

DOCUMENT RESUME

ED 285 932

UD 025 722

TITLE Project CAREERS, 1985-1986. OEA Evaluation Report.  
INSTITUTION New York City Board of Education, Brooklyn, N.Y.  
Office of Educational Evaluation.  
SPONS AGENCY Department of Education, Washington, DC.  
PUB DATE 86  
GRANT GOO-830-2145  
NOTE 42p.; Prepared by the OEA Bilingual Education  
Evaluation Unit. For related documents, see ED 270  
515 and ED 272 607.  
PUB TYPE Reports - Evaluative/Feasibility (142)  
EDRS PRICE MF01/PC02 Plus Postage.  
DESCRIPTORS Academic Achievement; \*Bilingual Education Programs;  
\*Career Education; Chinese Americans; \*English  
(Second Language); Haitians; High Schools; Hispanic  
Americans; \*Native Language Instruction; \*Parent  
Participation; \*Program Effectiveness; Urban  
Education  
IDENTIFIERS New York (Queens)

ABSTRACT

In 1985-86, Project CAREERS was in its third and final year at three Queens, New York, high schools. The project's goal was to help limited English proficient (LEP) students acquire proficiency in English while they developed reading and writing skills in their native languages. This goal was pursued through instruction in English as a second language (ESL) and native language arts, and bilingual instruction in mathematics, science, and social studies. The project served a total of 293 Hispanic, Chinese and Haitian LEP students at three Queens high schools. In addition to basic instructional goals, Project CAREERS aimed to teach basic skills in health-, law-, and business-related subjects, and to foster a positive career orientation. Title VII funds supported administrative and support staff positions, including a resource teacher and paraprofessional located at each site. Two of the schools were provided with a resource room for the project's career-oriented component. In 1985-86, the adaptation of curricular materials designed to parallel the mainstream program was in progress, and a series of training sessions for staff members was held. Each school established the proposed ESL/Americanization classes for parents, and parent advisory councils were established at each site. Instructional objectives were reached in English language achievement, but below the stated criterion for the program. This evaluation report includes recommendations for future programs serving similar populations.  
(KH)

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

ED285932

PROJECT CAREERS

1985-1986

# OEA Evaluation Report

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

*Richard Luffenberg*  
*N.Y.C. Bd. of Ed.*

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.

O.E.A. Evaluation Section Report

Robert Tobias, Administrator of Evaluation  
Judith S. Torres, Senior Manager

Grant Number. G00-830-2145

PROJECT CAREERS

1985-1986

Project Director:  
Angelo Gatto

Coordinator:  
Montserrat Espina

Prepared by the  
O.E.A. Bilingual Education Evaluation Unit

Armando Cotayo, Evaluation Manager  
Jose J. Villegas, Evaluation/Planning Specialist  
Shelley M. Fischer, Evaluation/Planning Specialist  
Margaret H. Scorza, Editorial/Production Coordinator  
Harvey Nadler, Evaluation Consultant  
Ana L. Martinez, Evaluation Consultant

New York City Public Schools  
Office of Educational Assessment  
Richard Guttenberg, Director

It is the policy of the Board of Education not to discriminate on the basis of race, 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: Carole Guerra, Local Equal Opportunity Coordinator, Office of Educational Assessment, 110 Livingston Street, Room 743, Brooklyn, New York 11201. Inquiries regarding compliance with appropriate laws may also be directed to: Mercedes A. Nesfield, Director, Office of Equal Opportunity, 110 Livingston Street, Room 601, Brooklyn, New York; or the Director, Office of Civil Rights, U.S. Department of Education, 26 Federal Plaza, Room 33-130, New York, New York 10278.

## A SUMMARY OF THE REPORT

Project CAREERS, a multi-site project in its third and final year, proposed to help limited English proficient (LEP) students acquire proficiency in English while they developed reading and writing skills in their native languages. The project proposed pursuing this goal through instruction in English as a second language (E.S.L.) and native language arts, and bilingual instruction in mathematics, science, and social studies. The project served a total of 293 Hispanic, Chinese, and Haitian LEP students at three Queens high schools: 131 Spanish-dominant students at William Cullen Bryant High School; 103 Haitian Creole-dominant students at Andrew Jackson High School; and 59 Chinese-dominant students at John Bowne High School. The students varied widely in both English- and native-language proficiency, and in overall academic preparedness.

The program's major instructional goals were: to provide a program of instruction that would enable students to improve their basic academic skills in both English and their native languages; foster a positive self-concept through the study and appreciation of both the students' native cultures and American culture; to encourage students to achieve academically and to graduate; and to teach basic skills in health-, law-, and business-related subjects, and to foster a positive career orientation.

Title VII funds supported administrative, support, and paraprofessional staff positions. All three project sites had E.S.L. programs paid for by a combination of P.S.E.N., tax-levy, and Chapter I funds. Project students participated in E.S.L. and native language arts classes at all three sites (French, rather than Haitian Creole, at Jackson); bilingual courses were offered in mathematics, science, and social studies at Bryant and Jackson High Schools, and in science at Bowne.

Title VII funds supported the project director (located at the central office), a coordinator (who was also coordinator for another Title VII program), and a resource teacher and paraprofessional located at each site. Bryant and Bowne each provided a resource room for the project's career-oriented component. The resource specialist at Jackson had to use a corner of the foreign language department office for this component because no room was available for use as the CAREERS resource center.

The adaptation of curricular materials designed to parallel the mainstream program was said to be in process. At Bryant, the math department's microcomputers were available for use by E.S.L. teachers and for peer tutoring in the bilingual content areas. At Bowne, the computers were available to the resource specialist and the paraprofessional for bilingual tutoring. None were available at Jackson.

