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**ABSTRACT.**

This report describes, presents demographic data for, and evaluates the effectiveness of a bilingual education program for 344 Hispanic students in South Bronx High School, New York. The program's goals include improvement of students' English and Spanish language skills, reinforcement of Hispanic cultural values and knowledge, enhancement of self esteem, and orientation to the culture and values that students confront in the United States. The instructional component of the program stresses early and gradual transition to a mainstream, English language program. This objective is pursued through intensive English as a second language instruction, as well as bilingual classes in science, mathematics, and social studies. The noninstructional component of the program includes emphases on curriculum and materials development, supportive services, staff development, parental and community involvement, and students' affective domain. Evaluations of students' academic performance indicate that in 1980-81, program participants who received instruction in English had higher pass rates than did those who received instruction in Spanish. This report provides several recommendations for more effective implementation of the bilingual program. (GC)

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FINAL EVALUATION REPORT

E.S.E.A. TITLE VII

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SOUTH BRONX HIGH SCHOOL  
BILINGUAL BASIC SKILLS PROGRAM  
1980-1981

Principal: Ms. Sonia Rivera

Director: Mr. Albert K. Kodjo

Prepared by the  
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UD 022 442

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## TABLE OF CONTENTS

	<u>PAGE</u>
I. Context	1
Environment	1
Project Site	3
II. Student Characteristics	5
Entry Criteria	5
Ethnic Composition	5
Language Proficiency	9
III. Project Description	11
Background	11
Organization	11
Funding	13
Staffing Pattern	15
Goals and Objectives	15
IV. Instructional Component	18
Student Placement and Programming	18
Transition	18
English Language Instruction	22
Native Language Instruction	26
Content-Area Instruction	28
Facilities: Library and Labs	32
V. Non-Instructional Component	34
Curriculum and Materials Development	34
Supportive Services	35
Staff Development	39
Parental and Community Involvement	40
Affective Domain	42
VI. Findings	44
Assessment Procedures, Instruments, and Findings	44
Summary of Findings	70
VII. Conclusions and Recommendations	72
APPENDICES	75

## LIST OF CHARTS AND TABLES

	<u>PAGE</u>
Chart 1. School and project organization.	12
Table 1. Program students' countries of origin.	6
Table 2. Number and percentages of students by sex and grade.	7
Table 3. Number of students by age and grade.	8
Table 4. Funding of non-instructional positions.	13
Table 5. Funding of instructional positions.	14
Table 6. Mainstream classes in which program students are enrolled.	22
Table 7. Instruction in English as a second language.	24
Table 8. Instruction in native language arts.	27
Table 9. Bilingual instruction in content areas, spring 1981.	29
Table 10. Results of the <u>Criterion Referenced English Syntax Test</u> (Spanish-speaking students, fall).	48
Table 11. Performance of students tested on the <u>Criterion Referenced English Syntax Test</u> (Spanish-speaking students, fall).	49
Table 12. Results of the <u>Criterion Referenced English Syntax Test</u> (Spanish-speaking students, spring).	50
Table 13. Performance of students tested on the <u>Criterion Referenced English Syntax Test</u> (Spanish-speaking students, spring).	51
Table 14. Native language reading achievement.	52
Table 15. Number of students attending courses and percent passing teacher-made examinations in mathematics (instruction in English, fall and spring).	53
Table 16. Number of students attending courses and percent passing teacher-made examinations in mathematics (instruction in Spanish, fall and spring).	55

LIST OF CHARTS AND TABLES  
(continued)

	<u>PAGE</u>
Table 17. Number of students attending courses and percent passing teacher-made examinations in science (instruction in English, fall and spring).	57
Table 18. Number of students attending courses and percent passing teacher-made examinations in science (instruction in Spanish, fall and spring).	59
Table 19. Number of students attending courses and percent passing teacher-made examinations in social studies (instruction in English, fall and spring).	61
Table 20. Number of students attending courses and percent passing teacher-made examinations in social studies (instruction in Spanish, fall and spring).	63
Table 21. Number of students attending courses and percent passing teacher-made examinations in native language arts (fall and spring).	65
Table 22. Number of students attending courses and percent passing teacher-made examinations in miscellaneous courses (instruction in English, fall and spring).	67
Table 23. Significance of the difference between attendance percentages of program students and the attendance percentage of the school.	69

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SOUTH BRONX HIGH SCHOOL  
BILINGUAL, BASIC SKILLS PROGRAM

Location: 701 St. Ann's Avenue, Bronx, New York  
Year of Operation: 1980-1981, Third Year of Funding  
Target Language: Spanish  
Number of Students: 344  
Principal: Ms. Sonia Rivera  
Program Director: Mr. Albert K. Kodjo

I. DEMOGRAPHIC CONTEXT

ENVIRONMENT

South Bronx High School is located in a devastated, partially abandoned section of the South Bronx. Facing the school to the east are burnt-out apartment buildings. A new post office building and a large, recently constructed housing project are on the north and south sides of the school. To the west are railroad tracks and vacant lots. Several blocks from the school, on Third Avenue, a business area stretching between 149th and 156th Streets includes small businesses, some chain stores, and banks.

The area's resources include hospitals and libraries, some recreational facilities (such as St. Mary's Park, located near the school), churches, community organizations, and small businesses which offer students some job opportunities or contacts. Also situated in the South Bronx are a number of educational institutions, some of which specialize in remediation. Among them is Hostos Community College of the City University of New York. The district has three high schools. While South Bronx

High School is the site of an academically-oriented bilingual project, Samuel Gompers offers a vocational bilingual project with a support team, trade shops, and C.O.D.-shared instruction with other area schools. Alfred E. Smith High School is a vocationally-oriented monolingual (English) institution teaching automotive and building trades, and architectural drafting.

With few exceptions, South Bronx High School students live in the attendance area, Community School District 7; the population of this district is approximately 70 percent Hispanic and 30 percent black American. Of the immigrant population, about 70 percent come from Puerto Rico and the balance from Central America and the Caribbean area, and, to a lesser extent, the northern countries of South America.

An index of the area's depressed economic situation is the fact that 100 percent of the school's students qualify for free lunches. A significant percentage of their families receive full or supplementary public assistance. A 1974 survey found the average annual income of area residents to be \$5,836. Factoring in the eight percent increase, nationwide, in average income (56 percent over seven years), the project staff estimated the present average annual income of area residents to be \$9,100.

The area's residents tend to be highly mobile, moving frequently within the South Bronx or to other areas of the city. The prevalence of violent crime, insecure employment (if any), and devastating fires contribute to their mobility. The desire to be near relatives and return to the native country also undermine the area's stability.



Sub-standard housing is one of the most serious problems affecting area residents, and affecting program participants. While the last year has witnessed public and private efforts to begin a renewal process, large sections of run-down and abandoned buildings remain. The systematic destruction of tenements by fire, which occurred over the last decade, has subsided to some degree; but sub-standard housing remains the norm. The lack of privacy and sufficient light in most apartments makes study difficult; students living in buildings with insufficient heat often have health problems which influence attendance.

The area's poverty and high rate of unemployment affect program students in other ways as well. Poor nutrition and health problems are common. Teenage students often take on family responsibilities -- caring for younger siblings or accompanying parents and relatives to health, social, or immigration agencies. These tasks keep students out of class and encourage withdrawal from school.

In addition, violent crime and drug addiction -- while not severe problems on school grounds -- affect the quality of students' lives.

#### PROJECT SITE

The school building, a massive, well-maintained, five-story building, covers about half a square city block, fronted by a garden. Its atmosphere is quiet, friendly, and orderly, with few evident discipline problems.

The bilingual project office is located on the fifth floor. Crowded into a room measuring about 21 by 9 feet are four desks, two file cabinets, a duplicating thermofax machine, and, in a corner, the bilingual "mini-resource" center.

## II. STUDENT CHARACTERISTICS

### ENTRY CRITERIA

Students enter the bilingual program directly from feeder schools, or are admitted as recent immigrants. A small number transfer to South Bronx from other attendance areas, and enter the bilingual program if they are found to be eligible.

Those students who score at or below the twenty-first percentile on the Language Assessment Battery (LAB) are recommended to the bilingual project; if they and their parents agree, they are admitted into the program. Limited English proficient students who do not qualify under Title VII guidelines are provided with English as a second language instruction and remedial work in the content areas with Title I and P.S.E.N. funds.

### ETHNIC COMPOSITION

Of the school's total population of 951 students, 65 percent are Hispanic and 35 percent are black American. Of the Hispanic students, about 60 percent come from Puerto Rico, 30 percent from the Dominican Republic, and the remaining 10 percent from other countries of the Caribbean, Central America, and the northern countries of South America. The Puerto Rican population includes a large group of students born in the United States.

The bilingual project serves 344 students, of whom more than two-thirds are female. A breakdown by country of origin of students for whom information was reported follows:

Table 1. Program students' countries of origin. (N=285)

<u>COUNTRY</u>	<u>NUMBER</u>	<u>PERCENTAGE</u>
Puerto Rico	132	46%
U.S. (of Puerto Rican ancestry)	83	30%
Dominican Republic	37	14%
El Salvador	9	3%
Honduras	9	3%
Ecuador	7	2%
Cuba	3	1%
Colombia	3	1%
Guatemala	1	-
Chile	1	-

.More than three-quarters of program students are from Puerto Rico, or of Puerto Rican parentage.

.Nearly a third of program students are American-born, and have entered the program from feeder schools.

.Relatively few immigrants from Central and South American countries are represented among program participants.

Because there may be selective personal and environmental pressure on students in urban communities, the composition of the student body may vary from school to school and grade to grade within a school. Table 2 presents the distribution by grade and sex of bilingual program students for whom information was provided.

