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ABSTRACT

Under Title VII funding, Project BEAMS (Bilingual Education for Achievement in Mathematics and Science) provided educational and support activities to 214 gifted students of limited English proficiency (LEP) in three Brooklyn high schools. The program gave students of Spanish, Haitian, Chinese, Korean, Middle Eastern, and various European backgrounds in grades 9-12 the opportunity to enroll in college courses while simultaneously developing English language proficiency. Students received instruction in English as a second language (ESL), native language arts (where available), mathematics, science, and social studies taught in a bilingual or ESL format. Students also enrolled in mainstream courses. To prepare for enrollment in Brooklyn College during their senior year, students participated in computer literacy and advanced placement courses, special classes in scientific research and problem solving, and an extracurricular program of field trips and guest speaker presentations. Extensive support services were also provided. Program objectives were met or surpassed in ESL, in native language arts courses, in math scores, in content-area course passing rates, in college course passing rates, and in attendance. The dropout rate objective was not met. Recommendations for program improvement are included. (MSE)

PROJECT BEAMS

1986 - 1987

O.E.A. Evaluation Section Report

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

Grant Number: GOO-863-5258

PROJECT BEAMS

1986 - 1987

Prepared by the O.E.A.
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June 1988

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A SUMMARY OF THE REPORT

Project BEAMS was an E.S.E.A. Title VII-funded program of educational and support activities for gifted students of limited English proficiency (LEP) at three Brooklyn high schools: South Shore, James Madison, and Franklin D. Roosevelt. During its single year of funding, this unique project served 214 LEP students of Spanish, Haitian, Chinese, Korean, Middle Eastern, and various European backgrounds in grades nine through twelve.

The project's aim was to provide gifted LEP high school students with the opportunity to enroll in college courses while they simultaneously developed their proficiency in English. Project students received instruction in: English as a second language (E.S.L.); native language arts (N.L.A.), when available; and mathematics, science, and social studies taught in a bilingual or an E.S.L. format. Students also enrolled in mainstream classes in art, music, physical education, and business and vocational subjects. In addition, to prepare students to take courses at Brooklyn College during their senior year, the project provided computer skills and advanced placement courses, special classes in scientific research and problem solving, and an extracurricular program of field trips and presentations by guest speakers.

Extensive support services were essential to the success of Project BEAMS at all three sites. These included individual guidance and program planning, career counseling, peer tutoring, and "buddy" systems for academic orientation and emotional adjustment. Generally there were staff members available to speak the students' native languages. However, if none were available, peers from mainstream classes were called upon to translate. This arrangement was used especially at South Shore and Madison, which had Chinese-speaking LEP students and no Chinese-speaking staff.

Other non-instructional activities included curriculum development; weekly site visits by the project director; monthly staff meetings; participation in conferences, workshops, and university courses; and efforts to involve more parents in their children's education through participation in school- and project-sponsored events. However, the level of parental involvement was low at all three sites.

Project objectives were assessed in English language development (Criterion Referenced English Syntax Test [CREST] and the New York City Reading Test); mastery of the native language (teacher-made tests); mathematics, science, and social studies (Regents Competency Test [R.C.T.] in Mathematics, New York State Regents Examinations in Sequential Mathematics, and teacher-made tests); performance in college courses (program records); and attendance and dropout rate (school and program records). Quantitative analysis of student achievement data indicates that:

- Students tested with the CREST met the program objective of mastering one CREST skill per month of instruction in the fall but not in the spring, due to high pretest scores creating a ceiling effect.

- Overall, students exceeded the objective of achieving at least an 85 percent passing rate in N.L.A., the sequential math regents, the math Regents Competency Test, and content-area courses.

- Program students had significantly higher passing rates than mainstream students in science courses, thus meeting the program objective.

- Seventy-nine percent of the program students participating in college courses received a passing grade, thereby exceeding the program objective by four percentage points.

- The dropout rate of BEAMS students was not significantly lower than that of mainstream students, thereby failing to meet the objective in this area. However, this was due to the low dropout rates for the schools.

- The attendance rate of program students was significantly higher than that of mainstream students, thereby meeting the objective in this area.

The following recommendations are offered for future programs serving similar populations at these schools:

- Recruit Chinese-speaking personnel for James Madison and South Shore, which have Chinese-speaking students. If this is not possible, try to arrange for Chinese-speaking personnel from other Title VII projects to provide BEAMS students with essential counseling services.

- Have twelfth graders who are currently taking college courses meet with eleventh graders who are considering whether to enroll in such courses during the coming year. This will help recruit students for the project's college-study component.

- Develop a semesterly or yearly guide to inform teachers, counselors, and other educational personnel serving gifted foreign-born students about the special educational opportunities available to their students. This could be done by the Board of Education's Office of Bilingual Education.

- Use a different instrument to measure gains in English to avoid ceiling effects. Program staff might consider the TOEFL, the college-level Test of English as a Foreign Language.

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 regular staff and consultants. In addition to those whose names appear on the cover, Arthur Lopatin has edited the manuscripts. Shelley Fischer and Martin Kohli have spent many hours, creating, correcting, and maintaining data files. Maria Grazia Asselle, Rosalyn Alvarez, Donna Plotkin, and Milton Vickerman have interpreted student achievement and integrated their findings into reports. Finally, Betty Morales has worked intensively to produce, duplicate, and disseminate the completed documents. Without their able and faithful participation, the unit could not have handled such a large volume of work and still have produced quality evaluation reports.

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PROJECT BEAMS

(Bilingual Education for Achievement in Mathematics and Science)

Year of Operation:	1986-1987
Participating Schools:	South Shore High School 6565 Flatlands Avenue Brooklyn, New York 11236 James Madison High School 3787 Bedford Avenue Brooklyn, New York 11229 Franklin D. Roosevelt High School 5800 20th Avenue Brooklyn, New York 11204
Number of Students Served:	213, fall; 214, spring
Project Director:	Alberto Bursztyn

I. PROJECT DESCRIPTION

OVERVIEW

Although the New York City public schools have a number of special instructional programs for gifted high school students, the admissions criteria of nearly all of them prevent intellectually gifted students of limited English proficiency (LEP) from enrolling. At the same time, special programs for LEP students are generally intended for those who need remedial and/or vocational instruction. Consequently, intellectually gifted LEP students have been an underserved population.

Funded under Title VII of the Elementary and Secondary Education Act (E.S.E.A.), Project BEAMS was designed to meet the special needs of these students at three Brooklyn high schools: South Shore, James Madison, and Franklin D. Roosevelt (F.D.R.). The project sought to provide:

- instruction in English as a second language (E.S.L.);
- academic fundamentals necessary for success at college;
- opportunities for study beyond the standard high school curriculum;
- individualized counseling to facilitate academic and social adjustment; and
- career and college counseling.

All three high schools were located in Brooklyn neighborhoods that have growing immigrant populations and had experienced significant increases in their LEP enrollments. South Shore High School, the project's main site, is located in Canarsie and was built in 1970. Of the 3,125 students enrolled in 1986-87, 125 had scored below the twenty-first percentile on the English version of the Language Assessment Battery (LAB) and were classified as LEP.

James Madison, located in the Midwood section, opened its doors in 1925. Of the 3,009 students enrolled in 1986-87, 179 were classified as LEP. They spoke 19 different languages, of which Chinese, Spanish, and Haitian Creole were represented the most. Fewer students spoke Urdu, Khmer, Thai, Rumanian, Farsi, and Serbo-Croatian.

F.D.R. is located in Bensonhurst and was constructed in 1965. It had the largest LEP population of all three BEAMS sites: 376 out of a student enrollment of 3,040. One hundred and forty-three spoke Chinese, 93 Spanish, 32 Haitian Creole and/or French, 11 Russian, 4 Italian, and 93 spoke other Asian and European languages.

Many LEP students at all three sites had demonstrated the potential to perform well in advanced academic courses but were held back by limited proficiency in English; therefore, they were excellent candidates for a project such as BEAMS. In addition, all three schools had strong records of service to non-English-speaking students. South Shore's history includes such Title VII-funded projects as BLAST (1978-80), VIBES (1980-83), the Comprehensive Russian Instructional Program (1982-84), and Project JOBS (1983-86). In 1986-87, the school hosted two Title VII-funded programs in addition to BEAMS -- the Computer Focused Russian Bilingual Instructional Program (1985-88) for newly arrived Russian-speaking students, and Project BRIDGES (1986-89) for academically deficient LEP students from several different linguistic backgrounds. South Shore also hosted a municipal tax-levy funded bilingual program for Haitian students.

As a participant in JOBS, another Title VII project, James Madison had begun to provide special educational and support services to Haitian Creole-speaking LEP students. In addition, because of the school's growing number of LEP students from other linguistic backgrounds, Madison also offered several content-area courses taught with an E.S.L. approach.

In addition to BEAMS, F.D.R. participated in BRIDGES, another Title VII project, had a seven-year-old bilingual program for Hispanic LEP students, and offered non-Hispanic LEP students several content-area courses taught with an E.S.L. approach.

All three sites had the extensive physical resources, such

as computer facilities, libraries, and science laboratories, needed to implement programs for gifted students. They also had special programs in mathematics and science that BEAMS could draw upon. The classroom teachers and paraprofessionals who taught BEAMS students were funded from municipal sources, while state funds supported various special services.

IMPLEMENTATION

Although BEAMS had been proposed as a three-year project, the Title VII grant was awarded for only one year. Since funds were received after the beginning of the academic year (October 1, 1986), the project's fall activities were limited to the implementation of preservice activities. By the end of the semester, the objectives for the preservice activities were completed successfully as follows:

OBJECTIVE 1: By October 1986, Project BEAMS will have hired competent and qualified staff to carry out its objectives.

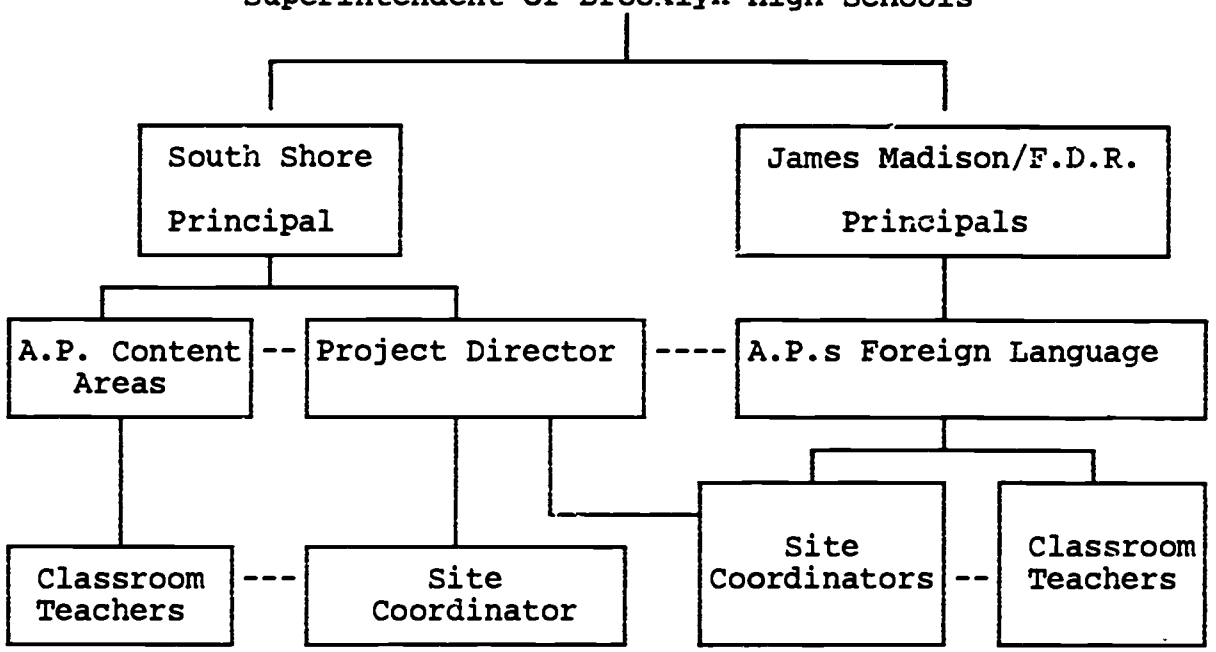
BEAMS was staffed by a project director (who also headed BRIDGES, another Title VII program operating at the central site), one site coordinator at South Shore and one at James Madison, and two coordinators at F.D.R. Because their funding was below the amounts proposed, BEAMS and BRIDGES shared the services of an educational assistant and a secretary.