The project reported that a series of training sessions to meet the educational needs of staff members had taken place under the auspices of the project coordinator, the Central Board of Education, and the Bilingual Education Multifunctional Support Center program at Hunter College. Each

of the schools had established the proposed E.S.L./Americanization classes for parents of participating students; their attendance rates varied. Parent advisory councils had also been established at each site.

Project objectives were assessed in English language development (Criterion Referenced English Syntax Test [CREST]); native language arts (teacher-made tests); mathematics, science, and social studies (teacher-made tests); business-, health-, and law-related careers (teacher-made tests); and dropout rates (school and project records). Several project objectives relating to pupil and staff awareness and attitudes were not measured because questionnaires/inventories developed for this purpose were unreliable. Quantitative analysis of student achievement data indicates that:

- Overall, students mastered 1.3 CREST objectives in the fall, and 1.1 CREST objectives in the spring, thus meeting the proposed objective.
- Chinese students achieved significant ( $p < .05$ ) gains in native language arts courses, attaining the objective. Data were not provided to assess the achievement of Spanish- and Haitian Creole-speaking students.
- Students were unable to reach the stated criterion in mathematics, science, social studies, and business and health career courses.
- Although program students' dropout rates were low, they failed to reach the proposed objective of being 10 to 15 percent less than those of mainstream students.

The evaluation team offers the following recommendations for future programs serving similar populations:

- Providing pre-occupational training and career-orientation classes in addition to college orientation;
- Making efforts to provide data to evaluate the objectives as proposed. Should data be unavailable, the objectives should be revised or eliminated; and
- Revising performance objectives in the content areas and for dropout rates, to reflect program students' achievement in comparison with students in mainstream classes.

## ACKNOWLEDGEMENTS

The production of this report, as of all Office of Educational Assessment/Bilingual Education Evaluation Unit reports, is the result of a cooperative effort of permanent staff and consultants. In addition to those whose names appear on the cover, Eulalia Cabrera has interpreted findings and has integrated material into reports; Arthur Lopatin has edited the reports following the O.E.A. style guide and written report summaries; and Joseph Rivera, Marcia Gilbert, Bruce Roach, Gladys Rosa, and Martin Zurla have worked intensively as word processors to produce and correct reports. Without their able and faithful participation, the unit could not have handled such a large volume of work and still produced quality evaluation reports.

## TABLE OF CONTENTS

	<u>PAGE</u>
I. PROGRAM DESCRIPTION	1
II. STUDENT CHARACTERISTICS	3
III. FINDINGS	6
English as a Second Language	6
Native Language Arts	10
Content-Area Subjects	13
Bilingual Career Awareness and Training	16
Staff Development	16
Curriculum and Materials Development	18
Parental Involvement	18
Informational Activities	19
Affective Domain	20
IV. CONCLUSIONS AND RECOMMENDATIONS	21
Conclusions	21
Recommendations	22
V. APPENDICES	24



## LIST OF TABLES

	<u>PAGE</u>
Table 1: Number and Percent of Program Students by School, Language, and Country of Birth.	4
Table 2: Number of Program Students by Age and Grade.	5
Table 3: Results of the <u>Criterion Referenced English Syntax Test</u> .	9
Table 4: Results of the Program-Developed Native Language Test for Chinese-Speaking Students.	12
Table 5: Passing Rates in Spanish and French Language Arts Courses.	12
Table 6: Passing Rates in Content-Area Subjects.	15

The Queens Borough Bilingual Education Career Institute  
for New York City High School Students

PROJECT CAREERS

Central Location: 1171 65th Street  
Brooklyn, New York 11219

Participating Schools: Andrew Jackson High School  
207-01 116th Avenue  
Cambria Heights, New York 11411

John Bowne High School  
65-25 Main Street  
Flushing, New York 11367

William Cullen Bryant High School  
48-10 81st Avenue  
Long Island City, New York 11103

Year of Operation: 1985-1986, Last year of funding

Target Languages: Haitian Creole, Chinese, Spanish

Number of Participants: 293 students

Project Director: Mr. Angelo Gatto

I. PROGRAM DESCRIPTION

Project CAREERS was a multi-site program in its third and final year of operation. Its basic goal was to help limited English proficient (LEP) students acquire English-language proficiency while also developing reading and writing skills in their native languages. The project proposed providing instruction in both English as a second language (E.S.L.) and native language arts, and bilingual instruction in mathematics, science, and social studies to Hispanic, Chinese, and Haitian LEP students at W.C. Bryant, John Bowne, and Andrew Jackson High Schools, respectively. Developing career awareness, providing career training, and enhancing students' knowledge and appreciation of their ethnic heritage were additional goals of Project CAREERS. The non-instructional services

provided by the project consisted of guidance, curriculum development, and E.S.L./Americanization classes for the parents of project students.

In the 1985-86 academic year, the program served 293 students: 131 Hispanic students at Bryant; 103 Haitian students at Jackson; and 59 Chinese students at Bowne.

The project director was responsible for administering and exercising budgetary control over the project, and for supervising and training the staff. Because he also administered several other Title VII projects, communication with Project CAREER'S on-site staff was done by a coordinator who was hired in April 1985 to oversee this and another Title VII project.

Project CAREERS' on-site staff consisted of three bilingual resource teachers and three paraprofessionals, who were supervised by an Assistant Principal (A.P.) at each school. All three A.P.s worked closely with the CAREERS staff, but with varying degrees of success. The A.P.s, the bilingual resource teachers, and the paraprofessionals coordinated the project on a day-to-day basis. The resource teachers at Bryant and Bowne, both of whom had graduate degrees in education, were highly respected within their schools. They were instrumental in implementing the program and in making extra time available to project students. At Jackson High School, the program was implemented by the acting A.P. for foreign languages, who had assumed this position in September 1984, and the Haitian resource teacher, who began in February 1985. The Haitian resource teacher had a bachelor's degree in engineering and had worked as a paraprofessional with another Title VII project. He helped identify eligible students and developed contacts with both parents and the school administration.