Table 2. Number and percentages of students by sex and grade.

GRADE	SEX		TOTAL N	column total: percent of all students		
	MALE N	percent of grade			FEMALE N	percent of grade
9	51	37	87	63	138	46
10	28	35	53	65	81	27
11	20	28	51	72	71	23
12	6	46	7	54	13	4
TOTAL	105	35	198	65	303	100

.The percentage of students is highest in the ninth grade (46 percent) and lowest in grade 12 (4 percent).

.Female students outnumber male students in all grades.

Because so many of the South Bronx bilingual students are immigrants, their educational histories may vary considerably. 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 3.

Table 3. Number of students by age and grade.\*

AGE	GRADE 9.	GRADE 10	GRADE 11	GRADE 12	TOTAL
14	2				2
15	43	1	1		45
16	50	34	2		86
17	29	33	32		94
18	12	11	27	7	57
19	1	2	7	5	15
20			1	1	2
21			1		1
TOTAL	137	81	71	13	302

Percent  
Overage            67%            57%            51%            46%            60%  
For Their  
Grade

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

.60 percent of the bilingual program students are overage for their grade.

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

As Table 3 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.

## LANGUAGE PROFICIENCY

Program students all have some degree of proficiency in both Spanish and English; at the time of the evaluator's site visits, no program students were reported to be entirely monolingual. Some 95 percent of participants are literate in Spanish. The small number of students who are not basically literate in Spanish have typically been born in the United States, or arrived here at a very early age. Most consider English to be their dominant language: they have been subjected to Spanish linguistic demands at home, and to English linguistic demands outside of the home. These students are, for the most part, deficient in both languages, and literate in neither.

Proficiency in English runs a broad range; students are placed in E.S.L. classes which range from elementary to advanced. Performance in English is typically affected by the fact that students live in a community where they can function entirely in Spanish -- at home, in stores, banks, hospitals, places of entertainment. The community has access to Spanish television and radio broadcasts, and to Spanish-language newspapers.

Communication among peers, in and out of the home, presents a different picture. Those who were born in the United States, or came before they were fully verbal, tend to use English with their peers; if they are speaking with someone whose English proficiency is severely limited, they will use Spanish, though sometimes in a rudimentary fashion. Code-switching may result if a student is more comfortable speaking about one set of topics in Spanish and another in English.

The large majority of program students communicate with friends and family exclusively in Spanish, except when demands of the school and program necessitate English. In response to the limited opportunities to use English in the immediate neighborhood, students in the program are encouraged to participate in all school activities. They are given all possible opportunities to interact with English speakers in school, and activities such as trips are organized to expose them to parts of the city beyond their neighborhood.



### III. PROJECT DESCRIPTION

#### BACKGROUND

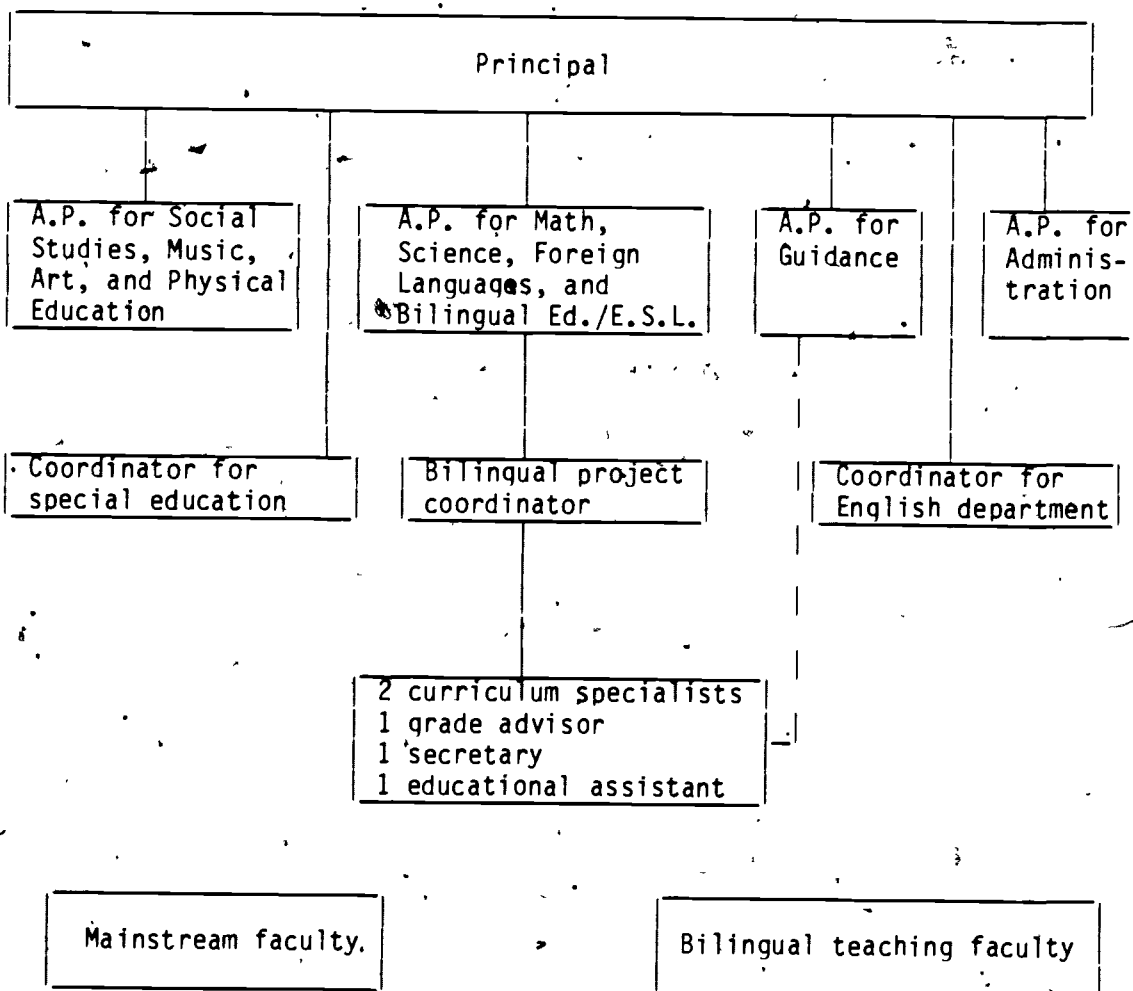
The building which until 1976 housed Junior High School 138 re-opened its doors as South Bronx High School in September, 1977. During its first year, the high school collaborated with community members to develop and submit a proposal for Title VII monies, as well as for Title I and Chapter 720 funds, to support a bilingual project. All three proposals were funded, and the project became operational in September, 1978. While Chapter 720 monies were received only for the project's initial year, Title I funds (with supplemental allocations) have been received on an ongoing basis. Title VII funds were approved for a four-year period.

#### ORGANIZATION

The school's overall administrative structure assumes the following form. Working under the school's principal are four assistant principals, who are responsible for: administration; guidance; the math, science, foreign languages, and bilingual education department; and the social studies, music, art, and physical education departments. Administrative functions are also carried out by three coordinators. The two coordinators who head the English and the special education departments are directly responsible to the principal. The third is the bilingual project coordinator, who is supervised by the assistant principal for bilingual education.

Working with the bilingual project director on the Title VII staff are two curriculum specialists, one grade advisor, an educational assistant, and a bilingual secretary. The following chart outlines the organization of the school and the bilingual project.

Chart 1. School and project organization.



The assistant principal responsible for bilingual education remarked that the school's mainstream faculty has, in general, a positive attitude toward the bilingual project. Because most of the departments which are involved with the project are under his supervision, the assistant principal has had the administrative flexibility to balance his resources to meet most of the needs of the various groups of teachers. In this way, he has been able to eliminate many sources of possible friction.

FUNDING

Non-Instructional Positions

The position of the assistant principal responsible for bilingual education is supported by tax-levy funds. Title VII funds the project's other non-teaching positions. The following table details staff positions funded by Title VII:

Table 4. <u>Funding of non-instructional positions.</u>		
	<u>FUNDING SOURCE</u>	<u>POSITION</u>
Administrative & supervision	Tax levy	1 assistant principal for bilingual education
Curriculum development	Title VII	1 curric. specialist (E.S.L.)
	Title VII	1 curric. specialist (content)
Supportive services	Title VII	1 bilingual grade advisor :
Staff development	Title VII	1 project director
Parental involvement	Title VII	1 per-session E.S.L. instructor for parents workshop
Other	Title VII	1 bilingual secretary intern
	Title VII	1 paraprofessional

As the table indicates, one E.S.L. per-session teacher who, until March 1981, was responsible for parent/community E.S.L. workshops, was supported by Title VII. (See the discussion of community and parental involvement in chapter IV of this report.)

### Instructional Positions

Tax-levy monies fund the instructional component of the bilingual project, with the exception of two E.S.L. teachers whose positions are supported by Title I/P.S.E.N. funds.

Table 5. Funding of instructional positions.

	<u>FUNDING SOURCE</u>	<u>NUMBER OF POSITIONS</u>	
		<u>TEACHERS</u>	<u>PARAPROFESSIONALS</u>
E.S.L.	Title I P.S.E.N.	2.0	1.0
Reading (English)	tax levy	0.4	
Native language	tax levy	3.6	
Math	supplemental allocation	1.0	
Social studies	supplemental allocation	1.0	1.0
Science	tax levy	1.0	
Secretarial studies	tax levy	1.0	

### Title VII Continuation Budget

The project was approved for a four-year period. When the Title VII continuation budget for 1980-81 was reduced by about four percent,

the project reduced its purchase of office and instructional supplies. The continuation budget for 1981-82 has been further reduced by approximately ten percent. (The exact amount was not known at the time of the evaluation.) Further cuts in purchases were expected. It was hoped that deficits would be made up, at least in part, by monies allocated to the Board of Education on the basis of the city's budget surplus.

