

## DOCUMENT RESUME

ED 311 727

FL 018 169

AUTHOR Berney, Tomi D.; Alvare., Rosalyn  
 TITLE Bilingual Language Arts Survival Training: Project  
 BLAST, 1987-88. OREA Evaluation Report.  
 INSTITUTION New York City Board of Education, Brooklyn, NY.  
 Office of Research, Evaluation, and Assessment.  
 SPONS AGENCY Department of Education, Washington, DC.  
 PUB DATE Jun 89  
 NOTE 37p.; For 1986-1987 report, see ED 298 791.  
 PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS \*Academic Advising; Attendance; \*Bilingual Education  
 Programs; Career Exploration; Citizenship Education;  
 Counseling Services; Cultural Enrichment; \*English  
 (Second Language); Extracurricular Activities;  
 Federal Programs; High Schools; Mathematics  
 Instruction; \*Native Language Instruction; Parent  
 Participation; \*Program Effectiveness; Program  
 Evaluation; Science Instruction; Social Studies;  
 \*Spanish Speaking; Staff Development

IDENTIFIERS Content Area Teaching; \*Project BLAST NY

## ABSTRACT

Project Bilingual Language Arts Survival Training (BLAST) served 254 Spanish-speaking 9th- through 12th-graders at Walton High School in the Bronx in its fifth year of funding. The program's aim was to supplement the school's bilingual program by providing instruction in English as a Second Language (ESL), native language arts (NLA) and culture, and bilingual instruction in math, science, and social studies. The program also provided extracurricular activities, career orientation, college counseling, coping skills and citizenship training, parent involvement, and staff development activities. The program met the objectives in ESL, NLA, and student attendance. It also met most of its objectives in parental involvement, staff development, and curriculum development. Content area classes were not evaluated as proposed. Program changes over the previous year include a larger population, budget cuts leading to shortages of materials and modified objectives, separate classes for native and non-native Spanish-speakers, hiring of fully bilingual content area teachers, increased parent involvement activities, and development of career awareness and computer literacy curricula. There was also a high dropout rate as students took jobs because of economic needs. It is recommended that BLAST staff should be relieved of time-consuming building assignments; that staff and counselors should try to reach consensus on when students should be mainstreamed; and that the project should supply data needed for evaluation. (MSE)

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

ED311727

SCOPE OF INTEREST NOTICE

The ERIC Facility has assigned this document for processing to:

FL

In our judgment, this document is also of interest to the Clearinghouses noted to the right. Indexing should reflect their special points of view.

UD  
CE



# OREA Report

## EVALUATION SECTION REPORT

BILINGUAL LANGUAGE ARTS SURVIVAL TRAINING

PROJECT BLAST

1987-1988

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

R. Tobias

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

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.

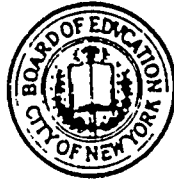
FL018169

EVALUATION SECTION  
John Schoener, Chief Administrator  
June 1989

EVALUATION SECTION REPORT  
BILINGUAL LANGUAGE ARTS SURVIVAL TRAINING  
PROJECT BLAST  
1987-1988

Prepared by  
The Bilingual Education Evaluation Unit  
Tomi D. Berney, Unit Manager  
Rosalyn Alvarez, Evaluation Consultant

New York City Public Schools  
Office of Research, Evaluation, and Assessment  
Robert Tobias, Director



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

Robert F. Wagner, Jr.  
President

Dr. Irene H. Impellizzeri  
Vice President

Dr. Gwendolyn C. Baker  
Amalia V. Betanzos  
Dr. Stephen R. Franse  
James F. Regan  
Edward L. Sadowsky

Bernard Mecklowitz  
Chancellor

Dr. Dolores M. Fernandez  
Deputy Chancellor for Instruction and Development

Dr. Harvey Robins  
Deputy Chancellor for Financial Affairs

Joseph J. Saccente  
Chief Executive for Operations

Amy Linden  
Chief Executive for School Facilities

---

It is the policy of the New York City Board of Education not to discriminate on the basis of race, color, creed, national origin, age, handicapping condition, sexual orientation, or sex in its educational programs, activities, and employment policies, as required by law. Any person who believes he or she has been discriminated against should contact his or her Local Equal Opportunity Coordinator. Inquiries regarding compliance with appropriate laws, including Title IX and Section 504, may also be directed to Mercedes A. Nesfield, Director, Office of Equal Opportunity, 110 Livingston Street, Room 601, Brooklyn, New York 11201; or to the Director, Office of Civil Rights, United States Department of Education, 26 Federal Plaza, Room 33-130, New York, New York 10278.

