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ABSTRACT

This report describes and presents 1980-81 evaluation results for Project Rescate at John Jay High School in New York City. The project, which was funded under Title VII of the Elementary Secondary Education Act, provided instruction in English as a Second Language and in native language skills for limited proficient students. Bilingual instruction in science, mathematics, and social studies was provided for Spanish speaking students, while those from French Creole (Haitian), Italian, or Portuguese backgrounds were placed in mainstream classes for content area instruction, but were eligible for tutorial support through the bilingual program. Some students whose dominant language was English were involved in the program to facilitate social integration. The report describes the setting in which the program was carried out; student characteristics; program history, funding, organization, goals and objectives; instructional content and procedures; strategies to avoid participant dropouts; curriculum development; staff development; and parent/community involvement. Student response to the program is determined by examining students' attendance, participation in extracurricular activities, achievement of honors/awards, post-graduation plans, and general behavior patterns. Evaluation results presented include student achievement in English language development; growth in mastery of their native language; achievement in mathematics, social studies, science, and native language arts; and student attendance rates. Recommendations for program improvement are included. (Author/MJL)

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FINAL EVALUATION REPORT

E.S.E.A. TITLE VII

Grant Number: G008006387

Project Number: 5001-42-17645

JOHN JAY HIGH SCHOOL

PROJECT "RESCATE"

1980-1981

Principal:

Mr. Robert Weinberger

Project Director:

Mr. Eduardo Uribe

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WD 022 248

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A SUMMARY OF THE EVALUATION
FOR PROJECT RESCATE
JOHN JAY HIGH SCHOOL
1980 - 1981

This program, in its first year of funding, provided instruction in E.S.L. and native language skills, as well as bilingual instruction in science, mathematics, and social studies to approximately 230 Spanish-speaking students of limited English proficiency (LEP) in grades nine through twelve. In addition, E.S.L. and native language instruction were provided to approximately 25 French/Creole-speaking, 15 Italian-speaking, and 6 Portuguese-speaking LEP students in grades nine through twelve. These Haitian, Italian, and Portuguese students, although placed in mainstream classes for content-area instruction, were eligible for tutorial support through the bilingual program. An additional 35 English-dominant students, who were enrolled in the program to facilitate social integration, took part in bilingual official classes, were eligible for tutorial and supportive services, but received all instruction in the mainstream. The LEP population represented over 15 national backgrounds and varied in educational preparedness, socioeconomic status, and length of residency in the United States.

As the overall goal of the program was dropout prevention, the program staff worked toward providing and reinforcing effective classroom instruction, while the various program components stressed motivating students to come to and remain in school; providing skills to serve students outside the school setting; and providing family members with the necessary skills to negotiate their new environment. These objectives were accomplished through an effective array of supportive services including:

- Individual and group guidance to discuss students' programs and progress, to advise and assist with behavior problems, and to make referrals to outside agencies;
- Career orientation component consisting of a one-semester career orientation course in Spanish, field trips and presentations by representatives of local colleges and the armed forces, and assistance in securing part-time jobs and other kinds of work experience;
- Outreach program of visits to students' homes to reduce truancy;
- Foreign language program to give E.S.L. instruction to students' family members and to provide cultural orientation in the home setting;

- Tutoring by program teachers two periods a day;
- Alternative school for students who were unable to function in the mainstream.

Title VII funds supported three full-time professional positions, one paraprofessional, and six of the part-time specialists who participated in the family language program. All instructional services and paraprofessional assistance were provided by tax levy and Title I personnel. Development activities for staff members included monthly departmental meetings and workshops and attendance at conferences and symposia on bilingual education. Parents of participating students were involved through a Parent Advisory Committee, the Family Language Program, and the Parent Teacher Association.

Students were assessed in English language development (Criterion Referenced English Syntax Test); growth in their mastery of their native language (Interamerican Series Prueba de Lectura and staff-developed tests); mathematics achievement (New York State Regents Competency Test); mathematics, social studies, science, and native language arts (teacher-made tests); and attendance (school and program records). Quantitative analysis of student achievement indicates that:

- Program students met the criterion level of one objective mastered for each month of instruction in E.S.L.;
- In Spanish reading, students at all grade levels showed statistically and educationally significant growth.
- In mathematics achievement, although none of the students reached the minimum passing score, students at all grade levels showed statistically and educationally significant increases in raw scores on this test.
- In mathematics, in the fall term Spanish-speaking program students met the criterion for mastery (that 70 percent or more of the students would pass teacher-made examinations in mathematics). In the spring, however, only the twelfth graders in this group achieved the objective. Other program students, enrolled in mainstream mathematics courses while receiving tutoring through the bilingual program exceeded the criterion in both fall and spring.
- In science, Spanish-speaking program students reached or exceeded the criterion in both semesters except for eleventh graders in the fall. Other program students enrolled in mainstream science courses while receiving tutoring through the bilingual program, met or surpassed the criterion in both semesters, except for a small group of eleventh graders who did not achieve the objective in the fall.

--In social studies, Spanish-speaking ninth, tenth, and twelfth graders met the 70 percent criterion level. Eleventh graders met the criterion in only one of the two terms reported. Other program students enrolled in mainstream social studies courses while receiving tutoring through the bilingual program surpassed the criterion level in both semesters.

--In native language arts, Portuguese-, Spanish-, and French-speaking students surpassed the criterion for mastery. Achievement for Italian students was not reported.

--The attendance rate of program students was significantly greater than that of the entire student body, suggesting a high level of student motivation.

The following recommendations are aimed at improving the overall effectiveness of the program:

--An assessment by bilingual official class teachers of the participation of monolingual English-speaking students in the bilingual program for social integration;

--Better documentation of the actual services provided to the French-, Italian-, and Portuguese-dominant students participating in the program;

--An increase in staff involvement in policy planning and other aspects of program administration;

--The formation of a clearer language-use policy in the content areas, the restructuring of Spanish-language instruction to reflect the needs of native speakers and second language learners, the extension of E.S.L. instruction, the incorporation of a remedial mathematics course into the program, and the expansion of tutorial services;

--Strengthening community and local business ties in an effort to locate new sources of employment for program students;

--Reinforcing the successful parental involvement component, including the maintenance of the family language program;

--Conducting an assessment of existing curriculum needs and a search of available materials from central sources and other Title VII projects.

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PROJECT "RESCATE"

JOHN JAY HIGH SCHOOL BILINGUAL PROGRAM

Location: Seventh Avenue, Brooklyn, New York
Year of Operation: 1980-1981, First year of funding
Target Languages: Spanish, French/Creole, Italian
Number of Participants: 335
Principal: Robert Weinberger
Project Director: Eduardo Uribe

I. CONTEXT

COMMUNITY SETTING

The Park Slope section of Brooklyn has traditionally encompassed a heterogeneous population. While wealthy brownstone owners were concentrated along Prospect Park West and on adjacent streets, the larger area bounded by Ninth Street, Fourth Avenue, and Flatbush Avenue has been home to a racially integrated, middle- and working-class community.

Throughout the seventies, Park Slope underwent sporadic gentrification. Newcomers to the neighborhood bought up and renovated many blocks of brownstones; less affluent renters continued to dominate other blocks. In the last two years, the sharp increase in real estate values has encouraged co-op conversion. Real estate brokers in the area now advertise apartments selling at between 50 and 100 thousand dollars; few rentals are available. On Seventh Avenue, the neighborhood's commercial thoroughfare, a rapid turnover of small businesses between Lincoln Place and Third Street has produced a variety of gourmet shops, specialty bakeries, plant stores, antique shops, and moderate to expensive eateries.

In the midst of this neighborhood is situated one of the country's largest public high schools. John Jay High School occupies a square city block on Seventh Avenue, just north of the section of Park Slope which has been most fiercely upgraded. An imposing, five-story, red brick building constructed at the turn of the century, it is bounded by residential blocks lined with brownstones. Methodist Hospital and its residential units lie just to the north. The stores and businesses facing the school on Seventh Avenue continue to serve the working-class community, and have undergone less vigorous turnover than the stores above Third Street.

Park Slope residents generally send their children to local nursery and elementary schools, but for secondary education many opt for specialized public schools or private schools. John Jay draws its students from the other neighborhoods within District 15. A majority of John Jay students commute from Sunset Park, Red Hook, Prospect Heights, and Crown Heights; fewer live in the other neighborhoods served by the school, that is, in Carroll Gardens, Brooklyn Heights, Boerum Hill, Cobble Hill, Prospect Park, and South Brooklyn. For the most part, students come to John Jay from neighborhoods which have fewer economic resources than Park Slope, and many more of the problems associated with poverty and unemployment.

The disparity between the school's setting and its larger attendance area has important implications. Most evidently, John Jay brings students into a neighborhood in which few of them could afford to live. The bilingual program's family assistant, who visits students' homes, reported that their own living quarters range from dilapidated tenements

to the abandoned buildings where some "squatter" families have made homes. Often students have no space, privacy, or lighting for study.

Furthermore, the school must relate to two distinct communities: the large community which includes parents of John Jay students, but which is dispersed throughout several neighborhoods and has little cohesion; and the community which lives in the school's vicinity.

In some respects, the second community has been more involved and more vocal than the first. In an area whose residents tend to view themselves as upwardly mobile, some resentment has been stirred by the presence of a large school in which only one in five students is white. Neighborhood groups have focused public attention on problems in the school, and have pressured the administration to "clean up" John Jay -- both its grounds and its image. Residents have not hesitated to complain about students hanging out in the neighborhood during or after school hours.

The setting has, to some degree, contributed to the rapid turnover of administrators at the school. Stewardship of John Jay -- an inner city school which has known relatively little racial conflict -- brings with it a fair degree of visibility. There are in the neighborhood many individuals who are vocal and influential in community and city affairs. They may not send their children to John Jay, but they are nevertheless aware of the school and its problems, particularly its attendance and dropout rates. It appears that an administrator who does not deal successfully with these problems will not long retain his position. By the same token, an effective administrator is likely to move swiftly on to a more desirable or prestigious position. In the last five years, John Jay

has had four principals. Four assistant principals have headed the foreign language department, which includes the bilingual program.

SCHOOL SETTING

John Jay High School accepts students from District #15. Approximately 60 percent of the students in this district are Hispanic.

The South Brooklyn area, in which John Jay is situated, attracts about a thousand non-English-speaking families each year from Puerto Rico, the Dominican Republic, South American countries, Haiti, Italy, Yemen, Hong Kong, Vietnam, and other countries. As the largest high school in the area, John Jay enrolls many of the adolescent children of these families.

John Jay's enrollment has declined over the last few years. The 1980-81 enrollment of 3,025 is about three-quarters of the previous year's register. This decrease is apparently due, at least in part, to the effort expended to resolve the status of some 900 long-term truants who were, at the beginning of the year, on the rolls but not in the classroom.

The percentage of Hispanic students at John Jay -- 56 percent in 1980-81 -- approximates the figure for the district as a whole. The level of language acquisition is higher than in the district as a whole: whereas one in four Hispanic students in the district qualifies for bilingual education on the basis of the Language Assessment Battery (LAB), one in seven Hispanic students at John Jay qualifies for bilingual services.

The percentage of Hispanic students at John Jay is increasing slowly; at the same time, the number of Haitian French/Creole-dominant and Italian-dominant students has declined.