#### STAFFING PATTERN

The project coordinates the work of 11 teachers and 2 paraprofessionals, who function within their respective instructional departments. Of the three E.S.L. teachers, one devotes part of her time to mainstream English instruction. Four Spanish-language teachers are in the foreign languages department; one works part-time as morning coordinator. Program students are also taught by one teacher from each of the following departments: math, science, social studies, and secretarial studies. With the exception of two per-diem E.S.L. teachers, all are licensed in their respective teaching fields. A table in the appendices outlines the function and background of the project staff.

#### GOALS AND OBJECTIVES

The bilingual project at South Bronx High School is an academically oriented basic skills program which works toward the following overall goals: improvement of students' language skills, both in English and Spanish; reinforcement of students' cultural values and knowledge of Hispanic cultures; enhancement of students' self-esteem; and orientation to the cultures and cultural values which students confront in the United States.

In expressing her support of the program's aims, the principal stressed the importance of content-area instruction in Spanish, which allows students to deal with challenging curricula, and the supportive services provided by the guidance staff, with the rest of the program and instructional staff. She noted that both the principal and assistant principal who supervise the bilingual staff have had substantial experience in bilingual education; their backgrounds lend cohesiveness to the effort.

The principal spoke about the bilingual program in the context of her goals for the school as a whole. She stressed staff development (particularly in the area of methodology) and curriculum development as important areas of concentration. Locating English-dominant Hispanic bilingual teachers to meet the needs of the growing population of English-dominant Hispanic students would help these students -- who are among the least successful either in the program or the mainstream -- to identify with their instructors and to increase self-esteem. In general, she pointed to the need for bilingual teachers whose skills and training allow them to use the Spanish language more effectively and with greater sensitivity, again with a view toward improving students' self-images.

She also emphasized the role of parents in bilingual education, and the importance of motivating parents to involve themselves in their children's education.

The principal commented that the school's ability to realize these goals will be affected by cuts in the Title VII budgets; at the time of the interview, it was not clear how deep these cuts would be. (See the discussion of plans for the future.)

A discussion with the assistant principal touched on several of the same goals. He emphasized the role of the program in permitting academic progress at the same level as mainstream students; all students take the same or parallel examinations. He stressed the program's care to involve parents in activities, and decisions, and its effort to work with parents and community leaders to help students make the traumatic transition into mainstream American culture.

#### IV. INSTRUCTIONAL COMPONENT

##### STUDENT PLACEMENT AND PROGRAMMING

Students who score below the twenty-first percentile on the English LAB and higher on the Spanish are eligible for participation in the bilingual program, and are given a number of placement tests to allow appropriate programming. Placement in an E.S.L. sequence is based on the LAB score; results on the Spanish reading exam, La Prueba de Lectura, guide placement in native language courses. Performance on teacher-made diagnostic tests determines the student's assignment to a mathematics class. The remainder of the program is filled with mandated and elective subjects, based on the school's and program's offerings and the requirements of the city and state.

For the most part, bilingual students' programs are uniform at each grade level; the exceptions are based on linguistic needs. Except for language courses, the programs of program students also parallel those of mainstream students at the same grade level. The school encourages discussion between bilingual and mainstream faculty to coordinate the planning of content-area courses, both in terms of curriculum and methodology. Tracking or streaming is not a characteristic of the bilingual program.

##### TRANSITION

###### Mainstreaming Policy

The bilingual program at South Bronx stresses early and gradual transition to a mainstream, English-language program. Students with strong language skills begin partial mainstreaming at the end of the ninth grade; the majority of students take this step at the end of the tenth.



All students are partially mainstreamed by the end of the eleventh grade, and fully mainstreamed by the end of the twelfth. While the program's goal is fully to mainstream students by the end of the eleventh grade, the exit criterion of an English LAB score above the twenty-first percentile is applied with flexibility. The recommendations of E.S.L. teachers, content-area teachers, and grade advisor are taken into account. The student and parents are brought into the process, and the assistant principal for bilingual education must authorize the decision.

Parents generally support the project's decision to mainstream their children. A small number want their children mainstreamed at the earliest possible date. (One parent refused participation in the project; this was an isolated case.) Students are also amenable to mainstreaming. A small minority resist transition; they feel that they are not prepared emotionally for that change. In these cases, the guidance department works with the student, and holds off mainstreaming until the emotional barrier has been removed. Guidance is also recommended when a student wants to be mainstreamed before being ready to work exclusively in English.

#### Partial Mainstreaming

Partial mainstreaming begins with a student's enrollment in courses which entail a relatively light reading load in English. Typing and math are typically the first mainstream courses taken by project participants.

The following term, the student is encouraged to take a science course in the mainstream. A social studies course will be added when

the student is prepared to absorb the greater amount of reading required in that area.

### Transition Within The Bilingual Program

Because the bilingual student takes content courses in Spanish as part of a process in the transition to English usage, there is movement toward a greater usage of English within bilingual content-area classes, particularly at the tenth-grade level. While the formal language policy is to use a single language exclusively as the language of instruction, this is not the general practice of program teachers. Program staff noted that the introduction of English into content-area courses depends on the students' level of comprehension.

A common strategy introduces new material in Spanish. During periods of interaction, students will speak in Spanish, but the teacher will encourage use of English to make statements or ask questions about areas in which the students feel confident. Then, the teacher might summarize the material, using as much English as possible, and preferably giving a complete summary in English. If time permits, the summary may be offered first in Spanish, and then in English.

English-language textbooks are introduced in bilingual classes during the tenth or eleventh grade. Students may read parallel texts in both languages. Some tests in content-area classes are offered in both languages. In some content-area classes, students may be offered the choice of taking tests in Spanish or English. If students pass tests taken in English, they are considered ready for mainstreaming. In general, the project staff has found that the acquisition of English skills

progresses more rapidly when English is introduced into content-area courses. This practice may also motivate students to apply themselves more conscientiously in E.S.L. and English reading classes.

#### Transition Data

Approximately 44 percent of the target population has been partially mainstreamed, and these students are taking two or more content-area courses in English. The table which follows indicates mainstream courses in which program students are enrolled. Since the program's inception, approximately 40 students have been fully mainstreamed. Of these, five have left school, another five have enrolled in colleges, and two moved to Puerto Rico. All maintain contact with the program.

Twenty-five students from the fourth-year bilingual class are to be mainstreamed during the next school year. (Five students from this class have remained in the project: three due to truancy; two for linguistic reasons.) There are no students in the project who have completed the E.S.L. sequence but continue to receive content-area instruction in Spanish.

Table 6. Mainstream classes in which program students are enrolled.

SUBJECT AREA	NUMBER OF STUDENTS		SELECTION CRITERIA
	FALL	SPRING	
Mathematics	140	153	Passing grades in prerequisite math classes; English skills
Science	123	98	Demonstrated ability and English skills
Social studies	137	164	Demonstrated ability and English skills
Physical education	344	344	Required for graduation
Fine Arts	39	9	Interest and talent
Music	40	5	Interest and talent
Typing	15	2	Interest and talent

#### Follow-Up Of Mainstreamed Students

The bilingual project maintains contact with students who have been fully mainstreamed. The grade advisor follows their progress informally, and encourages students to speak with members of the bilingual staff if problems arise, as they often do as students adjust to a new social context. Mainstreamed students may take part in the project's cultural events, in its newsletter, and in its bilingual writing team.

#### ENGLISH AS A SECOND LANGUAGE

##### Curriculum Offerings

The project offers three years (six terms) of E.S.L. study. During the fourth or senior year, the student typically enters mainstream English classes.

The first year is at the beginning level, with the first term geared specifically to newly arrived immigrant students. The third and fourth terms are intermediate courses; the fifth and sixth are transitional.

Placement at the appropriate level is based on the student's educational background and scores on tests, including the LAB and Criterion Referenced English Syntax Test (CREST). The grade equivalency of the three E.S.L. sequences with the ninth, tenth, and eleventh grades is applied with flexibility. The following table outlines the E.S.L. offerings.

#### English-Dominant E.S.L. Students

Students who, on the basis of interviews and testing are classified as English-dominant but who nevertheless fall below the twenty-first percentile on the English LAB, are enrolled in the appropriate E.S.L. class. At the same time, they take all content-area instruction in English.

#### E.S.L. Curriculum

The E.S.L. curriculum is designed to meet all Regents Competency Test (R.C.T.) requirements. The instructional objectives at each level are correlated and coded to the syntactical objectives of the Title I program, and of the CREST objectives for that level.

The focus of instruction is initially oral, and as the sequence progresses, emphasis shifts to reading and writing. In addition to regular exercises assigned by the classroom teacher, each student completes departmental exercises which are kept in a folder with a master key tabulat-

Table 7, Instruction in English as a second language.