---

5/22/89

PROJECT BLAST\*  
1987-88

SUMMARY

- Project BLAST was fully implemented. During the 1987-88 school year participating students received instruction in English as a second language (E.S.L.) and native language arts (N.L.A.). They also received bilingual content area instruction, college counseling, and participated in extracurricular activities. The project included parental involvement and staff development activities.
- The program met its objectives in E.S.L., N.L.A. and student attendance rate. The project also met most of its objectives in the areas of parental involvement, staff development, and curriculum development. Content area classes were not evaluated as proposed.

Project Bilingual Language Arts Survival Training (Project BLAST) was in its fifth year of funding under Title VII of the Elementary and Secondary Education Act. The project served 254 Spanish-speaking ninth through twelfth grade students at Walton High School in the Bronx. BLAST's aim was to supplement the school's bilingual program by improving their English language skills and providing them with career orientation, coping skills, and citizenship training.

The project provided E.S.L. instruction, courses in students' native history and culture, and bilingual instruction in math, science, and social studies. BLAST sought to (1) develop skills in English, Spanish, and content area subjects via computer-assisted instruction; (2) provide career-orientation/career-exploration training units, which were integrated with social studies classes; and (3) promote a high level of attendance via extensive monitoring and family follow-up activities. Additional components of the project included: college counseling; extracurricular cultural enrichment activities; parental involvement activities, including training in E.S.L.; and staff development, including participation in workshops and college courses. Students entered the program if they scored below the twenty-first percentile on the English version of the Language Assessment Battery (LAB), and on the basis of individual interviews, evaluation of transcripts, teacher evaluations, and composition writing tests. Generally students remained in the program for two to three years.

---

\*This summary is based on the final evaluation of the "Project BLAST 1987-88" prepared by the OREA Bilingual Education Evaluation Unit.

Students showed an overall gain on the LAB; the program met its objective in E.S.L. The objectives of students' gain on the Basic Inventory of Natural Language (BINI) and advancement in E.S.L. sequence could not be assessed due to lack of data. Ninety-two percent of the students in N.L.A. classes passed with a grade of 65 percent or higher, thereby exceeding the program objective by 17 percentage points. The N.L.A. objective for students' passing rates on the New York Citywide Examination in Spanish and New York State Regents examination could not be assessed as the information was unavailable. Content area classes were not evaluated as proposed but an examination of students' performance reveals that 60 percent of those taking math, 67 percent of those enrolled in science, and 73 percent of those attending social studies achieved the passing criterion of 65 percent.

The program achieved its objective in the area of attendance rate. Program students' attendance was 88 percent, 10 percentage points higher than the schoolwide rate. The project met most of its noninstructional objectives in the areas of parental involvement, staff development, and curriculum development. Office of Research, Evaluation, and Assessment personnel examined course passing rates, performance on the LAB, information obtained from interviews of program and school personnel, and observations of classes to evaluate the program.

Project BLAST served 254 students in 1987-88 as compared to 185 in 1986-87. The program experienced budget cuts this year which resulted in lack of funds for textbooks, cultural trips, and school materials, and led to modifications in program objectives. Changes from last year's program also included separate Spanish classes for native and nonnative Spanish speakers. All newly hired content area teachers were fully bilingual. The project increased the number of parental involvement activities, and developed career awareness and computer literacy curricula.

In implementing the program, project staff had to overcome work overload from nonproject duties, cramped quarters, and limited funds. The program faced a high dropout rate as students took jobs because of economic needs. The positive aspects of BLAST were its instituted changes in curricula and parental involvement activities.

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

- The school administration should rearrange schedules so that Project BLAST staff are relieved of time-consuming building assignments, particularly during periods when their presence is needed for project responsibilities.
- Project staff and the bilingual guidance counselor should attempt to reach a consensus on when students are to be mainstreamed.
- Project BLAST should supply OREA with the data it needs to appropriately evaluate the program objectives.