The ethnic breakdown of the student population as a whole in Autumn, 1980 was as follows:

Hispanic	56%
White, non-Hispanic	22%
Black, non-Hispanic	19%
Asian	2%
American Indian	1%

The following table indicates the home languages of John Jay students:

<u>LANGUAGE</u>	<u>NUMBER OF STUDENTS</u>	<u>NUMBER OF LEP STUDENTS</u>
Spanish	1,694	232
English	1,240	--
Creole	35	22
Italian	27	15
Other	29	9

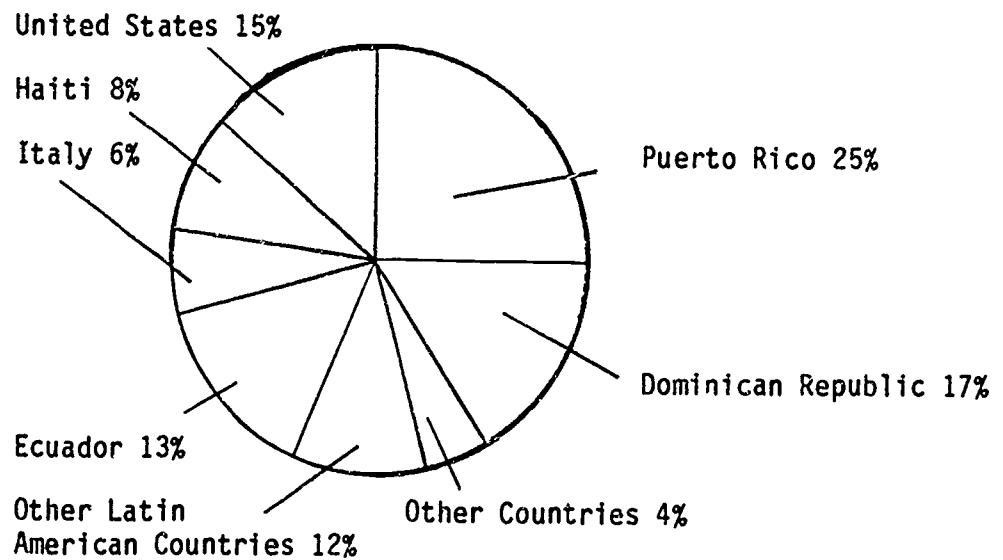
- .More than half the students at John Jay are Spanish-dominant.
- .One in seven Spanish-dominant students qualifies for bilingual services.
- .A total of 46 students dominant in languages other than Spanish or English qualify for bilingual services.

II. STUDENT CHARACTERISTICS

The bilingual program involved 335 students in 1980-81. Of these participants, about fifteen percent were English-dominant students who took part in official classes with bilingual students, and whose enrollment in the program was meant to stimulate social integration.

The remaining 85 percent of program students were all foreign-born. The following graph based on data submitted for 78 percent of the bilingual program population shows the participants' countries of origin.

Chart I. Countries of origin of program students.



.67% of program students are from Spanish-speaking countries.

.15% of participants were born in the United States.

In comparison with the previous Title VII bilingual program at John Jay, more students are from Ecuador and the Dominican Republic; fewer are from Puerto Rico. (About half the Hispanic students enrolled in the previous program were from Puerto Rico.) In this particular case, according to the program director, this means that students' level of preparedness tends to be somewhat higher. At the same time, the program has greater stability, since Puerto Rican students have a high rate of mobility; many return to or visit Puerto Rico during the school year. Table 2 presents the number and percentages of program students for whom information was provided, by native language and grade.

Table 2. Number and percentages of students by native language and grade. (N=309)

NATIVE LANGUAGE	GRADE	GRADE	GRADE	GRADE	TOTAL	
	9	10	11	12	N	%
Spanish	37	59	88	47	231	75%
English		9	13	13	35	12%
French/Creole		6	9	7	22	7%
Italian			13	2	15	5%
Portuguese	1	1	3	1	6	2%
TOTAL	38	75	126	70	309	100%

.There is greater variety of language groups appearing in the upper grade levels.

.12 percent of the students in grades 10, 11, and 12 are English-dominant.

Because there may be selective personal and environmental pressures on students in urban communities, the composition of the student body may vary from school to school and grade to grade within a school. At John Jay, the numbers of male and female students enrolled in the school are roughly equivalent. This similarity is reflected in the bilingual program where females comprise 51 percent of the population, and males comprise 49 percent.

Table 3 presents the distribution by grade and sex of bilingual students for whom information was reported.

Table 3. Number and percentages of students by sex and grade.

GRADE	SEX				TOTAL N	PERCENT OF ALL STUDENTS
	MALE		FEMALE			
	N	%	N	%		
9	22	54%	19	46%	41	13%
10	48	57%	36	43%	84	26%
11	58	46%	68	54%	126	38%
12	31	41%	45	59%	76	23%
TOTAL	159	49%	168	51%	327	100%

.The percentage of students is lowest in the ninth grade (13 percent) rises in the tenth (26 percent) and eleventh (38 percent) grades, and drops in the twelfth grade (23 percent).

.Male students appear to predominate in the lower grades, while the percentages of female students are higher in the upper grades.

Program students are, for the most part, recent immigrants who live in Spanish-speaking environments, but are generally anxious to speak English. Most arrive from their native countries having mastered at least rudimentary skills. One staff member noted that some come from their native countries better prepared than their American-educated peers. Most students seem to be of average ability; in cases where language acquisition has been extremely slow, staff members have sometimes found it difficult to distinguish cognitive problems from possible learning disability. But most stated that these cases are the exception rather than the rule.

Because so many of the bilingual program students are immigrants, many have suffered interrupted schooling, or because of a lack of educational opportunities in their countries of origin, have received fewer years of education than their grade level would indicate. Bilingual program students are reported by age and grade in Table 4.

As Table 4 indicates, the fact that so many students are overage may have implications for interpreting student outcomes and setting standards for expected rates of growth. These are students who have missed a year or more of school, whose grade placement may reflect their age more than their prior educational preparation. As a result they may have a lack of cognitive development in their native language which must be addressed, as it has implications for their ability to acquire oral and literacy skills in English.

Table 4. Number of students by age and grade.* (N=330)

AGE	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
14	1				1
15	9	9	1		18
16	11	31	9		51
17	14	27	48	7	93
18	6	16	42	27	91
19		3	23	22	48
20			2	15	17
21			4	6	10
22				1	1
TOTAL	41	85	126	78	330

Percent
Overage
For Their
Grade

83%

54%

56%

56%

*Shaded boxes indicate the expected age range for each grade.

.58 percent of the program students are overage for their grade.

.The highest percentage of overage students occurs in the ninth grade.

When members of the bilingual staff were asked what qualities might distinguish these students from others they have encountered in the school system, they mentioned the following characteristics:

Program students seem to be oriented toward working. More than half submitted CETA applications, for example. They tend to strive toward the independence and visible success which they feel that entry into the work force might offer.

Several teachers stressed the expressiveness and verbal skills of students in their native languages. Many speak colorfully; several show talent in art, music, poetry. Many are interested in politics, particularly in relation to their native countries. Students most often view these interests as a source of personal satisfaction, not as a career possibility or as an academic pursuit.

In short, students are motivated, have a fair level of skills, and are well disposed -- at least when they first arrive -- toward acquisition of English language and other skills. They tend to be less hampered than mainstream students by some kinds of problems. For example, drug abuse -- while not unknown in the bilingual program -- is less prevalent than in the mainstream. When a Phoenix House representative addressed a P.T.A./bilingual program meeting which was attended by several bilingual program students, the discussion that followed suggested that the problem is not severe.

At the same time, students are very much affected by problems of adjustment. Many are weighted down by family responsibilities, as they serve as caretakers for younger children, interpreters to parents and other relatives, or as emotional supports to parents who are dealing with perplexing and frustrating bureaucratic, legal, and economic difficulties. While neighborhood institutions, including the Pentacostal and other churches, provide some support to families, the parents tend to rely heavily on their adolescent children.

4

Housing is a particularly severe problem, according to the family assistant who has visited the sub-standard quarters in which many families of bilingual students have settled. In addition, the tough sub-culture in some areas where some of the families have made homes draws some bilingual program students into gangs, and has promoted truancy. Students who live in an area of Sunset Park, between Third and Fifth Avenues, have been particularly susceptible to this influence.

Program participants represent a rather mobile group: about 40 percent of the population changes during the year. At the same time, admissions to the bilingual program throughout the year occur at the rate of about seven to ten per month. The number of students who leave is about the same, so the overall number has remained stable. But testing and record-keeping are hampered by these shifts. Furthermore, parents often fail to inform the school of the family's departure, aggravating the already burdensome problem of record-keeping; absentees cannot be distinguished readily from transfers. The introduction of Metrolab student identification numbers has helped, but this does not resolve the status of students who move outside the city.

III. PROGRAM DESCRIPTION

HISTORY

Prior to 1975, tax-levy funds supported English as a second language (E.S.L.) classes for non-English-dominant John Jay students. One staff member was providing guidance in Spanish or French on a need basis; no other supplementary services were available.

The demonstrable need for bilingual services in the school was met with the funding, in 1974, of a five-year Title VII program. This was a basic bilingual program, offering E.S.L. and content-area instruction to three groups which were, at the time, roughly equivalent in numbers: Spanish-dominant, Italian-dominant, and French/Creole-dominant students.

When that program ended in 1979, and a new proposal was not funded, there was a one-year hiatus in supplementary bilingual services at John Jay. The basic instructional program remained intact; the bilingual guidance counselor retained responsibility for record evaluation and placement for bilingual students, and in this way became the figure of continuity. Other members of the bilingual staff who had furnished supplementary services returned to the classroom.

During 1979-80, the tax-levy services met the basic instructional needs of Spanish-dominant students. (The numbers of Haitian and Italian LEP students had declined through the late seventies; by 1980, these groups did not have the numbers to warrant content-area instruction in those languages.) But at the same time, statistics suggested that

the school was failing either to keep Hispanic youngsters in the classroom, or to prepare them to negotiate skillfully entry into the labor market. In that year, 60 percent of drop-outs from John Jay were Hispanic. This was somewhat higher than the percentage of Hispanic students in the school (55 percent in 1979-80). Hispanic students accounted for a significant proportion of the nearly one thousand students who were on the rolls but were not showing up at school. It became apparent that to provide bilingual instruction would not suffice in a setting where the students who needed that instruction were not in the classroom.

In 1980, a three-year Title VII proposal was submitted and funded. Stressing drop-out prevention and career education, the program placed, in supplementary positions, staff members who with one exception had not been on the staff of the previous Title VII program. The exception was the project director, who had served as a math teacher in charge of curriculum and testing, as well as consent decree and LAU coordinator.

FUNDING

Title VII funding provided three full-time professional positions, and one paraprofessional. In addition, it supported six of the part-time specialists who participated in the Family Language Program. The other teachers and paraprofessionals who participated in the program were tax-levy, with the exception of one Title I E.S.I. teacher.

The following tables indicate the funding of the program's instructional and non-instructional components:

Table 5. Funding of the instructional component (Spanish).

	FUNDING SOURCE(S)	TEACHERS	PARAPROFESSIONALS
E.S.L.	Tax levy	1	1
	Title I	1	
English Reading	Tax levy	.4	
Spanish	Tax levy	2	
Math	Tax levy	1	
	Title VII		1
Social Studies	Tax levy	1	
Science	Tax levy	1	
Shop, Art, Typing, Music	Tax levy	1	

Table 6. Funding of the non-instructional components.

	FUNDING SOURCE(S)	STAFF MEMBERS
Administration	Title VII	1 coordinator
Curriculum Development	Title VII	1 career advisor
Supportive Services	Title VII	1 resource specialist
Parental and Community Involvement	Title VII and Tax levy	10 part-time bilingual bicultural specialists
Other	Tax levy	1 paraprofessional - family assistant

PROGRAM ORGANIZATION

The bilingual program is part of the foreign languages department, under the direction of the assistant principal for foreign languages.