COURSE	NUMBER CLASSES	AVERAGE REGISTER	CLASSES/WEEK	DESCRIPTION	CURRICULUM
1 E.S.L. 31/41	1	12	10	Newly arrived students	<u>English Step by Step</u>
2 E.S.L. 11/21/71/81	2	25	10	Beginning level	<u>English for a Changing World</u>
3 E.S.L. 31/81/51/61	2	17	10	Intermediate level	<u>Learning English as a Second Language, Skits in English (Hines)</u>
4 E.S.L. 31	1	23	5	Eng. language skills for C.D. students	<u>Journeys to Fame (Kieszak)</u> <u>Little Stories for Big People</u> <u>Multiple Skills Series (Boning)</u>
4 E.S.L. 81	1	26	5	Upper-level intermediate	<u>Study Skills for Students of E.S.L.</u>
4 E.S.L. Reading 71	1	26	5	Upper-level reading	<u>30 Passages (Byrne/Cornelius)</u> <u>Growing in English Language Skills</u>
E.S.L. Transition 21/ E.S.L. Transition 61	2	20	10	Transition (for partially mainstreamed students)	<u>International Folktales</u>

-24-

ing the exercises performed and the scores attained. (An appendix to this report contains copies of some of the E.S.L. controls maintained in the students' folders.) Departmental exercises test the student's performance in the objectives associated with each level. The student must answer correctly three of four questions for each objective to achieve a passing score.

The project's resource center contains a stockpile of exercises which have been acquired or developed by the E.S.L. faculty; these are available to teachers upon request. At a weekly one-to-one conference, teachers assign a set of exercises to each student.

In order to proceed to the next E.S.L. level, the student must pass a minimum of 80 percent of the course objectives. When this criterion is met in the upper intermediate level (E.S.L. 81), a student is considered ready for partial mainstreaming.

In addition to the strategy outlined above, the program has instituted a "no-code" system geared to reading and writing skills. This system consists of additional exercises selected by the teacher and inserted into the students' folders. The second strategy consists of supplemental word games and E.S.L. games which develop writing and recognition skills, such as Junior Scrabble. A store of games has been placed in the E.S.L. office and in the teachers' rooms.

Guiding teachers' selection of texts is a master list of E.S.L. textbooks, coded by level. The list includes major texts, as well as supplementary and reference works. (A copy of this list appears in an appendix to this report.)

### Classroom Observation

The evaluator visited an E.S.L.-1 class, at which seven ninth-grade students were present. Taught by one teacher with no paraprofessional present, the lesson was based on English for a Changing World (Scott Foresman and Co.) and reviewed the past tense of the verb, to be.

Teacher and students used English exclusively during the class. Students took turns reading aloud and completing exercises from the text. Corrections were offered, and the class repeated the answer in unison. Attention was paid to pronunciation. After the exercises were completed, the class did a written assignment on demonstrative pronouns. The teacher moved from student to student as they completed the exercise.

### Follow-up Testing

Once a student is placed in an E.S.L. sequence, he or she is periodically tested to determine progress. Pre- and post- CREST tests are administered each semester, and the LAB is given on an annual basis. On the most recent LAB, about half the eleventh graders in the bilingual program surpassed the twentieth percentile. Scores on the CREST seem to corroborate results on the LAB.

### NATIVE LANGUAGE ARTS

#### Curriculum Offerings

The following table outlines the program of Spanish language classes available to bilingual students at South Bronx



Table 8. Instruction in native language arts.

<u>COURSE TITLE AND (TRACK)</u>	<u>NUMBER OF CLASSES *</u>	<u>AVERAGE CLASS REGISTER</u>	<u>DESCRIPTION</u>	<u>CURRICULUM OR MATERIALS IN USE</u>
2 Sp (1)	3	30	beginner	Board of Education
4 Sp (1)	2	32	intermediate	Board of Education
6 Sp (1)	1	25	advanced	Board of Education
4 Spx (2)	2	28	intermediate (lower)	Board of Education
5 Spx (2)	1	25	intermediate (upper)	Board of Education
6 Spx (2)	2	30	advanced	Board of Education
8 Spx (3)	1	30	elective advanced	Teacher-made materials

\*All classes are offered for five periods per week.

The native language arts curriculum consists of three tracks: track 1 is for English-dominant bilingual students for whom Spanish is a second language; track 2 is the regular bilingual curriculum taught to Spanish-dominant bilingual students; track 3 is an enrichment course for students in tracks 1 and 2 who excel in their studies.

#### Native Cultures

Study of participants' native cultures is an integral part of the instructional component. Presentations on Latin American cultural patterns are incorporated into social studies curricula, as well as in reading assigned to E.S.L. and N.L.A. classes. Advanced Spanish language classes read classics by Hispanic authors. The project sponsors extra-curricular activities which relate to native cultures; these include food festivals, Pan American Day, and Puerto Rico Day.

Mainstream students are introduced to the native cultures of bilingual students in several courses. Spanish as a second language (S.S.L.) classes touch on Hispanic cultures. On an informal basis, some mainstream teachers invite bilingual students to visit their classes, to take part in class activities, or to work in teams with English-dominant students. These activities help to familiarize students with each other's cultures. English-dominant students are also invited on an informal basis to join in the projects' activities, such as holiday celebrations and trips.

#### Classroom Observation

The evaluator observed a Spanish-5 lesson, at which 14 tenth graders were present. The lesson concentrated on reading comprehension, and was taught by a teacher with the assistance of a paraprofessional. Students read silently a selection about the inhabitants of Spain prior to the Roman conquest; the paraprofessional helped students on an individual basis during this time. The teacher then spoke about the same topic, using Spanish exclusively. Some passages of the reading selection were read aloud by the students. In the ensuing discussion, interchange between teacher and students was lively.

#### CONTENT-AREA INSTRUCTION

##### Overview

Content-area instruction in Spanish ensures that linguistic difficulties do not bar learning in the areas of science, mathematics, and social studies. Some departments of the school have a separate bilingual faculty, which teaches content-area courses for project students.

These courses parallel the corresponding mainstream offerings in terms of both curriculum and materials. All adhere to New York City Board of Education requirements for grade promotion and graduation,

The science department offers four bilingual courses, including chemistry; the project at South Bronx is the first, and at this time the only Bronx bilingual program that offers bilingual chemistry. The math department offers two courses; the social studies department offers three.

#### Curriculum Offerings

The project offers a total of 15 content-area classes. Most are required courses; the three elective classes include bilingual chemistry; bilingual economics; and project discovery. Table 7 outlines the program's content-area offerings; an appendix to this report lists the texts used in content-area courses.

Table 9. Bilingual instruction in content areas, spring, 1981.

COURSE	NUMBER OF CLASSES	TOTAL ENROLLMENT	COMMENT
General science	2	56	9th grade science General biology
Human biology	1	11	
Regents biology	1	13	
Chemistry	1	18	
General math	3	91	Fraction, decimals, percentage
Algebra	2	31	9th grade math
World history	2	43	
World culture	2	55	
Economics	1	19	

Each of the above courses met five times per week; Spanish was the language of instruction for 95 to 100 percent of class time.

### Classroom Observation

Of the five classes observed by the evaluator, three were in content areas: general science; general math; and economics. All classes were instructed as whole groups, without further subdivision. Classroom facilities were adequate: the classrooms were large, airy, and well lighted.

Science. One teacher and one paraprofessional conducted the general science class of 22 ninth graders. Instruction was almost exclusively in Spanish, although English vocabulary was also introduced, and a brief summary of the lesson was given in English. The students used Spanish exclusively when they addressed the teacher.

The subject matter of the lesson was storms and their causes. Students first read a passage from their texts, assisted on an individual basis by the paraprofessional. The textbook used was a Mexican publication, P.F. Brandwein's Quimica: la materia, sus formas y sus cambios (Chemistry: Matter, its Forms and Changes). After the period of silent reading, the paraprofessional showed slides, while the teacher played accompanying explanations on a Spanish-language cassette, interspersing comments for clarification when appropriate. It appeared that the teacher had not previewed the slides, since she had difficulty in coordinating the slides with the cassette. A question-and-answer session followed. The lesson progressed at good pace. The teacher wrote pertinent vocabulary on the blackboard in Spanish and English, emphasizing the correct pronunciation of English sounds.

The evaluator's presence apparently inhibited students in the discussion, but there appeared to be excellent rapport between teacher and students.

Math. Twenty-three ninth graders were present at a math lesson on metric units of measure and conversions from one unit to another, e.g., liters to milliliters, kilometers to meters. The textbook, E.I. Stein's Repaso Matematico (Mathematics Review) (Boston: Allyn and Bacon) presented the materials in English and Spanish on facing pages.

The teacher and students spoke Spanish, exclusively. Students first completed exercises on a handout; these exercises were then reviewed in class. Some of the students wrote their answers on the blackboard; their solutions were discussed by the entire class.

The lesson progressed at a satisfactory pace, and rapport between the teacher and students appeared to be excellent. The students' high level of interest and willing participation suggested that the teacher's explanations were clearly understood.

Economics. The evaluator sat in on an economics class, which involved 16 eleventh graders. The subject matter, inflation and depression, was based on the text by Perles and Sullivan, Economia para Todos (Economics for All) (La Compania Editorial Continental). The teacher indicated that the course, in content and organization, was based on the textbook used in mainstream economics classes, W.R. Plunkett's The Consumer in America (New York: Hartcourt Brace & Jovanovich). The teacher uses the Spanish text, but supplements it with selections from the English-language book.

The lesson began with a brief quiz, which was followed by a class discussion. The concepts of inflation and depression were presented both in the abstract and as they relate to the students' day-to-day lives. Students participated eagerly in the discussion, which was entirely in Spanish.

#### LIBRARY AND LABORATORIES

The evaluator visited some of the school facilities which are available to program students.

The library includes a section devoted to books in Spanish; the majority of these -- about 250 volumes -- were works of fiction and poetry. Several social studies books and a handful of volumes on Puerto Rico numbered among the collection. The librarian stated that the predominance of literary texts was due to the fact that bilingual reference books and content-area texts were housed in the resource center of the bilingual project.