## ACKNOWLEDGMENTS

We thank Shirley Hinkamp for editing, Margaret Scorza for coordinating production, Marbella Barrera for analyzing data, and Kristine Gatti for typing the final report.



## TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION.....	1
II. PROGRAM DESCRIPTION.....	2
Structure.....	2
Funding.....	3
Staffing.....	4
Student Placement, Programming, and Mainstreaming.....	4
III. STUDENT CHARACTERISTICS.....	7
IV. FINDINGS.....	11
Instructional Activities.....	11
English as a Second Language.....	11
Native Language Arts Activities.....	15
Content Area Activities.....	17
Noninstructional Activities.....	19
Cultural Activities.....	19
Career Activities.....	19
Student Involvement.....	20
Attendance.....	21
Parent Involvement Activities.....	21
Staff Development Activities.....	23
Curriculum Development Activities.....	23
V. CONCLUSIONS AND RECOMMENDATIONS.....	25

LIST OF TABLES

	<u>PAGE</u>
TABLE 1: Number and Percent of Program Students by Country of Birth.....	8
TABLE 2: Number of Program Students by Age and Grade.....	9
TABLE 3: Pretest/Posttest Differences of N.C.E.s on the <u>Language Assessment Battery</u> .....	14
TABLE 4: Student Achievement in Native Language Arts.....	16

## I. INTRODUCTION

Bilingual Language Arts Survival Training (Project BLAST) completed its fifth year of funding under Title VII of the Elementary and Secondary Education Act (E.S.E.A.). The project site was Walton High School, in the northwest Bronx. The neighborhood consisted of low- and middle-income two- and three-family houses and several large apartment buildings, some of which are cooperatives. Kingsbridge Avenue, three blocks from the school, is a commercial street containing family-owned stores, chain stores, banks, and offices.

Walton is a nonzoned school whose students come from all over the borough. The majority however, are from south of Fordham Road, a low-income black and Hispanic area. Forty-nine percent of Walton's 3,466 students were native speakers of Spanish; six percent were native speakers of Asian languages; and the remainder were English speakers, of whom the overwhelming majority were black.

## II. PROGRAM DESCRIPTION

### STRUCTURE

Project BLAST sought to provide support services to a preexisting bilingual program for the increasing numbers of Spanish-speaking students in the school, by improving their English language skills and providing them with career orientation, survival or coping skills, and citizenship training.

All native language arts (N.L.A.) and English as a second language (E.S.L.) teachers were members of a department of bilingual education, E.S.L., and foreign languages. An assistant principal (A.P.), who was also the director of Project BLAST, supervised this department. A project coordinator supervised BLAST on a day-to-day basis.

The project director supervised the project coordinator. According to the project coordinator, this centralized structure provided excellent communication and coordination. She said that the program staff met frequently to discuss different issues and did not feel alienated. Because of these coordinated efforts the program was able to have mainstream students provide informal counseling and tutoring to project students. The organizational structure also helped improve staff development workshops. For example, a spring staff development workshop was on incorporating the content area subject history into E.S.L. classes at different levels. The project director and coordinator decided to pair history content area teachers with E.S.L. teachers in the classrooms. The project coordinator stated that this addressed

part of one of the program's objectives--that school personnel would participate in two interdisciplinary workshops each semester.

According to the program coordinator, the only drawback of the organizational structure was the time factor. Project staff were supposed to use the fourth period of classes for departmental meetings twice a month. Because some teachers did not have this class period free, it was difficult to coordinate this particular meeting. The program coordinator suggested that a possible solution was to rotate nonproject staff in the fourth period in order for participating teachers to be able to attend the meetings.

#### FUNDING

According to the project coordinator, major budget cuts affected program implementation:

- There were more classes to teach with fewer staff. The program coordinator had to teach two classes as well as patrol bathrooms.
- Funds were lacking for textbooks and cultural trips.
- Supplementary school materials were limited.
- Computer facilities were inadequate.

The project coordinator stated that some program objectives had to be modified because of the budget cuts. These changes were related to field trips, computer facilities, parental activities, library and audiovisual services, newsletter and printing facilities, and bilingual guidance counseling services.

## STAFFING

The Title VII-funded staff consisted of a project coordinator (funded for 60 percent of the time), a bilingual resource/curriculum specialist (60 percent of time), and a bilingual family assistant (100 percent of time).

