

DOCUMENT RESUME

ED 318 238

FL 018 454

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 TITLE Bilingual Education and Career Awareness Program.  
 Project BECA, 1987-88. OREA Report.  
 INSTITUTION New York City Board of Education, Brooklyn, NY.  
 Office of Research, Evaluation, and Assessment.  
 PUB DATE Apr 89  
 NOTE 34p.  
 PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS Attendance; \*Bilingual Education Programs; Business  
 Education; \*Career Awareness; \*Curriculum  
 Development; \*English (Second Language);  
 Extracurricular Activities; Federal Programs;  
 Industrial Arts; Mathematics Instruction; \*Native  
 Language Instruction; \*Parent Participation; Program  
 Descriptions; Program Evaluation; School Counseling;  
 Science Instruction; Secondary Education; Second  
 Language Instruction; Social Studies; Staff  
 Development; Urban Education

IDENTIFIERS Content Area Teaching; New York City Board of  
 Education; \*Project BECA NY

ABSTRACT

Project BECA (the Bilingual Education and Career Awareness program) served 346 students at Adlai E. Stevenson High School in New York City in its second year of extension funding. Participating students received instruction in English as a Second Language (ESL), native language arts (NLA), content area subjects, bilingual industrial arts, and business education. The program also provided counseling, staff development, curriculum development, and extracurricular and parent involvement activities. Although students at all grade levels made significant gains in English language proficiency, only advanced students met the proposed ESL objective. The NLA objective was met. Science and business education objectives were met in both semesters, and the social studies objectives were met in the spring semester. Inadequate information was available on the industrial arts and suspension objectives. Attendance, staff development, and guidance and counseling objectives were met. Curriculum development and extracurricular activity objectives were only partially achieved, and mathematics and parental involvement objectives were not met. Recommendations for program improvement include assignment of a family assistant to the program, offering of the same vocational and career concentration courses offered to mainstream students, improved coordination of efforts, more comprehensive programming for overage students, and easier student access to nursery facilities. (MSE)

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# OREA Report

## EVALUATION SECTION REPORT

BILINGUAL EDUCATION  
AND CAREER AWARENESS PROGRAM  
PROJECT BECA  
1987-88

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EVALUATION SECTION  
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April 1989

EVALUATION SECTION REPORT

BILINGUAL EDUCATION  
AND CAREER AWARENESS PROGRAM  
PROJECT BECA  
1987-88

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BILINGUAL EDUCATION AND CAREER AWARENESS PROGRAM  
PROJECT BECA\*  
1987-88

SUMMARY

- Project BECA was fully implemented. During the 1987-88 school year, participating students received instruction in English as a Second Language (E.S.L.), Native Language Arts (N.L.A.), content area subjects, bilingual industrial arts, and business education. The program also provided counseling, staff development, curriculum development, and extracurricular, and parental involvement activities.
- Although students at all grade levels made statistically significant gains in English language proficiency, only advanced-level E.S.L. students mastered the proposed E.S.L. objective. Students met the program objective in N.L.A. The objective in content area subjects was met in science and business education in both semesters, and social studies in the spring semester. There was no information to assess the bilingual industrial arts or suspension objectives. The project met its attendance, staff development training, and guidance and counseling objectives. It partially achieved the curriculum development and extracurricular activity objectives. It did not meet the content area objective in mathematics in either semester and social studies in the fall semester, nor did it meet the parental involvement objective.

The Bilingual Education and Career Awareness project (Project BECA) was in its final year of a two-year extension of a Title VII grant. It served 346 students at Adlai E. Stevenson High School. Its major goals were to provide E.S.L., N.L.A., and bilingual instruction in content area subjects; to provide career awareness and business education; and to emphasize the importance of completing high school requirements for graduation.

The criteria used for student participation in the program included scores below the twenty-first percentile on the Language Assessment Battery (LAB) and program staff recommendations. At the beginning and end of the semester, students took the Criterion Referenced English Syntax Test (CREST). The program offered instruction in E.S.L., N.L.A., and business and industrial arts; it also offered career awareness counseling. The school provided content area courses in science, mathematics, and social studies to help students meet graduation requirements.