Project BEAMS was overseen by Brooklyn's Superintendent of High Schools (see Figure 1). His representative, the principal of South Shore High School, supervised BEAMS' project director.

The site coordinators at each school were supervised by the assistant principal (A.P.) for foreign languages and the project director.

FIGURE 1

Organization of Project BEAMS



_____ Direct Supervision

---------- Communication and Collaboration

The project director contacted BEAMS staff members at James Madison and F.D.R. on a weekly basis. BEAMS staff members at all schools said that their school administrations had been extremely supportive. For example, the James Madison site coordinator mentioned that her A.P. had been instrumental in convincing the school to institute content-area courses taught with an E.S.L. approach.

All BEAMS staff members were assigned to the project full time, and all were fluent in English and in one of the project's target languages.

The project director's duties included designing and implementing program activities; hiring and supervising project personnel; directing curriculum and staff development activities; and maintaining communication with relevant Board of Education offices and state and federal agencies. The project director was also the school psychologist and, as such, provided staff training, educational consultation, and student assessment. The project director had two master's degrees and an advanced certificate in educational administration, and four years' experience as the coordinator of E.S.L./bilingual instruction at South Shore High School. He was licensed by New York City as a teacher of biology and general science, teacher of biology (bilingual), and bilingual school psychologist. He also was certified as a school district administrator and a school psychologist by New York State. In addition to English, he knew Spanish and Hebrew.

The site coordinators administered project activities under the supervision of the project director, provided support services to tax-levy-funded classroom teachers, and served as advisors and counselors to program students. The site coordinators at South Shore and James Madison were also the official grade advisors for project students and, as such, were in a position to plan programs that provided courses needed for

high school graduation as well as the enrichment courses targeted by the project. Since all BEAMS staff members had been faculty members at each school before the project began, they were familiar with their school's administrators and maintained excellent relations with them.

The site coordinator at South Shore was a licensed teacher of E.S.L. and French and had a master's degree in linguistics. She also had bilingual curriculum development experience. Her graduate coursework included linguistics, language instruction, and guidance. In addition to French, she was fluent in Haitian Creole. The site coordinator at James Madison held a master's degree and was an experienced teacher of E.S.L. and Spanish. One of the site coordinators at F.D.R. was a licensed Spanish teacher and had a master's degree in bilingual education; the other coordinator was a licensed E.S.L. teacher, had a master's degree in education, and spoke French, Spanish, German, and Italian.

All the teachers serving project students had the appropriate New York City license and state certification. Teachers of E.S.L. and bilingual content-area courses at South Shore were members of the bilingual/E.S.L. department, while teachers of the content areas through an E.S.L. approach reported to their respective content-area chairperson. E.S.L. teachers at Madison and F.D.R. were part of the foreign language department, while bilingual teachers and teachers of the content areas through an E.S.L. approach reported to their respective content-area chairperson. (Appendix A lists the characteristics of the

project staff members and instructional personnel at each site.)

OBJECTIVE 2: By October 1986, Project BEAMS will have conducted training activities for all personnel involved in the education of the target population.

OBJECTIVE 3: By November 1986, staff training activities at all participating sites will make school staff aware of the project's objectives and intervention strategies. Full faculty participation will be sought.

All staff members reported having participated in two general orientation sessions for project personnel, monthly meetings at each site between the BEAMS staff and members of the foreign languages department, and monthly conferences with each school's principal.

At F.D.R., the Title VII staff and the A.P. for foreign languages also met with the project director on a weekly basis to discuss project planning and implementation. The A.P. in turn introduced the Title VII project to the foreign languages faculty at two departmental meetings.

BEAMS staff members also attended several workshops sponsored by the project or by outside agencies. These included: training by the project director in educational methods and counseling strategies; workshops on E.S.L. teaching techniques, mastery learning, and bilingual instruction offered by the E.S.L./Bilingual Unit of the Division of High Schools; and a conference on bilingual program administration sponsored by the New York Multifunctional Resource Center at Teachers College.

OBJECTIVE 4: By October 1986, project staff will be assigned working space and material resources at each participating site.

At all three sites, the project had adequate space for administrative, counseling, and tutoring activities. At South Shore and F.D.R., Projects BEAMS and BRIDGES shared an office giving students access to staff members from both programs.

Academic and career counseling at South Shore took place in an outer office, while the project director's private office was used for personal counseling. The site coordinator at James Madison worked out of a small office on the main floor; it was adequate for individual counseling, but too small for even a small group. In contrast, the project office at F.D.R., located in a former classroom, had space for desks and supplies, as well as a more private area for student tutoring and counseling. Because the office was located next to the foreign language department, it had easy access to curricular materials, student records, and a telephone.

The offices at all sites had an "open-door" policy and a member of the evaluation team observed many students visiting staff members throughout the school day for tutoring and counseling services, or just to say hello.

OBJECTIVE 5: By October 1986, target students will have been identified and programmed for participation for the following term.

Although the project originally had targeted Spanish-, Chinese-, Korean-, and French/Haitian Creole-speaking LEP students, in practice any LEP student who had above-average

grades in math and science and scored below the twenty-first percentile on the English version of the LAB was eligible for the project. Additional criteria included performance in foreign schools (if transcripts were available), scores on standardized tests, and the student's previous academic record in the United States.

After an extensive review of the records of each school's LEP population (in the case of F.D.R. this entailed a review of approximately 400 student records), 219 students were selected to participate in the project in the fall: 34 students at South Shore, 61 students at James Madison, and 124 students at F.D.R. In the spring, another 14 students were admitted to the project at James Madison. (For detailed information on the characteristics of the students served at each site, see Chapter II.)

To implement the college participation component, the project director met several times in the fall with the director of Brooklyn College's High School Enrichment Program* to discuss which college courses suited the interest and abilities of twelfth-grade BEAMS students. Staff members at each site then reviewed students' records to determine which ones were most likely to benefit from college work. At F.D.R., for example, the site coordinators selected students who had enrolled and done

*Through a cooperative agreement with the New York City Board of Education, each year approximately 100 high school students are given an opportunity to take courses at Brooklyn College. Qualifications include minimum P.S.A.T. or S.A.T. scores of 1,000 and grade averages of 90 percent.

well in advanced placement courses in the fall.

Of the 58 seniors participating in Project BEAMS, 19 were selected and agreed to participate: five from James Madison, six from F.D.R., and six from South Shore. Several of these selectees were also given placement exams by the college's mathematics and foreign language departments to make sure they would be able to cope with college-level work. A range of appropriate courses then were suggested to the students, and they chose the ones that fitted into their academic schedules.

An orientation session for BEAMS students was held at Brooklyn College on January 27. A dean and an associate dean welcomed the students to the college and BEAMS staff members and bilingual program graduates currently attending Brooklyn College later conducted orientation sessions for small groups of students.

INSTRUCTION

The project's instructional program consisted of regular high school courses, special activities for gifted students, and courses at Brooklyn College.

High School Curricula

In addition to fulfilling high school graduation requirements, the instructional program at all three sites was designed to develop competency in English and advanced skills in mathematics problem solving and science research. All project students received instruction in E.S.L.; native language arts

(when available); and mathematics, science, and social studies taught in a bilingual or an E.S.L. format. They also took mainstream courses in computer science, business and vocational subjects, art, music, and/or physical education. In addition, qualified students were encouraged to enroll in the advanced placement courses offered at each school. (Appendix B presents a sample of the courses taken by project students at each site.)

Special Activities For Gifted Students

The project offered students a triad of enrichment activities -- an approach specifically designed for gifted students. The triad consisted of:

General Exploratory Activities. A series of field trips and presentations by guest speakers introduced project students to new experiences and areas of study. At South Shore, 40 students visited the New York Aquarium in November; 24 students went to the Museum of Natural History in April; 15 students attended a college and career seminar at New York University and 24 attended a Bilingual Career Day at York College in May; and 40 students visited the Bronx Zoo and 22 visited the Statue of Liberty in June.

Guest speaker presentations at South Shore covered the following topics: college orientation, health and personal hygiene, Haitian culture and music, teenage pregnancy and sexual responsibility, and career preparation.

All BEAMS students at James Madison visited the Statue of Liberty in November and the Brooklyn Museum and the Brooklyn

Botanical Gardens in May; 15 students attended a performance of "The Nutcracker" in December; and 30 students attended the ballet "Romeo and Juliet" in May.

BEAMS students at F.D.R. visited the Brooklyn Museum and the Brooklyn Botanical Gardens. In addition, 63 students attended the Seventh Annual Bilingual Career Day at Kingsborough Community College in May. This event brought together representatives of the public and private sectors to speak to bilingual students about career opportunities.

Group Training Activities. All three sites offered mainstream classes in computer skills. If the students' academic abilities permitted, they were encouraged to enroll in the advanced placement courses offered at the three schools. Assistance with these courses was available through tutoring programs organized by project staff members.

At South Shore, BEAMS students could enroll in advanced placement courses in calculus, math, biology, chemistry, marine science, and American history. James Madison offered advanced placement courses in American history, biology, chemistry, calculus, and English. This spring, for the first time, Madison offered a health education class taught with an E.S.L. approach.

At F.D.R., project students could enroll in advanced placement courses in calculus, computer math, biology, chemistry, American history, French, Hebrew, Italian, Spanish, art, music, and home economics. F.D.R. also offered a typing class taught in an E.S.L. format. Several F.D.R. students also were enrolled in

the College Now Program, a series of remedial courses offered at five Brooklyn high schools by Kingsborough Community College. These non-credit courses prepared students for the City University Writing Skills Assessment Test, an examination that judges students' readiness for college-level written work.

Individual and Small Group Projects. At Madison, Research E.S.L., a special credit-bearing mathematics research course was offered to approximately 25 students. The class, which met twice weekly, had two aims: to give LEP students an opportunity to participate in mathematical inquiry and independent study and research, and to improve their English reading, writing, and oral skills. The course consisted of reading articles on current topics in mathematics; solving mathematical problems presented in educational journals and other publications; working on mathematical games and puzzles; and preparing for examinations in math. Materials used for the class included Student Math Notes (a publication of the National Council of Teachers of Mathematics), The Mathematics Teacher, Mathematics Magazine, and Math Motivators! Investigations in Pre-Algebra and Algebra (Posamentier). The teacher stated that all the students would be expected to produce an end-of-term research paper.

Another class project was the production of a mathematics dictionary in Chinese, French, Korean, and Spanish. Students were asked to submit a list of mathematical terms that they had found especially difficult to understand. The completed dictionary will define each term and present its use in English

sentences, and its equivalent in the native language. Diagrams will be included if appropriate. It was hoped that the completed dictionary will be distributed to entering LEP students to help them in their mathematics classes.