All Title VII staff members spoke Spanish fluently and the resource/curriculum teacher also spoke French.

The project coordinator and the resource teacher had numerous classroom teaching and building assignments that detracted from their project responsibilities. For example, Title VII staff were required to patrol the hall and bathrooms during the homeroom period. This resulted in the project coordinator having to counsel parents in front of the students' bathroom.

## STUDENT PLACEMENT, PROGRAMMING, AND MAINSTREAMING

Students entered the program as a result of individual interviews, evaluation of transcripts, teachers' evaluations, composition writing tests, and scores below the twenty-first percentile on the English version of the Language Assessment Battery (LAB).\*

In order to offer intensive instruction in English and

---

\*Language Assessment Battery (LAB) was developed by the Board of Education of the City of New York to measure the English-language proficiency of nonnative speakers of English in order to determine if their level of English proficiency is sufficient to enable them to participate effectively in classes taught in English. Students scoring below the twenty-first percentile on the LAB are entitled to bilingual and E.S.L. services.

provide a well-rounded and enriched program in all areas, Walton offered its students a nine-period school day rather than the eight periods offered to its mainstream students. Students at levels one through three received three periods of E.S.L. daily. Students at levels four and higher received a minimum of two periods of E.S.L. daily.

One of the aims of the program was to offer students a combination of English and survival skills, such as goal setting, self-assessment, and utilization of short-range goals to enhance self-image. The school stressed English skills within an interdisciplinary context. For example, during the fall, LEP students could enroll in such career/vocational courses as career orientation, career exploration, computer-assisted math, bilingual keyboarding, and a typing lab.

It was expected that the native language would be used 80 percent of the time in the ninth grade, 60 percent of the time in the tenth grade, and would decrease below 50 percent thereafter.

Students were offered five levels, including an honors level and an advanced placement level of N.L.A. during the fall.

The content area bilingual classes paralleled those in the mainstream. The use of native language in content area courses progressively decreased as language proficiency in English increased.

The BLAST staff had a process-oriented philosophy regarding mainstreaming. They believed that each student had particular needs and that although mainstreaming bilingual students as

quickly as possible was one of their goals, they did not want to do it before the student was ready. The BLAST staff differed with the bilingual guidance counselor on when to mainstream students. (BLAST's staff felt the guidance counselors did it before students were ready. She advised students who reached graduation age without accumulating the necessary credits to leave Walton and enroll in a G.E.D. program.)

Generally, students remained in the program for two to three years. Once mainstreamed, the project followed up students through such means as guidance counseling, report cards, college orientation, and guidance services. The project coordinator said that, overall, students performed well after they were mainstreamed; they generally had average grades of 75 or 80 percent.



### III. STUDENT CHARACTERISTICS

This year 99 percent of project students were native speakers of Spanish. The majority of these students (see Table 1) were born either in the Dominican Republic or Puerto Rico. Others came from several Latin American countries, Korea, the Middle East, and the United States.

Participating students were in grades nine through 12. Project BLAST provided complete age and grade data on 236 students. The majority (46 percent) were in the ninth grade. (See Table 2.) Forty-five percent of the students were overage for their grade placement.

Of the 208 students for whom data were available, 39 (19 percent) had participated for one year or less; 98 (47 percent) had participated for about two years; 54 (26 percent) had participated for about three years; and 17 students (8 percent) had participated in the program for four years.

Many of the students came from single-parent households; the parents of others did not live in the United States and the students lived with relatives. According to project staff, some students shuttled back and forth between the United States and Puerto Rico or the Dominican Republic. As a consequence, their education was interrupted.

TABLE 1

## Number and Percent of Program Students by Country of Birth

Country of Birth	Number	Percent
Dominican Republic	109	44.3
Puerto Rico	91	37.0
Ecuador	14	5.7
Honduras	6	2.4
El Salvador	5	2.0
U.S.A.	4	1.6
Mexico	3	1.2
Nicaragua	3	1.2
Colombia	3	1.2
Guatemala	2	.8
Costa Rica	2	.8
Cuba	1	.4
Panama	1	.4
Middle East	1	.4
Korea	1	.4
TOTAL	246 <sup>a</sup>	99.8 <sup>b</sup>

<sup>a</sup>Data were missing for eight students.