## II. STUDENT CHARACTERISTICS

The entrance and exit criteria for the program were the students' scores on the English version of the Language Assessment Battery (LAB). Only those students who scored below the twenty-first percentile on the LAB were eligible for participation. Such students were interviewed in their native language by the resource teacher on their educational and migrational histories, career goals, and general interests. The resource teacher also tested their native-language reading and writing skills.

The students from all three language groups were recent arrivals; consequently, they were facing major cultural and linguistic challenges. The majority of the project's Hispanic students were low socio-economic-level South Americans. Most were reportedly from single-parent families that had many children.

Staff members described the Chinese students served by the project as highly motivated, ambitious, quiet, reserved, and above grade level in math and science. The great majority of these students were from the People's Republic of China or Taiwan. (See Table 1.) According to project staff members, students from the People's Republic were not well prepared academically, whereas those from Taiwan had a good academic background but poor English-language skills. Staff members also mentioned that project students and their parents visited the project office seeking help with the intergenerational problems that stem from the conflict between America's individualistic, libertarian values, which the students are acquiring, and China's family-centered authoritarian values, which the parents tend to retain.

Regarding the Haitians, a staff member said they tended to socialize almost exclusively with each other and to rely on their native language because "... they don't feel understood by American students." Most of these students were from lower-middle class, two-parent families.

Fifty-one percent of the program students were overage. The highest percentage of overage students occurred at Jackson (68 percent). (See Table 2.)

TABLE 1  
Number and Percent of Program Students  
by School, Language, and Country of Birth

School	Language	Country of Birth	Number	Percent
William C. Bryant	Spanish	Colombia	46	16
		Other Central and South American	26	9
		Other Caribbean	22	8
		Ecuador	19	7
		United States	15	5
		Spain	3	less than 1
Jackson	Haitian/Creole	Haiti	102	34
		United States	1	less than 1
John Bowne	Mandarin	Taiwan	33	11
		People's Republic of China	4	1
	Cantonese	Hong Kong	13	4
		People's Republic of China	6	2
		Other Asian countries	3	1
TOTAL			293	100

- Forty-five percent of the program students reported are native speakers of Spanish. Thirty-five percent are speakers of Haitian Creole.
- Twenty percent of the program students were Asian-born. Seventy-five percent of the students in this group are speakers of Mandarin. The remainder are native speakers of Cantonese.

TABLE 2

Number of Program Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	Total
14		0	0	0	7
15			0	0	39
16	14			0	61
17	14	28	29	6	77
18	5	10	22	15	52
19	2	5	16	13	36
20	0	3	2	9	14
21	0	0	1	4	5
TOTAL	63	102	79	47	291*

Note. Shaded boxes indicate expected age range for grade.

All Overage Students

Overage Students					
Number	35	46	41	26	148
Percent	56	45	52	55	51

John Bowne High School

Overage Students					
Number	3	14	11	0	28
Percent	27	52	55	0	47

William C. Bryant High School

Overage Students					
Number	12	17	13	9	51
Percent	44	35	42	37	39

Andrew Jackson High School

Overage Students					
Number	20	15	17	17	69
Percent	80	58	61	77	68

\*Data were missing for two students.

- Fifty-one percent of the program students are overage for their grade.
- The highest percentage of overage students occurred at Andrew Jackson High School (68 percent).

### III. FINDINGS

The evaluation findings for the 1985-86 academic year include objectives measurable by standardized test results and those based on an examination of project materials and records, site visits, and interviews. The following findings are presented by the objectives that were proposed to and accepted by the Office of Bilingual Education and Minority Languages Affairs, U.S. Department of Education.

#### ENGLISH AS A SECOND LANGUAGE

- As a result of participating in the program, students will demonstrate an appropriate increase in English language proficiency as indicated by mastery of one English syntax objective per twenty days of instruction demonstrated on the appropriate level of the Criterion Referenced English Syntax Text (CREST).

All three project sites had E.S.L. programs prior to Project CAREERS. The E.S.L. teachers at all three sites worked with bilingual content-area and foreign-language teachers as a tightly-meshed group under the supervision of the A.P. for foreign-language education.

At Jackson, E.S.L. was offered on four levels. The E.S.L. teacher, a linguist, worked especially closely with project students, thereby providing them with the support they very much needed to successfully adapt to life in the United States. Her concern and originality are indicated by the writing and visual arts album and the writing competition that she organized. A Chapter I Haitian paraprofessional worked closely with this teacher, multiplying her effectiveness. However, because she was the only E.S.L. teacher in the school, project students were limited to one period of E.S.L. instruction per day. They also had one period of regular English instruction. Bowne offered three levels of E.S.L., in all of which

students were required to have both an English and a Chinese dictionary. Bryant had nine E.S.L. teachers and offered several different sections and levels of E.S.L. instruction.

### Student Achievement in E.S.L.

The assessment instrument used to evaluate the objective in this area was the Criterion Referenced English Syntax Test (CREST)\*. The CREST was administered at the beginning and the end of each semester. A mastery score to indicate gains was computed for each student by calculating the difference between pretest and posttest. The number of months of instruction between testings was computed for each student by multiplying the number of months between testings by the student's attendance rate. The number of skills mastered per month was calculated by dividing the mean mastery by the mean number of months of instruction between testings.

Table 3 presents the test results for CAREERS students who were pretested and posttested with the same level. Of the students who were reported to be taking E.S.L. Levels 1, 2, and 3, complete data (levels, pretest score, and posttest score) were available for 83 percent in the fall and 84 percent in the spring.