Brooklyn College Component

The aim of this component was to provide project students with educational experiences not available in the high schools and to familiarize them with college-level learning. Under the auspices of Brooklyn College's High School Enrichment Program, 19 twelfth-grade students enrolled in credit-bearing courses in several areas: calculus, foreign language (beginning and intermediate French), psychology, women's studies, chemistry, physics, computer studies, art, music, and public speaking.

In an interview, the director of the enrichment program (the associate undergraduate dean of the College of Liberal Arts and Sciences) said that although the college had previously admitted LEP students on an individual basis, Project BEAMS students were the first ones to be offered the college experience as a group. She said that the program provided the students with extra educational opportunities and challenged them to "try in a new setting."

Parental permission was necessary for the students to participate. And although City University tuition was waived, students had to pay an activities fee (if they were able) to be able to use the college's gym, pool, and library. Although the high schools provided the bulk of counseling services, Brooklyn

College also assigned a guidance counselor to the BEAMS students. Reportedly, several students visited her at the beginning of the semester to discuss course or section changes.

All classes were taken on the weekend or in the late afternoon so as not to interfere with the students' high school schedules. Course requirements were the same for Project BEAMS students as for Brooklyn College undergraduates. Generally, the professors were not informed of their students' status. Although no high school credit was given, if students successfully passed the course, they did earn college credit which could be transferred to other universities.

At a "celebration" ceremony held at the college at the end of the spring semester the students were given certificates acknowledging their participation in the Brooklyn College component. One of them, a twelfth grader who had arrived from Hong Kong the previous year, shared her experiences in the project and told the audience how much the physics course she had taken had helped her with her high school work and given her the confidence she needed to pass the advanced placement examination in physics. All of the students present told a member of the evaluation team that they would recommend the program to others. Most agreed that the college coursework was "much harder" than their high school homework, but all of them said they were able to complete their assignments during the semester.

The associate dean, the project director, and the site coordinators were so encouraged by the students' performance (see

Chapter III.), that they planned to continue this component of the project next year, even in the absence of Title VII funding.

II. STUDENT CHARACTERISTICS

Project BEAMS served a total of 214 students. Twenty-eight of the students graduated in June.

Table 1 and Figure 2 present project students by country of birth and native language, respectively. The majority of students were born in China (24 percent) and Hong Kong (19 percent). The rest came from Asia, Europe, Central and South America, the Middle East, and the Caribbean. One student was born in the United States. Twenty-nine percent of the students spoke Cantonese, and 14 percent spoke other Chinese languages.

Overall, male students slightly outnumbered females (51 percent to 49 percent); however, in the ninth and twelfth grades there were more females than males.

Table 2 presents the distribution of project students by age and grade. Data were provided for all 214 students. Fifty students (23 percent) were in the ninth grade; 59 (28 percent) were in the tenth grade; 54 (25 percent) were in the eleventh grade; and 51 (42 percent) were in the twelfth grade. Forty-two percent of the students were overage for their grade placement. The highest percentage of overage students occurred at F.D.R. (48 percent), the lowest at James Madison (30 percent).

Table 3 presents the students' years of education by grade. The students' mean number of years of education in the native country was 8.5, ranging from 7.7 for tenth graders to 9.4 for twelfth graders. The average number of years of education in the

United States was 1.5, indicating that most of the students were newly arrived. The range of education in the United States varied from 1.1 years for ninth graders to 1.9 years for twelfth graders.

Because most of the project students had been in this country less than two years, they faced major cultural as well as linguistic challenges. According to staff members at all three sites, the students' abilities in English varied. Most, however, were at the intermediate level of E.S.L. instruction, and tended to "pick up" the language quickly. Students' abilities in the content areas were also described as varied. The site coordinator at F.D.R. said that the Eastern European students were well prepared in mathematics. According to other staff members, students from the People's Republic of China were not well prepared academically, while those from Hong Kong and Taiwan had good academic backgrounds but poor English-language skills. Staff members also said that students from different ethnic groups got along well. This was partly the result of mixing in E.S.L. classes and content-area classes taught with an E.S.L. approach.

TABLE 1

Number and Percent of Program Students by Country of Birth

Region	Country of Birth	Number	Percent
Asia	China	51	23.8
	Hong Kong	41	19.2
	Korea	17	7.9
	Vietnam	10	4.7
	Taiwan	4	1.9
	Cambodia	1	.5
	India	1	.5
	Thailand	1	.5
Caribbean	Haiti	22	10.3
	Puerto Rico	2	.9
	Dominican Republic	1	.5
Europe	USSR	15	7.0
	Poland	4	1.9
	Spain	3	1.4
	Romania	2	.9
	Yugoslavia	2	.9
	Greece	1	.5
	Hungary	1	.5
	Italy	1	.5
Middle East	Israel	16	7.5
	Egypt	1	.5
	Other	1	.5
Central and South America	Colombia	6	2.8
	Panama	3	1.4
	Argentina	2	.9
	Ecuador	1	.5
	El Salvador	1	.5
	Honduras	1	.5
	Other	1	.5
North America	United States	1	.5
TOTAL		214	100.0

- The majority of program students were born in China (24 percent) and Hong Kong (19 percent).

TABLE 2

Number of Project Students by Age* and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	Total
14	**14**	**1**	0	0	15
15	**14**	**9**	**1**	0	24
16	6	**23**	**11**	**2**	42
17	4	17	**24**	**8**	53
18	5	4	12	**19**	40
19	5	2	3	11	21
20	1	1	3	6	11
21	1	2	0	5	8
TOTAL	50	59	54	51	214

Overage Students	All Students				
Number	22	26	19	22	89
Percent	44	44.1	33.3	43.1	41.6

Overage Students	South Shore High School				
Number	4	3	1	5	17
Percent	80	33.3	10	80	30.4

Overage Students	James Madison High School				
Number	0	5	7	5	17
Percent	0	41.7	41.2	31.3	30.4

Overage Students	F.D.R. High School				
Number	18	18	10	14	60
Percent	52.9	47.4	37	56	48.4

Note. Numbers in bold area reflect expected age range for grade.
*Age on June 30, 1987.

- Forty-two percent of the students were overage for their grade placement.
- F.D.R. had the highest percentage of overage students.

TABLE 3

Students' Years of Education by Grade

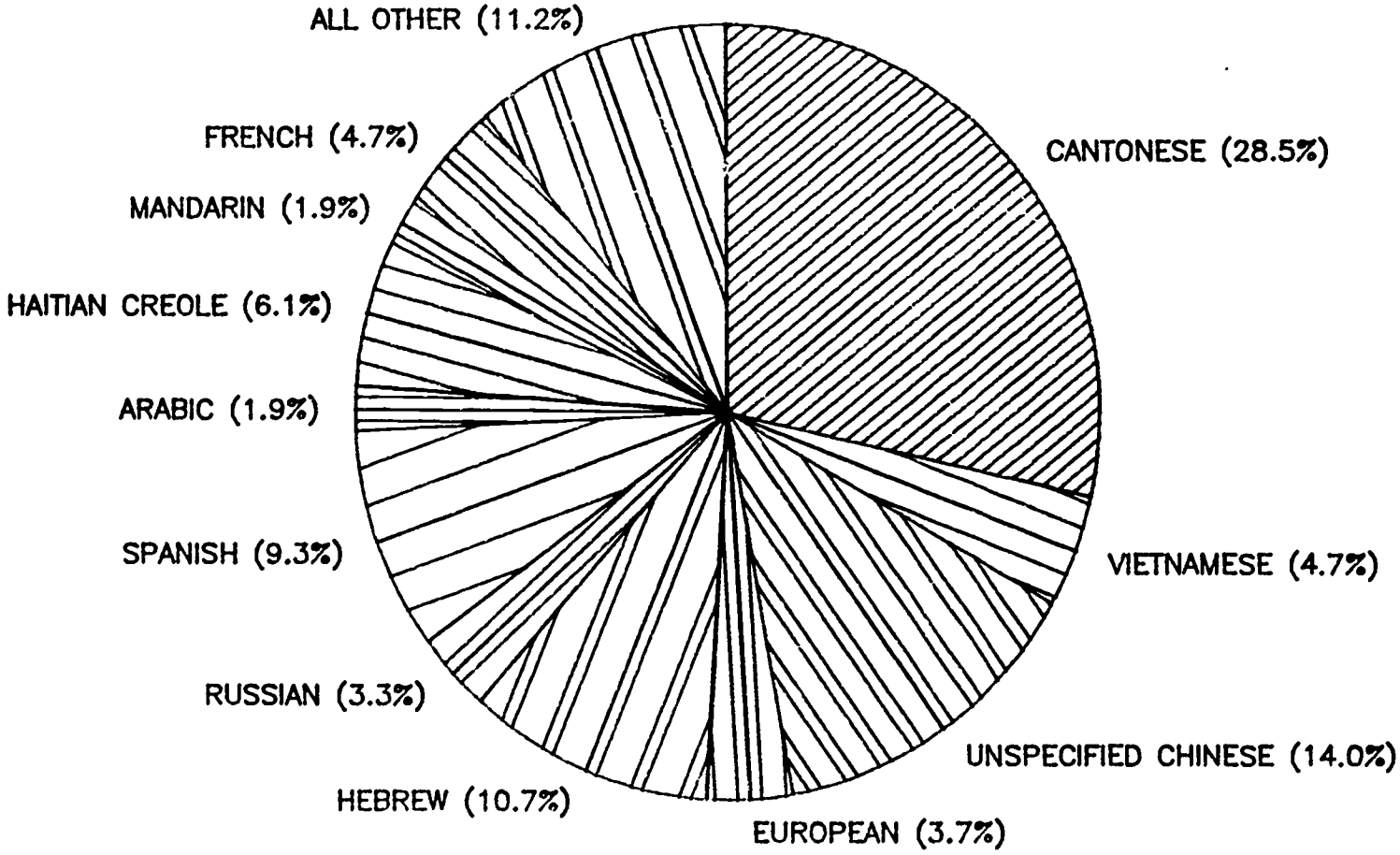
	Total Years of Education						Years Education Native Country			Years Education United States	
Grade	<8	9	10	11	12	>12	Total	Mean	S.D.	Mean	S.D.
9	18	22	2	8	0	0	50	7.9	1.2	1.1	.9
10	4	32	22	0	0	0	58	7.7	1.4	1.6	1.1
11	0	2	35	16	1	0	54	8.9	1.1	1.4	1.0
12	1	0	1	23	23	2	50	9.4	1.5	1.9	1.1
TOTAL	23	56	60	47	24	2	212*	8.5	1.5	1.5	1.1

* Data for two program students were missing.

- Program students averaged 8.5 years of school in the native country and 1.5 years of school in the U.S.

FIGURE 2

PROJECT BEAMS
DISTRIBUTION BY NATIVE LANGUAGE



III. FINDINGS

The evaluation findings for the 1986-87 academic year include objectives measurable by standardized tests and those assessable by an examination of program material and records, site visits, interviews with school personnel, and questionnaires completed by Title VII staff. In the following section, the findings are presented by the instructional and non-instructional objectives 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 master an average of one objective per twenty days of instruction on the Criterion Referenced English Syntax Test (CREST).
- At least 85 percent of the students who take the Regents Competency Test in reading will achieve a passing rate.

Course Offerings

E.S.L. reading and writing courses were offered at the beginning, intermediate, advanced, and transitional levels at each site. LEP students at South Shore attended two class periods of E.S.L. at the beginning through advanced levels of instruction. At F.D.R., students attended one period of E.S.L. writing and one period of E.S.L. reading at each level. As a result of a July 1986 memorandum from the Board of Education's Division of High Schools, James Madison offered three daily

periods of beginning E.S.L. instruction, which took the form of an E.S.L. class and two E.S.L. workshops (stressing reading, writing, and speaking skills).