<sup>b</sup>Total is less than 100 because of rounding.

- Eighty-one percent of the students were born in the Dominican Republic or Puerto Rico.

TABLE 2

## Number of Program Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	Total
12	1				1
13	1				1
14	20	2			22
15	28	13	1		42
16	28	23	7	1	59
17	23	21	13	11	68
18	5	6	7	9	27
19	1		6	5	12
20	1		1	2	4
TOTAL	108	65	35	28	236 <sup>a</sup>

Overage  
Students

Number	58	27	14	7	106
Percent	53.7	41.5	40.0	25.0	44.9

Note. Shaded boxes indicate expected age range for grade.

<sup>a</sup>Data were missing for 18 students.

- Ninth grade students made up most of the group that project BLAST served.
- More than half the ninth graders were overage for their grade.

According to the project coordinator, new students from the Dominican Republic had presented special educational problems for the program. Most of them had low levels of literacy in their native language.

Students generally had very limited exposure to English prior to their participation in the program. Although some of the students came from bilingual programs in junior high schools, most were at the beginning level of E.S.L.

In terms of students' literacy in their native language prior to their participation in the program, most were on the intermediate level and the rest were in advanced N.L.A.

## IV. FINDINGS

The Office of Research, Evaluation, and Assessment (OREA) evaluated Project BLAST by inspecting the results of standardized and teacher-made tests; by examining program and school records; by observing classes; and by interviewing project and school personnel.

### INSTRUCTIONAL ACTIVITIES

#### English As A Second Language

- As a result of participating in Project BLAST, by the end of the first year, at least 75 percent of the LEP students will achieve a gain in total raw score as measured by the Basic Inventory of Natural Language (BINL).
- As a result of participating in Project BLAST, 75 percent of our LEP students will improve English reading skills and will advance one level higher in the English as a Second Language sequence.
- As a result of participating in the program, E.S.L. students will demonstrate statistically significant gains in English language development as demonstrated by the results of the Language Assessment Battery.

Students participated in a four-year sequence. Those in the elementary and intermediate levels also received career orientation and career exploration instruction. During the first two years in the program, students took 15 periods of E.S.L. per week; during their third year, they took 10 periods per week. E.S.L. 6 through 8 prepared students to enter mainstream classes. Students also attended a weekly E.S.L. computer lab.

---

Basic Inventory of Natural Language San Bernadino, CA: CHEC point Systems, Inc., 1979.

Student Achievement in E.S.L. OREA could not assess the first two objectives because of lack of data. Either the project did not administer the BINL or did not provide results to this office. Project BLAST provided no information regarding advancement in E.S.L.

In evaluating LAB performance, a correlated  $t$ -test was computed on students' Normal Curve Equivalent (N.C.E.) scores." The  $t$ -test determines whether the difference between pretest and posttest mean scores is significantly greater than would be expected from chance variation alone. Effect sizes were also calculated to show educational meaningfulness.\*\*

Project BLAST provided complete LAB pretest and posttest scores for 101 students. Students' overall gain was 7.5 N.C.E.s with a range from 6.0 (for grade ten) to 10.5 (for grade eleven). (See Table 3.) These results were significant ( $p < .05$ ). The project met the E.S.L. objective measured by performance on the LAB. Also, an examination of effect sizes showed a range from .79 to 1.29, with an average of .94. Thus all students achieved

---

\*Raw scores were converted to N.C.E. scores which are normalized standard scores. They have the advantage of forming an equal interval scale so that scores and gains can be averaged. For the norming population, N.C.E.s have a mean of 50, a standard deviation of approximately 20, and a range from one to 99. Scores can be compared to the norming population.

\*\*The effect size, developed by Jacob Cohen, is a ratio of the mean gain to the standard deviation of the gain. This ratio provides an index of improvement in standard deviation units irrespective of the size of the sample. Effect size (E.S.) is interpreted to indicate educational meaningfulness, and an E.S. of .8 is thought to be highly meaningful, while one of .2 is considered to be only slightly so.

effect sizes considered to be of high educational meaningfulness.