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\*This summary is based on the final evaluation of the "Bilingual Education and Career Awareness Program (Project BECA) 1987-88" prepared by the OREA Bilingual Education Evaluation Unit.

Program staff attended university courses. Students received group and individual counseling and went on educational field trips. Parental involvement activities included an orientation day at the beginning of the year, meetings, and an awards assembly.

The Office of Research, Evaluation, and Assessment (OREA) examined course passing rates, performance on the LAB and CREST, attendance data, information from interviews of program and school personnel, and observations of classes to evaluate the program.

Students in the four lower levels of E.S.L. came close, but did not master an average of one objective on the intermediate level of the CREST per twenty days of instruction. Students in the upper two E.S.L. levels did master an average of 0.80 objectives on the advanced level of the CREST per twenty days of instruction. According to the results of the LAB, students met the evaluation objective by making statistically significant gains in English language proficiency.

According to the results of teacher-made tests, students achieved the objectives set in N.L.A., business education, and social studies in the spring, and science in both semesters. The project did not provide the data necessary to assess the bilingual industrial arts or the suspension objective. Project BECA met the staff development objective. Moreover, students received the proposed number of hours of guidance, counseling, and career advisement. The project partially met the objectives in extracurricular activities (there were a lack of career-related trips) and curriculum development (no curriculum for Introduction to Computers). Program students had significantly better attendance records than did mainstream students. Project BECA did not meet its objective in parental involvement.

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

- If funds permit, assign a family assistant to the program. This would enable the bilingual guidance counselor and the project director to spend more time fulfilling their assigned responsibilities.
- The school should offer participating students the same vocational and career concentration choices given to mainstream students.
- Program staff and the school administration should coordinate their efforts to disseminate information and resources among mainstream departments.

- The New York City Board of Education should develop a more comprehensive plan to offer Regents-level courses to overage bilingual students.
- The school should provide program students with easier access to nursery facilities.

## ACKNOWLEDGMENTS

We thank Magaret Scorza for coordinating production, Marbella Barerra for analyzing data, Shirley Hinkamp and Madelyn Anderson for editing, Cristina Borde for proofreading, and Betty Morales for typing and distributing the final document.

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## I. INTRODUCTION

The main goals of the Bilingual Education and Career Awareness program (Project BECA) were to provide Adlai E. Stevenson High School's population of limited English proficient (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 subjects while emphasizing career awareness and business education. The project also endeavored to help them complete high school requirements for graduation: Stevenson required that students complete a minimum of five courses in Spanish and three in business education. Program students received intensive guidance on an individual and small-group basis.

### SCHOOL AND COMMUNITY CONTEXT

Adlai E. Stevenson High School is in a well-kept lower middle class residential area in the Bronx. The school is surrounded by one- and two-family privately-owned houses and low-income public housing projects.

### ORGANIZATIONAL STRUCTURE

Project BECA was centralized and was administered by the assistant principal (A.P.) for foreign languages. Title VII staff, supervised by the program director, included a curriculum development specialist and a secretary. Non-Title VII teachers functioned under their respective departments. A tax-levy funded bilingual guidance counselor served the LEP students in the

bilingual program. All Title VII staff members were bilingual and had four to 27 years' experience.

Although the school principal expressed a high degree of commitment to the bilingual program, some professional staff members expressed concern about the lack of interdepartmental communication. The project director felt that many mainstream teachers didn't seem to be interested in the program, nor were they encouraged to participate in the program's activities or to exchange resources with the program teachers. She stated that she, along with other program staff members, would have liked to participate more actively in the decision-making processes of other departments and suggested that other departments could be more cooperative with the bilingual program. On the other hand, some program teachers were not aware of schoolwide resources, i.e. maps supplied by the social studies department. In this sense, the program's centralized structure hindered effective access to classroom materials.