The newly funded program was administered in 1980-81 by a project director who was to be, according to the organizational chart approved in the proposal, directly responsible to the school's principal. The position of the program within the organization and administration of the school was not firmly settled at the beginning of the year, however. A new principal presided over John Jay in 1980-81, who was committed to delegating direct supervision of funded programs to the appropriate assistant principals.

In April, 1981, the assistant principal of the foreign languages department became head of guidance services in the school; another assistant principal, new to the school, took his place. Charged by the principal with direct supervision of the bilingual program, he quickly instituted a system of accountability designed to better document the program's progress and to oversee finances more closely. (See the discussion of staff development.)

There seemed to be some uncertainty in the spring as to how the new assistant principal's innovations would affect program administration and lines of accountability. But at the time of the evaluator's site visits these questions were being discussed and resolved.

The program enjoyed during 1980-81 the support of the principal who expressed the view that bilingual education has a significant place at John Jay. He has taken a public stance in favor of bilingual education. The faculty of John Jay is, on the whole, somewhat less supportive of the program. There is not active resentment so much as a general and sometimes demoralizing lack of acceptance. Bilingual staff members mentioned an undercurrent of resentment of those supplementary staff members who are on the payroll but not in the classroom, at least not for five periods each day. (The principal stated his view that all staff members should spend time in the classroom, at least for one period each day, to keep in touch with students.) The faculty's doubts about non-teaching assignments may be aggravated by the fear that those teachers who cannot function in more than one language may find themselves out of work as the percentage of Hispanic students increases in the school. In a more general sense, some teachers dislike governmental intrusion, and specifically the use of tax dollars to aid minority groups.

Though it persists, this attitude is apparently less intense than in previous years. Personal contact within the faculty -- between bilingual staff and other faculty members -- has improved the situation. The college advisor, who has been at John Jay for 15 years, prepared a fact sheet about the program and has made special efforts to talk to faculty members about the program. And participation by members of the non-bilingual faculty in the family language program has further improved the situation. Each department is represented in that group, so that

familiarity with the program -- its participants and its goals -- has begun to filter back to the entire faculty.

OVERALL GOALS

The principal views the overall goals of the bilingual program in the framework of his aim for the school as a whole: to improve the image of John Jay, and at the same time to strengthen the school's holding power over its students. How might this be accomplished? "You make a building safe, put in rules and regulations, and enforce them."

More specifically, the principal has directed his efforts toward dealing with the nearly one thousand students who were not appearing in school at the beginning of the school year. He sought ideally to draw them back into the school, and minimally to resolve their status as long-term absentees. He was also working toward improving attendance rates at the school: on the day of the evaluator's interview with the principal, 69 percent of enrolled students were in attendance.

Toward realization of these goals in the school as a whole, the principal instituted an alternative school in the cafeteria. The alternative school was designed to serve that core of students -- those who are truants, those with behavior problems, those with consistently failing grades -- who were not functioning in the mainstream. (Because this program served several bilingual students and drew on the services of the bilingual resource teacher, it will be described in more detail in the section on supportive services.)

The overall goals of the bilingual program were in concert with those outlined by the principal. While the program staff worked toward providing and reinforcing effective classroom instruction, its various components stressed: motivating students to come to school and to remain in school; providing skills which would serve them well outside of the school setting; and providing family members with skills which would help them to negotiate their new environments, and would at the same time reduce reliance on school-age children for the day-to-day tasks that keep students out of school.

EVALUATION OBJECTIVES

The proposal states that "RESCATE" (Rescue) is a supportive dropout prevention program offering career education, vocational training, on-the-job experiences, part-time employment in local organizations, and a follow-up system. It established long-range and immediate goals in five areas: instructional services; guidance and supportive services; curriculum development; staff development; and parental participation.

IV. INSTRUCTIONAL COMPONENT

PLACEMENT AND PROGRAMMING

Entry

According to the proposal, approximately 700 John Jay students qualify for bilingual services, based on scores on the Language Assessment Battery (LAB). Because the program was designed to serve less than half that number, program selection was supposed to be based not only on the LAB, but also on reading and math scores. However, when asked what services were available to limited English proficient (LEP) students who were not accommodated by the program, the project director responded that he knew of no students in the school who qualified for but did not receive bilingual services. (He added that there is a handful of students who receive bilingual services in the school's special education department, and several students from Asian countries who take English as a second language but receive no other bilingual services.) The discrepancy of some 300 students suggests the LEP students may have been among those who were on the rolls at the outset of the school year but who had actually left the country, or those who were long-term truants and were excluded from the records.

Another factor may be the decline in the number of recent immigrants enrolling at John Jay. Numbers are down particularly along the periphery of the attendance area, where some eligible students are opting to attend Fort Hamilton or New Utrecht High Schools. At the same time, many families are moving to southern states or are going to Puerto Rico.

As a result, all students who qualify for and need bilingual services are enrolled in the bilingual program.

Placement

As a rule, records are available from the participants' native countries, and are acquired by the program's secretarial staff without undue difficulty. At the time of admission, students are given a basic skills test in math, and the Criterion Referenced English Syntax Test (CREST) to determine the appropriate level of initial English instruction. Students are placed at grade level; unless remedial work is required, or unless a student arrives with a record of more advanced coursework, programming is fairly uniform at each grade level. If a student has already completed in the native country courses at the next grade level, he or she is usually given more English or more work reinforcing basic reading or writing skills.

While there is tracking (regents and general courses) in the mainstream, and while the previous bilingual program did have tracking, the present bilingual program does not group students by ability or educational background.

Spanish-dominant students are placed in E.S.L., native language, and content-area classes appropriate to their grade level and language ability. Haitian and Italian students receive E.S.L. and native language instruction. While the previous program offered content-area instruction in French/Creole and Italian, the enrollment figures for these groups do not now allow for such courses. Haitian and Italian program students are placed in the mainstream for content-area instruction, but are eligible for tutorial support through the bilingual program. The ten percent of

program students who are English-dominant Americans take part in official classes, and are eligible for tutorial and supportive services, but take all instruction in the mainstream.

Admissions from Feeder Schools

While placement of students newly arrived from abroad is a fairly clear-cut process, placement of students from feeder schools in the district has proved more troublesome. Many of these students who were born in Latin American countries but attended school here, are literally bilingual (though not necessarily biliterate). Technically, they do not qualify for services at John Jay, where students in the bilingual program are initially monolingual. The definitions are nebulous; at articulation meetings held in December and March, counselors and administrators of feeder schools were asked not to label applicants as "bilingual" unless they do not speak English. In practice, this has not been very effective. For the first one to two semesters, it has been difficult to identify students who are truly in need of bilingual services. The LAB has not proved to be an effective measure, according to the guidance counselor, since students repeatedly take the same test, twice each year. If a student seems uncomfortable in English during the initial interview, the guidance counselor does not require entry into the mainstream program.

TRANSITION

Mainstreaming

Decisions about mainstreaming bilingual students are made primarily in September and February and continue throughout the year as necessary. The decision is based on scores on the LAB and CREST; teachers' recommendations are also taken into account. The science teacher noted, for example, that she observes carefully who can function in English. She said that in a few cases, students who wish to remain in the program will speak Spanish in class, but break into English if they become frustrated or upset. In these cases, she refers students to the bilingual guidance counselor for placement evaluation. In any case, each student is interviewed by the guidance counselor each semester; during these interviews, the idea of mainstreaming -- of "diving into English waters" -- is explored.

The bilingual program is a two-year program. During these two years, students take two periods of English instruction (E.S.L.) per day, and take all content-area classes in Spanish. Students generally want to be mainstreamed; this takes place at the end of the second or beginning of the third year. About fifty students have completed E.S.L. instruction, but continue to receive content-area instruction in the native language. These are primarily seniors who entered the program late and need to take mandated courses to meet graduation requirements.

When students are mainstreamed, they remain enrolled in bilingual official classes. Follow-up services include programming, record-keeping, and bilingual guidance. Students may return to the bilingual program if they wish to do so after mainstreaming for ancillary services.

Parents are asked to sign their consent to mainstreaming, and are generally amenable to this step. They tend to view school representatives as authority figures, and are reluctant to question recommendations of any kind.

In an attempt to better understand the factors underlying the movement of students through and out of the program, data were collected on the reasons given for students leaving the program during the 1980-81 school year.

Table 7. Number of students leaving the program.

REASON FOR LEAVING	GRADE 9	GRADE 10	GRADE 11	GRADE 12	GRADE UNKNOWN	TOTAL
Fully mainstreamed	3	15	3	8	1	30
Discharged/ transferred to altern. program	7	3	8	2	1	21
Transferred to another school	2	2	2			6
Graduated				48		48
Returned to Native Country	1	1	2	6		10
Truant	3	5	7			15
Discharged (Marriage)		1				1
TOTAL	16	27	22	64	2	131

.Approximately 39 percent of the total program population left during 1980-1981.

.50 percent of all mainstreamed students were in the tenth grade.

.Truancy increased with grade level.

Transition to Greater English Usage within the Program

The project director stated that he knows of some programs which introduce increased usage of English within bilingual content-area courses, but noted that this has not been bilingual program policy at John Jay. He said that Title VII evaluators who observed the previous program had criticized the introduction of English terminology in a bilingual math class. Those evaluators felt that content-area instruction should be given in one language, and that English language acquisition should not be the goal of content-area teachers.

Commenting on this, the new assistant principal called it an "unfortunate theorization of instruction." He noted that while Title VII legislation specifically advocates the gradual introduction of English within the program, the Consent Decree mandates that substantive courses must be given in the native language. Program administrators are caught in a bind. He feels that it is important to introduce English in all areas but native language instruction. The cardinal principle must be students' comprehension: if they are understanding, and if instruction is at the appropriate level, then transition to greater English usage is appropriate. He commented that in some cases, students who have taken two years of E.S.L. have been mainstreaming without comprehension skills. E.S.L., he concluded, is not always sufficient to prepare a student for a successful move into the mainstream.

ENGLISH LANGUAGE INSTRUCTION

Participants were offered four semesters of E.S.L. and a supplementary English class, as indicated on the following table:

Table 8. English language instruction.

COURSE	NUMBER OF CLASSES	AVERAGE REGISTER	MATERIALS IN USE
Beginning-1	1	34	Title I curriculum, Lado Book 1
Beginning-2	3	21	Lado Book 2
Intermediate	1	22	Lado Book 3
Advanced	2	28	Lado Book 4
Supplementary English	3	28	Dixon, Modern American English *

NATIVE LANGUAGE INSTRUCTION

Spanish-dominant participants were enrolled in Spanish classes at levels three through six (intermediate levels) and level seven/eight (advanced). Except at the advanced level, students in Spanish classes included both Spanish-dominant students studying their native language, and English-dominant students for whom Spanish was either a foreign language or a language used at home by parents (but not the students' dominant language). The advanced levels included only Spanish-dominant students, and stressed the study of native cultures.

There was one section each for language instruction for native speakers of French and Italian.

The following table outlines the program of native language instruction:

COURSE	NUMBER OF CLASSES	AVERAGE REGISTER	MATERIALS IN USE
Spanish 3	1	31	Espanol Al Dia
Spanish 4	1	30	Espanol Al Dia
Spanish 5	1	32	Espanol Al Dia Book 2
Spanish 6	3	29	Espanol Al Dia Book 2
Spanish 7/8	2	30	Calidoscopio
French	1	32	Parlez-Vous Francais?
Italian	1	32	Corso Integrale

CONTENT-AREA INSTRUCTION

Science

The bilingual program offered biology I and general science I in the fall term, and the second sequence of these two courses in the spring.

In both courses, the instruction adhered to the curriculum established for mainstream science classes; the same material was introduced in translation on the same schedule. The school's two science departments (environmental and biological) have curriculum coordinators

who standardize curriculum by means of ditto sheets specifying weekly units of instruction, including experiments to be performed and supplementary material to be integrated into each class.