The evaluator visited the chemistry and biology labs, as well as the room which will become the computer lab. The chemistry lab consists of two rooms, the smaller of which is used for storage. In the lab itself, tables accommodate 35 students. The equipment was new, carefully stored, and clearly labeled. Fire extinguishing equipment was easily accessible and well marked.

The biology lab also consists of two rooms. The main lab room is fully equipped and is divided into two sections. One half contains tables seating 35 students, and displays numerous charts; the other sec-

tion is for cleaning. Both labs are used by project students at least once each week.

The computer lab is to be opened in September, 1981. Available for use by students, including program participants, are four Commodore Business computers, series 2001. In addition, 11 units have been ordered, and will be purchased with tax-levy funds. A resource math specialist, funded by Title I, was scheduled to train faculty members on use of the computers during June, 1981.

## V. NON-INSTRUCTIONAL COMPONENT

### CURRICULUM AND MATERIALS DEVELOPMENT

To develop original materials and to modify existing resources for use by bilingual students are priorities of the program staff. During 1980-81, materials were generated in science and social studies.

#### Science

Human biology. The mainstream curriculum for this subject was translated into Spanish. In addition, the Spanish-language textbook for this course was adapted to meet curriculum standards; in areas where the text was deficient, supplementary materials were selected from the English-language text.

General science. The measures described above were taken for general science materials.

Chemistry. Work was begun on a Spanish-language laboratory manual.

#### Social Studies

World culture. A translation of the New York City Board of Education curriculum materials for world culture was undertaken.

Economics. The Spanish-language text was adapted to meet curriculum standards.

Other social studies courses. New resource units were written for the social studies curricula. The citywide examination for social studies was translated into Spanish.



### Sources of Materials

The project has a resource center, which may be used by the project or the school at large. The appendix to this report contains a listing of the project's holdings.

In order to research, acquire, or exchange materials, with other bilingual projects in the city, the project director visited Stevenson High School in the Bronx, Brandeis High School in Manhattan, and Eastern District in Brooklyn.

### SUPPORTIVE SERVICES

#### School-Year Services

During the school year, program students receive individual and group guidance, vocational and career counseling, and, in some cases, family guidance.

Individual guidance is provided by the program's bilingual counselor; students also seek advice from staff members in the bilingual office. The issues discussed in these one-to-one situations may be problems stemming from the student's special linguistic needs, or from the difficult cultural and social adjustment which they must make. Disciplinary problems, family difficulties, or health problems may also be the subject of these sessions. Individual guidance may also be necessary to clarify information discussed in group guidance meetings.

Group guidance focuses on information which may help students to function successfully in the school and the community. Students learn of the school's requirements, standards, and expectations in general and specific terms. In addition, group guidance provides a setting in which

students may ask questions or seek information which they need to orient themselves to their new environments. When their customs or mores of their culture or home life conflict with school rules or situations, (as when young women in the program were reluctant to change into gym clothes in front of their female classmates), group guidance may clear the air, or provide alternative solutions. Group guidance may be used to resolve disciplinary problems which affect a group of students; in some cases, clarifying information or providing a setting for students to ventilate differences of opinion helps to resolve these problems.

At times, individual and group guidance are supplemented with family counseling. A parent or parent substitute may be called to the school for a meeting; in such cases, parents are usually receptive to the ideas and recommendations offered by the counselor. Parents sometimes initiate this kind of contact by coming to talk about family problems or issues related to their children. Or, they may seek referrals for help with legal, housing, or other personal problems. Counseling is offered and referrals are made in these cases.

Career and vocational counseling is another aspect of the program's supportive services. The school sponsors a career day, when representatives of educational institutions and the armed forces visit the school to offer information on various career areas. Prior to this event, South Bronx students complete questionnaires; while the instrument is in English, the bilingual teachers discuss it with program students in Spanish, and assist them in filling it out. The bilingual guidance counselor reviews the tabulated results of the questionnaire; and on the basis of students' responses recommends that invitations be issued to

various speakers or representatives. In addition, individual students are encouraged to seek appointments with the guidance counselor in order to discuss educational plans or to review the questionnaire. The questionnaires also suggest areas for curriculum development. For example, on the basis of information gathered from bilingual students, a course on computers is being developed.

Supportive services are provided and coordinated by the bilingual guidance counselor, who works closely with the school's guidance department. He also serves as grade advisor to project students; in this capacity, he is responsible for program advisement and changes of program. He also assists the deans when they need interpreting services, or when they are dealing with disciplinary problems of project students. The bilingual guidance counselor remarked that his involvement in all these areas, while resulting in a large work load, allows him to develop rapport with program students, and at the same time to work with flexibility.

He added that since the project has no family assistant, he has assumed responsibility for making home visits; he visits approximately six homes per week either before or after school hours to deal with emergencies or illnesses, or in cases where parents cannot come to school.

The project office maintains telephone contact with parents as well. Such calls are made in cases of absenteeism, cutting of classes, home or health problems, peer friction, or to ask parents to come to school for conferences. In some cases, phone calls may supplement notices or school events or other information sent to students' homes. Members of the program staff may call parents to seek their cooperation in en-

couraging students to take part in tutorial programs, or to urge parents to participate in the school's adult education program. The evaluator was told that 35 to 40 phone calls per day may be made to or received from parents.

The project seeks the help of community agencies in its efforts to provide supportive services to the project students. Health problems may be referred to the New York City Department of Health, for health and immunization information or local clinics at Lincoln, Prospect, Morrisania, and Lebanon Hospitals. Other agencies include: the Hunts Point Multiservice Center; the Puerto Rican Family Services Institute; and the Roberto Clemente High School. Once the project initiates these contacts, some type of coordination is developed and maintained. The project staff follows up with the family, reminding them of the appointments, if necessary, and determining whether their needs have been met or whether additional referrals are appropriate.

#### Summer Follow-Up Programs

During summer, 1981, two follow-up programs involved E.S.L. students. The first was the Discovery-Environmental Studies Project funded by the Edwin Gould Foundation which has functioned for three years. This project, which involves 30 students for three periods each afternoon was not formally part of the bilingual project, but provided follow-up English-language experience to approximately 20 percent of the target population. It provides an instructional curriculum, plus physical education, outdoor survival skills, wilderness training, canoeing, skiing, and rock climbing. Some of the above activities take place on weekends, when outside specialists are invited to share skills with participating

students. A major goal of the program is to develop initiative and confidence which can be brought back to the urban setting, and which can be useful to students in the school and community. The E.S.L. curriculum specialist served as the liaison between the bilingual project and the Discovery-Environmental Studies Project.

Project students and the curriculum specialist were also involved in a camping program. Ten school students, including two project participants, spent 20 days at Camp Minivanca, in Shelby, Michigan, under the auspices of the National Leadership Conference. Half of the 20 days were spent traveling through the wilderness to get to the conference grounds. The remaining ten days were spent attending lectures and training. Participating students, including the bilingual students, raised some of the funds themselves. These fund-raising activities helped to develop confidence and communication skills in the students.

#### STAFF DEVELOPMENT

The project's staff development component is designed to familiarize the bilingual faculty with recent methodological concepts and newly developed materials, while reinforcing pedagogical skills. Monthly cabinet and departmental meetings are the core of staff development activities. Meetings of the bilingual education department are also attended by members of the math, science, and foreign language departments, which are all supervised by the same assistant principal. As a result, almost all faculty members who work with project students meet regularly.

More specific training -- workshops, demonstration lessons, orientation to techniques and curricula -- is provided by a Title I teacher trainer who visits South Bronx once a month to work with the E.S.L. faculty. In content areas, the curriculum specialist and senior teachers presented demonstration lessons in science and social studies several times during the year.

Apart from these regular activities, individual members of the bilingual staff attended workshops and conferences held outside of school. Two staff members attended a workshop sponsored by the New York State Department of Education's Bilingual Division, entitled "Make Language Come Alive." The project director attended conferences held by the National and New York State Associations for Bilingual Education. Staff members also took part in briefings or meetings held at the Board of Education on such topics as evaluation, supplemental allocation, grant development (Title VII and Chapter 720).

Five members of the project staff attended college or university courses during 1980-81; of these, three were pursuing M.S. degrees in Educational Administration, E.S.L., and bilingual education.

#### PARENTAL AND COMMUNITY INVOLVEMENT

Parental and community involvement is a cornerstone of the bilingual project at the South Bronx High School. This component of the project encompasses the following activities: the Parent Community Advisory Committee; adult E.S.L. classes; parental E.S.L. workshops; and the project's series of school-wide extracurricular activities.

The Parent Committee Advisory Committee consists of eight parents, two other community members, two project staff members, and the project director. It is scheduled to meet on a monthly basis, but this school year it has only met four times because of difficulties in contacting out-of-school members. It meets to discuss and review the project's policies and plans. The committee contacts political leaders on behalf of the project, plans and implements extracurricular activities, and participates in trips. Students have not been involved in the committee due to lack of interest; they have been involved in student government activities, however. The president of the student government in 1980-81 was a mainstreamed bilingual student.

Adult E.S.L. classes also involved the community in project activities. Funded with Title VII monies, the classes were initiated in May 1980 and continued to meet twice a week through the summer. They were reinstated on a once-a-week basis in October, 1980, at the end of March, 1981, Title VII funds earmarked for this purpose had been exhausted, and classes were discontinued. Parent adult E.S.L. classes were conducted by a regular E.S.L. teacher. They met in the evenings, and had an average attendance of 13 parents.

Parents have participated in other extracurricular activities, including trips sponsored by the project to the United Nations, West Point, and the Federal Reserve Bank. Parents also took part in Parent Teacher Association meetings, and attended students' assemblies, concerts, and sport matches. Some 15 to 20 parents attended each activity.