TABLE 3

Pretest/Posttest Differences of N.C.E.s on the Language Assessment Battery

Grade	Number of Students	Pretest		Posttest		Difference		t Value	Effect Size
		Mean	SD	Mean	SD	Mean	SD		
9	47	16.0	10.8	24.0	13.8	8.0	8.7	6.35*	.92
10	34	17.2	9.3	23.2	11.2	6.0	7.6	4.62*	.79
11	11	16.1	11.1	26.6	12.6	10.5	8.7	4.03*	1.21
12	8	11.0	9.9	17.6	10.0	6.6	5.1	3.66*	1.29
Total	101*	16.1	10.2	23.6	12.5	7.5	8.0	9.37*	.94

\* $p < .05$ 

\*Total number includes one student for whom grade level information was not available.

- Students at grade levels nine through twelve showed a significant gain on the posttest.



## Native Language Arts Activities

- As a result of participating in Project BLAST, 80 percent of students in Level I Spanish will pass a teacher-made final examination; 90 percent of students in Level II Spanish will pass a New York Citywide examination in Spanish; 90 percent of students in Level III Spanish will pass a New York State Regents Examination.
- As a result of participating in Project BLAST, 75 percent of the students will pass course work in their N.L.A. class or Spanish class.

The large number of students illiterate in Spanish made it difficult to prepare them for the Spanish Regents examination.

N.L.A. students used the computer on a weekly basis to type and edit their essays. The program newsletter included the best of their work.

The program offered special courses in students' native history and culture, advanced Spanish literature (offered for one year), and advanced placement (also offered for one year).

Student Achievement in N.L.A. Project students did not take the citywide examination in Spanish; the project reported results for only three students who took and passed the Spanish Regents in the fall. OREA could not state whether Project BLAST achieved the N.L.A. objective dealing with the citywide test or Regents examination results.

From 81 to 100 percent of the students passed their N.L.A. courses in the fall, and from 91 to 100 percent passed them in the spring. (See Table 4.) Project BLAST met its N.L.A. objective dealing with course passing grades.

TABLE 4

## Student Achievement in Native Language Arts

Level	Fall		Spring	
	Number of Students	Percent Passing*	Number of Students	Percent Passing*
Level 2	51	84.3	29	96.6
Level 3	58	81.3	50	94.0
Advanced Spanish Literature	25	92.0	23	91.3
Advanced Placement	<u>5</u>	<u>100.0</u>	<u>3</u>	<u>100.0</u>
TOTAL	139	89.9	105	94.3

\*Passing criterion was 65 percent.

- Since no fewer than 80 percent of project students passed selected N.L.A. courses, Project BLAST met its N.L.A. objective that 70 percent would pass these courses.

## Content Area Activities

- As a result of participating in Project BLAST, the percentage of LEP students enrolled in bilingual mathematics, science and social studies will be on a par statistically with the percentage passing school-wide uniform examinations in mainstream classes on a comparable level.

Walton High School offered bilingual mathematics, science, and social studies. They were parallel to mainstream classes.

All examinations used in bilingual content area classes were translations of those used in mainstream classes.

The program offered special courses not found in the mainstream such as: career orientation and career exploration classes, computer math, bilingual keyboarding, and typing for LEP students. The project coordinator said that these fulfilled another program objective--to develop students' career and language skills.

Content area courses were taught largely, if not entirely, in Spanish, with teachers providing English vocabulary lists, and in some cases summarizing lessons in English. Although professional staff considered a policy of gradually increasing the use of English in content area courses to be desirable, they had had difficulty implementing it because of the wide variance in student abilities.

Science, social studies, and mathematics classes made use of the computer lab. Since the software was in English, these labs enabled students to develop their English while at the same time learning content area materials and developing computer skills.

Ninth- and tenth-grade students who had not passed the Regents Compency Test (R.C.T.) enrolled in bilingual computer mathematics.

An OREA field consultant observed a general science class of 28 taught in Spanish. The aim of the lesson was to discuss kinetic energy concepts. While the teacher discussed the concepts, she gave examples and formulas which introduced students to the basic principles of physics. A paraprofessional provided individualized instruction and checked homework. Many students actively participated in the group discussion.

Eighteen students attended a global history class, also conducted in Spanish. The aim of the lesson was to discuss the political relations between China and the United States, emphasizing the effects of Nixon's visit to China. The lesson also included a discussion of the external politics of China.