The bilingual science teacher reported that excellent science facilities and equipment, including tables and slides, are available. Locating appropriate textbooks has been more problematic. (See the discussion of curriculum development.) General science I, emphasizing environmental science, uses exclusively Spanish texts; general science II uses a simple English text. In the latter class, students read one or two pages on their own, then read aloud for pronunciation. The teacher then reviews vocabulary and discusses the text in Spanish. In biology, the texts are in Spanish, but here too the teacher encourages students to read in English by requiring the use of research tools such as the encyclopedia. One assignment, for example, asked biology students to look up the heart in the encyclopedia; they were asked to translate a passage. If it was too difficult, they were to copy the page and write a summary, in English, of what they had read. In addition, biology students were given weekly vocabulary quizzes.

The teacher noted that while most students fare well in science classes, some had not previously been exposed to science instruction and had problems functioning in classes.

Mathematics

Participants were offered three levels of math instruction in Spanish: pre-algebra, algebra I, and algebra II (regents-level). Less than half of the students participating in the program in 1980-81 were enrolled in mathematics classes. The math teacher urged his students to

take advantage of tutoring, which he offered on a voluntary basis during the second and eighth periods.

Social Studies

American history I and world history I were offered in the fall; world history II and economics were given in the spring. The second semester of American history was not offered in 1980-81; when the assistant principal, who assumed that post in April, was asked why the second semester had not been offered, he responded that he did not know.

The instructional materials which formed the basis of these courses are discussed in the section on curriculum development.

The tables on the following pages outline content-area instruction in the bilingual program.

Table 10. Bilingual content-area instruction (Fall, 1980).

COURSE	NUMBER OF CLASSES	AVERAGE REGISTER
Pre-algebra 1	1	30
Algebra 1	2	41
Algebra 2	1	23
Environmental Science 1	2	29
General Science	1	33
Biology 1	2	27
American History 1	2	31
World History 1	2	27

Table 11. Bilingual content-area instruction (Spring, 1981).

COURSE	NUMBER OF CLASSES	AVERAGE REGISTER
Pre-algebra 1	1	43
Algebra 1	1	26
Algebra 2	2	26
General Science 2	2	18
Biology 2	2	25
Career Education	1	33
World History 2	2	30
Economics	3	24

The project director stated that in all the courses listed above, Spanish was the language of instruction for 90 percent of class time. Each class met for five periods each week.

Mainstream Classes

Program students enrolled in mandated mainstream courses and in elective courses which suited their individual needs or interests. The following table lists mainstream classes in which participants were enrolled during both terms:

Table 12. Mainstream classes in which program students enrolled.

COURSE	NUMBER OF STUDENTS	CRITERIA FOR SELECTION
Gym	260	Required for graduation
Music	36	Student interest
Shop	35	Student interest
R.C.T.'s	65	Teacher recommendation, Performance on standardized tests in English and math
Art	25	Student interest, graduation requirements
Business math	65	Career interest
Biology, chemistry	37	Student interest
Typing/stenography	22	Student interest
American history, economics	40	Required for graduation
Regular English	40	Course sequence after fourth semester of English as a second language
Hygiene	20	Required for graduation

Staffing Pattern Content Areas

In each of the three major content areas, staff members were teaching out-of-license. The bilingual social studies teacher, science teacher, and math teacher were all licensed in Spanish, but not in the content areas. The assistant principal ascribed the staffing pattern to the shortage of qualified teachers in the city, but stressed that he had no qualms about the performance of any one of these teachers in their present assignments.

The bilingual math teacher was licensed in bilingual science, but not in math. Two non-teaching staff members were licensed in math and social studies. Thus, the overall staff did include teachers who are qualified to teach the content areas, but they were not assigned to those areas.

V. DROP-OUT PREVENTION

OVERVIEW

In its array of supportive services, the bilingual program pursues its overriding goal of drop-out prevention. To fortify the school's holding power, the bilingual program provides:

- guidance
- career orientation
- outreach program of home visits
- family language program
- tutorial program
- alternative school

GUIDANCE

Bilingual program participants, like other John Jay students, see the guidance counselor once each semester to discuss their adjustment to the school and program, and to explore the possibility of transition into the mainstream program. The bilingual guidance counselor speaks Spanish, Italian, and, to a lesser degree, French.

The counselor meets with students or with their parents at the school. He makes referrals, when appropriate, to the social worker who spends three days per week at the school, or to the school psychologist. The guidance counselor also maintains ties with community agencies and organizations which provide supplementary services. The Family Reception Center at Fourth Avenue and Ninth Street, and the Catholic Charities in downtown Brooklyn, offer outside counseling and family therapy. Students and parents sometimes resist such referrals, but when a problem warrants outside intervention, the counselor urges students to take advantage of these services. More severe problems are referred to the South Brooklyn Psychiatric Center.

For assistance in making their way through the labyrinth of bureaucratic and legal tasks that face new immigrants, the guidance counselor refers students or parents to Immigration and Naturalization authorities, or to various local agencies.

Official classes or history classes provide a context for group guidance sessions. The guidance counselor discusses such matters as required courses, credits, and standardized exams. More general conversations encourage students to compare the requirements of John Jay and the city's public school system with the expectations of their native countries' school systems.

Students are also encouraged to consult with other members of the bilingual program staff for assistance or advice. Bilingual teachers have sometimes turned to the resource teacher for advice or assistance with behavior problems. She ran a group in the alternative school, and made use of its behavior modification approach in dealing with disruptive or troubled program students. Her tack was often to draw up a personal contract with a student, as an alternative to contacting the student's parents. She stressed the importance of students' learning to live beyond the moment, to make decisions based on the conviction that there will indeed be a future.

CAREER ORIENTATION

Career orientation is a basic commitment of Project RESCATE. In the short run, this component of the program motivates students to come to school by providing information which they perceive to be of practical value. In the longer view, it orients students to entry into the labor force or the academic world.

A one-semester career education course, offered in Spanish as an elective, was taken by 33 students in the spring semester. The course made use of numerous texts and audio-visual materials acquired by the career advisor. The class was taught by the bilingual science teacher, who said that she took a traditional instructional approach. She found techniques like role-playing interview situations to be tedious and repetitive.

In conjunction with the career education class, students took trips and attended presentations made by guest speakers. They visited the United Nations in the spring; the trip stressed the use of multilingualism in careers. A visit was made to the school by a Marine Corps representative, who particularly addressed the role for women in the military. Thirty students were invited to go to Washington to learn more about the Marine Corps, but lack of funds precluded this visit. Additionally, the career advisor noted that he had hoped to plan visits to local businesses, but that local merchants were reluctant to permit high school students to come; they apparently feared vandalism or disruption of their businesses.

A further goal of the career orientation component was helping students to secure part-time jobs or other kinds of work experience. For some, these jobs meant being able to help their families; for others, being able to buy fashionable clothing was an additional incentive. About a dozen young men worked in factories; the young women found sewing or sales jobs. The few who worked in downtown Brooklyn needed English language skills to function in their jobs; the others did not.

The program has been assembling information on students' work experience, in part to allow evaluation of its efforts, and in part to award one credit of work experience to students who spend the required number of hours working at an after-school job. But record-keeping has proven difficult, since students are often reluctant to report their work status. Some work off-the-books; other worry about their families' eligibility for welfare benefits. (More than 85 percent come from families which qualify for welfare.)

In May, bilingual students participated in career day, which brought to John Jay representatives of college and other educational institutions, as well as representatives of various armed forces branches. Staff members were available to serve as interpreters when necessary.

OUTREACH PROGRAM

The bilingual program's educational assistant devoted approximately one day each week to visiting students' homes; at the beginning of each term she spent up to three days a week making such visits. Her schedule was weighted toward locating chronic truants. Her role was, in part, verification, for even if a family is known to have left the country, an underage student cannot legally be removed from the school's rolls until a new school is known and verified. Therefore, if a student has not appeared at school for some time, and letters or phone calls elicit no response, a visit is made. The family assistant said that in many cases, she finds no one at the student's address; in this case, she will attempt to speak with the landlord or with neighbors to determine whether the family remains in the city, and to learn their new address.

If she succeeds in locating the family, she still may not find the student. Many live with their extended family, and may be sent back to their parents if their presence becomes burdensome for economic or other reasons. If the student is found, the family assistant tries to talk with him or her about giving the school and the bilingual program a try. In one case, a student did not attend school throughout the fall term. The parents responded to a letter from the family assistant, and came to school for an interview. They said that they could not understand why the youngster did not want to come to school. The family assistant then went to the home and spoke with the student; she tried to promote identification with the program rather than with the school, to localize the idea of education, and make it less threatening. He seemed to be affected when she compared the school to an apartment building, which is threatening when you think about the entire building, but cozy when you picture your own apartment or your own room. The student came back to school and attended regularly throughout the spring.

The family assistant also made telephone calls to members of student's families when necessary; the guidance counselor or any other member of the bilingual staff also were encouraged to phone the families when a particular problem arose.

FAMILY LANGUAGE PROGRAM

In 1980-81, 62 bilingual students -- who are members of 33 families -- took part in the newly created Family Language Program. Coordinated by an E.S.L. teacher, whose position was funded by tax levy (60 percent) and Title VII (40 percent), the program sent ten teachers (half funded by Title VII) to students' homes to give E.S.L. instruction

to family members and to provide cultural orientation in the home setting.

After the ten part-time positions were advertised, teachers were selected from the various departments of the mainstream faculty. Each participating teacher visited from two to five families for one hour each week.

Selection was based both on need and cost effectiveness. E.S.L. classes were surveyed to identify those students most in need of services; priority was given to newly arrived students and to those with severely limited proficiency in English. In terms of cost effectiveness, priority was given to those families which have more than one child enrolled at John Jay. Additionally, it was required that at least one parent must be in the home, and that all members of the family must participate.

A Haitian student described the program in the following way:

The teacher comes to my house every Thursday. Seven or eight people come to each session -- my mother, brother, sister, friends from the building, sometimes different friends. My mother gets ready one hour or sometimes more before the teacher comes. We've had dialogues about what's happening in the world. On the day before Thanksgiving we were talking about Thanksgiving. Or when the Russians attacked Afghanistan, the teacher brought us the newspaper to show us. Each time we learn new words. Everybody in the family took a test at the beginning and at the end and we don't know the results yet but they're supposed to send them in the mail. My friends ask me what happens when the teachers come. I think they'd like to be in the program too, but you have to have a brother or sister in the school to get in. There are free trips sometimes, once to Madison Square Garden. Everybody was invited to the International Day at John Jay. When they have meetings at the school, the teacher comes to the house and drives my mother there.

The project director stressed the importance of the family language program; the school does have an adult education program which offers E.S.L., but the fees charged for this class and the distance of families' homes from the school rule out attendance for most parents.

TUTORIAL PROGRAM

The second and eighth periods have been designated for individual tutoring by program teachers. The only facility for this tutoring is the crowded bilingual office, where up to four staff members may be trying to work while the tutoring is going on. There is little quiet or privacy; students find themselves dealing with difficult material in a public setting. (During the site visit, the evaluator conducted interviews while the math teacher, sitting across the table, tried to help a student work confusing math problems.)

Tutoring is on a voluntary basis. There seems to be a small core of students who take advantage of this individualized instruction.

ALTERNATIVE SCHOOL

Description

The alternative school, a behavior modification approach introduced this year at John Jay, has no formal relationship to the bilingual program. It is designed to create an educational setting for 300 students who have been identified as unable to function in the mainstream. The basic idea, as explained by the principal, is that students are assigned to the alternative school for the first five periods of the day; the sixth period is spent in physical education. One period is spent in a behavior modification group, composed of 10 to 15 individuals, run by a teacher

who has been handpicked for that position. Four periods are spent in academic work. Students rotate from one makeshift "classroom" (a partitioned section of the cafeteria) to another, to study reading, writing, math, and G.E.D. preparation.