#### PARTICIPATING STUDENTS

The program's entry criteria were program staff and teacher recommendation, information from feeder schools (when available), and a score below the twenty-first percentile on the English

version of the Language Assessment Battery (LAB).<sup>7</sup>

### Student Characteristics

The BECA program served 184 Hispanic LEP students in the fall and 162 in the spring. Fifteen percent were born in the United States, the rest were recent arrivals from Spanish-speaking countries: Puerto Rico (33 percent), the Dominican Republic (28 percent), Ecuador (12 percent), and the rest were from other South and Central American countries. Students coming from the Dominican Republic and Puerto Rico were usually in a transient state, traveling back and forth between their native countries and the States.

Most of the program students come from low-income neighborhoods. All the students were entitled to free lunch, an indication of poverty. Consequently, many of the students needed to work after school in low-paid, unskilled jobs. The project director stated that there had been several dropouts due to pregnancy. Although the school had a nursery, program students found it difficult to meet school requirements for its use.

Students' exposure to English prior to their participation in the program ranged from none to one year, and they had reached intermediate or advanced levels in their native language.

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<sup>7</sup>The 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 whether 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.

Students' educational backgrounds varied depending on socioeconomic class and the area from which they came (rural or urban).

Their depressed socioeconomic status, their transiency, their need to work after school, and their unstable home conditions hindered these students academic achievement.

### Mainstreaming

Stevenson mainstreamed students gradually, depending on their proficiency in English. The project offered transitional courses, and the director stated that students generally remained in the program an average of three years. Even when fully mainstreamed, students could receive supportive services and N.L.A. Part of the follow-up process was to make sure that students had the courses required to graduate.

Former program students were in the top twenty percent of the school, with an average of 85 or better. Moreover, 90 percent of former program students had been accepted by postsecondary schools. For the year under review, six program students were on the school's honor roll, three were referred to the Academy of Finance, and one student participated in a diplomatic exchange program to Spain.

Equal numbers of students were in ninth, tenth, and eleventh grades. Forty-two percent of the students were overage for their grade placement. (See Table 1.)

TABLE 1

Number of Program Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	TOTAL
13					
14	10	4	1		15
15	13	7	1		21
16	11	17	7	1	36
17	8	14	17	9	48
18		3	14	9	26
19	1		7	10	18
20			1		1
TOTAL	43	45	48	29	165 <sup>a</sup>

Overage Students

Number	20	17	22	10	69
Percent	46.5	37.8	45.8	34.5	41.8

Note. Shaded boxes indicate expected age range for grade.

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

- Students were evenly distributed in ninth, tenth, and eleventh grades; fewer students were in twelfth grade.
- Forty-two percent of program students were overage for their grade.

## II. EVALUATION FINDINGS: INSTRUCTIONAL ACTIVITIES

The Office of Research, Evaluation, and Assessment (OREA) evaluated Project BECA by inspecting student test results and program records, interviewing school and project personnel, and observing classes. The project proposed instructional objectives in E.S.L., N.L.A., content area subjects, and career education.

### ENGLISH AS A SECOND LANGUAGE

- As a result of participating in the program, students in E.S.L. 1 and E.S.L. 2 will master an average of one objective per twenty days of instruction on the beginning level of the Criterion-Referenced English Syntax Test (CREST).
- As result of participating in the program, students in E.S.L. 3 and E.S.L. 4 will master an average of one objective per twenty days of instruction on the intermediate level of the CREST.
- As a result of participating in the program, students in E.S.L. 5 and E.S.L. 6 will master an average of 0.80 objectives per twenty days of instruction on the advanced level of the CREST.
- As a result of participating in the program, students will make statistically significant gains in English language proficiency.

Implementation. The E.S.L. curriculum had two tracks: a grammar and writing track and a reading track. Both had beginning, intermediate, and advanced levels. The grammar track also had a transitional level that was not actually part of the BECA program but rather a course for mainstream students classified as somewhat limited in both their native language and English. In the grammar track, the beginning and intermediate levels met two periods a day; the other levels met one period a

day. Improvement in English language skills was also sought in the content areas and in the business education and industrial arts classes.

Students were placed in E.S.L. classes on the basis of LAB results, teacher interviews, and information from feeder schools, when available.

