Bilingual Education Through the Arts (Project BETA)

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

26 Jul 91

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

Reports - Evaluative/Feasibility (142)

An evaluation was done of New York City Public Schools' Bilingual Education Through the Arts program (Project BETA), which served poor, language minority elementary school students. The project enrolled 366 Spanish speaking kindergarten through sixth grade students at 2 elementary schools. Ninety-seven percent of the students were eligible for the Free Lunch Program. Project BETA targeted schools with a recent influx of immigrants and served Spanish-speaking students with limited English proficiency. The Project adapted the Learning to Read Through the Arts program for students' linguistic development. Students received a weekly 1.5-hour period of English as a Second Language (ESL) and Spanish reading as well as workshops in musical arts or visual arts. Students also attended a variety of art events and museums throughout the city.

Evaluation of the program was based on demographic data, citywide student test scores, and interviews with and surveys of the program directors. Results indicate that program strengths lay in its positive impact on students across the curriculum, with students showing increased enthusiasm and motivation. Project BETA was fully implemented and met its objectives for ESL, arts appreciation, staff development (two out of three objectives), curriculum development, and parental involvement. Two appendices summarize the data collection and analysis procedures and list instructional materials.

(JB)
Bilingual Education Through the Arts
(Project BETA)
Community School District 7
Grant Number: G008710370
1990-91

FINAL EVALUATION PROFILE
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FINAL EVALUATION PROFILE
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7/30/91
ACKNOWLEDGMENTS

This report has been prepared by the Bilingual, Multicultural, and Early Childhood Evaluation Unit of the Office of Research, Evaluation, and Assessment.

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
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 the Appendix following the text.
Bilingual Education Through the Arts (Project BETA)
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STUDENT BACKGROUND

<table>
<thead>
<tr>
<th>Native Language</th>
<th>Number of Students</th>
<th>Countries of Origin</th>
<th>Number of Students</th>
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<tbody>
<tr>
<td>Spanish</td>
<td>362</td>
<td>United States</td>
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<td></td>
<td>Puerto Rico</td>
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<tr>
<td></td>
<td></td>
<td>Dominican Republic</td>
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<tr>
<td></td>
<td></td>
<td>Mexico</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
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<td>Other countries</td>
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</tbody>
</table>

Mean Years of Education in Native Country: 1.3; in the United States: 3.8

Percentage of Students Eligible for Free Lunch Program: 97.0

ADMISSION CRITERIA

The project admitted students who scored at or below the 40th percentile on the Language Assessment Battery (LAB) as well as a number of English proficient students who would benefit from the program and whose parents requested placement.

PROGRAMMING

Features

Project BETA targeted two elementary schools in Community School District (C.S.D.) 7 with a recent influx of immigrants. Spanish-speaking students of limited English proficiency (LEP) and a number of English proficient (EP) students received supplementary instruction through exposure to the arts.

Project BETA adapted the Learning to Read Through the Arts (L.R.T.A.) program for students' linguistic development. BETA students received a weekly one-and-a-half-hour period of E.S.L. and Spanish reading, as well as workshops in musical arts at P.S. 5 or visual arts at P.S. 27. Students also attended a variety of art events and museums throughout the city.
Strengths and Limitations

Program strength lay in its positive impact on participating students: project staff reported that as a result of joining the program, students were more creative across the curriculum, had developed a sense of pride in and respect for cultural arts and institutions, and were notably more enthusiastic in reading, writing, and subject area lessons. Project BETA staff reported that students were motivated to create their own stories and acquired vocabulary quickly because of their enthusiasm for discussing the arts.

Budgetary constraints limited the number of books that the project could purchase as well as the number of visits to cultural institutions that it could subsidize.

CONCLUSIONS AND RECOMMENDATIONS

Project BETA was fully implemented. It met its objectives for E.S.L., arts appreciation, staff development (two out of three objectives), curriculum development, and parental involvement. The project failed to meet its objective for N.L.A.