Students in the alternative school are told that they have been assigned there because they were not functioning in the mainstream, and that if they did not care for the assignment, they were free to be discharged. If they showed in the course of a term that they were prepared to function in the mainstream, they were discharged. In other words, they could earn their way out of the alternative school.

In 1980-81, 275 students were assigned to the alternative school; 150 were retained. The remainder either were discharged, or entered an off-site alternative school, or finished the G.E.D.

Connection with the Bilingual Program

The bilingual program's Title VII resource teacher spent one period per day in the alternative school; she ran a group which, since it was also her official class, met the first period each day. There were a few bilingual students in her group, and she reported using Spanish on an individual basis to establish a closer rapport. In general, she ran the group in English; therefore, Spanish-dominant students had limited access to the alternative program. She stated that they needed a special tutoring program, but spent most of the day in the cafeteria.

The resource teacher spoke positively about the program. Most students assigned to the alternative school initially felt punished. After a time, when they had let off steam, they began to see the advantages

of the program. The groups gave them a chance to talk through problems, to discuss why they had failed, to talk about what is important to them, to see the advantages of planning.

VI. OTHER NON-INSTRUCTIONAL COMPONENTS

CURRICULUM DEVELOPMENT

The development of materials in bilingual world history and career development occupied the career advisor and resource teacher during 1980-81. Textbook acquisition in the areas of environmental science and biology was also a priority.

Career Education

In preparation for the career education course, the career advisor developed and compiled a broad array of texts and audio-visual materials. Because it was not clear what the level of language acquisition of class members would be, he designed lesson plans and materials for self-evaluation for use with either a Spanish-dominant or an English-intensive approach.

The curriculum devised by the career advisor was intended for "emergency" use. The materials ordered for the new course took four months to arrive; it was possible that they would not be delivered in time for use in the spring semester. When other materials were received and put into use, the program-generated curriculum was put aside for reference and independent study.

Course materials were located through the National Clearinghouse for Bilingual Education (Rosslyn, Virginia) and the Bibliographic Retrieval Services (Scotia, New York). Bibliographies were consulted, including the "Offline Bibliography of the Academic and Occupational Performance of Puerto Ricans" and the Reader's Guide to Educational Publications. The career advisor also consulted other Title VII programs

in the city and the Rutgers University Curriculum Center. While some programs were apparently not anxious to share resources, others were helpful. Bushwick High School provided a curriculum entitled "L.I.F.E.: Looking Into Future Employment: A Course in Career Awareness."

Through these channels, the career advisor located and acquired the following materials:

- Dallas Independent School District's career education materials (Spanish)
- Twenty Trades to Read About (Spanish and English facing pages)
- Open Doors, What's It Like to Work in New York City (English)
- Changing Time: Education Series, Planning for Career Decisions. (Multi-media resource kit, including overhead projections, filmstrips, cassettes, activity books, stencils)
- Education Design Inc., Consiguiendo Trabajo (Getting a Job) (Practical lessons from resume through interview), parts 1 and 2.
- Careers by Hoffman, Occupational Learning Systems (cassettes in English and Spanish offering profiles on various careers)
- Armstrong, Miller, and Baum, Lifeworks: A Realistic Job Search
- Taylor, Como tener exito en el negocio de encontrar trabajo
- SRA Occupational Briefs.

Social Studies

Working toward writing a new curriculum for Spanish-dominant students in social studies, the resource teacher completed ten chapters of an independent-study course in world history. Based on standard curriculum, the text includes a guide for teachers which permits adaptation for classroom use.

The curriculum was designed to be flexible, appropriate both for program students and for community members in the family language program. Assignments built into the curriculum, include matching questions, multiple choice questions, composition topics based on issues addressed in the text, and vocabulary.

The resource teacher also assembled a variety of materials for other curricula, such as ethnic studies. Some of these are based on other programs' curricula, and might be incorporated into social studies or Spanish courses.

The resource teacher also acquired or translated materials for use with parents. A filmstrip on truancy, translated into Spanish, was used at a large meeting of the Parents' Advisory Committee.

Science

Locating science texts in the native language which met curriculum requirements and challenged students, which were sophisticated and yet accessible, has proven difficult. Since the science curricula are fixed on a week-by-week basis by the school's two science departments, the bilingual science teacher has had to adapt foreign texts to city and school standards, or to locate simple English-language texts for use by program students.

General science I, a course which focuses on the environment, uses a series of books published in Spain, entitled Ciencias.

General science II students read Pathways in Science, the simplest chemistry text in English that the teacher could locate which presents material in a way that is neither boring nor condescending.

The biology classes make use of three texts: a Mexican text entitled Biologia, and two books from the Spanish Ciencias series.

STAFF DEVELOPMENT

The strategy of staff development activities was affected in 1980-81 by the administrative shifts which occurred late in the year. Before April, 1981, staff development activities consisted of monthly departmental meetings and workshops offered to teachers and paraprofessionals by the career advisor and other members of the staff. At departmental meetings, the program staff reviewed the progress of the program in terms of the goals which had been set, discussed obstacles to their achievement, and fixed objectives for the future. In-service workshops acquainted teachers with instructional techniques, and aimed at resolving classroom problems. They focused on such issues as the techniques of mastery learning, integrating career education into the curricula of other content areas. They familiarized teachers with diploma requirements, and dealt with discipline problems. Two sessions were devoted to the topic of testing. More than one teacher stated that workshops on testing and methodology, with their practical orientation (what works, what does not) were most helpful.

In addition, the project director attended five conferences or conventions (lasting one, two, or three days), including those sponsored by:

- The New York State Office of Bilingual Education, Albany
- The New York City Office of Bilingual Education
- The New York State Association of Bilingual Education
- The Eastern Regional Management Institute

The career advisor also attended symposia at the Office of Bilingual Education.

When the new assistant principal for foreign languages assumed his post in the spring, he introduced a more rigorous staff development program. He instituted a management system which, in his view, makes non-teaching staff members more directly accountable. He required on a weekly basis from each staff member whose assignment was not primarily in the classroom, a written set of goals and objectives, and a written report on the fulfillment of those goals and objectives. He views this management system and its requirements as analogous to lesson plans and observations, by which the classroom teacher is accountable.

PARENT AND COMMUNITY INVOLVEMENT

The program has maintained contact with the parents of bilingual program students through several means: the Parent Student Advisory Committee, the family language program, the monthly newsletter, and the Parent Teacher Association.

The Advisory Committee included about a dozen members, but attendance at its monthly meetings was often three times that number. The distance of the school from the families' homes discouraged many parents from attending. But in many cases, teachers who work in the family language program have, on a voluntary basis, picked up parents and driven them to and from school for these meetings. Several meetings focused on practical matters, such as explaining graduation requirements, stressing the importance of tutoring, and helping parents to know what questions to ask when they come to school or when they speak with school representatives.

Other meetings, attended by parents and students as well as by staff members, have been the occasion for open discussion among students and parents. In some cases, entire families have come. When a filmstrip on truancy was presented, parents seemed to get a better sense of what question they might pose to their children and to school representatives: How do I know if my child is going to school? What arguments can I make when my child doesn't want to go? Another meeting raised issues about drug abuse. The resource teacher, who prepared materials for these meetings, stressed that parents of program students are often perplexed by these issues, and that the advisory committee has, in this sense, exceeded its advisory role.

The committee has also established ties with the school's P.T.A. Some members of the P.T.A. are Spanish-speaking; they invited members of the committee to meet with them, to share their concerns.

AFFECTIVE DOMAIN

Indicators of students' responsiveness to the Title VII program which fall under the affective domain include attendance participation in extracurricular activities, achievement of honors and awards, post-graduation planning, and general patterns of behavior.

Attendance

The program staff suggested that close monitoring has improved attendance markedly. Students know that if they are out of school for three days, their parents will receive a phone call or a personal visit. Tight supervision is not the only factor which is at work here; a teacher noted that Latin American children are used to the idea that they must

attend school; their parents also have this expectation. An effort must be made not so much to inculcate this as to reinforce it, to be sure it is not un-learned. Close identification with the smaller bilingual program rather than with the impersonal larger school, is maintained throughout a student's stay in high school -- beyond mainstreaming -- and in this way, attendance is reinforced.

Extracurricular Activities

Bilingual students participated in school-wide activities, particularly in sports. Boys went out for track and soccer, girls for volleyball. In addition, they took part in program activities, including the Parent Student Advisory Committee, the family language program, and wrote articles for the newsletter.

Directed by the resource teacher, the bilingual club attracted some 25 members from the bilingual program. The club met during the eighth period on Fridays; meetings involved discussions of the bilingual program -- its aims, the importance of bringing parents and students together; discussions of the changes from Latin America to the United States; planning for cultural program (International Night) which took place at the year's end; and other cultural activities.

Honors and Awards

Both the valedictorian and salutatorian at the January, 1981 commencement exercises were bilingual students; overall, 16 of the top 30 students in the class were bilingual students.

Six members of Arista, the honor society, were bilingual students. One of these was elected president of Arista.

Post-Graduation Plans

Of the twenty students who graduated in January, 13 were college bound, and six enlisted in the armed forces, with plans to continue their education later. One student returned to the native country.

Of the 43 June graduates, 29 had plans to attend college, 3 desired additional vocational or career training, and 16 hoped to obtain full-time employment at the time of the evaluation site visit.

Student Behavior/Attitudes

Conversations with bilingual students suggested that most value the program -- some seemed moderately enthusiastic; others felt more strongly that the program must not be reduced or discontinued. What would it be like to come to John Jay without the bilingual program? "Oh my God," said one student, "it would be like dropping you in a hole."

A few Haitian students who were seniors in the mainstream but had spent a year or more in the bilingual program expressed concern about the reduction of bilingual services for French/Creole-dominant students. "Most of us come from a good level in Haiti, but some kids don't have the chance," said one student who had a firm command of English, but mentioned that he had spoken no English when he entered the bilingual program two years earlier. He said he liked the E.S.L. courses. "The teacher would do anything to help me understand, draw things, or make faces."

While there were isolated violent incidents at John Jay this year, and while drug and alcohol abuse seem to be acute problems in the school, the bilingual program was relatively untouched by these problems.

VII. FINDINGS

ASSESSMENT PROCEDURES, INSTRUMENTS, AND FINDINGS

The following section presents the assessment instruments and procedures, and the results of the testing to evaluate student achievement in 1980-1981.

Students were assessed in English language development, growth in their mastery of their native language, mathematics, social studies, and science. The following are the areas assessed and the instruments used:

English as a second language -- CREST (Criterion Referenced English Syntax Test, Levels I, II, III)

Reading in Spanish -- Interamerican Series, Prueba de Lectura (Total Reading, Forms BS and AS, intermediate and advanced levels, 1950 version)

Mathematics achievement -- New York State Regents Competency Test

Mathematics performance -- Teacher-made tests

Science performance -- Teacher-made tests

Social studies performance -- Teacher-made tests

Native language arts performance -- Teacher-made tests

Attendance -- School and program records

The following analyses were performed:

On pre/post standardized tests of Spanish reading achievement, and mathematics achievement statistical and educational significance are reported in Tables 28 and 29 respectively.

Statistical significance was determined through the application of the correlated t-test model. This statistical analysis demonstrates

whether the difference between pre-test and post-test mean scores is larger than would be expected by chance variation alone; i.e. is statistically significant.