The project also planned to offer students computer-assisted instruction in English. Although such classes were not yet provided at South Shore and F.D.R., they had begun at James Madison in March during one of the E.S.L. workshop periods. The class used word processing software to combine instruction in English and computer skills.

Classroom Observations

A member of the evaluation team observed E.S.L. classes at all levels of instruction at the three schools. All classes contained a mix of Asian, Hispanic, Haitian, Russian, and Middle Eastern students, and all were conducted entirely in English.

Eleven students were present in the beginning-level E.S.L. class observed at South Shore. Two other students were working on individual assignments with a paraprofessional in the back of the classroom. The aim of the first part of the lesson was for students to learn to use the auxiliary verbs "has" and "have." The teacher supplied the personal pronoun and the main verb and called on students to provide the appropriate auxiliary.

For the second part of the lesson, the teacher distributed a handout featuring items of furniture commonly found in a living room. The teacher asked the students to label each item correctly and then called on individual students to answer each item verbally. Following this exercise, the teacher asked

students to write five sentences describing the living room furniture in their own homes. While the students were writing, the teacher went from desk to desk helping students. After this assignment was completed, the students read their compositions aloud, and errors were corrected.

The topic of the intermediate-level E.S.L. class observed at this site was the quality and popularity of fast-food restaurants. The lesson included practice in reading, writing, speaking, and listening skills. As the class began, all 19 students in attendance were busy writing the answers to questions from their text, Insights and Ideas. When they finished, the teacher then called on individual students to read their responses aloud while a student wrote their correct answers on the blackboard. The teacher urged the students to speak loudly and clearly. The students appeared to be enjoying themselves, and many hands were raised to volunteer answers.

Both classrooms observed at this site were colorfully decorated -- the first with posters displaying various grammatical rules and examples of antonyms, synonyms, homonyms, and punctuation marks, the second with colorful posters of Asian, European, and Caribbean countries.

An E.S.L. workshop for beginning-level students was observed at James Madison. The "do-now" exercise asked students to supply missing words for five sentences written on the blackboard. When the assignment was completed, the teacher called on students to give their answers. She spoke loudly and clearly and asked the

class to repeat any new words introduced during the discussion. According to the teacher, the 20 students present in the class included two BEAMS students who, although weak in English (they had arrived in September 1986), were enrolled in advanced mathematics courses taught in English.

Thirteen BEAMS students were among the 26 students present in the advanced E.S.L. class that also was observed at James Madison. The teacher was giving a short spelling quiz using words from the Test of English as a Foreign Language (TOEFL). After the test, she called on students to spell out the words, while she wrote the correct spelling on the blackboard.

The second part of the lesson was a review of the previous day's homework assignment -- to answer questions based on the first chapter of The Pigman by Paul Zindel. It appeared that most of the students had done the assignment, since many raised their hands in response to the teacher's questions.

A beginning- and an intermediate-level E.S.L. class were also observed at F.D.R. Of the 27 students present in the beginning-level class, six were BEAMS participants. The topic of the lesson, "What do you like to eat?" was written on the blackboard. For the beginning of the lesson, the students corrected sentences that the teacher had written on the blackboard. She then called on students to go to the board to correct the errors.

After this exercise was completed, the teacher held up artificial fruits and vegetables and asked students to identify

the item and to say whether or not they liked to eat it. She made the students respond in full sentences. She then had them question each other about their tastes. New words introduced during the lesson were defined and written on the board. The students appeared to enjoy the class; there was much joking and laughter.

The aim of the intermediate-level E.S.L. class "How can we interview our classmates?" The teacher asked the students to pose as reporters and think about the questions they would ask each other during the course of an interview. Many students volunteered questions that the teacher listed on the blackboard, but she also made sure to call on students who were not eager to participate. As in the previous class, new words, such as "hobby" and "reporter," were defined and written on the blackboard. Of the 22 students present in the class, nine were enrolled in the BEAMS project.

Student Achievement

The assessment instrument used to evaluate the first E.S.L. instructional objective 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 4 presents the CREST results for students who were pretested and posttested at the same level. (Tables presenting the CREST achievement by students at each participating school are included as Appendix C.)

An examination of Table 4 reveals that overall, the first E.S.L. objective was met in the fall but not in the spring. 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 the instructional objectives of the E.S.L. curriculum, 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).

reason for low mastery per month is mostly due to test ceiling effects: students at Levels 1 and 2 had mastered more than 17 out of 25 skills on the pretest and students at Level 3 had mastered more than 11 out of 15 skills on the pretest. When examined by site, during the fall, students at F.D.R. and South Shore mastered more than one CREST skill per month of instruction, while those at Madison did not meet the objective. During the spring semester, only students at Madison met the objective.

TABLE 4

Results of the Criterion Referenced English Syntax Test

Test Level	Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	MASTERY Mean	MASTERY S.D.	Mean Mastery Per Month
				FALL				
1	34	17.4	5.3	22.4	3.2	5.0	3.8	2.0
2	36	19.1	4.4	23.0	2.0	3.9	3.1	1.7
3	70	11.2	2.9	13.2	2.1	2.0	1.8	0.9
TOTAL	140	14.7	5.4	17.9	5.3	3.2	3.0	1.4
				SPRING				
1	20	21.5	3.4	23.8	1.9	2.3	2.2	0.7
2	30	18.9	5.5	22.8	2.6	3.9	3.8	1.2
3	66	12.2	2.6	13.4	1.9	1.2	1.3	0.4
TOTAL	116	15.5	5.4	17.6	5.3	2.1	2.1	0.6

- Program students met the objective of mastering an average of one CREST skill per 20 days of instruction in the fall but not in the spring.

Data provided on the Regents Competency Test in reading (Table 5) indicated that overall, 98.2 percent of the 57 students who took the test during the year passed. Thus, the objective, that at least 85 percent of program students taking this test should pass it, was achieved.

TABLE 5

Performance on Regents Competency Test in Reading

	FALL		SPRING		TOTAL
Test	Number of Students	Percent Passing	Number of Students	Percent Passing	Overall Passing Rate
Reading R.C.T.	27	96.3	30	100.0	98.2

- Ninety-eight percent of program students who took the R.C.T. reading test passed. Thus, the program objective was achieved.

NATIVE LANGUAGE ARTS

- At least 85 percent of the students will score at or above the 65 percent passing criterion in native language arts each semester.

Course Offerings

At South Shore, N.L.A. instruction was offered to Haitian students for five daily periods per week -- Monday through Thursday classes were devoted to French, while the Friday class focused on Creole language and literature. Spanish, French, Italian, and on an independent-study basis, Russian, were offered as foreign languages.

For the first time, James Madison offered Spanish N.L.A. in the spring semester. According to the teacher of this class, course content paralleled mainstream Spanish but was geared to the abilities of native speakers. The small number of Hebrew-speaking project students were offered an advanced-level N.L.A. class in that language, while French-speaking project students could enroll in French foreign-language classes along with mainstream students.

F.D.R. offered native language classes in Spanish (elementary/intermediate and advanced), Hebrew (advanced), and Russian (elementary and advanced), as well as foreign language instruction in Italian, French, Hebrew, Russian, and Spanish. In response to the growing number of Chinese-speaking students enrolling at the school, F.D.R. intends to offer three levels of Chinese native language arts in September 1987.

Classroom Observations

The N.L.A. class observed at South Shore featured a lecture by a Haitian Creole-speaking physician from a nearby hospital. A former student and teacher at the school, he had previously spoken to the students about careers in medicine. The subject of the day's address was sexually transmitted diseases, including AIDS. During the presentation, which was entirely in Haitian Creole, the speaker referred to three-dimensional models of the female and male reproductive systems. The students listened to the lecture intently, and when it was over asked many questions. The speaker had excellent rapport with the students, which was essential because of the delicate nature of the topic. Twenty students were present in the class. Their ages ranged from 14 to 18.

In an interview held after the lecture, the teacher of the N.L.A. class, a native Creole speaker, described the students' skills in French and English as "mixed." She said that most students spoke French well but had difficulty reading and writing the language. However, some students entered the French class with advanced writing skills. As for English, she said that while most students were at the intermediate level of E.S.L., as might be expected, the level of more recent arrivals was elementary.

A Spanish N.L.A. class was observed at James Madison. Twenty-nine students were present, including one ethnically Korean student who had been born and raised in Argentina.

According to the teacher, most of the students had advanced skills in their native language. The topic of the lesson, written on the blackboard in Spanish, concerned television's effectiveness as an advertising tool. At the beginning of the class, small groups of students performed television commercials they had prepared themselves. After the skits, the students viewed videotaped commercials on a television in the back of the classroom. After the viewing, students were given a handout asking them to supply the slogan for the products featured in the advertisements. The teacher then called on the students to supply the answers and to discuss whether or not they had enjoyed the commercial and the product. The students actively participated in the discussion and many students volunteered to answer the teacher's questions.

Student Achievement

Teacher-made tests were used to evaluate the objective in this area. Of the 70 program students who took N.L.A. courses during the academic year, all passed with a grade of 65 percent or higher. Thus, the program surpassed its objective that 85 percent of the students enrolled in N.L.A. classes would pass.

CONTENT-AREA SUBJECTS

-- At least 85 percent of program students who take Regents exams in sequential math will achieve a passing grade.

-- At least 85 percent of program students who take the Regents Competency Test in mathematics will achieve a passing grade.

-- Students will score at or above the 65 percent passing criterion in science at a rate that is greater than that of similar non-program students.

-- At least 85 percent of the students will score at or above the 65 percent passing criterion in subject-area courses each semester.

Course Offerings

Many BEAMS students were enrolled in mainstream offerings in content-area subjects; however, project students with weaker English language skills were enrolled in each school's special offerings for LEP students.

At South Shore, fundamentals of mathematics, biology, hygiene, American history, and global studies were offered with an E.S.L. approach. French/Haitian Creole-speaking students also were provided bilingual classes in biology, American history, and global studies.

At James Madison, BEAMS students participated in mainstream math classes, while general science, American history, and global studies were taught using an E.S.L. approach.

F.D.R. offered math fundamentals, general science, biology, chemistry, global studies, and United States history and government in an E.S.L. format. Bilingual (Spanish/English) classes were offered in general science, biology, global

studies, United States history and government, and economics. F.D.R. also planned to offer general science, biology, global studies, United States history and government, and economics bilingually as part of a Chinese bilingual program due to start in September 1987.

According to staff members at all three sites, students were placed in mainstream classes after a careful review of their academic performance.

Classroom Observations

A member of the evaluation team observed mathematics, science, and social studies classes at the three sites. Twenty-three LEP students from various ethnic groups were present in a mathematics class taught with an E.S.L. approach at F.D.R. Three of these students were Project BEAMS participants. (The class was one of several designed specifically for foreign students.) The aims of the lesson were to teach students the three ways to write ratios and how to reduce fractions to their lowest terms. The teacher wrote several problems on the blackboard, which the students then solved in their notebooks. All of the students were involved in the lesson and appeared eager to write their answers on the blackboard.

Like the math class, the general science class observed at F.D.R. was taught with an E.S.L. approach. Seven of the 20 students were BEAMS participants. The topic for the day was, How do some animals replace lost parts?" During the lecture on regeneration, the teacher referred to a desiccated starfish, an

artificial lobster, and a giant lobster claw. The teacher defined new words, wrote them on the blackboard, and had the class repeat each one aloud. In some instances, she also asked students to name the animals in their native languages. The students appeared to enjoy this a great deal and there was much laughter as they compared terms in their native languages with their English equivalents.