\*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 curricular 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. The Kuder-Richardson reliability estimates for pretest and posttest administrations of the three levels of the CREST are:

- Level 1 -- pretest (.91)/posttest (.96)
- Level 2 -- pretest (.94)/posttest (.95)
- Level 3 -- pretest (.91)/posttest (.91).



Examination of Table 3 reveals that students acquired an average of 1.3 CREST objectives in the fall and 1.1 CREST objectives in the spring. Thus, the objective was achieved in both semesters. Students tested at Level 3 had lower performance rates than those tested at lower levels, partly because fewer skills are tested at that level and partly because mastery of objectives takes longer at that level. The program objective appears to be based on the assumption that progress across levels is linear; the lower achievement at Level 3, which is found frequently in other high school bilingual programs, suggests that it is not. (CREST results for each individual school are presented in Appendix A.)

TABLE 3

Results of the Criterion Referenced English Syntax Test

Test Level	Number of Students	PRETEST		POSTTEST		MASTERY		Mean Mastery Per Month
		Mean	S.D.	Mean	S.D.	Mean	S.D.	
<u>FALL</u>								
1	91	11.3	7.0	16.5	6.5	5.2	4.3	1.7
2	55	16.2	5.9	19.5	5.1	3.3	2.4	1.1
3	38	9.9	2.7	12.1	2.4	2.2	1.4	0.7
TOTAL	<u>184</u>	<u>12.5</u>	<u>6.5</u>	<u>16.5</u>	<u>6.0</u>	<u>4.0</u>	<u>3.6</u>	<u>1.3</u>
<u>SPRING</u>								
1	78	14.5	6.3	18.2	5.4	3.7	3.1	1.3
2	58	16.0	6.0	19.3	4.6	3.3	2.8	1.1
3	50	11.0	3.4	12.7	2.4	1.7	1.8	1.7
TOTAL	<u>186</u>	<u>14.0</u>	<u>5.9</u>	<u>17.0</u>	<u>5.3</u>	<u>3.0</u>	<u>2.8</u>	<u>1.1</u>

- Overall, students met the proposed criterion of mastering one CREST objective per month of instruction both semesters.

## NATIVE LANGUAGE ARTS

-- As a result of participating in the program, students will demonstrate a significant increase in Haitian Creole, Chinese, or Spanish language achievement.

Bryant instituted a native language arts program in Spanish that included eleven sections. The CAREERS resource specialist taught two Spanish classes that were paid for by tax-levy funds. In a native language arts class that was observed by a member of the evaluation team at this site, the teacher conducted a lively, informative discussion on symbolism in Spanish literature. Twenty-four students were present.

At Bowne, most project students were from Taiwan and the People's Republic of China and spoke Mandarin; the students from Hong Kong spoke Cantonese. Although their spoken languages differed, their written one was identical, as is the case with all 300 Chinese dialects. The resource teacher, who was fluent in Mandarin and in Cantonese, taught two native language arts classes, each with an enrollment of more than 30 students.

Jackson offered French language arts classes. According to project staff members, the Haitian students were well-prepared educationally and had a good knowledge of French. Both the E.S.L. teacher and the bilingual content-area teacher communicated with their students in French rather than in Creole.

### Student Achievement in Native Language Arts

The project proposed that students would demonstrate a significant increase ( $p < .05$ ) in Haitian Creole, Spanish, or Chinese language achievement. As data relating to achievement in Haitian Creole and Spanish were not provided, the objective could only be assessed for the project's Chinese-speaking students.

The assessment instrument used to measure gains in Chinese language arts was a program-developed native language test. Statistical significance of the mean gain was determined through the correlated t-test model to demonstrate whether the mean gain was larger than would be expected by chance variation alone. Because statistical significance does not provide enough descriptive information, the table also includes the proportion of students making gains.

Examination of Table 4 reveals that both Cantonese- and Mandarin-speaking students made significant ( $p < .05$ ) gains in Chinese language achievement, thus meeting the program objective for this language group. Of those students tested, 94 percent of Cantonese speakers and 77 percent of Mandarin speakers made actual gains.

For descriptive purposes, Table 5 presents students' final course grades in Spanish and French language courses. Overall passing rates were 81.2 percent in Spanish language courses and 76.1 percent in French language classes.

TABLE 4

Results of the Program-Developed Native Language Test  
for Chinese-Speaking Students

Language Group	Number of Students	PRETEST		POSTTEST		GAIN		Proportion Making Gains
		Mean	S.D.	Mean	S.D.	Mean	S.D.	
Cantonese	18	54.0	29.4	73.5	11.4	19.5*	26.3	94.0
Mandarin	31	74.9	12.8	79.3	12.1	4.4*	8.0	77.0

\*Statistically significant at the .05 level.

- Both Cantonese- and Mandarin-speaking students made significant gains on the program-developed native language test.

TABLE 5

Passing Rates in Spanish and French  
Language Arts Courses

Language Arts Course	Number of Students	FALL		SPRING		TOTAL
		Number of Students	Percent Passing	Number of Students	Percent Passing	Overall Passing Rate
Spanish	118	118	82.2	111	80.2	81.2
French	71	71	88.7	80	65.0	76.1

- Overall passing rates in Spanish and French language arts courses exceeded 75 percent.

## CONTENT-AREA SUBJECTS

- As a result of participation in the program, 80 percent of the students will achieve a passing grade of 75 percent or better in the subject areas of mathematics, science, social studies, and business and health careers.

Bryant offered tax-levy courses in mathematics, general biology, and social studies that were taught to Spanish-speaking students bilingually. The math department had four computers, which were also used by the E.S.L. teachers and for peer tutoring in the bilingual content areas. A member of the evaluation team was told that the project's business/health/law career-orientation component was part of the social studies curriculum. The pre-occupational training component consisted of an inventory to assess students' interests; no career training was provided. A member of the evaluation team observed exciting bilingual classes in mathematics, science, and social studies. Attendance at these classes ranged from 21 to 29.