An OREA field consultant visited two E.S.L. classes. In the advanced class of seven students, the aim of the lesson was how to use the phrases: "break into," "get away," "get away with," and "make up." The teacher required students to use specific words in sentences. Teacher and students used English exclusively, and students actively participated in the lesson. A paraprofessional gave individualized instruction and translated when necessary.

The second class observed was an advanced level of reading and writing. The class, conducted entirely in English, was a review of vocabulary, idioms, and synonyms. Students were very animated and asked and answered questions constantly.

Outcome. The assessment instrument used to evaluate the first three objectives in E.S.L. was the Criterion Referenced English Syntax Test (CREST). Students took the CREST at the

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The Criterion Referenced English Syntax Test (CREST) was developed by the Board of Education of the City of New York to measure mastery of instructional objectives of the E.S.L. curricula, and thus was constructed to maximize content validity. The test contains four items per curriculum objective, and mastery of an objective is achieved when three of these items are answered correctly. The test measures mastery of 25 objectives at Levels 1 and 2, and 15 objectives at Level 3.

beginning and end of each semester. OREA computed a mastery score for each student by calculating the difference between his/her pre-and posttest scores and dividing that figure by time of instruction (calculated by multiplying the students' attendance rate by the time in months between the tests). OREA then computed the means for these figures to arrive at a mean mastery score.

Complete data were available for 123 students in the fall and 112 in the spring. Students tested at levels 1 and 2 (beginning and intermediate) mastered an average of .90 CREST objectives per 20 days of instruction. (See Table 2.) While they were close, they did not meet the proposed evaluation objective. Students tested at level 3 (advanced) mastered an average of .92 CREST objectives per 20 days of instruction, meeting the objective set for their level.

The instrument used to evaluate the fourth E.S.L. objective was the Language Assessment Battery (LAB). Complete data were available for 109 students. OREA compared normal curve equivalent scores (N.C.E.s) on pretests with those obtained on posttests." Students in each grade, and the group as a whole, made significant ( $p < .05$ ) gains, indicating that Project BECA met its fourth E.S.L. objective. (See Table 3.) OREA analysts also

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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.

TABLE 2

Results of the Criterion Referenced English Syntax Test

Test Level	Number of Students	<u>Pretest</u>		<u>Posttest</u>		<u>Mastery</u>		Mean Mastery per 20 Days Instruction
		Mean	S.D.	Mean	S.D.	Mean	S.D.	
<u>FALL</u>								
1	44	8.66	5.75	12.64	5.73	3.98	2.40	.91
2	49	11.49	6.72	14.43	6.38	2.94	2.27	.90
3	30	8.53	2.85	10.66	2.89	2.13	1.25	.94
<u>SPRING</u>								
1	34	10.17	6.90	14.44	7.62	4.27	3.10	.90
2	29	10.52	4.84	14.42	5.19	3.90	2.54	.90
3	49	9.12	3.27	11.69	2.84	2.57	1.84	.91

- Students taking level three of the CREST mastered the requisite number of objectives per 20 days of instruction.
- Students taking levels one and two of the CREST did not master the requisite number of objectives per 20 days of instruction.

TABLE 3

Pretest/Posttest N.C.E. Differences on  
the Language Assessment Battery, by Grade

Grade Level	Number of Students	Pretest		Posttest		Difference		t Value	Effect Size
		Mean	S.D.	Mean	S.D.	Mean	S.D.		
9	29	6.9	7.9	10.1	10.5	3.2	6.9	2.47*	.40
10	32	10.9	9.6	16.6	10.9	5.7	7.4	4.37*	.59
11	33	8.0	7.2	12.9	11.6	4.9	8.9	3.13*	.67
12	15	12.5	10.1	20.2	9.9	7.7	6.4	4.71*	.76
TOTAL	109	9.2	8.7	14.3	11.3	5.1	7.7	6.87*	.58

$p < .05$

- All pretest/posttest N.C.E. differences were significant.

computed effect size to assess educational meaningfulness.\* The effect size for the group was .58, which indicates that gains were of moderate educational meaningfulness.