A biology class for native speakers of Spanish also was observed at F.D.R. The aim of the class was for students to learn the difference between phenotype and genotype. Eighteen students were present. Both the aim and new terminology were written on the blackboard in English. At the beginning of the class the students were solving problems on genetic inheritance. The teacher then called on students to write their genetic "keys" on the board. During the ensuing discussion, the teacher used both English and Spanish to define terms, explain concepts, and ask questions. The students also used both languages interchangeably and appeared to enjoy the class.

The second half of a two-period advanced placement chemistry class was observed at F.D.R. The class had an attendance of 20 students. Thirteen were mainstream students and seven were BEAMS students, three of whom were taking courses at Brooklyn College. The teacher wrote various chemical equations on the blackboard and students were called on to solve them. Later in the day, three of the BEAMS students from this class were observed discussing the chemistry lesson in a tutoring

session with a Title VII staff member.

A bilingual general science class was observed at South Shore. The class was taught in English and Haitian Creole by the teacher of the N.L.A. class described above. Twenty Haitian students were present. The students were completing a series of questions from Biology and Human Progress, by Charles Tazin, on the human immune system. While the students were working on their answers, the teacher moved around the room checking their work and helping with individual problems. When the exercise was completed, the teacher called on one student to read each question aloud and on another student to answer it. Many students raised their hands to volunteer, and all their answers were in English. The teacher wrote each correct response on the blackboard in English, and then reviewed it in Haitian Creole to make sure that all students understood the point being discussed. The teacher had excellent rapport with the students; whenever a few began to talk among themselves, she quickly returned them to the task at hand.

In an after-class interview, the teacher said that most of the students were hardworking, and that using the native language helped facilitate their progress. She felt that most of the students would be able to enroll in mainstream science classes the following semester.

Twenty-six LEP students of different ethnic backgrounds were present in an E.S.L./health education class observed at James Madison. This was the first time the class was being offered.

It was conducted entirely in English. The topic was "your personality." The students were asked to choose two characters from a book, a movie, or television program, and to list the qualities that made them similar or different. The students then were called upon to read their responses. Most of the students had selected characters from popular television shows, such as The Colbys, The A Team, or Stingray. Some students appeared reticent about speaking English in front of their classmates; those who did speak could do so at an intermediate level of English ability.

Twenty-nine LEP students from different language groups were present in the E.S.L./social studies class observed at South Shore. The teacher called on the students to answer the following question, which had been written on the blackboard in English: "Why do new immigrants have problems in the United States?" He then spoke about his family's experiences when they arrived in this country and his own experiences living in India. During his talk, he referred to several maps posted on the walls. The students eagerly joined in the discussion and seemed to enjoy the class and the teacher. Many offered examples of how their own cultural traditions differed from those in America.

Four of the 18 students attending in the social studies class for foreign students observed at F.D.R. were enrolled in Project BEAMS. Most of the students were of Asian, Indian, Israeli, or Polish background. At the beginning of the class, the trilingual teacher (English, Spanish, and Mandarin)

distributed a map of the world to each student. He asked the students to look at the map and identify the lakes, rivers, mountains, and seas of Asia. Many students raised their hands to contribute a response. The teacher wrote on the blackboard and defined new terms, such as "plain," "desert," and "peninsula." The teacher also translated several other words for a newly arrived Chinese-speaking student. According to the site coordinator, this teacher would be teaching in the Chinese bilingual program due to start at the school in September.

Finally, an economics class taught entirely in Spanish was observed at F.D.R. According to the site coordinator, although most of the 22 students present in the class had good Spanish skills, the impossibility of providing classes solely on the basis of language ability meant that some students with deficient Spanish skills had to be included in the class. The topic of the day's lesson, "What jobs will be available in the future," was written on the blackboard in Spanish, as was the handout from which students were reading. All of the students appeared involved in the lesson, and many eagerly discussed the skills they would need to be successful in the future.

Student Achievement

Table 6 presents the passing rate of program students in the sequential math regents exam and in the Math Regents Competency Test (R.C.T.). It shows that, overall, 94 percent of the students who took the sequential math Regents and 89 percent of those who took the math R.C.T. passsed the exams. Thus, the objective that 85 percent of the program students would pass their exams was achieved.

TABLE 6

Performance on the Regents Competency Test in Mathematics and on the Sequential Math Regents

	FALL		SPRING		TOTAL
COURSE	Number of Students	Percent Passing	Number of Students	Percent Passing	Overall Passing Rate
Sequential Math Regents	18	94.4	52	94.2	94.3
R.C.T. Math	26	73.1	54	96.3	88.8

- Ninety-four percent of program students passed the sequential math regents, and 89 percent passed the R.C.T. Math test, thus surpassing the program objectives.

Table 7 presents the passing rates for program and mainstream students in science courses at the three sites. The table shows that program students at Madison and South Shore had passing rates that were significantly higher than those of mainstream students. Thus, the objective that program students would pass science courses at a higher rate than mainstream students was met.

TABLE 7

Passing Rates for Program and Mainstream Students in Science

	BILINGUAL PROGRAM		MAINSTREAM
Program Site	Number of Students	Percent Passing	Percent Passing
South Shore	46	95.6	67.0
Madison	82	97.5	85.3
F.D.R.	213	96.2	*

*Passing rates for mainstream students were not available.

- Passing rates of program students at Madison and South Shore were significantly higher than those of mainstream students. Thus, the objective was met.

Table 8 presents program students' passing rates in math, science, and social studies for the fall and spring semesters. (Content-area passing rates for each school are included in Appendix D.) The table indicates that, overall, students achieved a passing rate of 97 percent, thus exceeding the objective that at least 85 percent of the students would pass.

TABLE 8

Passing Rates in Content-Area Courses

COURSE	FALL Number of Students	FALL Percent Passing	SPRING Number of Students	SPRING Percent Passing	Overall Passing Rate
Math[a]	197	93.9	178	97.2	95.5
Science[b]	175	98.9	166	94.0	96.5
Social Studies[c]	206	98.5	122	97.5	98.1

[a]Math courses ranged fcrm remedial to advanced placement.

[b]Science courses ranged from general science to physics.

[c]Social Studies courses included American history A and B. Global History A and C, and economics.

- Overall, program students achieved program objectives in all subject areas.

BROOKLYN COLLEGE COMPONENT

-- Program students in their senior year will have the option of participating in college courses. At least 75 percent of the students taking college courses will successfully complete them.

The proposed objective was met in this area. According to the project director, 15 of the 19 BEAMS students (79 percent) attending courses at Brooklyn College received a passing grade. Of the four students who did not pass, one dropped the course at mid-term due to an illness in the family and one student received an incomplete.

EXTRACURRICULAR ACTIVITIES

-- Program students will contribute to school and community life. Seventy-five percent of program students will participate in at least one of the following: schools' math team, chess team, publication, computer club, ecology club, academic olympics team, science competition, or do volunteer work at public institutions.

At James Madison, two project students were on the school's academic olympics team; nine students entered a science competition, including the Westinghouse Science Talent Search; 12 students were members of the school's math team; 31 students contributed to a school publication; 37 students did volunteer work; and 60 students joined ethnically based clubs, such as the Haitian Club, the Chinese Club, and the Asian Student Union. Project students at Madison also sponsored an international food fair in November to raise money to aid the earthquake victims in El Salvador. Another BEAMS student attended a series of five Saturday-morning lectures for high school students sponsored by

Baruch College's mathematics department on topics not treated in the regular high school curriculum.

At South Shore, five project students were members of the school's math team, four did volunteer work, and one entered a science competition. Twenty-five project students were also involved in publishing two literary magazines, Stepping Stone and Soley (a French/Haitian Creole magazine). Two students from South Shore participated in an after-school biology and science research program for minority students sponsored by the Consortium of American Medical Schools. Project students also were encouraged to attend a mathematics and science academy offered by the biology department at South Shore during the summer recess.

At F.D.R., Spanish and Korean clubs met once a week after regular school hours. The project was planning to organize a club for Chinese-speaking students that would include trips, to introduce students to various aspects of American culture. Project students also participated in the school's annual "International Festival and Circus," which offered both foreign- and U.S.-born students an opportunity to learn more about each other's native culture. F.D.R.'s foreign language department also sponsored a poster contest that was open to both project and mainstream students. Finally, BEAMS students attended a performance of "Puerto Rico -- Encanto y Cancion," presented by the Repertorio Espanol. Thus, the objective in this area was met.

AFFECTIVE DOMAIN

--Program students will have a significantly lower dropout rate than non-program students in each school.

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

To prevent student attrition and promote better attendance, the project incorporated a number of supportive strategies in its non-instructional component, including academic guidance, personal and career counseling, and tutoring programs. (A detailed listing of all the support services offered to project students at each site is included as Appendix E.)

Guidance and Counseling

BEAMS students received all the guidance and counseling services regularly provided at each school; however, project staff at all three sites mentioned that BEAMS students tended to approach them rather than mainstream personnel because they usually knew the students' native languages. The site coordinator at South S..ore also pointed out that since she served fewer students, she could devote more time and provide more individualized counseling than the mainstream grade advisors, who each served some 600 students. A BEAMS coordinator at F.D.R. said that since none of the school's guidance counselors were native Spanish speakers, the project's Hispanic students always approached him with questions and problems. At sites where a BEAMS staff member did not speak one of the target languages, mainstreamed students were used as translators. This was the

case for Chinese-speaking students at South Shore and James Madison. At F.D.R., the Chinese-speaking site coordinator from Project BRIDGES provided assistance to Chinese-speaking BEAMS students whenever necessary.

To help students overcome adjustment difficulties, South Shore implemented a "big brother/big sister" program in which more experienced students were paired with incoming students of the same ethnic background. The site coordinator also assisted students with job placement when necessary. Korean students at F.D.R. benefited from a "buddy system" in which students already enrolled in the project helped orient new students.

In his role as bilingual school psychologist, the project director worked with project and teaching staff at each site to identify potential participants and plan students' programs. He also met with guidance personnel at each school approximately once a week to develop strategies for counseling individual students. It was largely due to his efforts that F.D.R. assigned a guidance counselor to work with all the school's LEP students.

Tutoring

Tutoring was provided by BEAMS staff members on an as-needed basis. At South Shore, BEAMS staff inaugurated a peer-tutoring program that paired eleventh and twelfth graders with ninth graders of the same sex and ethnic background. The students were excused from their regularly scheduled classes to meet for this purpose (see Appendix F). The tutors received service credit for their efforts, and an end-of-term trip to the Statue of Liberty

was planned for both tutors and tutees.

Mainstream students at James Madison were given service credit for tutoring BEAMS students in English. Project BEAMS students also were tutored in their native language during their free periods once or twice a week. The site coordinator noted that she had found peer tutors to be very effective in helping her communicate with students' parents. In addition, language or E.S.L. education majors from Brooklyn College had been solicited to work with project students on a voluntary basis.

Students at F.D.R. were offered small-group tutoring sessions in English language skills conducted by a paraprofessional. Plans also were underway to organize program students to tutor each other and students from other programs. However, staff members mentioned that organizing such a program might prove difficult because students' academic schedules left little time for tutoring activities. As a result, staff were considering alternatives, such as using mainstream students or asking Brooklyn College students to serve as tutors.

Awards and Honors

The success of the BEAMS support component can be gauged not only by student academic achievement but by the many awards and honors they received.

Two project students from James Madison and two from South Shore were awarded $1500 scholarships from Columbia University to participate in an intensive summer E.S.L. program for 20 college-bound foreign students. Another South Shore project

student won a full four-year scholarship to Cooper Union.