Th's analysis does not represent an estimate of how students would have performed in the absence of the program. No such estimate could be made because test norms were unavailable or inapplicable for this population, and because no appropriate comparison group was available.

Educational significance was determined for each grade level by calculating an "effect size" based on observed summary statistics using the procedure recommended by Cohen¹. An effect size for the correlated t-test model is an estimate of the difference between pre-test and post-test means expressed in standard deviation units freed of the influence of sample size. It became desirable to establish such an estimate because substantial differences that do exist frequently fail to reach statistical significance if the number of observations for each unit of statistical analysis is small. Similarly, statistically significant differences often are not educationally meaningful.

Thus, statistical and educational significance permit a more meaningful appraisal of project outcomes. As a rule of thumb, the following effect size indices are recommended by Cohen as guides to

¹Jacob Cohen. Statistical Power Analysis for the Behavioral Sciences (Revised Edition). New York: Academic Press, 1977 Chapter 2.

interpreting educational significance (ES):

a difference of $1/5 = .20 =$ small ES

a difference of $1/2 = .50 =$ medium ES

a difference of $4/5 = .80 =$ large ES

The instrument used to measure growth in English language was the Criterion Referenced English Syntax Test (CREST), which tests mastery of specific syntactic skills at three levels. Material at the beginning and intermediate levels of the CREST is broken down into 25 objectives per level, such as present-tense forms of the verb "to be" (Level I), or possessive adjectives and pronouns (Level II). Material at the advanced level (Level III) is organized into 15 objectives, such as reflexive pronouns. At each level, students are asked to complete four items for each objective. An item consists of a sentence frame for which the student must supply a word or phrase chosen from four possibilities. Mastery of a skill objective is determined by a student's ability to answer at least three out of four items correctly.

This report provides information on the average number of objectives mastered, and the average number of objectives mastered per month of treatment by students who received Title I E.S.L. instruction in fall and spring semesters (Tables 13, 15, and 17), by students receiving non-Title I E.S.L. instruction during the spring semester only, Table 18 and by students receiving non-Title I E.S.L. instruction over the entire year (Tables 20, 22, 24, 26).

Information is also provided on students' performance at the various test levels. Performance breakdowns are reported in two ways. First, Tables 14, 16, 18, and 21 contain grade and level breakdowns for

students who were pre- and post-tested with the same test level. In addition, in Tables 23, 25, and 27 a grade and test level breakdown is reported for students who were administered a higher level of the CREST when post-tested than when pre-tested. For students given different levels of the test at pre- and post-testing, it was assumed that all objectives of the pre-test level were mastered by the time of post-testing. If Levels I and III were used, the additional assumption was made that all Level II objectives were also mastered.

Rates of success of students in mathematics, science, social studies, and native language arts courses taught in the bilingual program are reported by course and by grade. These tables contain the numbers of students reported as taking the relevant courses, the number reported to have passed, and the percent passing, for fall and for spring courses separately. Data are also reported for students who were taking mainstream courses in the same content areas but received tutoring through the program. The tables reporting these data are listed below by subject content area.

<u>Subject</u>	<u>Bilingual</u>	<u>Table #</u>	<u>Mainstream</u>
Mathematics	30, 31		32, 33
Science	34, 35		36, 37
Social Studies	38, 39		40, 41
Native Language Arts	42, 43		

Comparisons of the attendance rates of program participants with that of the school as a whole are presented by language group in Table 44 and by grade in Table 45. These tables contain average rates for the school and for the various participant groups, the percent differ-

ences, values of the t statistic, and its level of statistical significance. Although the t statistic used here is slightly different than that described above, it again indicates the extent to which the observed percentage differences vary from what might be expected by chance.

*

Table 13. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. Title I-Spanish-speaking students, fall)

Grade	# of Students	Average Number of Objectives Mastered		Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
		Pre	Post			
9	6	4.8	9.3	4.5	2.8	1.6
10	14	10.0	14.3	4.3	2.8	1.5
11	38	9.8	14.1	4.2	2.8	1.5
12	10	7.8	12.6	4.8	2.9	1.7
TOTAL	68	9.2	13.6	4.43	2.83	1.56

* Post-test minus pre-test.

.Spanish-speaking Title I students showed, on average, a gain of more than one-and-a-half CREST objectives per month, or fifty-six percent above the rate set as the program objective.

.Students in all grades made outstanding gains.

Table 14. Performance of students tested on the Criterion Referenced English Syntax Test

(CREST): average number of objectives mastered by grade and test level.

(E.S.L. Title I Spanish-speaking students, fall)

Grade	LEVEL I				LEVEL II				LEVEL III			
	N	Average Number of Objectives Mastered			N	Average Number of Objectives Mastered			N	Average Number of Objectives Mastered		
		Pre	Post	Gain*		Pre	Post	Gain		Pre	Post	Gain*
9	6	4.8	9.3	4.5	--	--	--	--	--	--	--	--
10	14	10.0	14.3	4.3	--	--	--	--	--	--	--	--
11	18	10.3	14.6	4.3	16	9.2	13.6	4.4	4	10.0	12.5	2.5
12	2	8.0	13.5	5.5	7	8.1	13.3	5.2	1	5.0	6.0	1.0
TOTAL	40	9.4	13.9	4.5	23	8.9	13.7	4.8	5	9.0	11.2	2.2

Note: number of objectives for each level: Level I (25), Level II (25), Level III (15).

* Post-test minus pre-test.

. Students in higher grades more often took Levels II or III of the CREST.

. Students taking Level III show smaller gains than do those in the same grade taking a lower level of the test. This may be due, in part, to the high level of mastery at pre-test by these students, leaving little room for improvement.

Table 15. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. Title I Spanish-speaking students, spring)

Grade	# of Students	Average Number of Objectives Mastered		Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
		Pre	Post			
9	16	5.4	8.5	3.13	2.87	1.09
10	16	10.5	15.6	5.13	2.78	1.84
11	26	8.7	12.8	4.04	2.78	1.45
12	4	11.2	14.0	2.75	2.80	0.98
TOTAL	62	8.5	12.5	4.00	2.81	1.43

* Post-test minus pre-test.

.While the number of ninth graders tested increased from 6 in the fall to 16 in the spring, fewer eleventh and twelfth graders were included in data reported for this test period.

.Spring gains were very substantial (1.4 objectives per month) but were smaller than those in the fall for ninth and twelfth graders.

.In contrast to the fall, the group with the highest mastery rate in the spring was the tenth graders, while twelfth graders barely reached the criterion of one objective per month.

Table 16. Performance of students tested on the Criterion Referenced English Syntax Test

(CREST): average number of objectives mastered by grade and test level.

(E.S.L. Title I Spanish-speaking students, spring)

Grade	LEVEL I				LEVEL II				LEVEL III			
	N	Average Number of Objectives Mastered		Gain*	N	Average Number of Objectives Mastered		Gain*	N	Average Number of Objectives Mastered		Gain*
		Pre	Post			Pre	Post			Pre	Post	
9	15	5.0	8.2	3.2	1	11	13	2	--	--	--	--
10	10	8.9	13.3	4.4	6	12.8	19.0	6.2	--	--	--	--
11	12	7.7	11.1	3.4	10	10.9	15.6	4.7	4	6.5	9.5	3.0
12	2	6.5	7.5	1.0	2	16.0	20.5	4.5	--	--	--	--
TOTAL	39	6.9	10.5	3.6	19	12.2	17.3	5.1	4	6.5	9.5	3.0

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15)

* Post-test minus pre-test.

. Although a few ninth and tenth graders were give CREST Level II in the spring, most students were apparently tested in the spring at the same level at which they were tested in the fall.

. With the exception of the ninth grader, students taking Level II made especially large gains.

Table 17. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. Title I French-speaking students, fall)

Grade	# of Students	Average Number of Objectives Mastered		Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
		Pre	Post			
10	1	11.0	17.0	6.0	3.0	2.0
11	5	7.8	13.4	5.6	2.5	2.2
TOTAL	6	8.3	14.0	5.7	2.6	2.2

* Post-test minus pre-test.

.These six French-speaking, Title I students had an even higher average rate of gain than their Spanish-speaking peers.

.One tenth grader and one eleventh grader were tested at Level I while the remaining students were tested on Level II objectives.

Table 18. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. Non-Title I Spanish- and French-speaking students, spring)

Grade	# of Students	Average Number of Objectives Mastered		Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
		Pre	Post			
9	6	0.6	4.6	4.0	2.9	1.4
10	9	2.1	11.9	9.8	3.1	3.2
TOTAL	15	1.4	8.7	7.3	2.52	2.9

* Post-test minus pre-test.

.These non-Title I program participants who were tested with the CREST in the spring only, include 13 Spanish- and two French-speaking students.

.While the rate of gain by the ninth graders was quite good, the tenth graders made outstanding progress during this time period.

Table 19. Performance of students tested on the Criterion Referenced English Syntax Test

(CREST): average number of objectives mastered by grade and test level.

(E.S.L. non-Title I Spanish- and French-speaking students, spring)

Grade	LEVEL I				LEVEL II				LEVEL III			
	N	Average Number of Objectives Mastered		Gain*	N	Average Number of Objectives Mastered		Gain*	N	Average Number of Objectives Mastered		Gain*
		Pre	Post			Pre	Post			Pre	Post	
9	5	0.4	3.8	3.4	--	--	--	--	1	0	4	4
10	7	1.6	11.3	9.3	2	4.0	14.0	10.0	--	--	--	--
TOTAL	12	1.1	8.2	7.1	2	4.0	14.0	10.0	1	0	4	4

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15)

* Post-test minus pre-test.

.The size of gains made by these students, though differing by grade, is unrelated to the test level they were given.

Table 20. Results of the Criterion Referenced English Syntax Test
(CREST): number of objectives mastered, and objectives mastered
per month.

(E.S.L. Spanish-speaking students pre- and
post-tested with same level, total year)

Grade	# of Students	Average Number of Objectives Mastered		Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
		Pre	Post			
9	1	3	7	4	3.8	1.1
10	3	4.0	11.7	7.7	7.1	1.1
11	4	5.0	16.5	11.5	6.0	1.9
TOTAL	8	4.4	13.5	9.1	6.15	1.48

* Post-test minus pre-test.

.This small group had an average rate of gain very similar to that of the Title I students but, due to their longer participation (6.2 as opposed to 5.3 months) mastered even more objectives (an average of 9.1 versus 7.2).

.Eleventh graders made much larger gains than those in ninth or tenth grades.

Table 21. Performance of students tested on the Criterion Referenced English Syntax Test

(CREST): average number of objectives mastered by grade and test level.

(E.S.L. Spanish-speaking students pre- and post-tested with same level, total year)

Grade	LEVEL I				LEVEL II				LEVEL III			
	N	Average Number of Objectives Mastered *			N	Average Number of Objectives Mastered			N	Average Number of Objectives Mastered		
		Pre	Post	Gain*		Pre	Post	Gain*		Pre	Post	Gain*
9	--	--	--	--	--	--	--	--	1	3	7	4
10	2	4.0	14.5	10.5	--	--	--	--	1	4	6	2
11	2	8.0	17.0	9.0	2	2.0	16.0	14.0	--	--	--	--
TOTAL	4	6.0	15.8	9.8	2	2.0	16.0	14.0	2	3.5	6.5	3.0

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15)

* Post-test minus pre-test.

.There is little relationship between the students' grade and the level of the CREST that they were administered.

.Students taking Level III again show much smaller gains than do those taking a lower level of the test.

Table 22. Results of the Criterion Referenced English Syntax Test
(CREST): number of objectives mastered, and objectives mastered
per month.