Other indicators of parental involvement were: participation in the Consultative Council, a group of some 20 parents as well as staff

and students, which advises the principal in setting school policy; involvement in the Aspira Club's activities; and their role in putting out el Vocero Bilingue, the project's newsletter. Parents came to cultural festivities, such as International Food Day, Pan American Day, and Puerto Rico Discovery Day.

Parents are inhibited from further participation by a number of factors, including: work schedules; health or other family problems; care of small children; transportation difficulties. Because the school is in a somewhat isolated area, seven blocks from the nearest subway station, the latter problem is most frequent. In some cases, the family budget will not allow for extra carfare to attend school activities.

#### AFFECTIVE DOMAIN

Perhaps the most significant indicator of the program's impact on students' attitudes and self-esteem is the attendance rate, which is at least eight percent higher than the 75 percent attendance rate for the school as a whole. The fact that program students appear to adjust well to mainstreaming also suggests a positive impact; program staff estimated that four in five students fare well in mainstream classes.

Program students assumed leadership roles and earned honors throughout the school year. The president of the student government in 1980-81 was a program student. Of the thirteen students who were part of the 1981 graduating class, three earned Regents diplomas, and five students accumulated seven awards. Other program students won honors as well: four of their names appeared on the school's honor roll. Bilingual students earned special awards in chemistry and math.



Of the twelve bilingual students who graduated from South Bronx in 1980, three entered college, two enlisted in the armed forces, and one found employment.

Bilingual students participated eagerly in such extra-curricular activities as trips, sports, the band, and other school performances. Program participants were not involved in vandalism, drug or alcohol abuse, or gang membership, according to the staff. While a gang did organize when the high school opened, and did involve several bilingual students, it has been disbanded, in part due to the intervention of the school administration. One bilingual student was suspended during the year when he became involved in a fight, but has been re-admitted.

The evaluator spoke with a group of students who were chosen randomly for interview from a group standing in the hallway. The students, who were from Cuba, Honduras, Puerto Rico, and Santo Domingo, made the following comments about the program. Their rapport with the teachers, whom they find to be patient and thorough, has helped them to learn English and to progress in other areas as well. They mentioned that teachers seem to worry if students are not learning. They appreciated the fact that both English and Spanish are used in instruction, and added that extra-curricular activities help in the process. They commented that the program has allowed them to know people and customs from other parts of the world. Their complaints had mainly to do with the physical layout of the building (the program office and classes are held on the fifth floor of a building with few elevators).

## VI. 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, science, typing, music, and art. 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, Level E3, Forms A and B)

Mathematics performance -- Teacher-made tests

Science performance -- Teacher-made tests

Social studies performance -- Teacher-made tests

Native language arts performance -- Teacher-made tests

Typing, music and art -- Teacher-made tests

Attendance -- School and program records

The following analyses were performed:

On pre/post standardized tests of native language achievement statistical and educational significance are reported:

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

strates 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. This 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 of the inapplicability of test norms for this population, and the unavailability of an appropriate comparison group.

Educational significance was determined for each grade level by calculating an "effect size" based on observed summary statistics using the procedure recommended by Cohen.<sup>1</sup> 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 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

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

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.

Performance breakdowns are reported in two ways. First, a grade and level breakdown is reported for students who were pre- and post-tested with the same test level. Second, results for the combined sample are reported for the average number of objectives mastered at pre- and post-testings, and the average number of objectives mastered per month of treatment.

The results of the criterion referenced tests in mathematics, social studies, science, native language arts, typing, music, and art are reported in terms of the number and percent of students achieving the criterion levels set for the participants (65 percent passing). Results are broken down by language of instruction.

Information is provided on the attendance rate of students participating in the bilingual program compared with that of the total school population.

The following pages present student achievement in tabular form.

Table 10. Results of the Criterion Referenced English Syntax Test

(CREST): number of objectives mastered, and objectives mastered

per month.

(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	54	11.9	14.1	2.2	2.68	0.82
10	30	11.2	16.4	5.2	2.81	1.85
11	21	12.6	15.9	3.3	2.93	1.13
12	1	7.0	12.0	5.0	2.40	2.08
TOTAL	106	10.8	15.1	4.3	2.77	1.55

\*Post-test minus pre-test

The overall mastery demonstrated by these students was 15.1 objectives, a gain of 4.3 objectives during the fall instructional months.

Mastery rates varied by grade from .82 objectives per month in grade nine to 1.85 objectives per month in grade ten.

Table 11. Performance of students tested on the Criterion Referenced English Syntax Test

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

(Spanish-speaking students, fall)

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	24	8.3	14.4	6.1	9	14.3	18.8	4.5	21	9.9	11.8	1.9	
10	13	11.5	18.1	6.6	6	13.2	20.0	6.8	11	9.7	12.4	2.7	
11	6	14.8	19.5	4.7	8	13.0	16.7	3.7	7	10.1	12.0	1.9	
12	-----										7.0	12.0	5.0
TOTAL	43	10.2	16.2	6.0	23	13.6	18.4	4.8	40	9.8	12.0	2.2	

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

\* Post-test minus pre-test.

. Student tested at each of the three levels of the test demonstrated gains.

. The two largest gains were made by tenth-grade students whose gain was 6.8 objectives at Level II and 6.6 objectives at Level I.

. Ninth- and eleventh-grade students' Level III gains of 1.9 objectives depressed the overall gain for these groups.

Table 12. Results of the Criterion Referenced English Syntax Test  
(CREST): number of objectives mastered, and objectives mastered  
per month.

(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	39 <sup>1</sup>	9.8	14.8	5.0	2.81	1.78
10	16	12.2	17.2	5.0	2.90	1.72
11	13	15.6	19.5	3.9	2.96	1.32
TOTAL	68	11.5	16.2	4.7	2.86	1.64

\* Post-test minus pre-test.

The overall mastery demonstrated by these students was 16.2 objectives, a gain of 4.7 objectives during the spring instructional months.

Mastery rates were comparable in the ninth and tenth grades and lower among eleventh-grade students.



Table 13. Performance of students tested on the Criterion Referenced English Syntax Test (CREST); average number of objectives mastered by grade and test level.

(Spanish-speaking students, spring)

Grade	LEVEL I				LEVEL II				LEVEL III			
	N	Average Number of Objectives Mastered Pre	Post	Gain*	N	Average Number of Objectives Mastered Pre	Post	Gain*	N	Average Number of Objectives Mastered Pre	Post	Gain*
9	15	6.1	12.9	6.8	15	14.1	18.9	4.8	9	8.9	11.0	2.1
10	2	18.0	21.5	3.5	13	11.1	16.8	5.7	1	14.0	14.0	0
11	2	16.0	21.5	5.5	11	15.5	19.1	3.6	-----	-----	-----	-----
12	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
TOTAL	19	8.4	14.7	6.3	39	13.5	18.3	4.8	10	9.4	11.3	1.9

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

\* Post-test minus pre-test.

• Students tested with Level I made the greatest gains, largely as a function of their low pre-test scores.

• The greatest gains among ninth graders were made by those tested with Level I; ninth-grade students tested with Level III made the least gains.

Table 14. Native language reading achievement.

Significance of mean total raw score differences between initial and final test scores in native language reading achievement of students with full instructional treatment on the Prueba de Lectura (total reading, forms BS and AS, level 3).

Grade	N	Pre-test		Post-test		Mean Difference	Corr. Pre/post	t	p	ES
		Mean	Standard Deviation	Mean	Standard Deviation					
9	100	31.6	21.3	53.5	22.5	21.8	.67	12.33	.001	1.23
10	68	33.5	21.2	56.3	25.1	22.8	.65	9.46	.001	1.15
11	52	42.2	26.3	64.4	21.0	22.2	.74	8.97	.001	1.24
13	10	51.6	23.5	61.4	25.8	9.8	.52	1.28	NS	0.41

The pre/post differences were statistically significant and of large educational significance for ninth, tenth, and eleventh grades.

The twelfth grade differences were not statistically significant or of large educational significance. However, their pre-test scores were higher than other grades and the number of students involved was small (10).

Table 15. Number of students attending courses and percent passing teacher-made examinations in mathematics.

(Language of instruction: English)

FALL COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
General Math I	16	37	4	50	4	75			24	46
General Math II	15	67	4	100	3	67			22	73
General Math III	13	61	9	33	11	82	1	100	34	62
Remedial Math I			1	100					1	100
Business Math			2	-	2	50	5	100	9	67
Algebra I	7	71	16	56	1	100			24	62
Algebra II			3	33	7	29	1	-	11	27
Geometry I			2	100	7	71	2	100	11	82
Advanced Algebra & Trigonometry					3	33	1	100	4	50
TOTAL	51	57	41	54	38	63	10	90	140	60

.The overall passing rate was 60 percent.

.Thirty-six percent of the students were in academic math classes (Algebra, Geometry, Trigonometry), and had a 58 percent passing rate.

.Sixty-four percent of the students were in general math classes, and had a 61 percent passing rate.

.The passing rate for students in general math classes was slightly better than for academic math classes.

Table 15  
(continued)

SPRING COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
General Math II	26	35	13	61	8	75			47	49
General Math III	13	69	3	67	1	100			17	71
Fundamental Math I					1	100			1	100
Transitional Math							3	67	3	67
Business Math	6	33	5	-	10	40	1	100	22	32
Algebra I, Academic	10	30	9	44	7	71	1	-	27	33
Algebra II Academic	6	50	10	40	3	33			19	42
Algebra III, Academic	1	100							1	100
Geometry I			2	100	3	33			5	60
Geometry II			2	100	5	80			7	86
Advanced Algebra & Trigonometry					2	-	2	-	4	-
TOTAL	62	43	44	50	40	58	7	43	153	49

.The overall passing rate was 49 percent.