#### NATIVE LANGUAGE ARTS

- As a result of participating in the program, at least 70 percent of the students will score at or above 65 in native language arts classes.

Implementation. The program's N.L.A. curriculum included Spanish levels I, II, and III; Caribbean studies; Puerto Rican history and culture; Spanish history/literature; and creative writing. Courses beyond level III were considered to be advanced electives. All these N.L.A. courses were credit-bearing. The study of Spanish fulfilled one of the three- or five-unit areas of concentration required by the Regents Action Plan.

A field consultant visited a level III class of 15 students. Students in this class had already taken the Regents exam. The aim of the lesson was to use the passive voice with irregular verbs in the past participle. Students had to write sentences with past participles and an indeterminate subject. The teacher then distributed an exercise sheet, which all students completed.

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\*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 .80 is thought to be highly meaningful, while one of .20 is considered to be only slightly so.

Outcome. Data provided by the program showed an N.L.A. enrollment of 123 in the fall and 94 in the spring. In the fall, 95 percent of the students reached the passing criterion of 65, in the spring 93 percent passed. Project BECA easily achieved its N.L.A. objective.

#### CONTENT AREA SUBJECTS

- At least 70 percent of the students will score at or above the passing criterion of 65 in social studies, science, and mathematics.

Implementation. In the academic content areas, BECA offered courses which fulfilled the graduation requirements of the New York City Board of Education. Stevenson offered a minimum of two years in science and mathematics and four years of social studies. Program students could receive bilingual instruction in mathematics, science, and social studies. Textbooks were in Spanish, but classes used English when the ability of the students permitted. Curricula and class content paralleled mainstream courses.

An OREA evaluation consultant observed a global history class conducted in Spanish. The aim of the lesson was to study the population of the Kiev region in the Soviet Union. Teacher and students reviewed the political climate in U.S.S.R. and its ethnic and racial composition. The teacher had written some questions in the blackboard, and students answered them in a class discussion. They covered such topics as the different

ethnic backgrounds in the U.S.S.R. and the factors contributing to the survival of particular cultures.

The teacher complained to the OREA consultant about the lack of classroom materials such as maps and other visual aids. Another concern voiced by several content-area teachers was that many of the books assigned by the New York City Board of Education were outdated and inadequate.

In the fundamental mathematics class observed by the OREA evaluator, the 14 students present worked on changing decimals and fractions. As the teacher conducted the class, it was apparent that she was aware of the difficulty many of the students were having with the material. She tried to involve the whole class in the lesson, asking each student to go to the blackboard and solve a division problem while the rest of the class worked on the same problem.

The aim of the observed biology class was to discuss the respiratory system. Twenty-three students were present, and the class was in Spanish. First the students described the functions and parts of the respiratory system. The teacher used charts to show anatomy and discussed the respiratory process. The teacher explained each biological concept clearly and tried to relate it to everyday experiences of the students. Most students participated actively.

Outcome. Students achieved the content area objective both semesters in science and in the spring semester in social

studies. (See Table 4.) They did not meet the criterion for social studies in the fall or in mathematics either semester.

### CAREER EDUCATION

- As a result of program participation, at least 70 percent of the students will score at or above the passing criterion of 65 in bilingual industrial arts classes.
- As a result of program participation, at least 70 percent of the students will score at or above the passing criterion of 65 in business education classes.

Implementation. The BECA program emphasized career awareness, offering courses in business, industrial arts, and related areas. Originally, this component offered 14 courses; however, many courses have been withdrawn because of diminishing enrollment. Business education teachers were assisted by bilingual paraprofessionals in each classroom who translated and helped with equipment. Only four business courses were offered in the fall: keyboarding, record keeping, accounting, and computer applications.

In the technical and vocational component, Project BECA offered courses such as graphic arts, automotive machine shop, and fashion design.