At James Madison, a twelfth-grade project student won a $16,000 scholarship from Colgate University, and two project students were winners in an essay and poetry contest sponsored by the New York City Commission on the Status of Women as part of the citywide celebration of Women's History Month (March 1987). Two BEAMS students were also selected to participate in a trip to Madrid with the chancellor and the president of the New York City Board of Education. One student was a member of the all-city orchestra and a finalist in the citywide math fair. Finally, one student in the Research E.S.L. class received acknowledgement for submitting the solution to a problem in the Pi Mu Epsilon mathematics journal.

Of the 30 twelfth-grade project students at F.D.R., 13 received awards, citations, or scholarships at graduation. These awards included the Alexander medal (for highest honors in art), the St. Gaudens medal (for excellence in draftsmanship), the Society of Women Engineers Award, and the Governor's Citation on Scholastic Achievement. (A full list of the awards given to BEAMS students is included at Appendix G.)

Attendance and Dropout Outcomes

Since the schools attendance rates include the attendance of program students, statistical significance between program and school rates was determined through the application of a z-test

for the significance of proportion.* This procedure tests whether the difference between one proportion (the program's rate) and a standard proportion (the school's rate) is greater than can be expected from chance variation.

As shown in Table 9, z-tests for the significance of a proportion indicated that the attendance rates for program students at all three sites were significantly higher (p=.01) than the schoolwide rates (z=2.72 for Madison; z=4.05 for F.D.R.; and z=1.68 for South Shore). Thus, the program objective was met.

TABLE 9

Difference Between Program and Schoolwide Attendance

	Total # of Program Students	Program/Site Attendance	Schoolwide Attendance	z
Madison	56	98.83	86.35	2.72*
Midwood	123	97.43	84.05	4.05*
South Shore	34	95.51	85.33	1.68*
Program	213	97.5		

*Statistically significant at .05 level.

The dropout rate of program students at F.D.R. was 3.6 percent, compared with a schoolwide rate of 4.5 percent. No

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

program students at South Shore dropped out, compared with a 4 percent schoolwide dropout rate. Dropout rates for program students at Madison were not available. Tests of statistical significance (p=.05) of the difference between program and schoolwide dropout rates at both F.D.R. and South Shore indicated no significant difference at either school. Thus, the objective that program students would have a significantly lower dropout rate than non-program students was not met. However, this was due to the low dropout rates for the schools. So that even at South Shore where no program students dropped out, the difference between zero and four percent was not significant.

STAFF DEVELOPMENT

The project director met with the project staff monthly and made weekly visits to each site. In addition, he attended five workshops on issues related to the education of LEP students sponsored by the New York Multifunctional Resource Center at Teachers College, a conference of E.S.E.A. Title VII project directors, and project-related meetings at the Office of Bilingual Education (O.B.E.) and the Office of Educational Assessment.

The site coordinators also participated in all school-sponsored staff development activities, as well as citywide meetings. The Madison site coordinator attended monthly meetings with her department's A.P. and the school's E.S.L. coordinator. She also attended bimonthly training activities sponsored by the E.S.L./Bilingual Unit of the Division of High Schools.

BEAMS staff members at F.D.R. attended all meetings of the school's foreign language department. Topics discussed during the fall included: bilingual courses and classes for non-English-speaking students, computer-assisted E.S.L. instruction, the computer as a stimulus to writing, the problems of foreign students, and using VCR equipment in the classroom. Spring topics included: implications of the Regents Action Plan for the instruction of LEP students, Regents examinations and alternative testing for LEP students, and content-area instruction for LEP students. Outside the school, the BEAMS F.D.R. staff attended five workshops on the E.S.L. component of the College Now Program sponsored by Kingsborough Community College, a workshop on E.S.L./content-area instruction at Bryant High School, a literacy profile conference at Columbia University, a bilingual vocational conference at Kingsborough Community College, and a conference on LAB testing at the board of Education's Office of Bilingual Education.

Although tuition for graduate study was not included in the BEAMS grant award, several staff members and classroom teachers attended university courses that were paid for by other funding sources. The project director attended two courses in the fall and three courses in the spring at Columbia University; the site coordinator at South Shore attended two courses in both the fall and the spring at Long Island University; and three E.S.L. teachers at South Shore and F.D.R. attended courses at Brooklyn and Hunter Colleges, and Fordham and Adelphi Universities.

Finally, the project director was planning to take a course at Teachers College during the summer months. (A detailed listing of the university courses attended by project staff appears as Appendix H.)

CURRICULUM DEVELOPMENT

Although no curriculum development activities were proposed until the project's second and third years (for which funds were not allotted) staff at South Shore developed curricula for courses on research methods and the use of computers in research. The teacher of the mathematics research course at James Madison developed a math curriculum for use with computers. In addition, the site coordinator proposed a speech class for the fall that would emphasize the development of LEP students' oral skills. Staff at F.D.R. adapted the school's vocational handbook for use in advanced and transitional E.S.L. classes. The site coordinator also developed an alternative reading course for September 1987 to reinforce the reading skills of LEP students.

PARENTAL AND COMMUNITY INVOLVEMENT

To involve more parents in their children's education and in project activities, BEAMS proposed to establish a Bilingual Advisory Committee. According to the project director, separate committees were established at each site and met bimonthly. Topics discussed at three council meetings held at South Shore included: the implementation of the BEAMS program (October 29, 1986); the Brooklyn College component and student performance

(January 28, 1987); and staff training activities, the tutoring program, and college and career advisement (March 24, 1987). Unfortunately, parental attendance was lower than expected -- only five parents attended each of these meetings. Reportedly, the level of attendance was similarly low at the other two sites.

According to the site coordinator at South Shore, many efforts were made to increase parents' participation in school-sponsored events. She stated that prior to Open School Night, the Title VII staff mailed approximately 150 letters and made over 25 phone calls to invite parents to the school. Only ten to fifteen parents came. She felt that many of the immigrant parents were simply not comfortable dealing with school personnel.

At James Madison, the site coordinator attended semesterly parent-teacher conferences to familiarize immigrant parents with the educational process. However, she, too, reported that parental participation at her site needed improvement; in her opinion, parents' tendency to let the school take over meant they remained uninvolved in school affairs.

At F.D.R., the staff sent a letter to the parents of all BEAMS students containing a reprint of an article from a local newspaper discussing the project, and encouraging them to contact the project office (see Appendix I). Parents also were invited to attend the school's international festival and circus held in May, the Seventh Annual Bilingual Career Day at Kingsborough Community College, and the "Senior Awards Night" to

honor graduating students. In addition, the staff sent a letter in Spanish to students' parents to announce the school's College and Career Night held on April 1. Unfortunately, at this and other schoolwide events, such as open school day/night held in March, parental attendance was poor. The site coordinator attributed this to the fact that many parents held two jobs and could not attend school meetings.

In an effort to increase community interest and involvement in the project, the site coordinator at James Madison initiated a penpal program between the intermediate level E.S.L. students and the residents of a nearby senior citizen center. It was hoped that approximately three letters would be exchanged between the newly-arrived students and the older immigrants. A reception was planned for May so that the penpals could meet.

IV. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

After reviewing the project's instructional and non-instructional activities, as well as students' performance on standardized and teacher-made examinations, the evaluation team concluded that Project BEAMS met virtually all of its proposed objectives during its single year of Title VII funding.

During the fall semester, qualified and dedicated staff were hired to conduct project activities, office space and material resources were assigned to the project at each participating school, training was provided to all project personnel, and targeted LEP students were identified for participation. An instructional approach was designed for project students that included required high school courses, special classes and activities for gifted students, and, for twelfth graders, attendance at courses at Brooklyn College.

A review of student achievement data reveals that instructional objectives were met in E.S.L. in the fall but not the spring because of ceiling effects, in R.C.T. reading both semesters, in N.L.A., in math and science, and in college courses. BEAMS also met its attendance objective, but it did not meet its dropout objective due to low school dropout rates.

The project's non-instructional component included: an extensive network of support services for students, including counseling and tutoring; continuous staff training activities; the development of new curricula and materials; and parental

involvement activities. The level of parental involvement was low at all three sites despite many steps taken by program personnel to try and involve parents.

It was clear to the evaluation team that the Title VII staff at all sites had excellent rapport with the students. During evaluation visits, many students were observed approaching staff members in the project offices and in the hallways to discuss matters of individual, projectwide, or schoolwide concern. The site coordinators said they believed BEAMS students were extremely pleased with the project and noted several cases in which participation in BEAMS had helped improve students' self-images and academic performance. However, the project did not have Chinese-speaking staff at James Madison and South Shore, both of which had Chinese-speaking students.

The project was fortunate to have had the full support of the administration and faculty at each site. In an interview held in April, the principal of South Shore spoke at length about the benefits, to mainstream as well as LEP students, of the bilingual programs operating at her school. Specifically, she believed that the programs had been largely responsible for the low dropout and high attendance rates of LEP students, and she was proud of BEAMS students' success in gaining admission to institutions of higher learning. At the same time, she noted that the existence of special content-area classes for LEP students meant that the progress of mainstream students was not hampered by the presence in their classes of LEP students. When

asked what would happen when Title VII funding ended, the principal said that some project staff members might have to return to the classroom, and therefore would be unable to provide students with the same level of support service they currently were receiving.

In June, however, the project director reported that due to the success of Project BEAMS, personnel at the three participating schools agreed to continue to identify gifted LEP students and recommend them for Brooklyn College courses, even though the Title VII program was ending. In fact, the project director was successful in recruiting gifted LEP students from Sheepshead Bay High School to join the other participants in the fall, and hoped to include students from Edward R. Murrow High School the following spring.

As previously mentioned, F.D.R. was planning to implement a bilingual instructional program for its Chinese-speaking population in September 1987. It was also learned that a new principal would begin work at the school at the same time. It is hoped that the new administration will continue to support these expanded efforts to serve the school's non-English-speaking students.

RECOMMENDATIONS

The following recommendations are offered for future programs at the BEAMS sites which propose to serve similar populations:

-- Recruit Chinese-speaking personnel for James Madison

and South Shore, which have Chinese-speaking students. If this is not possible, try to arrange for Chinese-speaking personnel from other Title VII projects to provide BEAMS students with essential counseling services.

-- Have twelfth graders who are currently taking college courses meet with eleventh graders who are considering whether to enroll in such courses during the coming year. This will help recruit students for the project's college-study component.

-- Develop a semesterly or yearly guide to inform teachers, counselors, and other educational personnel serving gifted foreign-born students about the special educational opportunities available to their students. This could be done by the Board of Education's Office of Bilingual Education.

-- Use a different instrument to measure gains in English to avoid ceiling effects.

-- Have more realistic objectives for dropout rate comparisons at schools with low dropout rates.