.Forty-one percent of the students were in academic math classes and had a 44 percent passing rate.

.Fifty-nine percent of the students were in general math classes and had a 51 percent passing rate.

.The passing rate for general math classes was slightly better than for academic math classes.

Table 16. Number of students attending courses and percent

passing teacher-made examinations in mathematics.

(Language of instruction: Spanish)

FALL COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
General Math I	41	37	15	20	4	50			60	33
General Math II	1	-	1	-					2	-
General Math III	25	8	11	36	14	14			50	16
Remedial Math I	1	100							1	100
Algebra I	4	50	9	33	5	60			18	44
TOTAL	72	28	36	28	23	30			131	28

.The overall passing rate was 28 percent.

.Fourteen percent of the students took academic math (Algebra), and had a 44 percent passing rate.

.Eighty-six percent of the students took general math classes, and had a 26 percent passing rate.

.Unlike the pattern observed for math classes taught in English, the passing rates for academic math classes were better than the passing rate for general math classes.

NOTE: According to the project director, all math classes in Spanish were taught by one teacher; therefore the possibility of teacher effects exists in the outcomes.

Table 16  
(continued)

SPRING COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
General Math II	62	19	19	10	11	45			92	21
General Math III	1	-							1	-
Business Math	1	-							1	-
Algebra I, Academic	5	60	7	43	3	100			15	60
Algebra II, Academic	1	100	5	20	4	25			10	30
TOTAL	70	23	31	19	18	50			119	26

.The overall passing rate was 26 percent.

.Twenty-one percent of the students took academic math classes, and had a 48 percent passing rate.

.Seventy-nine percent of the students took general math classes, and had a 20 percent passing rate.

.Unlike the math classes in English, the passing rates for academic math classes were considerably better than the passing rate for general math classes.

.Overall, the passing rates tended to be higher for classes taught in English than in Spanish.

NOTE: According to the project director, all spring math classes in Spanish were taught by one teacher.

Table 17. Number of students attending courses and percent passing teacher-made examinations in science.

(Language of instruction: English)

FALL COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
Biology I, Academic			10	60	13	69			23	65
Biology I, General	2	100	22	41			3	67	27	48
Biology II, General			1	100	4	75	2	100	7	86
General Science I	39	69	10	60					49	67
General Science II, Academic	1	100			1	100			2	100
Chemistry					13	69	2	100	15	73
TOTAL	42	71	43	51	31	71	7	86	123	65

- .The overall passing percentage was 65 percent.
- .The lowest passing percentage by course was for Biology I, General (48 percent).
- .The passing percentages by grade range from 51 percent in grade 10 to 86 percent in grade 12.

Table 17  
(Continued)

SPRING COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
Biology II, Academic	2	100							2	100
Biology II, General			10	100	9	67	2	100	21	86
General Science II, Academic	52	63	8	100	1	100			61	69
Chemistry					9	66			9	66
Health Careers					3	33	2	50	5	40
TOTAL	54	65	18	100	22	59	4	75	98	69

.The overall passing percentage was 69 percent.

.The passing percentages by grade ranged from 59 percent for eleventh graders to 100 percent for tenth graders.



Table 18. Number of students attending courses and percent

passing teacher-made examinations in science.

(Language of instruction: Spanish)

FALL COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
Biology I, General	1	-	13	61	7	57			21	57
General Science I	62	48	5	40	1	100			68	49
Chemistry			2	100	15	80	3	100	20	85
Health Careers	1	100	1	100					2	100
TOTAL	64	48	21	62	23	74	3	100	111	58

.The overall passing percentage was 58 percent.

.Most students were enrolled in basic science classes.

.Sixty-one percent of the students took general science I which had a passing percentage of 49 percent.

NOTE: According to information provided by the project director, all fall science classes in Spanish were taught by one teacher, thereby introducing the possibility of teacher effects.

Table 18  
(continued)

SPRING COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
Biology II, Academic			10	90	6	83			16	87
Biology II, General			9	67	4	100			13	77
General Science II, Academic	57	39	2	100	2	100			61	43
General Science II, General			2	50					2	50
Chemistry			3	33	13	85	3	67	19	74
Medical Lab Technician	1	100							1	100
TOTAL	58	40	26	73	25	88	3	67	112	59

The overall passing percentage was 59 percent.

Fifty-five percent of the students took general science II, academic and had a 43 percent passing rate, thus depressing the overall passing percentages.

NOTE: All spring science classes in Spanish were taught by one teacher, according to the project director.

Table 19. Number of students attending courses and percent passing teacher-made examinations in social studies.

(Language of instruction: English)

FALL COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
American History I, Academic			1	-	29	69	3	100	33	70
World History I, Academic	2	100	36	58	5	60	1	100	44	61
World History I, General	1	100							1	100
American Studies					1	100	1	100	2	100
World Culture	50	66	6	67			1	-	57	65
TOTAL	53	68	43	58	35	69	6	83	137	66

.The overall passing percentage was 66 percent.

.The passing percentage per grade ranged from 58 percent for tenth graders to 83 percent for twelfth graders.

Table 19  
(continued)

SPRING COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
American History I, Academic			2	50	7	57			9	56
World History I, Academic							1	100	1	100
World History II, Academic	6	33	41	51	9	67			56	52
Economics, Academic					8	87			8	87
Economics, General					4	75			4	75
Consumer Economics			1	-	16	81			17	76
World Culture	57	56	4	100					61	59
American Studies (I)							8	87	8	87
TOTAL	63	54	48	54	44	75	9	89	164	62

The overall passing percentage was 62 percent.

Seventy-one percent of the students were in either world culture or world history II, academic.

Table 20. Number of students attending courses and percent

passing teacher-made examinations in social studies.

(Language of instruction: Spanish)

FALL COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
American History I, Academic	1	-	1	100	23	91	1	100	26	85
World History I, Academic	7	57	28	75	7	86			42	74
World History II, Academic	1	-							1	-
World Culture	63	71							63	71
TOTAL	72	68	29	76	30	90	1	100	132	75

The overall passing percentage was 75 percent.

The passing percentages improve continuously from the lower to the higher grades.

NOTE: According to the project director, all courses were taught by one teacher.

Table 20.  
(continued)

FALL COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
World History I, Academic	12	67	24	79	9	78			45	76
Economics, Academic			1	100					1	100
Economics, General					4	100			4	100
Consumer Economics	1	-	1	100	8	87			10	80
World Culture	55	64	1	-	1	100			57	63
TOTAL	68	63	27	78	22	86			117	71

.The overall passing percentage was 71 percent.

.Eighty-seven percent of the students were in either world culture or world history II, academic.

Table 21. Number of students attending courses and percent passing teacher-made examinations in native language arts.

(Language of instruction: Spanish)

FALL COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
Native Language I, Academic	27	85	7	100					34	88
Native Language II, Academic	58	65	31	68	5	60			94	66
Native Language III, Academic	32	69	22	91	12	75	3	100	69	78
Native Language IV, Academic			4	50	10	100			14	86
Native Language Advanced Placement			2	100					2	100
TOTAL	117	71	66	79	27	81	3	100	213	75

.The overall passing percentage was 75 percent.

.The passing percentages improve continuously from the lower to the higher grades.

.Forty-four percent of the students were in native language II which had a passing percentage of 66 percent. This course depressed the overall passing percentage.

Table 21  
(continued)

SPRING COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
Native Language I, Academic	32	91	10	60	4	100	1	-	47	83
Native Language II, Academic	39	33	28	39	9	22			76	34
Native Language III, Academic	32	78	27	96	17	82	6	100	82	87
Native Language IV, Academic	1	100	3	100	9	89			13	92
Native Language Advanced Placement			2	50					2	50
TOTAL	104	65	70	67	39	72	7	86	220	68

.The overall passing percentage was 68 percent.

.The passing percentages improve continuously from the lower to the higher grades.

.Thirty-five percent of the students were in native language II which had a passing percentage of 34 percent. This course depressed the overall passing percentage.



Table 22. Number of students attending courses and percent passing teacher-made examinations in miscellaneous courses.

(Language of instruction: English)

FALL COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
Typing	5	100	4	75	6	100			15	93
Music and Language Arts	17	94	11	64	9	78	3	100	40	82
Fine Arts and Language Arts	13	77	11	82	8	100	7	100	39	87
TOTAL	35	86	26	74	23	91	10	100	94	86

The overall passing percentage was 86 percent.

Typing had the highest percent passing (93 percent).

Table 22.  
(continued)

SPRING COURSES	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING	N	% PASSING
Typing					2	100			2	100
Music and Language Arts	2	100			3	67			5	80
Fine Arts and Language Arts	2	100			7	86			9	89
TOTAL	4	100			12	83			16	87

The overall passing percent was 87 percent.

The number of students enrolled in these classes declined from 94 to 16.

Table 23. Significance of the difference between attendance percentages of program students and the attendance percentage of the school.

Average School-Wide Attendance Percentage: 74.5

<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	133	79.1	25.3	4.6	2.10	.025
10	82	83.1	21.6	8.6	3.61	.001
11	69	89.8	9.2	15.3	13.81	.001
12	12	89.0	5.8	14.5	8.66	.001
TOTAL	297	83.1	21.3	8.6	6.96	.001

The total attendance rate of program students was 8.6 percent better than the school-wide attendance, a difference which was statistically significant beyond the .001 level.

All grades had better attendance than the school-wide rate. All differences were statistically significant.

The eleventh and twelfth graders averaged more than 15 percent better than the school-wide attendance.