The program reported one bilingual teacher each for mathematics, social studies, and science at Jackson. Although the pre-occupational training that had been proposed was not explicitly part of the curriculum, the resource specialist indicated that this area was covered in social studies and physical education classes. Jackson was so crowded that some students could not be programmed for a lunch period. Another consequence of the space shortage was that although computers for the project had been delivered, no space was available in which to set them up. Jackson did not have a Project CAREERS resource room; the resource specialist had to share the foreign language office with other department members. This meant that meetings with students were conducted in a room in which there frequently were several simultaneous conversations.

At Bowne, where another Chinese bilingual program has been funded for the 1986-87 school year, the only bilingual content-area instruction offered was a bilingual science course. Computers were available for the resource specialist and the paraprofessional to use for bilingual tutoring.

#### Student Achievement in Content-Area Subjects

The project proposed that 80 percent of the students would achieve a 75 percent grade or better on teacher-made tests in mathematics, science, social studies, business, and health careers.

Examination of Table 6 reveals that only 38 percent of the students achieved a 75 percent passing grade in these courses. Thus, the objective was not achieved. Perhaps this indicates that the criterion set in the objective is unrealistic for this population. When the citywide criterion of 65 percent as a passing grade is used, students' achievement exceeds the objective in most areas. In addition, the objective proposes that 80 percent of the students will pass their courses. This also appears to be excessively ambitious when compared to the 70 to 75 percent criterion used by other New York City high school bilingual programs to assess students' achievement.

TABLE 6  
 Passing Rates in Content-Area Subjects

Course	FALL		SPRING		TOTAL			
	Number of Students	Percent Passing at 75%	Percent Passing at 65%	Number of Students	Percent Passing at 75%	Percent Passing at 65%	Overall Passing Rate at 75%	Overall Passing Rate at 65%
Mathematics*	187	36.9	66.3	165	29.7	58.2	33.5	62.5
Science	183	43.7	80.3	171	40.9	80.7	42.4	80.5
Social Studies*	188	31.9	76.6	193	38.3	73.6	35.1	85.2
Business*	45	42.2	86.7	53	64.2	92.5	54.1	89.8
TOTAL		37.8	75.3		39.0	79.7	38.4	77.4

\*Includes Jackson and Bryant only.

- Only 38.4 percent of the students were able to achieve a grade of 75 percent in content-area subjects. The 80 percent passing criterion was not achieved.
- When the citywide passing criterion of 65 percent is used, overall rates exceeded the objective in science, social studies, and business/vocational courses.



## BILINGUAL CAREER AWARENESS AND TRAINING

Although two of the schools (Bryant and Bowne) had resource centers and computers to implement this aspect of the program, there was little evidence that much attention had been paid to it. The resource specialists at all three schools said that they provided career and college guidance in addition to tutorials, but that no specific career- and college-guidance courses were available.

Bowne offered an English-language career-guidance course, but only two CAREERS students had the level of aural comprehension that was needed for taking it. Members of the CAREERS staff at Bryant said that pre-occupational training was part of the social studies curriculum. The resource specialist at Andrew Jackson said that pre-occupational training was part of the physical education curriculum. It must, therefore, be noted that the bilingual career awareness and training objective had not been achieved to any significant degree at any site.

## STAFF DEVELOPMENT

- As a result of participation in the program, staff will demonstrate professional growth. Ninety percent of the staff taking courses will complete the course work.
- Staff members will demonstrate an increased awareness of pupil needs and problems. Eighty percent will improve at least one scale unit on a five-point scale.

Two of Project CAREERS' resource specialists hold master's degrees in education, the third has a bachelor's degree in engineering. Two of the paraprofessionals have bachelor's degrees; the third has an associate's degree. The project coordinator is studying for a doctorate.

The resource specialists had enrolled in a total of 18 credits of coursework in computer science, social psychology, world literature,

educational psychology, and language at Columbia University, Hunter College, and the New School. All these courses were listed as having been completed, so the project staff met this objective.

The project coordinator held biweekly one-to-one training sessions for the resource specialist and the paraprofessionals at each site. Project staff members also attended "Excellence in Education" workshops held once a semester at the Board of Education; "Career Education Workshops" held every two months at the Board of Education; and staff development workshops held every two months by the Hunter College Bilingual Education Multifunctional Support Center staff.

Although a five-item questionnaire to measure changes in staff's awareness of pupils' needs and problems had been developed by a previous Title VII project's resource specialist, it was not administered to Project CAREERS' staff. The questionnaire on School Staff's Awareness of Bilingual Pupils' Needs and Problems was inadequate because it contained only five items, and four were stated in positive terms so that results would be skewed. Such a limited questionnaire could not provide a meaningful measure of changes in staff awareness. (See Appendix B for copy of this questionnaire.)

## CURRICULUM AND MATERIALS DEVELOPMENT

- Curricula will be developed in the following areas:
  - Applied E.S.L.: levels I, II, and III
  - Native language arts: advanced writing skills and literature in Spanish, Haitian Creole, and Chinese
  - International studies: international banking, international trade.
  
- New York City Board of Education curricula in the following areas will be translated and/or adapted in Spanish, Haitian Creole, and Chinese:
  - Social Studies/Pre-Law
  - Mathematics/Computer Science
  - Mathematics/Accounting.

The response indicated that social studies materials in Spanish, Haitian Creole, and Chinese, and science materials in Haitian Creole were being adapted from English-language originals. Although project personnel at Jackson said that all project students at this site were fluent in French, Haitian Creole materials were being prepared by the project administrators.