V. APPENDICES

APPENDIX A

South Shore

Staff Characteristics: Professional and Paraprofessional Staffs

Title/Function	Percent Time in Each Function	Education (Degrees)	Is person licensed or certified for this title/function? (Y/N/NA)	Total Yrs. Experience Education	Years Relevant Experience Bilingual/E.S.L./ Foreign Language
Project Director	100%	M.S. School Psychology P.D. Ed. Admin. M.S.Sci. Ed.	Yes	9	9
Site Coordinator	100%	M.A. Linguistics	Yes	14	I4
Bilingual Teacher	100%	M.S. Bilingual Ed.	Yes	7	7
ESL Teacher	100%	M.A. Linguistics	Yes	9	9
ESL Teacher	100%	M.A. ESL	Yes	17	9
ESL Teacher	100%	M.S. ESL	Yes	2	2
ESL Content Area Science	20%	M.A. Science	Yes	20	3
ESL Content Area Soc. Studies	20%	Ph.D.	Yes	20	1

James Madison

Staff Characteristics: Professional and Paraprofessional Staffs

Title/Function	Percent Time in Each Function	Education (Degrees)	Is person licensed or certified for this title/function? (Y/N/NA)	Total Yrs. Experience Education	Years Relevant Experience Bilingual/E.S.L./ Foreign Language
E.S.L. Teacher	100%	M.A.	Y	14	10
E.S.L. Teacher	100%	M.A.	Y	8	8
ESL Teacher	40%	MA	Y	7	7
ESL Teacher	40%	MA	N	13	0
ESL Content Teacher (Social Studies)	60%	MA	Y	21	2
ESL Content Teacher (Social Studies)	40%	BA	Y	1	0
ESL Content Teacher (Science)	20%	MA	Y	27	2
ESL Content Teacher (Hygiene)	20%	MA	Y	14	0
ESL Content Teacher (Math Remedial)	20%	MA	Y	7	2
Transitional English Teacher	20%	MA	Y	18	10
N.L.A. Hebrew Teacher	20%	MA	Y	18	16
N.L.A. Spanish Teacher	20%	MA	Y	4	4
ESL Paraprofessional	100%	—	—	10	1
Project Director (Guidance)	100%	M.A.	Y	17	17

Franklin D. Roosevelt

Staff Characteristics: Professional and Paraprofessional Staffs

Title/Function	Percent Time in Each Function	Education (Degrees)	Is person licensed or certified for this title/function? (Y/N/NA)	Total Yrs. Experience Education	Years Relevant Experience Bilingual/E.S.L./ Foreign Language
B.E.A.M.S. Project Director (FDR)	100	BA, History; MS Bil. Educ.	NA.	18	18
B.E.A.M.S. Site Coordinator (FDR)	100	BA, French; MA Engl. Educ.	N.A.	15	15
Bilingual (Span.) Soc. St. Teacher	40 Bil SS 60 LEP SS	B.A. + MA., History Ph.D. (ABD)	Y	10	4
Bil. (Span.) Bio/Gen. Sci. Teacher	40 Bil Bio 20 Bil GS	B.S., Biology	Y	3	3
ESL Teacher	100	B.A. English; MA, ES.L.	Y	7	6
E.S.L. Teacher	40	B.A. + M.A. French	N	30	10
E.S.L. Teacher	100	B.A. Art; MA in prog. ESL	N	14	7
E.S.L. Teacher	100	B.A. French; M.A. E.S.L.	Y	15	15
E.S.L. Teacher	80	B.A. French; M.A. French	Y	20	20

Staff Characteristics: Professional and Paraprofessional Staffs, page 2

Title/Function	Percent Time in Each Function	Education (Degrees)	Is person licensed or certified for this title/function? (Y/N/NA)	Total Yrs. Experience Education	Years Relevant Experience Bilingual/E.S.L./ Foreign Language
E.S.L. Teacher	100	B.A., M.A., + Ph.D. English	N	9	9
N.L.A. Spanish Teacher	60	B.A. + M.A., Spanish	Y	19	19
N.L.A. Spanish Teacher	20	B.A. Spanish, M.S. Business	Y	12	12
Paraprofessional	100	—	N.A.	19	7
Paraprofessional	100	—	N.A.	2	2

APPENDIX B

Courses Taken By Project Students in Spring 1987

SOUTH SHORE

Tenth-Grade Haitian Student
- Sequential Math 2
- Physical Education
- Advanced E.S.L. (Two Periods)
- Native Language Arts
- Bilingual Biology

Eleventh-Grade Israeli Student
- English 6
- Economics
- French 2
- Computer 4
- Sequential Math
- Physical Education
- Chemistry 2/Lab

Eleventh-Grade Chinese Student
- Art
- Computer 3
- Pre-Calculus
- Physical Education
- Advanced E.S.L. (Two Periods)
- Economics
- Physics 2/Lab

Twelfth-Grade Chinese Student
- Word Processing
- English 8
- American Studies 2
- Calculus 2
- Physical Education
- Physics 2/Lab

JAMES MADISON

Ninth-Grade Korean Student
- Citizenship
- Practical Science
- Ninth-Year Mathematics
- E.S.L.
- E.S.L. Workshop (Two Periods)
- Orchestra
- Modern Dance

Tenth-Grade Chinese Student
- E.S.L. Level 4
- E.S.L. Workshop
- Math Team
- Business Computers
- Tennis
- Human Biology
- American History/E.S.L.
- Tenth-Year Mathematics

Eleventh-Grade Chinese Student
- American History/E.S.L.
- Computer
- Transitional E.S.L.
- Health Education/E.S.L.
- Biology
- Eleventh-Year Mathematics
- Communications
- Research E.S.L.

Twelfth-Grade Haitian Student
- American History/E.S.L.
- Tennis
- Ceramics
- Transitional E.S.L.
- Business Machines
- Tenth-Year Mathematics
- Research E.S.L.

FRANKLIN D. ROOSEVELT

Ninth-Grade Haitian Student
- Computer
- Math Fundamentals 2
- E.S.L. (Intermediate)
- Soccer Team
- General Science/E.S.L.
- E.S.L. Writing (Intermediate)
- Global Studies/E.S.L.

Eleventh-Grade Chinese Student
- American History/E.S.L.
- Typing
- E.S.L. Reading (Advanced)
- Sequential Math 5
- Soccer
- General Science/E.S.L.
- E.S.L. Writing (Advanced)

Tenth-Grade Italian Student
- Basketball
- Beginning E.S.L. Writing
- Advanced Italian
- General Science/E.S.L.
- Sequential Math
- E.S.L. Reading
- Global Studies/E.S.L.

APPENDIX C

Results of the Criterion Referenced English Syntax Test

South Shore

Test Level	Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	MASTERY Mean	MASTERY S.D.	Mean Mastery Per Month
				FALL				
1	5	18.6	3.8	22.8	1.9	4.2	3.4	2.0
2	8	20.8	3.5	24.1	1.0	3.4	3.2	1.5
3	5	12.8	2.2	14.	1.0	1.2	1.3	0.6
TOTAL	18	17.9	4.6	20.9	4.6	3.0	3.0	1.4
				SPRING				
1	3	20.0	4.6	23.3	2.9	3.3	2.1	1.1
2	4	19.3	2.4	22.0	1.0	2.8	2.1	0.9
3	11	12.3	2.8	13.2	2.4	0.9	0.9	0.3
TOTAL	18	15.1	4.6	16.8	5.3	1.7	1.7	0.6

•The program objective of students mastering one CREST skill per twenty days of instruction was met in the fall but not in the spring.

Results of the Criterion Referenced English Syntax Test

James Madison

Test Level	Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	MASTERY Mean	MASTERY S.D.	Mean Mastery Per Month
				FALL				
1	11	20.8	3.6	23.9	1.9	3.1	2.3	1.0
2	6	22.0	1.8	23.3	1.2	1.3	0.8	0.4
3	2	14.5	0.7	15.0	0.0	0.5	0.7	0.2
TOTAL	19	20.5	3.6	22.8	3.2	2.3	2.0	0.7
				SPRING				
1	2	20.0	1.4	24.0	0.0	4.0	1.4	1.4
2	7	19.7	3.5	24.4	0.8	4.7	3.1	1.6
3	1	11.0	0.0	13.0	0.0	2.0	0.0	0.8
TOTAL	10	18.9	4.0	23.2	3.6	4.3	2.8	1.5

- The objective of students mastering an average of one CREST skill per twenty days of instruction was met in the spring but not in the fall.

Results of the Criterion Referenced English Syntax Test

F.D.R.

Test Level	Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	MASTERY Mean	MASTERY S.D.	Mean Mastery Per Month
				FALL				
1	18	15.1	5.6	21.4	3.7	6.3	4.1	2.9
2	22	17.6	4.7	22.5	2.3	4.9	3.1	2.2
3	63	10.9	2.8	13.0	2.2	2.1	1.8	1.0
TOTAL	103	13.1	4.8	16.5	5.1	3.4	3.1	1.5
				SPRING				
1	15	21.9	3.4	23.8	1.9	1.9	2.2	0.6
2	19	18.6	6.6	22.4	3.1	3.8	4.3	1.1
3	54	12.2	2.6	13.4	1.8	1.2	1.4	0.4
TOTAL	88	15.3	5.6	17.1	5.2	1.9	2.6	0.5

- The objective of students mastering an average of one CREST skill per twenty days of instruction was met in the fall but not in the spring.

APPENDIX D

Passing Rates in Content-Area Courses

COURSE	FALL Number of Students	FALL Percent Passing	SPRING Number of Students	SPRING Percent Passing	TOTAL Overall Passing Rate
			James Madison		
Math	55	87.3	52	94.2	90.7
Science	40	100.0	42	95.2	97.5
Social Studies	54	100.0	-	-	100.0
		95.3		94.6	95.1
			F.D.R.		
Math	109	98.2	98	98.0	98.1
Science	111	98.2	102	94.1	96.2
Social Studies	119	97.5	96	96.9	97.2
		98.0		96.3	97.2
			South Shore		
Math	33	90.9	26	100.0	94.9
Science	24	100.0	22	90.9	95.6
Social Studies	33	100.0	26	100.0	100.0
		96.7		97.3	96.9

- Program students at all three sites had overall passing rates of at least 95 percent. Thus the program objective was met.

APPENDIX E

South Shore

SUPPORT SERVICES

TYPE OF SERVICE	STAFF PERSON(S) RESPONSIBLE	FREQUENCY* OF SERVICE OFFERED	LANGUAGE IN WHICH SERVICE IS OFFERED
COUNSELING			
◦ ACADEMIC	Site Coordinator Project Director	Bi-monthly	English and native language
◦ PERSONAL	All Staff	Daily	English and native language
◦ CAREER ORIENTATION	Site Coordinator	Daily	English and native language
◦ COLLEGE ADVISEMENT	Site Coordinator College Advisor	Weekly	English and native language
◦ INDIVIDUAL METROGUIDE	Site Coordinator	Semesterly	English and native language
◦ GROUP	Site Coordinator Project Director	Weekly	English
REFERRALS			
◦ IN-SCHOOL	Site Coordinator	As needed	N/A
◦ OUT-OF-SCHOOL	Site Coordinator	As needed	N/A
CAREER/VOCATIONAL			
◦ PLACEMENTS	Site Coordinator	As needed	English
◦ TRAINING Guest Speakers		Bi-monthly	English
◦ LABORATORIES			
◦ CAREER INFUSION	ESL Teachers	Monthly	English
◦ ADVISEMENT	Site Coordinator	As needed	English and native language
TUTORING	Resource Teacher	Daily	English and native language

*Please report frequency in daily, weekly, monthly, bimonthly, semisemesterly, or semesterly rates.

TYPE OF SERVICE	STAFF PERSON(S) RESPONSIBLE	FREQUENCY* OF SERVICE OFFERED	LANGUAGE IN WHICH SERVICE IS OFFERED
FAMILY CONTACTS			
∘HOME VISITS	N/A		
∘TELEPHONE	All Staff	As needed	English and native language
∘MAIL	Site Coordinator	As needed	English and native language
∘PROGRAM ACTIVITIES	Project Director	Semesterly	English and native language
∘SCHOOL ACTIVITIES	Project Director Guidance Department	Semesterly	English
PARENT INVOLVEMENT			
∘CLASSES	N/A		
∘WORKSHOPS	N/A		
∘ADVISORY COMMITTEE	Project Director	Bi-monthly	English and native language
OTHER: (Specify) Job Placement	Site Coordinator	As needed	English

*Please report frequency in daily, weekly, monthly, bimonthly, semisemesterly, or semesterly rates.