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

- Explore ways in which to meet the N.L.A. objective.
- Encourage project staff to enroll in university courses.
PROGRAM ASSESSMENT

STAFFING

Project Staff funded by Title VII Staff (Total 2)

<table>
<thead>
<tr>
<th>Title</th>
<th>Degree</th>
<th>Language Competencies</th>
<th>Title VII Funding</th>
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<tr>
<td>Project Coordinator</td>
<td>Master's Professional Diploma</td>
<td>Spanish</td>
<td>Part time</td>
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<td>Paraprofessional</td>
<td>College credits</td>
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<td>Full time</td>
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Other Staff Working With Project Students (Total 16)

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<tr>
<th>Degree</th>
<th>Certification</th>
<th>Language Competencies</th>
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<tr>
<td>Bachelor's 13</td>
<td>Bil. Common Branches 12</td>
<td>Spanish 16</td>
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<tr>
<td>Master's 3</td>
<td>Bilingual T.P.D. 4</td>
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IMPLEMENTATION AND OUTCOMES (Objectives prefaced by *)

Language Instruction

Project BETA adapted the Learning to Read Through the Arts (L.T.R.A.) program. Staff trained participating teachers to use a thematic and whole language approach for students' Spanish and English language instruction. Teachers developed lessons for regular E.S.L.-Spanish reading instruction around the themes initiated in arts-oriented workshops and on visits to cultural events. Teachers worked with each student in charting individual language acquisition by providing colorful, personal envelopes/folders which contained vocabulary words and knowledge assessment sheets. Students benefited from cooperative learning strategies by clustering in small groups to prepare linguistically-based arts projects such as plays. Classroom teachers then used these projects to stimulate further classroom discussion.

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

* By June 1991, as a result of participating in the program, students will demonstrate achievement beyond expectation in English as a Second Language (p<.05) in N.C.E.s as measured by the English version of the Language Assessment Battery (LAB).

Evaluation Instrument: Language Assessment Battery*


Number of students for whom pre- and posttest data were reported: 298

Mean gain: 5.2 N.C.E.s (s.d. = 22.6)

*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.
Mean gain is statistically significant ($t = 3.95, p < .05$).

Project met objective.

Native Language Arts (N.L.A.)

Students lacking literacy skills in native language: estimated at one percent.

- By June 1991, as a result of participating in the program, students will demonstrate achievement beyond expectation ($p < .05$) in N.C.E.s on the Spanish version of the Language Assessment Battery (LAB).

Evaluation Instrument: Language Assessment Battery, Spanish version


Number of students for whom pre- and posttest data were reported: 175

Mean gain: -3.7 N.C.E.s ($s.d. = 16.1$)

Project did not meet objective.

Arts Appreciation (Visual and Musical)

Arts cluster teachers provided workshops specifically tailored to develop students’ skills, after which students produced their own art works. Art teachers assessed each student’s development based on the work produced or skills achieved. Students also cooperatively created a variety of projects and/or performed together.

Student’s art works were displayed in classrooms, at local businesses, and at the Bronx Museum of the Arts. Students performed flamenco, African, and other dances at events sponsored by Project BETA and the Bronx Museum of the Arts.

- By June 1991, 80 percent of the participating students will demonstrate knowledge and appreciation of various art forms.

Evaluation Instrument: Surveys used to assess knowledge and appreciation of the arts.

Number of students for art performance data were reported: 358

Percentage of students that demonstrated knowledge and appreciation of art: 99.7

Project met objective.

Staff Development

- Participating teachers will demonstrate a greater ability to use various art forms in their E.S.L. and Spanish reading instruction as measured by lesson plans and classroom demonstrations.

As a result of coordinating lessons with arts-cluster teachers, attending arts events, and receiving on-going staff training, participating teachers were better able to use art forms in their E.S.L. and Spanish reading instruction. Project staff identified these improved skills in intermittent classroom observations, reviews of lesson plans, and ongoing teacher evaluation.

