S.L. classroom," "Communicative Activities in the Classroom," "E.S.L. Methodologies in the Social Studies Class," and "Communication Activities in the E.S.L. Classroom."

An evaluation questionnaire was distributed among the participating teachers at the end of each conference. While 84.8 percent of the respondents to the evaluation questionnaire at the second conference indicated that they thought the workshop was helpful, and 90.9 percent believed that they would be able to apply what they had learned, the project did not report on the development of skills.

OREA could not evaluate objective.

## Curriculum Development

- The curriculum specialist will have developed 12 instructional units in each of the content areas, utilizing learning strategies and career infusion technologies.

Evaluation Indicator: Project-developed instructional material inventory.

The curriculum specialist developed six instructional units during the first and second years and four more (one in science, two in health, and one in social studies) in the year under review. The project director reported that lack of time and staff prevented the last two instructional units from being completed.

**Project partially met objective.**

## Other Activities

Program students participated in field trips throughout the year. They visited museums, went to the theater, visited the Statue of Liberty, and visited INFOQUEST at the I.B.M. building.

## MAINSTREAMING

Eleven students (3.9 percent of participants) were mainstreamed.

### Academic Achievement of Former Students in Mainstream

Thirteen of the previous year's participants were mainstreamed. However, the project reported grades for only a few. Their subsequent performance is tabulated below:

<u>Mainstream</u>	<u>Students Enrolled</u>	<u>Students Achieving Passing Grades</u>
English	4	1
Mathematics	3	2
Science	4	2
Social Studies	4	4
Business/Vocational	3	3

## CASE HISTORY

M. was a 16-year old Hispanic female who was in a BIS I program when the project started. Her first language was Spanish, but she seemed to have a good command of social English. Her interest in class work was erratic, and school was mostly a social activity for her. She was not mandated for counseling by the Committee for Special Education (C.S.E.) but visited the counselor frequently to discuss her boyfriends, marriage plans, etc. These stories became more exaggerated and bizarre, and the counselor contacted the parent. It was learned that M. had been sexually abused by an uncle and had serious problems at home. The counselor made a referral to the S.B.S.T. for academic and psychological evaluation, contacted Lincoln Hospital for psychiatric assistance, and arranged a conference with a doctor, the student, and the mother. To increase M.'s interest in school, she was recommended for the COOP program (in which students attend school and work on alternate weeks). Teachers were advised that M.'s stories were fantasy and that she was receiving guidance. In her E.S.L. classes, the project suggested to the teacher that group activities be used to take advantage of M.'s sociability, allowing her to interact with the other students.

## APPENDIX B

### Instructional Materials

#### Social Studies

Comprende tu Mundo, Jarret Publishing.  
Europa, Asia, Africa, Australia, Silver Burdett.  
Vayamos por el Mundo, Lectorum.

#### Science

Horizontes en Ciencia, Silver Burdett.  
Las Ciencias Biológicas, Publisha Distribuidora Escolar, Puerto Rico.  
The Wonders of Science, Steck Vaughn.

#### Mathematics

Matemáticas - Exploremos tu Mundo, Silver Burdett.  
Language Development Mathematics, Book A, Addison Wesley.

#### Native Language Arts (N.L.A.)

Historietas en Español, National Textbook Company.  
Cuentos Simpáticos, National Textbook Company.  
Cuentos Corrientes, National Textbook Company.  
Escribir para Leer, Santillana.  
Spanish is Fun, Amsco.  
Colección de Emilio Salgieri, Lectorum.  
Aventuras de Don Quijote, Regents.

## APPENDIX A

### DATA COLLECTION AND ANALYSIS

#### 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.

#### 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. (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 determine 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. The level of significance is set at .05 for all tests.