The teacher used maps during the class discussion of the specific treaties that China and the United States had made as a result of Henry Kissinger's trip in 1973. The teacher started the class discussion with a detailed explanation of the political geography and history of China, and described how Asian-American relations had changed since 1944. He wrote the work to be completed in class on the blackboard. He tried to incorporate English vocabulary, content area, and vocational skills in the lesson and used English when questioning the students.

A field consultant observed a computer math class. In it

students created a computer program to determine employees' salaries on a commission basis. The project coordinator stated that as a result of budget cuts, the program was unable to obtain computer software.

Content Area Achievement. It was not possible to evaluate achievement in content area subjects as proposed because the project did not provide data on mainstream students. Of program students, 60 percent of those taking mathematics, 67 percent of those enrolled in science, and 73 percent of those attending social studies classes achieved the passing criterion of 65 percent.

#### NONINSTRUCTIONAL ACTIVITIES

##### Cultural Activities

- As a result of participating in Project BLAST, student awareness of the cultural pluralism of the United States, of career opportunities and of the value of citizenship will be increased through the activity of four educational field trips.

Due to budget cuts the project was unable to organize as many field trips as proposed. Students were only able to attend the Broadway play, CATS, and the Spanish Repertory Company during the fall term. The project did not meet its cultural objective.

##### Career Activities

- As a result of participation in Project BLAST, student awareness of careers and survival/life skills will be increased.

Project BLAST carried out a number of activities designed to increase the students' awareness of career and survival/life

skills. The project added a citizenship unit to social studies classes; it integrated a career orientation/career exploration component with E.S.L. courses; and it organized a schoolwide Career Day to provide students with information on career opportunities. The project offered career orientation classes and published a booklet on popular careers.

Although it is impossible to state what the specific effects of these activities were on participating students, it can be assumed that they served to make students aware of career and survival/life skills. Project BLAST, therefore, accomplished its career objective.

#### Student Involvement

- As a result of participating in Project BLAST, the incoming first year students will become involved in class, department, school, and community activities.

For budgetary reasons, the project had eliminated student clubs and was attempting to develop a sense of group identification in the homeroom period. However, because several staff members (including the project coordinator) had the assignment of patrolling the halls during homeroom periods, this was difficult to accomplish.

The program staff and students participated in activities such as the school's foreign language week; career orientation/career exploration classes; the production of the newsletter, Pensamientos Bilingues; and working in the department as office aides or tutors. The project partially met its student involvement objective.

## Attendance

- As a result of participation in Project BLAST, average daily attendance will be five percent better than students in the mainstream (nonprogram students).

Teachers sent a copy of their class's daily attendance sheet to the family assistant, and whenever a student had three absences she sent a letter to his or her parents. Whenever a student was absent five or more times the family assistant made a home visit. The bilingual guidance counselor also tried to set up lines of communication with parents to deal with these matters.

Attendance Outcomes. Since the school's attendance rate includes the attendance of program students, statistical significance of the difference between program and school attendance was determined through the application of a  $z$ -test for the significance of a proportion.

The attendance rate of program students was 87.6 percent, 9.5 percentage points above the schoolwide rate. The  $z$ -test results ( $z=3.07$ ) indicate that the attendance rate of program students was significantly higher ( $p<.05$ ) than the schoolwide rate. Thus, the program met its attendance objective.

## Parental Involvement Activities

- As a result of their children's participation in Project BLAST, parental involvement in regularly scheduled meetings will be ten percent higher than nonproject parents.
- As a result of Project BLAST, monthly meetings of the program's Advisory Committee will be attended by a minimum of seven parents, two students, one bilingual teacher, the coordinator, and the resource/curriculum teacher.

- As a result of Project BLAST, ten workshops for parents of participating students in English as a Second Language will be held.
- As a result of Project BLAST, parents of participating students will be contacted twice per term by mail, phone, or home visit by the guidance counselor or family assistant. This will be in addition to issuance of three report cards per term.
- As a result of Project BLAST, there will be a newsletter describing the project's activities issued at least four times during the school year.

The parents of Project BLAST students were involved in their children's education through attendance at Parents Advisory Council (PAC) meetings and E.S.L. workshops, through home visits by the family assistant, and through telephone and mail contacts.