Some program teachers mentioned that program students were not offered some courses offered to the mainstream, such as a program in law and an Academy of Finance program. The bilingual guidance counselor felt that many bilingual students wanted other career options than were being offered. Nursery services offered

TABLE 4

Student Achievement in Content Area Courses

Area	Fall		Spring	
	Number of Students	Percent Passing	Number of Students	Percent Passing
Mathematics	109	60.6	103	50.4
Science	77	94.8	59	84.7
Social Studies	142	66.2	121	76.9

- Over 70 percent of participating students passed their science courses both semesters and their social studies courses in the spring semester.

to mainstream students were also difficult for program students to access.

The bilingual guidance counselor also suggested that the course structure be better adapted to the particular needs of the bilingual students. For example, bilingual students should have taken mathematics and biology at Regents levels but, since they had not yet mastered English, they were offered only general sciences.

An OREA field consultant observed a computer mathematics class in which students were constructing graphs on the computer. A paraprofessional provided individualized assistance in the application of LOGO.

The accounting course observed by the consultant had 20 students present; the teacher conducted the class in Spanish and used keyboard charts. Students were deeply involved in writing business accounts, while the teacher explained how to write and read clients' balance sheets. They also reviewed a textbook example of a client's business debts, credits, and balances. The teacher asked students to look at the dates and see what happened to cause a problem for a client on a particular date. A student then went to the blackboard to solve the problem. A paraprofessional provided individualized instruction.

Outcome. Since the project did not provide any data on industrial arts classes, OREA could not evaluate the objective relating to industrial arts.

One hundred eleven students in the fall and 106 students in the spring enrolled in one or more business education classes. Sixty-one percent of the students in the fall and 82 percent in the spring achieved the passing criterion of 65. The overall passing rate was 72 percent, therefore Project BECA met its objective for business education classes.

### III. NONINSTRUCTIONAL ACTIVITIES

Project BECA included noninstructional objectives in attendance, suspension, guidance and counseling, extracurricular activities, staff development, curriculum development, and parental involvement.

#### Attendance

- As a result of participating in the program, the student's attendance will be significantly higher than the attendance of mainstream students.

As reported by most professional staff members and the principal, bilingual program students had better attendance rates compared to mainstream students. The principal stated that every year many program students received awards for perfect attendance. He also said that this year three bilingual students were admitted to the Academy of Finance. Moreover, he and the project director indicated that businesses usually placed program students in jobs that paid well.

The attendance rate for program students was 88 percent, 12 percentage points above the schoolwide attendance rate of 76 percent. Statistical significance of the difference between program and mainstream attendance rates was determined through a z-test for the significance of a proportion.\* This procedure tests whether the difference between one group's rate (in this

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\*Bruning, J.L. and Kintz, B.L., Computational Handbook of Statistics, (Glenview, Illinois: Scott, Foresman and Company, 1968).

case, the program's) and a standard rate (in this case, the school's) is greater than can be expected by chance variation. The z-test results ( $z= 3.48$ ) indicated that the difference in attendance rates was statistically significant ( $p<.05$ ). Project BECA met its attendance objective.

### Suspension

- As a result of program participation, the percentage of program students who are suspended will be significantly lower than the percentage of non-program students who are suspended.

Although project and school personnel reported that program students had a lower percentage of suspensions than did mainstream students, the project did not provide any data. Therefore, OREA was unable to evaluate the suspension objective.

### Guidance and Counseling

- All program students will meet with the bilingual guidance counselor in order to plan their school program.
- Fifty percent of the students in the program will participate in group counseling sessions.

Counseling and advisement were the tasks of the bilingual guidance counselor, who served only the program students. Counseling was done in group and individual sessions. The group sessions had three main goals: to orient new students to the school milieu, to develop positive self-awareness, and to develop appropriate career-awareness. The bilingual guidance counselor stated that during the first part of the year, she emphasized self-awareness and along with the rest of the professional staff,

tried to present the students with positive adult role models. The second part of the year was given over to the vocational component. Job categories in which a student might have potential interest or abilities were computerized and, in conjunction with a series of questions, provided current information about schools, aptitudes, market demands, salaries, job locations, and general information about particular occupations. The bilingual guidance counselor stressed that Stevenson should offer more course choices, since many students showed neither interest in, nor aptitude for, business.