The project director planned to hire teachers to work on curricular materials during the summer.

## PARENTAL INVOLVEMENT

- Project parents' attendance at regularly-scheduled meetings will be ten to fifteen percent more than mainstream parents'.

E.S.L./Americanization classes for parents were established off-site for each of the three schools in the project. The schools reported that a total of 94 parents had enrolled in the six-hours-a-week sessions, which were run by the parent trainers. However, an examination of attendance records kept at the project's central office showed that attendance was far below enrollments.

The project also reported that 60 parents attended parent training workshops sponsored by the Bilingual Education Multifunctional Support Center at Hunter College each semester.

The project reported that from seven to ten parents attended the regularly-scheduled monthly meetings of the parents' advisory councils at each of the three sites. Whether this was more or less than the attendance rate of mainstream parents could not be ascertained, as the necessary comparative data were not available.

### INFORMATIONAL ACTIVITIES

The project proposed to disseminate information about its activities through bilingual newsletters, periodic staff and parental meetings, telephone calls, intervisitations, and informal discussions among staff members and parents.

Humanitas, 84-85, Bryant High School's foreign language magazine, which was sponsored by both Project CAREERS and the foreign language department, received Medalist Honors from the Columbia University Scholastic Press Association. The magazine contains student work that reflects the seven foreign languages that are offered at Bryant. In addition, Project CAREERS was described in Foreign Language & Music, another Bryant publication.

There was no indication that information about the project was distributed at either Bowne or Jackson.

## AFFECTIVE DOMAIN

- Eighty percent of all target students will demonstrate an improvement in attitude toward their heritage as indicated by results on an appropriate Language Cultural Heritage Attitude Scale, tabulating growth from pretesting to posttesting and ascertaining the percentage of students gaining one scale point or more on a five-point scale.
- Eighty percent of all target students will demonstrate an improvement in attitude toward school as indicated by results on a five-point scale inventory to measure interest in continuing education beyond their present grade, tabulating growth from pretest to posttest and ascertaining the percentage of students gaining one scale point or more.
- The dropout rate of target students will be ten to fifteen percent less than that of mainstream students as indicated by school records, tabulating and comparing the percentage of drop-outs for program students and mainstream students.

Although questionnaires/inventories had been developed by a resource specialist from another project, they were inadequate because, like the staff-development questionnaire discussed above, their scope was too limited. (See Appendix B for copies of these two questionnaires.) Thus, the first two objectives could not be assessed.

The overall dropout rates at Jackson, Bryant, and Bowne were, respectively: 10.0 percent, 10.8 percent, and 6.1 percent. The program dropout rate at Jackson was 1.9 percent, or 8.1 percentage points below the schoolwide rate. At Bryant, the program dropout rate was 3.8 percent (7 percentage points below the schoolwide rate). No program dropouts were reported at Bowne, so that the program rate was 6.1 percent below the school rate.

Although the program dropout rates were considerably lower than the schoolwide rates, they were not 10 to 15 percent less as proposed. Thus, the objective was not achieved because it was unrealistic.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

##### CONCLUSIONS

In its final year of operation, Project CAREERS was fully operational at Bryant High School, which offered E.S.L. classes for two periods per day, Spanish native language arts classes, and bilingual classes in mathematics, science, and social studies (which included business and health careers orientation). Bryant High School also provided students with vocational interest inventories, a resource center, and four computers to be used for instruction and tutoring.

The other two sites did not offer a full complement of services. Bowne High School offered two periods of E.S.L., a resource center and computers, and native language arts classes, but the only bilingual content-area offering was a science class. Jackson High School provided native language and bilingual content-area classes, but only one period of E.S.L. per day. It did not have a resource center, nor did it provide computer instruction. On the other hand, the newly-appointed coordinator improved program implementation in the areas of planning and coordination, staff development, and parental involvement. For example, E.S.L./Americanization classes for parents and parent advisory councils were in place at all three sites.

The program met its E.S.L. objective: students mastered 1.3 CREST skills in the fall, and 1.1 in the spring. In addition, Chinese students at Bowne High School made statistically significant gains in a school-developed native language arts test. However, no data were available for assessment of the native language arts achievement of students at the other two schools.

The content area objective defined a final grade of 75 as the passing criterion, although high school teachers considered 65 as the passing grade. Consequently, although a weighted average of all classes for both semesters indicated that 77.4 percent of students had passed by teacher standards, only 38.4 percent had reached the program's criterion.

Although the program dropout rates at the schools ranged from zero to 3.8 percent, the objective of program students having dropout rates 10 to 15 percent lower than the school was not realistic, because the schools had dropout rates ranging from 6.1 to 10.8 percent.

The objectives requiring attitude measures -- student attitudes toward native language and culture, student attitudes toward school, and staff awareness of pupil needs and problems -- could not be assessed because of the unreliability of the instruments.

Little, if any, progress was reported on the program's major objectives: awareness of and pre-occupational training in business-, health-, or law-related careers.

## RECOMMENDATIONS

Because this program is in its final year, the major recommendation that can be made is that the principals in the participating schools should make every effort to ensure that its stated objectives are met. The following recommendations are for future programs serving similar populations:

1. Providing pre-occupational training and career-orientation classes in addition to college orientation. This might include arranging for guidance to be provided by role models from various career areas.

2. Making efforts to provide data to evaluate the objectives as proposed. If instruments are unreliable or data are unavailable, the objectives should be revised or eliminated.

3. Revising performance objectives in the content areas and for drop-out rates, possibly to reflect program students' achievement in comparison with students in mainstream classes, or to reflect commonly-used performance standards developed for other Title VII programs.