There were monthly PAC meetings throughout the school year. The purpose of these meetings was to acquaint parents with schoolwide procedures, the goals of bilingual education, and the aims of Project BLAST. The project, however, did not provide the data necessary to determine if the attendance rate of parents of program students was higher than that of parents of mainstream students. OREA could not determine whether the project met the objective which compared the involvement of project parents with that of mainstream parents or the one which dealt with PAC meetings.

The program referred parents to E.S.L. adult workshops at Lehman College, thus meeting the E.S.L. objective.

Although Project BLAST arranged a parent self-help group which met every Monday night and held an open school night for



incoming students and their parents to introduce staff and plan the year's activities, it was impossible, given the lack of data, to determine whether the project met its parental involvement objectives with project contact with parents or the newsletter.

#### Staff Development Activities

- As a result of Project BLAST, school personnel will participate in two interdisciplinary workshops each semester.
- As a result of Project BLAST, staff members will enroll in courses at accredited colleges in bilingual education or related fields.

Project staff members and E.S.L. and bilingual teachers attended joint staff development workshops once a semester. They also attended monthly meetings of the foreign language department; had house meetings twice a month to discuss the goals and methods of bilingual education and to listen to reports on conferences and workshops that staff members had attended. Since staff members attended one, not two, interdisciplinary workshops each semester, the project did not accomplish that objective. It is possible that the many other meetings could be considered to be in lieu of the second workshop.

Five staff members, including two paraprofessionals, enrolled in college courses. Project BLAST met its college course staff development objective.

## Curriculum Development Activities

- As a result of Project BLAST, curricula and resource materials will be developed, revised, or updated to meet the program's needs.

The curriculum specialist/resource teacher developed, adapted, and/or translated a variety of materials, including courses of study and material for use in computer lab, N.L.A., and social studies. Project BLAST met its curriculum development objective.

## V. CONCLUSIONS AND RECOMMENDATIONS

Project BLAST met some of its proposed objectives in E.S.L. and N.L.A. Sufficient data were not available to assess accomplishment of the content area objective. It partially met its student involvement, parental involvement, and staff development objectives. It did not meet its cultural activities objective.

Staff development activities were one of BLAST's major strengths.

Since Walton is a nonzoned school, many students and their families live outside the immediate neighborhood; however, the project succeeded in establishing good communication between parents and school.

School certificates and "Big Mac" certificates (for free hamburgers) for good attendance contributed to Project BLAST's high attendance rate.

Project BLAST instituted changes from last year's program. The principal agreed to schedule separate Spanish classes for native and nonnative Spanish speakers. In addition, all newly hired content area teachers were fully bilingual. The project increased the number of parental involvement activities it offered, and it developed career awareness and computer literacy curricula. All of these changes functioned to strengthen the program.

Despite the positive changes undertaken by Project BLAST it could not accomplish all of its objectives. Some of the reasons

were externally imposed; others were because of the population the project served. The project coordinator and family assistant had time-consuming building assignments which used up time they might have devoted to the program. Project philosophy concerning mainstreaming differed from that of the school's bilingual guidance counselor. The project coordinator and resource curriculum teacher had to teach two courses each in addition to their program duties. Cramped quarters made it impossible to have the privacy needed to counsel students effectively. There were limited funds for computer facilities, cultural trips, parent activities, student clubs, the newsletter, and supplementary school materials.

Other factors also negatively affected students' achievement in the program. Their families' extreme poverty and lack of literacy as well as a lack of previous bilingual instruction have had deleterious effects.

There was a high dropout rate among program students; they left school early to take low-paying jobs with little or no chance of career advancement because of the lack of economic resources in the home. Many of these students rarely traveled outside their immediate neighborhoods and were alienated from the career opportunities open to them or the services made available by the government.

Two problems appeared to exist with the current curriculum. Low literacy students from the Dominican Republic were unable to pass the R.C.T. tests needed for graduation. The curriculum did

not completely meet their needs. The second problem was that the state-funded E.S.L. classes carry one-half or zero credits. Most students had to take two of these courses each day for four semesters. To expect these students to graduate in four years was unrealistic.

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

- The school administration should rearrange schedules so that Project BLAST staff are relieved of time-consuming building assignments, particularly during periods when their presence is needed for project responsibilities.
- Project staff and the bilingual guidance counselor should attempt to reach a consensus on when students are to be mainstreamed.
- Project BLAST should supply OREA with the data it needs to appropriately evaluate the program objectives.