Individual counseling consisted of crisis intervention, informal contacts with family members, home visits, follow-ups on poor attendance, discussion of academic and vocational goals, and referrals to school and outside agencies. The guidance counselor indicated that she was overburdened because of the lack of a family assistant in the program. She remarked that a family assistant would be able to assist in family crisis intervention and referrals to family affairs agencies, follow-ups through home visits, and programming for parents' activities.

Project BECA met its guidance and counseling objectives.

#### Extracurricular Activities

- Fifty percent of the program students will visit business offices, industrial plants, and cultural and educational sites.

Most program students participated in extracurricular activities. The principal said that he would have preferred to see more career-related trips such as visits to Wall Street, than

the visits made by students to cultural and educational sites, and their contemplated trip to Philadelphia. Since student activities did not relate to the program objective of enhancing knowledge of business and industry, the project only partially met its extracurricular activity objective.

### Staff Development

- Program staff will take at least 20 university credits in E.S.L./Bilingual Education or 20 credits related to their area of teaching.

All teachers took at least 20 university credits in E.S.L./Bilingual Education or in their areas of teaching. Most teachers in the program had Masters degrees, and those who did not, were pursuing them. Two teachers and two paraprofessionals were attending university courses at institutions such as Queens College, City College, Columbia University, and Lehman College. The project achieved its staff development objective.

### Curriculum Development

- Curriculum will be developed in business education in Introduction to Educational Occupations and Introduction to Computers and Application.

This year, the curriculum resource teacher developed a curriculum for the Introduction to Educational Occupations. He said that he had adapted and translated a number of materials. However, he had not yet developed curriculum in Introduction to Computers and Application, therefore Project BECA did not meet the second half of the objective in curriculum development.

## Parental Involvement

- The Bilingual Parent Advisory Council will hold at least four meetings during the 1987-88 school year.

The Parent Advisory Council, along with some of the professional staff of the program, held a parent orientation meeting. A P.T.A. meeting with the principal covered security measures in the school. Evening parents meetings were also held, as well as an awards assembly. Since Stevenson was not a neighborhood school, many parents of program students found it difficult to attend school meetings. The project did not meet the objective that the Parent Advisory Council would hold at least four meetings.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

Project BECA met its proposed instructional objectives in E.S.L. for students enrolled in advanced level E.S.L. classes; in English language proficiency for students at all grade levels; in N.L.A.; and, in the content area subjects, for science and business education both semesters, and for social studies in the spring semester only. It met its proposed noninstructional objectives in attendance, guidance and counseling, and staff development. The project partially met its objectives in extracurricular activities and curriculum development. OREA did not have sufficient data to determine whether the project had met its objectives in industrial arts classes and suspension. Project BECA failed to meet its objectives in E.S.L. for students at the beginning and intermediate levels, the content area subject of social studies in the fall semester, mathematics both semesters, and parental involvement.

The principal of Adlai Stevenson High School said that contributing to the excellent performance of program students was the very supportive and well-organized environment of the program. He praised the professional staff of the program for being very competent and committed to the bilingual students.

The program appears to have achieved its primary academic and career awareness goals. In spite of its overall success, it has been beset by several difficulties: program students were not offered Regents-level courses in mathematics and biology until they mastered English, thereby making it difficult for them

to graduate; there was an interdepartmental lack of communication; choices in vocational and career area concentration for program students were extremely limited; family assistance services were unavailable, impeding programming and the development of strategies to get more parents involved and thus placing strains on program implementation and its ultimate success.

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

- If funds permit, assign a family assistant to the program. This would enable the bilingual guidance counselor and the project director to spend more time fulfilling their assigned responsibilities.
- The school should offer participating students the same vocational and career concentration choices given to mainstream students.
- Program staff and the school administration should coordinate their efforts to disseminate information and resources among mainstream departments.
- The New York City Board of Education should develop a more comprehensive plan regarding the offering of Regents-level courses to overage bilingual students.
- The school should provide easier access to the nursery facilities for program students.