(S.L. Spanish-speaking students pre- and
post-tested with different levels, total year)

Grade	# of Students	Average Number of Objectives Mastered		Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
		Pre	Post			
10	12	16.2	30.2	14.0	6.9	2.0
11	34	12.4	35.8	23.4	6.7	3.5
12	11	11.1	36.8	25.7	6.7	3.9
TOTAL	57	13.7	35.5	21.8	6.72	3.25

* Post-test minus pre-test.

.The large majority of non-Title I participants took one level of the CREST in the fall and a higher level as a post-test in the spring.

.Though some of the gains here are based on questionable assumptions, this group had the highest rate of gain of any Spanish-speaking group.

.These students show progressively larger gains with higher grade.

Table 23. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(E.S.L. Spanish-speaking students, pre- and post-tested with different levels, total year)

Grade	LEVELS I & II				LEVELS II & III				LEVELS I & III			
	N	Average Number of Objectives Mastered		Average Gain	N	Average Number of Objectives Mastered		Average Gain	N	Average Number of Objectives Mastered		Average Gain
		Pre(I)	Post(II)			Pre(II)	Post(III)			Pre(I)	Post(III)	
10	2	18.5	10.0	16.5	10	15.7	4.2	13.5	--	--	--	--
11	16	9.6	11.1	26.5	17	14.5	8.8	19.3	1	22	14	42
12	2	13.0	11.5	23.5	8	11.4	9.4	23.0	1	5	7	52
TOTAL	20	10.9	11.1	25.2	35	14.1	7.6	18.5	2	13.5	10.5	46.0

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

- .A majority of these students were given Level II at pre- and Level III at post-test.
- .Gains by those taking Levels I and III are most subject to overestimation due to the assumptions described above.
- .There is little relationship between students' grade and the levels of the CREST that they were administered.

Table 24. Results of the Criterion Referenced English Syntax Test
(CREST): number of objectives mastered, and objectives mastered
per month.

(E.S.L. French- and Italian-speaking students
pre- and post-tested with same level, total year)

Grade	# of Students	Average Number of Objectives Mastered		Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
		Pre	Post			
10	3	5.7	13.7	8.0	7.1	1.1
11	2	5.0	14.0	9.0	7.4	1.2
12	1	0.0	15.0	15.0	6.9	2.2
TOTAL	6	4.5	16.0	11.5	7.14	1.61

* Post-test minus pre-test.

.The average rate of gain by these students is just slightly higher than those by Spanish-speaking students who received the same level of the CREST at pre- and post-test.

.Because of their somewhat longer participation, these students mastered more objectives (an average of 11.5) than Spanish-speaking students.

Table 25. Performance of Students tested on the Criterion Referenced English Syntax Test

(CREST): average number of objectives mastered by grade and test level.

(E.S.L. non-Title I French- and Italian-speaking students pre- and post-tested with the same level, total year)

Grade	LEVEL I				LEVEL II				LEVEL III			
	N	Average Number of Objectives Mastered			N	Average Number of Objectives Mastered			N	Average Number of Objectives Mastered		
		Pre	Post	Gain*		Pre	Post	Gain*		Pre	Post	Gain*
10	1	5	17	12	1	6	15	9	1	6	9	3
11	1	2	15	13	1	8	13	5	--	--	--	--
12	1	0	15	15	--	--	--	--	--	--	--	--
TOTAL	3	2.3	15.7	13.3	2	7.0	14.0	7.0	1	6	9	3

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

* Post-test minus pre-test.

.The greatest gains were made by those students tested on Level I.

Table 26. Results of the Criterion Referenced English Syntax Test
(CREST): number of objectives mastered, and objectives mastered
per month.

(E.S.L. French- and Italian-speaking students
pre- and post-tested with different levels, total year)

Grade	# of Students	Average Number of Objectives Mastered		Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
		Pre	Post			
11	11	9.7	37.5	27.7	7.1	3.9
12	2	15.5	40.0	24.5	7.2	3.4
TOTAL	13	10.6	37.8	27.2	7.13	3.81

* Post-test minus pre-test.

.Though some of the gains here are, again, based on questionable assumptions, this group had the highest rate of gain of any group reported.

.This group also mastered by far the most objectives of any group.

Table 27. Performance of students tested on the Criterion Referenced English Syntax Test

(CREST): average number of objectives mastered by grade and test level.

(E.S.L. non-Title I French- and Italian-speaking students, pre-
and post-tested with different levels, total year)

Grade	LEVELS I & II				LEVELS II & III				LEVELS I & III			
	N	Average Number of Objectives Mastered		Average Gain	N	Average Number of Objectives Mastered		Average Gain	N	Average Number of Objectives Mastered		Average Gain
		Pre(I)	Post(II)			Pre(II)	Post(III)			Pre(I)	Post(III)	
11	6	5.3	13.8	33.5	4	14.8	5.0	15.3	1	16	9	43
12	1	15	18	28	1	16	12	21	--	--	--	--
TOTAL	7	6.7	14.4	32.7	5	15.0	6.4	16.4	1	16	9	43

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15)

* Post-test minus pre-test.

.Students tested on Levels I and then II mastered almost twice as many objectives as did those moving from Levels II to III.

.The gain by the students taking Levels I and III is, as before, the most subject to over-estimation due to the assumptions described above.

Table 28. Spanish language reading achievement.

Significance of mean total raw score differences between initial and final test scores in Spanish language achievement of students with full instructional treatment on the CIA Prueba de Lectura, level 3, forms CEs and DEs.

<u>Grade</u>	<u>N</u>	<u>Mean</u>	<u>Pre-test Standard Deviation</u>	<u>Mean</u>	<u>Post-test Standard Deviation</u>	<u>Mean Difference</u>	<u>Corr. Pre/post</u>	<u>t</u>	<u>p</u>	<u>ES</u>
9	19	41.9	12.8	56.4	15.8	14.5	.77	6.25	.001	1.43
10	40	44.2	12.1	57.2	12.1	13.0	.65	6.96	.001	1.10
11	66	49.7	16.4	66.1	20.1	16.4	.83	11.58	.001	1.43
12	26	51.2	14.3	63.4	15.9	12.2	.66	4.95	.001	.97

.Students at all grade levels showed statistically significant gains in raw scores with average gains of at least twelve raw score points in all grades.

.The educational significance of raw score gains for all grades, most especially for ninth and eleventh grades, is very large.

Table 29. Mathematics achievement.

Significance of mean total raw score differences between initial and final test scores in mathematics achievement of students on the New York State Regents Competency Test in Mathematics*

<u>Grade</u>	<u>N</u>	<u>Mean</u>	<u>Pre-test Standard Deviation</u>	<u>Mean</u>	<u>Post-test Standard Deviation</u>	<u>Mean Difference</u>	<u>Corr. Pre/post</u>	<u>t</u>	<u>p</u>	<u>ES</u>
9	19	6.8	4.2	12.1	5.8	5.3	.882	8.01	.001	1.84
10	41	10.1	5.4	15.0	6.6	4.9	.912	11.21	.001	1.75
11	65	9.3	4.6	13.5	5.6	4.2	.862	11.90	.001	1.48
12	26	11.0	5.2	16.8	6.5	5.8	.949	12.79	.001	2.51

*Minimum passing score on this test is 39 items correct out of a possible 60.

- .Students at all grade levels show statistically significant and educationally significant increases in raw scores on this test.
- .Although ninth graders have the lowest scores and twelfth graders, the highest, eleventh-grade students generally did not do as well as did tenth graders.
- .None of the students in this group reached the minimum passing score (39), though ninth-grade students are normally expected to pass this test. Thus, while showing marked improvement, these students remain far from adequate proficiency in mathematics.

Table 30. Number and percent of students passing
teacher-made examinations in mathematics.

(Spanish-speaking students)

Course	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
Pre-algebra I & II	26	26	100%	--	--	--
Pre-algebra II	--	--	--	29	18	62%
Algebra I	53	40	75%	23	11	48%
Algebra II	18	14	78%	46	29	63%
TOTAL	97	80	82%	98	58	59%

- .Approximately a third of program students were reported to be enrolled in Spanish-language mathematics courses.
- .Students' rate of passing decreased markedly from fall to spring, particularly in Algebra I.
- .In the fall term, the criterion of 70 percent of students passing was exceeded in all classes. In the spring, the criterion was not met in any mathematics course.

Table 31. Number and percent of students passing
teacher-made examinations in mathematics.

(Spanish-speaking students, by grade)

Grade	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	15	15	100%	22	15	68%
10	33	24	73%	39	18	46%
11	41	34	83%	38	21	55%
12	7	6	86%	6	6	100%
TOTAL	96	79	82%	105	60	57%

- .Most students in math courses taught in Spanish were tenth or eleventh graders.
- .Tenth graders generally had the lowest rate of passing.
- .Ninth graders had a far better rate in the fall than in the spring though they continued to reach the 65 percent criterion.
- .Only the small group of twelfth-grade students in the spring reached the criterion.

Table 32. Number and percent of students receiving tutoring through the bilingual program passing teacher-made examinations in mainstream mathematics courses.

(Portuguese-, Spanish-, and Italian-speaking students)

Native Language	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
Portuguese	2	2	100%	2	2	100%
Spanish	11	11	100%	2	2	100%
Italian	--	--	--	1	1	100%
<u>TOTAL</u>	13	13	100%	5	5	100%

.All students reported to be receiving tutoring in mathematics through the program passed their courses.

Table 33. Number and percent of students receiving tutoring through the bilingual program passing teacher-made examinations in mainstream mathematics courses.

(Portuguese-, Spanish-, and Italian-speaking students, by grade)

Grade	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	7	7	100%	2	2	100%
10	5	5	100%	1	1	100%
11	1	1	100%	2	2	100%
TOTAL	13	13	100%	5	5	100%

.Most students reported to be receiving tutoring in mathematics were either ninth or tenth graders.

Table 34. Number and percent of students passing
teacher-made examinations in science.

(Spanish-speaking students)

Course	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
General Biology I	33	28	83%	--	--	--
General Biology II	--	--	--	40	31	78%
General Science I	52	39	75%	--	--	--
General Science II	29	20	69%	47	40	85%
TOTAL	114	88	77%	87	71	82%

.Approximately one in three program students was reported to be enrolled in Spanish-language science courses in the fall, and one in four in the spring.

.The criterion of 70 percent of students passing was almost reached or exceeded in every course.

Table 35. Number and percent of students passing
teacher-made examinations in science.

(Spanish-speaking students, by grade)

Grade	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	20	18	90%	21	16	76%
10	37	30	81%	38	30	79%
11	46	30	65%	26	23	88%
12	11	10	91%	3	3	100%
TOTAL	114	88	77%	88	72	82%

- .Students at all grade levels reached or exceeded the criterion in both semesters except for eleventh graders in the fall.
- .Eleventh graders improved their performance considerably from fall to spring.

Table 36. Number and percent of students receiving tutoring through the bilingual program passing teacher-made examinations in mainstream science courses.

(Portuguese- and Spanish-speaking students)

Native Language	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
Portuguese	4	2	50%	2	2	100%
Spanish	1	1	100%	9	8	89%
TOTAL	5	3	60%	11	10	91%

.Almost all students reported to be receiving tutoring in science passed their mainstream courses.

Table 37. Number and percent of students receiving tutoring through the bilingual program passing teacher-made examinations in mainstream science courses.

(Portugese- and Spanish-speaking students, by grade)

Grade	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	2	2	100%	1	1	100%
10	1	1	100%	2	2	100%
11	2	0	0%	4	3	75%
12	-	-	-	4	4	100%
TOTAL	5	3	60%	11	10	91%

.Very few students were reported as taking mainstream science courses and receiving tutoring through the bilingual program.

.In general, this group was successful in mastering the course context.

Table 38. Number and percent of students passing
teacher-made examinations in social studies.