Project met objective.
• All program staff will participate in teacher training conferences and workshops.

All Project BETA teachers attended training workshops and conferences given by the district office. The project director also disseminated informal letters to inform teachers about materials, activities, curricula, etc.

Project met objective.

• Sixty percent of program staff members will enroll in at least one university course each semester.

The staff director reported that approximately half the staff members enrolled in a university course.

Project did not meet objective.

Curriculum Development

• By June 1991, a manual (draft) containing learning activities and methods used for E.S.L. and Spanish reading will be prepared by participating teachers and staff.

Grade-appropriate manuals had been developed and were used by participating teachers. With the help of the curriculum guides, Project BETA staff and faculty achieved uniformity throughout all project classrooms at each site.

Project met objective.

Parental Involvement

• By June 1991, 60 percent of the parents of target students will have participated in program-related activities.

• By June 1991, 60 percent of the parents of target students will have participated in E.S.L. and Spanish reading activities.

The project conducted ten parent meetings, at which E.S.L., Spanish reading, and arts activities were offered. The project director reported that 60 percent of the parents of target students participated in these activities.

Project met objectives.

Attendance

Project BETA did not propose any attendance objectives. The project students' attendance rate was 93.4 percent.

Dropout

No dropout objective was proposed, and no data were submitted by project.

STUDENTS WITH SPECIAL ACADEMIC NEEDS

Project BETA staff followed the procedures established by C.S.D. 7 for referring students to special education, in accordance with New York City Public Schools regulations. Classroom teachers who felt that a student required special education services referred him/her to the guidance counselor. Staff consulted parents
before advising the bilingual School-Based Support Team (S.B.S.T.).

Nine students (2.5 percent of participants) were retained in grade.

**MAINSTREAMING**

None of this year's participants were mainstreamed.

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

The project did not provide data on former project participants.

**CASE HISTORY**

Maria M. at P.S. 5 was a model student in the Project BETA program. She not only learned the steps and movements of Spanish dancing quickly, but she was able to express the emotion, style, and characteristics of a true flamenco gypsy dancer. Her musical talents, ranging from vocalization to dexterity on the xylophone, were outstanding. Maria also learned to use different art media--crayons, India ink, pencil, and watercolors--and made a papier mâché statue of an Aztec Indian for BETA's P.S. 5 World's Fair.

Maria's artistic interests also served to enrich her academically. Her reading and comprehension improved, and her writing and speaking abilities were more creative. Her creative writing (stories and poetry) brought her an award in *Sports Illustrated* magazine.
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

Instructional materials used include program-developed, teacher-made, and commercially produced materials. All participating bilingual classes received resources in the form of multimedia library centers. These centers contained books, filmstrips, audio tapes, records, and games in order to: (a) reinforce skills in E.S. and Spanish reading; (b) provide independent and enjoyable activities; and (c) encourage research and creative writing. Program staff used BETA-developed manuals as training materials for participating teachers as well as providing them with consumable art supplies and materials for implementing activities in the curriculum.

Some of the basic instructional texts used included the following:

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<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addison Wesley E.S.L., A-D</td>
<td>Michael Walker</td>
<td>Addison Wesley, 1989</td>
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<tr>
<td>Open the Light</td>
<td>Coreen Carruthers</td>
<td>Addison Wesley, 1982</td>
</tr>
<tr>
<td>Complete E.S.L./E.F.L. Resource Book</td>
<td></td>
<td>National Textbooks, 1988</td>
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<tr>
<td>Where the Wild Things Are</td>
<td>Maurice Sendak</td>
<td>Harper &amp; Row, 1963</td>
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<tr>
<td>Mil Maravillas, Spanish Reading Series</td>
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<td>Macmillan Publishing Co., 1987</td>
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<td>Campanitas de Oro, Spanish Big Books</td>
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<td>Lectorum Publishing Co., 1988</td>
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<td>Spanish Reading Series</td>
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<td>Houghton Mifflin, 1989</td>
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