V. APPENDICES

APPENDIX A

Results of the Criterion Referenced English Syntax Test  
John Bowne High School

Test Level	Number of Students	<u>PRETEST</u>		<u>POSTTEST</u>		<u>MASTERY</u>		Mean Mastery Per Month
		Mean	S.D.	Mean	S.D.	Mean	S.D.	
<u>FALL</u>								
1	4	16.0	3.4	22.0	2.2	6.0	2.6	1.9
2	22	17.2	6.0	20.3	4.6	3.1	2.3	1.0
3	15	9.8	2.1	11.9	2.2	2.1	1.1	0.7
TOTAL	<u>41</u>	<u>14.4</u>	<u>5.8</u>	<u>17.4</u>	<u>5.6</u>	<u>3.0</u>	<u>2.2</u>	<u>1.0</u>
<u>SPRING</u>								
1	2	14.0	7.1	18.5	6.4	4.5	0.7	1.4
2	25	14.4	5.7	18.4	3.9	4.0	2.6	1.3
3	24	10.8	2.9	12.5	2.2	1.7	1.7	0.6
TOTAL	<u>51</u>	<u>12.7</u>	<u>4.9</u>	<u>15.6</u>	<u>4.4</u>	<u>2.9</u>	<u>2.5</u>	<u>1.0</u>

Results of the Criterion Referenced English Syntax Test  
Andrew Jackson High School

Test Level	Number of Students	<u>PRETEST</u>		<u>POSTTEST</u>		<u>MASTERY</u>		Mean Mastery Per Month
		Mean	S.D.	Mean	S.D.	Mean	S.D.	
<u>FALL</u>								
1	55	12.6	6.9	16.4	6.5	3.8	3.1	1.1
2	18	17.0	6.2	19.8	5.4	2.8	2.1	0.8
3	10	11.7	1.4	13.2	1.3	1.5	1.1	1.5
TOTAL	<u>83</u>	<u>13.4</u>	<u>6.6</u>	<u>16.8</u>	<u>6.1</u>	<u>3.4</u>	<u>2.8</u>	<u>1.0</u>
<u>SPRING</u>								
1	61	14.5	6.4	17.7	5.6	3.2	2.7	1.2
2	12	18.8	4.9	20.8	4.3	2.0	1.3	0.8
3	17	12.1	3.5	13.0	2.9	0.9	1.3	0.3
TOTAL	<u>90</u>	<u>14.7</u>	<u>6.0</u>	<u>17.3</u>	<u>5.5</u>	<u>2.6</u>	<u>2.5</u>	<u>1.0</u>

Results of the Criterion Referenced English Syntax Test  
William C. Bryant

Test Level	Number of Students	<u>PRETEST</u>		<u>POSTTEST</u>		<u>MASTERY</u>		Mean Mastery Per Month
		Mean	S.D.	Mean	S.D.	Mean	S.D.	
<u>FALL</u>								
1	32	8.5	6.6	15.8	6.8	7.3	5.4	2.7
2	15	13.7	4.8	18.0	5.4	4.3	2.9	1.5
3	13	8.6	3.3	11.7	3.2	3.1	1.5	1.1
TOTAL	<u>60</u>	<u>9.8</u>	<u>6.0</u>	<u>15.5</u>	<u>6.2</u>	<u>5.7</u>	<u>4.6</u>	<u>2.1</u>
<u>SPRING</u>								
1	15	14.3	6.4	19.9	4.2	5.6	4.3	1.7
2	21	16.2	6.3	19.5	5.5	3.3	3.3	1.1
3	9	9.5	3.9	12.8	2.4	3.3	2.1	1.1
TOTAL	<u>45</u>	<u>14.3</u>	<u>6.4</u>	<u>18.3</u>	<u>5.3</u>	<u>4.0</u>	<u>3.6</u>	<u>1.3</u>

APPENDIX B

Questionnaire

Subject: School staff's awareness of bilingual pupils' needs and problems.

Survey: Using the 5-Point Scale for the following five issues, please check your perception of each.

I

It is useful to have access to a bilingual staff member to act as liaison for school personnel working with bilingual students and/or their parents (as interpreter, facilitator in mediating issues, etc.)	1	2	3	4	5
	essential	very important	important	some what useful	useless

II

There is a need for the non-bilingual staff member to act as teacher of bilingual/bicultural students to learn about them (for example their learning style, etc.) so as to help them learn better.	1	2	3	4	5
	essential	very important	important	some what useful	useless

III

There are differences between bilingual and "American" pupils that should be addressed. Areas of difference include language, learning style, emotional response, attitudes, values and cultural systems.

1 essential	2 very import ant	3 impor tant	4 some what useful	5 useless
----------------	----------------------------	--------------------	-----------------------------	--------------

IV

There are differences between the behavior of bilingual pupils and the expected norms of the classroom that need to be addressed. Areas of difference include language, learning style, emotional response, attitudes, values and cultural systems.

1 essential	2 very import ant	3 impor tant	4 some what useful	5 useless
----------------	----------------------------	--------------------	-----------------------------	--------------

V

The language learning style, cultural content, values, etc., of the "American" classroom should be carefully introduced to bilingual pupils, preferably through their own styles, rather than imposed through a "melting pot" philosophy (bicognitive bicultural sig).

1 essential	2 very import ant	3 impor tant	4 some what useful	5 useless
----------------	----------------------------	--------------------	-----------------------------	--------------

Questionnaire

Subject: Bilingual pupils' improvement in attitude toward their cultural heritage..

Survey: On the 5-point scale next to the following statements check (✓) your opinion about each. .

I

My contact with at least one member of the school staff helps me appreciate my Hispanic Heritage more.

1 strongly agree	2 mostly agree	3 agree in general	4 agree slightly	5 disagree
------------------------	----------------------	-----------------------------	------------------------	---------------

II

The fact that there is a Title VII Bilingual Counseling Program helps me appreciate my Hispanic Heritage more.