James Madison

SUPPORT SERVICES

TYPE OF SERVICE	STAFF PERSON(S) RESPONSIBLE	FREQUENCY* OF SERVICE OFFERED	LANGUAGE IN WHICH SERVICE IS OFFERED
COUNSELING			
• ACADEMIC	Fern Berenberg	As necessary	Eng/Spanish
• PERSONAL	Fern Berenberg	"	"
• CAREER ORIENTATION	Fern Berenberg	"	"
• COLLEGE ADVISEMENT	Beverly Cooper Fern Berenberg	"	"
• INDIVIDUAL	Fern Berenberg	"	"
• GROUP	Fern Berenberg		"
REFERRALS			
• IN-SCHOOL	Fern Berenberg		
• OUT-OF-SCHOOL			
CAREER/VOCATIONAL			
• PLACEMENTS	Fern Berenberg		"
• TRAINING			"
• LABORATORIES			
• CAREER INFUSION			
• ADVISEMENT	Fern Berenberg		"
TUTORING			

*Please report frequency in daily, weekly, monthly, bimonthly, semisemesterly, or semesterly rates.

TYPE OF SERVICE	STAFF PERSON(S) RESPONSIBLE	FREQUENCY* OF SERVICE OFFERED	LANGUAGE IN WHICH SERVICE IS OFFERED
FAMILY CONTACTS			
•HOME VISITS			
•TELEPHONE	Fern Berenberg - Maryann Cacchiarelli Ed Jenner	Daily	French, English, Spanish.
•MAIL	Fern Berenberg	Weekly	Eng. Spanish
•PROGRAM ACTIVITIES			
•SCHOOL ACTIVITIES	Fern Berenberg		
PARENT INVOLVEMENT			
•CLASSES			
•WORKSHOPS	Fern Berenberg	semi-semester	Eng/Span
•ADVISORY COMMITTEE			
OTHER: (Specify)			

*Please report frequency in daily, weekly, monthly, bimonthly, semisemesterly, or semesterly rates.

Franklin D. Roosevelt

SUPPORT SERVICES

TYPE OF SERVICE	STAFF PERSON(S) RESPONSIBLE	FREQUENCY* OF SERVICE OFFERED	LANGUAGE IN WHICH SERVICE IS OFFERED
COUNSELING			
◦ ACADEMIC	Site Coordinator Project Director	as needed	English and native language
◦ PERSONAL	All staff	daily	English and native language
◦ CAREER ORIENTATION	Site coordinator	daily	English and native language
◦ COLLEGE ADVISEMENT	Site coordinator College advisor	as needed	English and native language
◦ INDIVIDUAL Metroguide	Site coordinator	as needed	English and native language
◦ GROUP	Site coordinator Project director	weekly	English
REFERRALS			
◦ IN-SCHOOL	Site coordinator	as needed	N.A.
◦ OUT-OF-SCHOOL	Site coordinator	As needed	N.A.
CAREER/VOCATIONAL			
◦ PLACEMENTS	Site coordinator	as needed	English
◦ TRAINING			
◦ LABORATORIES			
◦ CAREER INFUSION	ESL teachers	monthly	English
◦ ADVISEMENT	Site coordinator	as needed	English and native language
TUTORING	Resource teacher	Daily	English and native language

*Please report frequency in daily, weekly, monthly, bimonthly, semisemesterly, or semesterly rates.

TYPE OF SERVICE	STAFF PERSON(S) RESPONSIBLE	FREQUENCY* OF SERVICE OFFERED	LANGUAGE IN WHICH SERVICE IS OFFERED
FAMILY CONTACTS			
◦HOME VISITS	N.A.		
◦TELEPHONE	All staff	as needed	English and native language
◦MAIL	Site coordinator	as needed	English and native language
◦PROGRAM ACTIVITIES	Project director	Semesterly	English and native language
◦SCHOOL ACTIVITIES	Project director Guidance Dept.	semesterly	English and native language
PARENT INVOLVEMENT			
◦CLASSES	N.A.		
◦WORKSHOPS	N.A.		
◦ADVISORY COMMITTEE	Project director	Bi-monthly	English and native language
OTHER: (Specify)			
Job placement	site coordinator	as needed	English

*Please report frequency in daily, weekly, monthly, bimonthly, semisemesterly, or semesterly rates.

SOUTH SHORE HIGH SCHOOL
RINA STEMPEL, PRINCIPAL

BILINGUAL/ESL DEPARTMENT
A. BURSZTYN, PROJECT DIRECTOR

APPENDIX F

Date _____

Dear _____ _____ _____

_____ is a student in your class who is participating in a peer tutoring program. He/she will meet regularly with his/her peer on _____, period _____.

Please excuse this student's absence at these times. He/she will report to your class for attendance at the beginning of the period and will return at the end of the period to get the homework.

This student understands that he/she is responsible for all work missed during these periods. Should you plan a test or special activity that requires his/her attendance, please inform the student in advance.

Thank you for your cooperation.

Sincerely,

Alberto Bursztyn
Project Director
Bilingual Department

jm

APPENDIX G

AWARDS AT GRADUATION TO B.E.A.M.S. SENIORS

Franklin D. Roosevelt

Yang, Fai	Alexander medal - highest honors in art
Cheung, Wai Han	St. Gaudens medal - excellence in draftsmanship Arista Presidential Academic Fitness Awards
Tejeda, Robert	Foreign language achievement award Presidential Academic Fitness Awards
Kim, Won	Joint Association of Music Supervisors of N.Y.C. Awards - Concert band Presidential Academic Fitness Award Arista
Vindman, Leonid	Joint Association of Music Supervisors of N.Y.C. Awards - piano Social studies medal Social studies Marlene Ellen Nussbaum Award Advanced Placement American History awards Governor's Citation on Scholastic Achievement Presidential Academic Fitness Award Scholarship award New York State Regents Scholarships
Au Yeung, Kwan Kwan	N.Y.S. Science supervisors' awards - Chemistry
Lui, Wai Yee	Chemistry teachers club of New York New York State Regents Scholarships
Xu, Yun Cheng	National Science Supervisors' awards Arista Presidential Academic Fitness Awards
Luong, Thai	Presidential Academic Fitness Awards UFT Scholarship Award Arista Governor's Citation on Scholastic Achievement Scholarship Awards
Luong, Ngoc	Governor's Citation on Scholastic Achievement Scholarship Awards Presidential Academic Fitness Awards Arista
Vu, Diep	Scholarship Awards Arista Presidential Academic Fitness Awards Governor's Citation on Scholastic Achievement New York State Regents Scholarships
Castellanos, Mayra	Scholarship award Foreign Student Award
Rotman, Regina	Society of women engineers awards Presidential Academic Fitness Awards Arista
Mohammed, Munther	Presidential Academic Fitness Awards
Wong, Tat	Presidential Academic Fitness Awards
Yang, Fai	Presidential Academic Fitness Awards
Chojnowska, Yolanta	Presidential Academic Fitness Awards Senator Solomon's merit award Arista
Chan, Yuk Ming	Presidential Academic Fitness Awards
Cao, Yi Qing	Presidential Academic Fitness Awards Arista

APPENDIX H

FALL '86 SEMESTER

University Courses Attended by Staff (Professional and Paraprofessional)

List Staff Titles	Institution	Courses	Grade P/F/ Inc/NA	Total No. of Credits Taken	Applicability of Coursework to Program		
					Hardly	Somewhat	Very
Alberto Bursztyn, Project Director South Shore High School	Columbia University	1) Cognitive Development	P	3			X
		2) Proseminar in Social Psychology	P	3			X
Marie Spadaccini, Site Coordinator/Grade Advisor South Shore High School	Long Island Univ.	1) Understanding Human Development	P	3			X
		2) Family Counseling in An Urban Setting	P	3			X
Janice Miglino, Secretary South Shore High School	Kingsborough Community College	1) Advanced Stenography	P	3			X
Olga Tune, Teacher South Shore High School	Brooklyn College	1) Strategies for Integrating Children With Handicapping Conditions Into the Educational Mainstream	P	3			

SPRING '87 SEMESTER

University Courses Attended by Staff (Professional and Paraprofessional)

List Staff Titles	Institution	Courses	Grade P/F/ Inc/NA	Total No. of Credits Taken	Applicability of Coursework to Program		
					Hardly	Somewhat	Very
Alberto Bursztyn, Project Director South Shore High School	Columbia University	1) Review-Research/Counseling Psychology	P	3			X
		2) Psychotherapy Theory: Dynamic Approach	P	3			X
		3) Effectively Utilizing Cultural and Ethnic Difference in Counseling & Psychotherapy	P	2			X
Marie Spadaccini, Site Coordinator/Grade Advisor South Shore High School	Long Island Univ.	1) Practicum In Group Work, I	P	3			X
		2) Diagnostic Tools for Measurement	P	3			X
Janice Miglino, Secretary South Shore High School	Fordham University	1) Exceptional Youth in The Regular Classroom	P	3			
	Kingsborough Community College	1) The School Secretary II	P	2			X

SPRING '87 SEMESTER

University Courses Attended by Staff (Professional and Paraprofessional)

List Staff Titles	Institution	Courses	Grade P/F/ Inc/NA	Total No. of Credits Taken	Applicability of Coursework to Program		
					Hardly	Somewhat	Very
Olga Tune, Teacher							
South Shore High School	Fordham Univ.	1) Exceptional Youth In The					
		Regular Classroom	P	3			
	Adelphi Univ.	2) Teaching of Reading and					
		Study in the Secondary Schools	P	3			X
Ida Maryanovskaya, Teacher	Adelphi Univ.	1) Teaching of Reading and					
South Shore High School		Study in the Secondary Schools	P	3			X
		2) Treating Reading Problems of					
		Exceptional Learners	P	3			X
Nancy Croce, Teacher							
Franklin D. Roosevelt H.S.	Hunter College	1) Language and Culture	P	3			X

SUMMER '87 SEMESTER

University Courses Attended by Staff (Professional and Paraprofessional)

List Staff Titles	Institution	Courses	Grade P/F/ Inc/NA	Total No. of Credits Taken	Applicability of Coursework to Program		
					Hardly	Somewhat	Very
Alberto Bursztyn, Project Director South Shore High School	Teachers College	1) Probability and Statistical Inference		3			x

FRANKLIN DELANO ROOSEVELT HIGH SCHOOL.
5000 20TH AVENUE
BROOKLYN, NEW YORK 1204
TELEPHONE: 256-1346

ALFRED ELLISON E
PRINCIPAL

AARON M. MILLER
JOHN SISTI
ASSISTANT PRINCIPALS

March 3, 1987

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Dear ____________________:

We are proud to inform you that ____________________ is participating in the program that enabled our students to take courses at Brooklyn College (see the article below).

Bilingual Students Join Bklyn College Program

Gifted bilingual students at South Shore, James Madison and Franklin Delano Roosevelt High Schools, are currently in a program geared to suit their needs.

As part of this program, 23 students will be attending courses at Brooklyn College in their senior year. On January 27, the dean of Liberal Arts and Science at Brooklyn College, Wendy Fairey, and Associate dean, Mary Ostereicher, welcomed the participating students to the college. Present at this orientation were bilingual counselors representing the schools and graduates of bilingual programs presently attending Brooklyn College.

This program, known as Project B.E.A.M.S. (Bilingual Education for Achievement in Mathematics and Science) directed by Alberto Bursztyn, has been possible through an Education Department grant which was awarded in October of 1986 to the Office of the Superintendent of Brooklyn High Schools.

The Canarsie Courier,

Thursday, February 12, 1987

Students in the program and their parents should feel free to visit us in room 415, the Title VII office, between the hours of 8 a.m. and 2 p.m.

Yours sincerely,

C. Seuling P. Valenti
Title VII Coordinators

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