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ABSTRACT

Project BETA (Bilingual Education Talented Academy), a program of the New York City Public Schools, served (in 1990-91) 342 talented and gifted high school students who were classified as limited English proficient. The project provided instruction in English as a Second Language and Native Language Arts, and offered bilingual instruction in content area courses. The project met its objectives for career advisement, staff and curriculum development, and parental involvement. It partially met its attendance objective, but did not meet its objectives for Native Language Arts, English as a Second Language, and content area subjects. An appendix describes data collection and analysis procedures. (JLD)

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# OREA Report

Bilingual Education Talented Academy  
(Project BETA)

Grant Number: T003L80059

1990-91

FINAL EVALUATION PROFILE

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**Bilingual Education Talented Academy  
Project BETA  
Grant Number: T003L80059**

**1990-91**

**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  
**Bilingual Education Talented Academy**  
**Project BETA**  
 Grant Number T003L80059  
 1990-91

**EXTRACT**

**PROJECT DIRECTOR:** Julia Sanchez      **Funding Cycle** Year 3 of 3

**SITES**

<u>High School</u>	<u>Borough</u>	<u>Grade Levels</u>	<u>Enrollment*</u>	
			<i>(fall)</i>	<i>(spring)</i>
Christopher Columbus	Bronx	7-12	132	93
Theodore Roosevelt	Bronx	9-12	152	143

\*The project enrolled 342 students (16 less than in the previous year), serving 284 in the fall and 236 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	173	Dominican Republic	77
Vietnamese	32	Vietnam	32
Chinese	24	China	21
Cantonese	10	Puerto Rico	21
Other	14	Soviet Union	19
Russian	19	Korea	16
Khmer	7	Other Asian countries	10
Haitian Creole	5	Other Spanish-speaking	
Arabic	5	countries	54
Korean	16	Other countries	47
Unreported	61	Unreported	45

Mean Years of Education in Native Country: 8.2; in the United States: 2.2

Percentage of Students Eligible for Free Lunch Program: 66.1

**ADMISSION CRITERIA**

Students were eligible for the program if they were classified as limited English proficient (LEP) by scoring below the 40th percentile on the Language Assessment Battery (LAB), had a grade average higher than 80 percent, and were recommended by a teacher. Teachers and guidance counselors conducted personal interviews of prospective participants.

## PROGRAMMING

### Features

Project Bilingual Education Talented Academy (Project BETA) provided talented and gifted LEP students with instruction in English as a Second Language (E.S.L.), Native Language Arts (N.L.A.), and bilingual instruction in content area courses. Project BETA provided access to educational programs that had not been previously available to this bilingual student population.

### Strengths and Limitations

- The project director reported that the enthusiastic cooperation of program staff created a highly motivating environment for students at both sites. Bilingual counselors were particularly effective.

- The project director expressed the need for college and financial aid advisement as well as Chinese-speaking paraprofessionals at Christopher Columbus High School. Lack of funds prevented Project BETA from providing essential tutoring for advanced courses in mathematics and science.

## CONCLUSIONS AND RECOMMENDATIONS

Project BETA was fully implemented. It met its objectives for career advisement, staff and curriculum development, and parental involvement. It partially met the attendance objective. The project did not meet its objectives for N.L.A., E.S.L., and content area subjects. OREA was unable to evaluate the objective for educational option courses because Project BETA did not provide the data.

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

- Provide OREA with the data necessary to evaluate all objectives.
- Explore ways in which to improve the attendance rate at Christopher Columbus High School.
- Modify the E.S.L., N.L.A., and content area objectives to make the passing criterion more realistic.



## PROGRAM ASSESSMENT

### STAFFING

#### Title VII Staff (Total 6)

<u>Title</u>	<u>Degree</u>	<u>Language Competencies</u>	<u>Funding</u>
Project Director	M.A.	Spanish	Part time
Resource Specialist	Ph.D.	French, Spanish, Italian	Part time
Educational Assistant	B.A.	Spanish	Part time
Assistant Principal	M.A.	Spanish	Full time
Bil. Teacher	M.A.	Spanish	Part time
Paraprofessional		Vietnamese	Full time

#### Other Staff Working With Project Students (Total 37)

##### **Theodore Roosevelt High School:**

<u>Title</u>	<u>Language Competencies</u>
Bil.Guid.Counselor 3	Spanish 4
College Counselor 1	Vietnamese 2
Job Coordinator 1	Khmer 2
Ed. Assistant 2	
Bil. Coordinator 1	
Bil. Teacher 1	

##### **Columbus High School:**

<u>Degree</u>	<u>Certification</u>	<u>Language Competencies</u>
Ph.D. 1	Spanish	Spanish 12
M.S. 9	Italian	French 15
M.A. 15	E.S.L.	Italian 2
B.S. 1	Social Studies	Hebrew 1
B.A. 1	Mathematics	Vietnamese 1
	Chemistry	
	Guidance Counselor	
	T.P.D.	