1 strongly agree	2 mostly agree	3 agree in general	4 agree slightly	5 disagree
------------------------	----------------------	-----------------------------	------------------------	---------------

III

The fact that there are signs, posters and books in Spanish in the Title VII office (Rm. 318) helps me appreciate my Hispanic Heritage more.

1 strongly agree	2 mostly agree	3 agree in general	4 agree slightly	5 disagree
------------------------	----------------------	-----------------------------	------------------------	---------------

IV

The fact that I can go to see the Title VII Bilingual Counselor any time helps me appreciate my Hispanic Heritage more.

1 strongly agree	2 mostly agree	3 agree in general	4 agree slightly	5 disagree
------------------------	----------------------	-----------------------------	------------------------	---------------

V

The fact that there was a bus trip and there will be more activities planned for Hispanic students helps me appreciate my Hispanic Heritage more.

1 strongly agree	2 mostly agree	3 agree in general	4 agree slightly	5 disagree
------------------------	----------------------	-----------------------------	------------------------	---------------

m/v.

Cuestionario

AL ALUMNO(A): MARCA CON UN ✓ SUS OPINIONES.

I

	1	2	3	4	5
Mie contactos con al menos un miembro del personal de la escuela se hace apreciar más la cultura hispana.	Estoy muy de acuerdo.	A veces estoy de acuerdo.	Estoy general mente de acuerdo.	Estoy un poco de acuerdo.	No estoy de acuerdo.

II

	1	2	3	4	5
El hecho de que hay un programa de consejo bilingüe en la escuela (cuarto 318) se hace apreciar más la cultura hispana.	Estoy muy de acuerdo.	A veces estoy de acuerdo.	Estoy general mente de acuerdo.	Estoy un poco de acuerdo.	No estoy de acuerdo.

III

	1	2	3	4	5
El hecho de que hay letreros, carteles y libros en español en la oficina del programa bilingüe se hace apreciar más la cultura hispana.	Estoy muy de acuerdo.	A veces estoy de acuerdo.	Estoy general mente de acuerdo.	Estoy un poco de acuerdo.	No estoy de acuerdo.

IV

El hecho de que puedo ir a ver en cualquier momento al consejero bilingüe se hace apreciar más la cultura hispana.

V

	1	2	3	4	5
El hecho de que nos ofrecieron a los alumnos hispanos un viaje en autobús y que se planean otras actividades más se hace apreciar más la cultura hispana.	Estoy muy de acuerdo.	A veces estoy de acuerdo.	Estoy general mente de acuerdo.	Estoy un poco de acuerdo.	No estoy de acuerdo.



Questionnaire

Subject: Bilingual pupils' improvement in attitude toward school.

Survey: On the 5-point scale next to the following statements check

(✓) your opinion about each.

I

I feel better about school

1	2	3	4	5
strongly	mostly	agree	agree	disagree
agree	agree	general	slight	
			tly.	

because the Title VII

Program in school

is helping us bilingual

students to be happier

and more successful.

II

I feel better about

1	2	3	4	5
strongly	mostly	agree	agree	disagree
agree	agree	general	slight	
			tly.	

school because there

is at least one person

on the staff who sees and

appreciates Hispanic

people.

III

I feel better about

1	2	3	4	5
strongly	mostly	agree	agree	disagree
agree	agree	general	slight	
		ral	tly.	

school because there

is a Title VII Bilingual

Counselor there

whom I can talk to.

IV

I feel better about

1	2	3	4	5
strongly	mostly	agree	agree	disagree
agree	agree	general	slight	
		ral	tly.	

school because the  
*learn more about*  
school has classes where

the life, language, and

contributions of Hispanic *people*

people are discussed *often*.

V

I feel better about school

1	2	3	4	5
strongly	mostly	agree	agree	disagree
agree	agree	general	slight	
		ral	tly.	

because I'm learning

English and in this way

I can talk with more

people.

32

2/v.

Cuestionario

AL ALUMNO(A): MARCA CON UN ✓ SUS OPINIONES.

I

	1	2	3	4	5
Aprecio más a mi escuela porque su programa bilingüe nos hace más felices y capacitados a los estudiantes bilingües.	Estoy muy de acuerdo.	A veces estoy de acuerdo.	Estoy generalmente de acuerdo.	Estoy un poco de acuerdo.	No estoy de acuerdo.

II

	1	2	3	4	5
Aprecio más a mi escuela porque está allí por lo menos una persona del personal que conoce y comprende a los hispanoparlantes.	Estoy muy de acuerdo.	A veces estoy de acuerdo.	Estoy generalmente de acuerdo.	Estoy un poco de acuerdo.	No estoy de acuerdo.

III

	1	2	3	4	5
Aprecio más a mi escuela porque está allí un consejero bilingüe con el cual puedo hablar.	Estoy muy de acuerdo.	A veces estoy de acuerdo.	Estoy generalmente de acuerdo.	Estoy un poco de acuerdo.	No estoy de acuerdo.

IV

	1	2	3	4	5
Aprecio más a mi escuela porque dan clases en que la vida, lengua y contribuciones de la raza hispana se discuten a menudo.	Estoy muy de acuerdo.	A veces estoy de acuerdo.	Estoy generalmente de acuerdo.	Estoy un poco de acuerdo.	No estoy de acuerdo.

V

	1	2	3	4	5
Aprecio más a mi escuela porque aprendo allí el inglés y por lo tanto puedo hablar con más personas.	Estoy muy de acuerdo.	A veces estoy de acuerdo.	Estoy generalmente de acuerdo.	Estoy un poco de acuerdo.	No estoy de acuerdo.