(Spanish-speaking students)

Course	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
World History I Academic	54	32	59%	-	-	-
World History I General	30	24	80%	-	-	-
World History II Academic	27	22	81%	10	10	100%
World History II General	-	-	-	46	36	78%
Economics General	-	-	-	62	48	77%
TOTAL	111	78	70%	118	94	80%

- Approximately one in three program students was reported to be enrolled in a Spanish-language social studies course.
- Students in world history I (academic) did not meet the criterion of 70 percent passing.
- In all other social studies courses, approximately four out of five students passed teacher-made examinations.

Table 39. Number and percent of students passing
teacher-made examinations in social studies.

(Spanish-speaking students, by grade)

Grade	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	20	16	80%	19	15	79%
10	36	28	78%	36	29	81%
11	46	30	65%	53	41	77%
12	10	7	70%	9	8	89%
TOTAL	112	81	72%	117	93	79%

.The only group failing to pass Spanish language social studies courses at or above criterion levels was the eleventh graders in fall courses.

Table 40. Number and percent of students receiving tutoring through the bilingual program passing teacher-made examinations in mainstream social studies courses.

(Portuguese-, Spanish-, French-, and Italian-speaking students)

Native Language	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
Portuguese	4	4	100%	2	2	100%
Spanish	8	8	100%	5	5	100%
French	2	2	100%	2	2	100%
Italian	-	-	-	1	1	100%
TOTAL	14	14	100%	10	10	100%

All those students tutored through the program passed their mainstream science courses.

Table 41. Number and percent of students receiving tutoring through the bilingual program passing teacher-made examinations in mainstream social studies courses

(Portuguese-, Spanish-, French-, and Italian-speaking students, by grade).

Grade	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	2	2	100%	3	3	100%
10	2	2	100%	2	2	100%
11	6	6	100%	4	4	100%
12	4	4	100%	2	2	100%
TOTAL	14	14	100%	11	11	100%

The largest group of students receiving tutoring in social studies were eleventh graders.

Table 42. Number and percent of students passing teacher-made examinations in native language arts.

(Portuguese-, Spanish-, and French-speaking students)

Native Language	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
Portuguese	1	1	100%	1	1	100%
Spanish	56	52	93%	52	44	85%
French	1	1	100%	1	1	100%
TOTAL	58	54	93%	54	46	85%

.Approximately one in six program students was reported to be enrolled in native language arts.

.The percentage of students passing native language arts was high during both terms, with a decrease from fall to spring.

Table 43. Number and percent of students passing
teacher-made examinations in native language arts.

(Portuguese-, Spanish-, and French-speaking students, by grade)

Grade	FALL 1980			SPRING 1981		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	2	2	100%	2	1	50%
10	20	19	95%	8	7	88%
11	29	26	90%	31	26	84%
12	6	6	100%	14	13	93%
TOTAL	57	53	93%	55	47	85%

- .Native language arts was most often taught to eleventh graders.
- .There was a large decline in the enrollment of tenth graders from fall to spring while enrollment of twelfth graders increased.
- .Almost no ninth graders (approximately 5 percent) received native language arts.
- .The passing rates for all groups were very high.

Table 44. Significance of the difference between attendance percentages of program students and the attendance percentage of the school, by language group.

Average School-Wide Attendance Percentage: 64.7

<u>Native Language</u>	<u>N</u>	<u>Mean Percentage</u>	<u>Standard Deviation</u>	<u>Percentage Difference</u>	<u>t</u>	<u>p</u>
Portuguese	5	96.6	2.7	31.9	29.0	.001
French	19	93.6	4.7	28.9	26.2	.001
Italian	11	92.1	7.1	27.4	24.9	.001
Spanish	151	86.5	17.6	21.8	19.8	.001
English	30	83.5	15.3	18.8	17.1	.001
TOTAL	216	87.3	16.2	22.6	20.5	.001

.All language groups had attendance rates far higher than their school's average and all differences were highly significant, statistically.

.Attendance rates for English and Spanish-speaking students were somewhat lower than for other program participants, but all rates were above 80 percent.

Table 45. Significance of the difference between attendance percentages of program students and the attendance percentage of the school, by grade.

Average School-Wide Attendance Percentage: 64.7

<u>Grade</u>	<u>N</u>	<u>Mean Percentage</u>	<u>Standard Deviation</u>	<u>Percentage Difference</u>	<u>t</u>	<u>p</u>
9	21	74.3	29.0	9.6	1.3	NS
10	48	87.1	14.6	22.4	10.6	.001
11	98	88.4	14.9	23.7	15.7	.001
12	48	90.5	9.2	25.8	19.4	.001
TOTAL	215	87.2	16.2	22.5	20.3	.001

- .Average attendance rate for all program participants was almost 90 percent.
- .Students in all but the ninth grade attended at rates which were both much higher and significantly different statistically from the school average.
- .Ninth-grade participants also attended more frequently than the school average, but because of the large variability in this group's attendance, the difference is not statistically significant.

VIII. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

In the first year of Project RESCATE, the program staff reinforced the instructional program which, in the previous year, had operated in the absence of Title VII funding. In addition, it worked toward the overriding goal of keeping students in school on a regular basis. Despite some tension occasioned by administrative changes during the year, the staff seemed to work effectively toward these ends, and to create a warm supportive environment in which students might make important adjustments to a new setting and new expectations.

Highlights of the program included: the emphasis on career awareness which was integrated into the various content areas, and which was the focus of the career orientation elective offered in the spring term; and the family language program, which touched the lives of hundreds of people in the students' communities, while helping to alleviate parents' reliance on their teenage children for tasks that keep students out of school.

In the instructional program, some modifications might be called for in the areas of English as a second language and native language instruction. (See recommendations.) In the content areas, teachers were working out-of-license, due to the shortage of qualified teachers in the city. The assistant principal for foreign languages who supervises them expressed complete confidence in their effectiveness in the classroom.

Policy concerning language usage in the content areas seemed to be ambiguous. The project director stated that because the previous program had been criticized by Title VII evaluators for using English in some content-area courses, official policy has been to use Spanish exclusively in these classes. But the science and career orientation teacher explained that she often uses English in class, and that reading English texts, translating them, and reviewing vocabulary is a regular part of her bilingual science classes. The materials generated by the career advisor for the new career orientation course was geared both to a Spanish-dominant and English-intensive approach.

The recommendations offered below touch on these and other areas of program function in more detail. In general, the program in 1980-81 made a solid start, building on the previous Title VII program, but at the same time making important shifts in emphasis. The devotion and skills of the bilingual program staff contributed to this effort.

RECOMMENDATIONS

Participant Selection

The assistant principal for foreign languages and the project director might assess the benefits of including monolingual English-speaking students in the bilingual program. These students, who constituted 15 percent of the program's enrollment, were registered in bilingual official classes in order to encourage social integration. However, the program's services to which they are entitled -- guidance, career advisement, and tutoring -- are precisely those which are provided on an individual basis. Bilingual official class teachers might be asked to

observe the degree to which the English-dominant students interact with program students and participate in the program's extracurricular activities. Including English-dominant students in the program skews data on participants' achievement. Other means of encouraging social integration might be explored.

French-, Italian-, and Portuguese-Dominant Students

Eighteen percent of program students were dominant in languages other than Spanish or English. The project director reported that these students did not receive content-area instruction in the native language, but were eligible for tutorial assistance in these areas. A future evaluation might focus on the services actually given to these students; information provided on this aspect of the program was somewhat sketchy. To what extent do they participate in program activities? in the family language program? These questions need fuller answers, since it may be difficult to provide equal resources in programs which cater to a concentration of students in one language group, and small numbers of participants who are dominant in other languages.

Administration

The principal and assistant principal should make every effort to involve the bilingual staff in discussing and planning policy changes. The assistant principal might assess whether adding to the paperwork, by requiring written weekly reports on goals and objectives, is an efficient use of time, considering the large amount of paperwork already required of the program's staff to meet reporting requirements.

Language Policy

No clear language policy governs instruction in the content areas. The use of English or Spanish in a particular course seems to hinge on the materials available, rather than on the students' needs. The program's official stance seems to be that content-area instruction is to be Spanish; however, interviews with teachers suggest that practice is inconsistent. Staff development time might well be devoted to discussing this issue.

Native Language Instruction

The assistant principal for foreign languages has suggested that Spanish instruction should be offered by two departments: one would offer Spanish as a foreign or second language; the other would gear its courses to native speakers. This seems to be a reasonable way to restructure the Spanish program.

English Language Instruction

The program of English-language instruction needs to be intensified, according to E.S.L. teachers who work with program students. Currently, each student takes two periods of E.S.L. per day: one funded by Title I and the other by tax-levy funds. The assistant principal, project director, and E.S.L. staff might explore the possibility of extending E.S.L. instruction to three years with provisions for acceleration on an individual basis.

Content-Area Instruction

Two-thirds of the program's population were Spanish-dominant and were eligible for content-area instruction in the native language.

Test results in the three content areas were reported for only half this number in any of the three content areas. If complete test outcomes were supplied to O.E.E., it must be concluded that only one-third of project students were enrolled in bilingual courses in each of the three subjects. A future evaluation might examine the program cards of numerous students, to place these percentages in their educational context.

In the area of mathematics, a remedial course might be incorporated into the program, since the math teacher's effort to provide this kind of instruction on a tutorial basis seems to be impractical, considering students' demonstrated need. A relatively high number of failures in math courses also suggests intense need in this area.

Career Orientation

The career advisor might devote less time to curriculum development in the coming years, and more time to searching out work possibilities for program students. In order to allow students to gain the kind of firsthand exposure to the work place called for in the proposal, the program needs to strengthen ties with the community, with its businesses and enterprises. The teacher of the career orientation course said that she does not care for role-playing and other simulations of the work place. But at the same time, students clearly need and want practical know-how. While the program was designed to provide practical work experience, it does not seem to have done so in its first year of operation.

Family Language Program

The family language program seems to be a cost-effective and highly beneficial undertaking which may help to keep students in school

by increasing motivation while reducing parents' reliance on their adolescent children. The program also encourages group interaction within families and within the community. Although funding cutbacks are anticipated, all efforts should be made to absorb those cuts without dispensing with this crucial effort.

Tutorial Program

Several staff members remarked on the importance of tutoring, particularly for students who are basically capable but who may become so frustrated at not understanding particular lessons that they abandon all effort. The two periods of tutoring available on a voluntary basis do not appear to be sufficient. The second period may not be available, and most students tend to go home rather than use the eighth period to seek assistance. Furthermore, the cramped space of the bilingual office is not conducive to tutorial work. The tutorial program might be expanded and run on a pull-out basis. Peer tutoring might be instituted, if funds do not allow for staff time. The assistant principal might look into the possibility of using other space in the school to allow attentiveness and privacy in tutoring on a small-group or individual basis.

Curriculum Development

A great deal of effort was expended in 1980-81 in the preparation of curricula which are now shelved and ready for independent study. While the evaluator does not doubt the excellence of these materials, priorities might be reassessed in this area. Which materials are needed now for classroom use? Are they available from other programs or from the Board of Education? A needs assessment and review of existing available materials might save time and be cost-effective.

Staff Development

Program meetings and workshops seem to be meeting the needs of teachers. Workshops in the future might address such topics as: curriculum development (what materials are lacking or insufficient in specific areas; what kinds of priorities should the program establish for this component); language policy (how should English and Spanish be mixed in content-area classes); and E.S.L. (does the English offerings available to students need to be intensified? how are mainstreamed students faring with the English provided in the program's E.S.L. classrooms?).

Parental and Community Involvement

This seems to be a particularly strong component of the program. The family language program, the active parents' advisory committee, and the materials prepared for meetings by the resource teacher, have all contributed to its strength. Efforts should be made to reinforce this component.