### IMPLEMENTATION AND OUTCOMES (objective prefaced ●)

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

<u>Level</u>	<u>Periods Weekly</u>
Beginning	15
Intermediate	10
Advanced	10

A list of instructional materials can be found in Appendix B.

- Eighty-five percent of project students will demonstrate a significant statistical improvement in English language proficiency.

Evaluation Instrument: Language Assessment Battery (LAB)\*

Pretest: March 1990; posttest: March 1991.

Number of students for whom pre- and posttest data were reported: 208

Percentage showing a gain: 71.2

**Project did not meet objective.**

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

Students lacking literacy skills in native language: none

Three levels of N.L.A. were offered (beginning, intermediate, and advanced) five periods weekly. Chinese N.L.A. used the universal symbol system. Paraprofessionals were available to assist when necessary.

A list of instructional materials can be found in Appendix B.

- At least 85 percent of project students enrolled in Native Language Arts will score at or above 85 on final course grades.

Evaluation Indicator: Final course grades.

The criterion of 85 as a final passing grade was very high, even for gifted students. Of the 117 students enrolled in N.L.A. in the fall, 68.4 percent passed. Of the 104 students enrolled in the spring, 79.8 passed.

**Project did not meet objective.**

### Content Area Subjects

The project students in Christopher Columbus High School took courses in mathematics, science, and social studies. Subjects were taught with an E.S.L. methodology and had the assistance of paraprofessionals. The project students in Theodore Roosevelt High School took classes in global history, American history, government, general science, biology, chemistry, earth science, and mathematics (fundamentals, consumer, and sequential). All were taught in the students' native language with individualized instruction. A resource room was available in both schools to assist students in content area subjects.

A list of instructional materials can be found in Appendix A.

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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.

- Eighty-five percent of all target students will achieve a passing grade of 85 or better in the subject areas of science, mathematics, social studies, computer science, and career education as indicated by results on teacher made-final tests.

Evaluation Indicator: Final course grades.

A passing grade of 85 was unrealistically high.

Grades of at Least 85 in Content Area Courses

	Fall		Spring	
	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>
Mathematics	235	43.4	250	49.2
Science	213	36.6	183	43.7
Social studies	250	51.2	212	67.9
Business Vocational	126	65.1	96	67.7

**Project did not meet objective**

Educational Option Courses

Chemistry (Regents and non-Regents classes) and keyboarding were offered as educational option courses. Teachers prepared individualized instruction plans for these classes. Students were also offered architectural drawing and music (chorus and band).

A list of instructional materials can be found in Appendix B.

- The proportion of program students who are accepted to participate in educational option courses or programs will be equal to or greater than the proportion of mainstream students who are accepted.

Project BETA did not provide the data necessary to evaluate this objective.

**OREA could not evaluate objective**

Attendance

- The attendance rate of target students will be ten to fifteen percent greater than mainstream students as indicated by school records.

Evaluation Indicator: Project and school attendance records.

<u>School</u>	<u>Project Students' Rate</u>	<u>Mainstream Students' Rate</u>	<u>Percent</u>
<u>Difference</u>			
Christopher Columbus High School	86.6	79.1	9.5
Theodore Roosevelt High School	91.4	79.3	15.3

**Project partially met objective.**

### Dropout

No objective was proposed for dropout rate. Two students (0.6 percent) dropped out of the program.

### Career Advisement

- Each student will meet with the talent specialist for career advisement at least two times during the school year on an individual basis as indicated by program records.

All program students met with the bilingual resource teacher on an individual basis for career orientation and planning at least two times during each semester. Students also met with their bilingual guidance counselors.

**Project met objective.**

### Staff Development

- Five program staff members will enroll in at least one credit-bearing university course each semester.
- Ninety percent of program staff will demonstrate professional growth by passing and completing courses of study as indicated by college transcripts and attending in-service training sessions as indicated by certificates and attendance records.

Ninety percent of the staff took and passed credit-bearing college courses. Members of this group included the project director, resource specialist, teachers, and paraprofessionals.

**Project met objectives.**

### Curriculum Development

- By the end of the third year, the curriculum specialist will have developed four additional applied E.S.L. and interdisciplinary subject matter oriented curriculum guides geared for the gifted and talented High School student grades nine through 12, in math, science, social studies or computer science as indicated by a project-developed inventory.

Project staff developed curriculum guides in English, Spanish, advanced placement Spanish literature, mathematics, R.C.T. mathematics, and E.S.L..

**Project met objective.**

### Parental Involvement

- Parents of target students will demonstrate more involvement than parents of mainstream students by demonstrating 10-15 percent higher attendance at school functions.

Almost 36 percent (35.7 percent) of the parents of participating students attended school functions. This exceeded the 20.5 percent of mainstream parents who attended by more than 15 percent.

**Project met objective.**

- The project will offer classes in E.S.L. which will include issues and concerns in dealing with the gifted and talented bilingual student to at least sixty parents of project students.

Parents of students in Project BETA motivated and encouraged their children to attend classes and excel academically. They called teachers as necessary and came to school for parent-teacher conferences. A total of 75 parents participated in E.S.L. classes twice weekly. The evening school program provided 22 additional E.S.L. classes, and more than 75 parents attended regularly.

**Project met objective.**

### Additional Activities

Project BETA provided a Bilingual Educational Enrichment Center at both sites. Project staff tutored students individually at the center and also offered computer-assisted instruction.

### MAINSTREAMING

Eleven students (3.2 percent of participants) were mainstreamed.

#### Academic Achievement of Former Project Students in Mainstream

Project students were followed for one year after being mainstreamed. The resource teacher maintained a checklist which was used by teachers to note students' progress. Ten of the previous year's participants were mainstreamed. Their subsequent performance is presented below:

<u>Mainstream Subject</u>	<u>Students Enrolled</u>	<u>Students Achieving Passing Grades</u>
English	10	10 (100 percent)
Mathematics	8	7 (87.5 percent)
Science	6	6 (100 percent)
Social Studies	8	7 (87.5 percent)
Business/Vocational	7	6 (85.7 percent)

### Case History

The project did not offer a case history.

## 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.

## APPENDIX B

### Instructional Materials

<u>Title</u>	<u>Author</u>	<u>Publisher</u>
Turning Points 1-4 Publishing Co.	Robert Saitz, Mario Papa	Addison-Wesley & Guñano Iantorno
Lado-English Series 1-6	Robert Lado	Regents Publishing Co.
Skill Sharpeners 1-4	Judy DeFilippo, et al.	Addison-Wesley
Side by Side 1-2	Steven J. Molinsky, Bill Bliss	Prentice Hall, Inc.
Living American Plays	Felix Sper	Globe Book Co., Inc.
Reflections	Griffen & Dennis	Newbury House Publishers
Great American Stories II	C.G. Draper	Prentice Hall Regents
Developing Reading Skills	Markstein-Hirasawa	Newbury House Publishers
Experiences Reading		
Literature	Dennis	Newbury House Publishers
Facts and Figures	Patricia Ackert	Newbury House Publishers
Understanding the		
Chemistry of Metals	Seymour Rosen	Globe Book Co., Inc.
Biology and Human		
Progress	Charles Tanzer	Prentice Hall, Inc.
UPCO's Review of		
Chemistry	Robert M. Capia	United Publishing Co.
Achieving Competence in		
Mathematics	Schneider & Mandery	AMSCO
Integrated Mathematics	Dressler & Keenan	AMSCO
Advanced Mathematical	Vanatta, Crosswhite,	
Concepts	Yunker, Elswick	Merrill Publishing
Exploring Our Nation's		
History	Sidney Schwartz	Globe Book Co., Inc.
American History	Jack Abramowitz	Follet Publishing Co.
World History	Reich, Krug, Biller	Coronado Publishers
People and Our World	Kownslar & Smart	Holt, Rinehart and Sinston
¿Qué hay de nuevo?	Fernandez & García	D.C. Heath and Co.
Spanish for Communication	G. Milgrom	Curriculum Press