## SUMMARY OF FINDINGS

In English reading achievement in the fall, program students demonstrated an average of 1.55 objectives mastered per month of instruction. In the spring, the demonstrated average gain was 1.64 objectives mastered per month. The gain scores were depressed by lower achievement scores in Level III of the CREST, where the smaller number of objectives restricted the opportunity for students to demonstrate growth.

In native language reading, students in grades 9, 10, and 11 demonstrated statistically and educationally significant gains; twelfth-grade students did not. The lack of significance at the twelfth grade, however, was attributed to high pre-test scores and the small number of students tested.

In mathematics courses taught in English, the overall pass rate in the fall was 60 percent. In the spring, the overall pass rate was 49 percent. In mathematics courses taught in Spanish, the overall pass rate was 28 percent in the fall and 26 percent in the spring. In both terms, students in academic courses taught in Spanish achieved passing rates which were substantially higher than the rates achieved by students in general classes. In all grades, program students who received mathematics instruction in English had higher pass rates in both fall and spring than did students who received their instruction in Spanish.

The overall pass rate in the fall in science courses taught in English was 65 percent. In spring, the overall pass rate was 69 percent. In science courses taught in Spanish, the overall pass rate was 58 percent.

in the fall and 59 percent in the spring. Although the overall pass rates were higher in both fall and spring for students who received science instruction in English, tenth graders (spring), eleventh graders (fall and spring), and twelfth graders (spring) receiving instruction in Spanish achieved higher pass rates than their counterparts taught in English.

In social studies taught in English, the overall pass rate was 66 percent in the fall and 62 percent in the spring. The overall fall pass rate in social studies courses taught in Spanish was 75 percent. In spring, the overall pass rate was 71 percent. In all grades, program students who received social studies instruction in Spanish had higher pass rates in both fall and spring, than did students receiving instruction in English. (See conclusions and recommendations for discussion.)

In native language arts courses, the fall overall passing rate was 75 percent. In spring, the overall pass rate was 68 percent. The passing percentage per grade ranged from 65 percent (grade 9, spring) to 100 percent (grade 12, fall).

In typing, music, and fine arts courses taught in English, the overall pass rate was 86 percent in the fall and 87 percent in the spring. Passing rates ranged from 74 percent (grade 10, fall) to 100 percent (grade 9, spring and grade 12, fall).

The attendance rate for the total program was 8.6 percent higher than the average school-wide attendance rate, a difference which was statistically significant. In addition, all grades had significantly better attendance rates than did the total school population.

## VII. CONCLUSIONS AND RECOMMENDATIONS

During 1980-81, the bilingual program at South Bronx High School provided instruction in English as a second language, content-area courses in the native languages, and supportive services to 344 LEP students. Curriculum development, staff development, and parental involvement activities supplemented these services.

The work of the bilingual program was administered by a project director, who worked under the assistant principal for bilingual education. The principal indicated that a new assistant principal is scheduled to join the staff in February, 1981; this addition should alleviate the work load of the present assistant principal, who supervises three departments as well as the bilingual program.

The principal further stated that in the coming school year, the administration plans to examine the situation of English-dominant Hispanic students in the bilingual project. These students are English-dominant, but are neither proficient nor literate in English. The bilingual project curricula will be revised to meet their academic and affective needs. The principal anticipates an expansion of the school's bilingual population in the next two years; part of this expansion will involve a greater number of English-dominant Hispanic students.

Interpretation of the differences in achievement rates between students in content-area courses taught in Spanish and English is difficult for several reasons. (This holds for differences between students in academic and general courses as well, although, perhaps to lesser degree.)

The process by which students were selected to participate in classes

(English or Spanish language, academic or general) may have resulted in groups of students who differed in educational preparedness or needs, and who might not be expected to perform similarly in a given content area. In addition to selection factors, the bilingual courses were taught by a single teacher in each subject area, thus introducing the possibility of teacher effects on students' achievement. An awareness of these confounding factors precluded any further clarification of those differences which are reported.

The assistant principal for bilingual education stressed that 1981-82 will be the final year of Title VII funding for this project. He and the project director plan to seek Title VII funds for another project whose focus will be career and vocational orientation, including laboratory techniques and computer training. The basic bilingual services presently supported with Title VII monies will continue under tax levy, Title I, and supplemental allocation funds. The present curriculum will be offered with the possible addition of a class in Latin American culture which will be taught within the social studies department if enrollment is sufficient. Other immediate plans include instruction in bilingual math and native language arts, as well as a computer training course, to be offered by September, 1981.

The project director indicated that, to the extent that the budget allows, staff development will be expanded in the coming year.

The following recommendations are proposed to implement the bilingual education program even more effectively:

- 1) the project should seek avenues to establish better communication with the parent population and the outside community;
- 2) more community leaders should be invited to the project to serve as role models;
- 3) a family assistant should be assigned to the project;
- 4) bilingual education and public relations training of the staff personnel should be included in the project's activities;
- 5) student participation in the Advisory Committee should be encouraged;
- 6) a needs assessment of the faculty should be pursued;
- 7) the differences in achievement rates between students in content-area courses taught in Spanish and English be examined more closely to determine if lower rates of achievement in mathematics courses, especially those taught in Spanish, require changes in curriculum, materials, or instructional approach;
- 8) a better system of data collection and analysis should be instituted.



APPENDICES

Staff Characteristics: Professional and Paraprofessional Staffs

POSITION	% TIME SPENT IN FUNCTION	DATE HIRED	EDUCATION	LICENSE	YEARS OF MONOLINGUAL EXPERIENCE	YEARS OF BILINGUAL EXPERIENCE	YEARS OF F.S.L. EXPERIENCE
Project Director	100	2/80	B.S. Chemistry M.S. hosp. adm. M.S. educa. adm.	N.Y.C. Bil. chem. and q.s. (DHS) N.Y.C. Bil. math (JHS) N.J.S. Req. chem. and q.s. (DHS) Req. math (JHS)	6	12	3
Curriculum specialist (E.S.L.)	100	9/78	B.A. English M.S. urban ed.	N.Y.C. English (secondary) N.Y.S./Cal. English (7-12)	2	5	3
Curriculum specialist (content)	100	9/78	B.A. hist./soc. M.A. history	N.Y.C. Bil. social studies (JHS) Bil. social studies (DHS) Req. social studies (DHS)	1	7	2
Grade advisor/ counselor	50 50	9/78	M.S. Spanish Counseling-psych.	N.Y.C. Req. Spanish (DHS) N.Y.S.	23	23	11
E.S.L. teacher	100	9/78	B.A. speech/Eng.	N.Y.C. English (DHS) N.Y.S. E.S.L. (DHS)	4	--	4
E.S.L. teacher	100	per diem	B.A. French M.A. French	N.Y.C. French P.D. N.Y.S. Spanish (DHS)	15	--	1
N.L.A. teacher/ a.m. coordinator	60 40	9/80	B.A. Spanish M.A. Spanish	N.Y.C. Spanish (DHS)	3	3	1
F.S.L. teacher/ req. English	40 60	per diem	B.B.A. personnel administration	N.Y.C. Req. subst. elem. P.D. (DHS)	3 (elem) 1/2 yr. (DHS)		
Science teacher	100	9/77	B.S. biol./q.s. M.A. science ed.	N.Y.C. Biol. and q.s. (DHS) N.Y.S. Bil. biol. and q.s. (DHS) biol. and earth sci. (DHS)	10	10	6
Math teacher	100	10/77	B.A. math M.S. atmosph. sci.	N.Y.C. Bil. math (DHS)	--	3	5
Social studies teacher	100	10/77	B.A. soc. stud. M.A. educ. adm.	N.Y.C. Bil. social studies (Spanish) (DHS)	15	20	20
Spanish teacher	100	9/78	B.A. Spanish M.A. Spanish	N.Y.C. social studies (DHS) N.Y.S. Spanish (7-12)	4	4	4
Paraprofessional	100	5/81	Jr. at Rutgers		2 mos.	2 mos.	2 mos.
Paraprofessional	100	3/81	B.A. educ. (El Salvador)		17	17	17
Secretary/intern	100	11/79	Sec. studies		17	17	17

Note. Two Spanish teachers were not available when this form was completed. This table does not reflect their backgrounds or experience.

DATA RETRIEVAL FORM

ENGLISH AS A SECOND LANGUAGE

SCHOOL										TEACHER																																																																										
OFFICIAL CLASS										ESL CLASS																																																																										
LAST NAME															FIRST NAME					PUPIL NUMBER																																																																
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REASONS FOR INCOMPLETE EVALUATION DATA

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0001	01	<input type="checkbox"/>	<input type="checkbox"/>	0010	01	<input type="checkbox"/>	<input type="checkbox"/>	0018	01	<input type="checkbox"/>	<input type="checkbox"/>
0002	01	<input type="checkbox"/>	<input type="checkbox"/>	0011	01	<input type="checkbox"/>	<input type="checkbox"/>	0019	01	<input type="checkbox"/>	<input type="checkbox"/>
0003	01	<input type="checkbox"/>	<input type="checkbox"/>	0012	01	<input type="checkbox"/>	<input type="checkbox"/>	0020	01	<input type="checkbox"/>	<input type="checkbox"/>
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0007	01	<input type="checkbox"/>	<input type="checkbox"/>	0016	01	<input type="checkbox"/>	<input type="checkbox"/>	0024	01	<input type="checkbox"/>	<input type="checkbox"/>
0008	01	<input type="checkbox"/>	<input type="checkbox"/>	0017	01	<input type="checkbox"/>	<input type="checkbox"/>	0025	01	<input type="checkbox"/>	<input type="checkbox"/>
0009	01	<input type="checkbox"/>	<input type="checkbox"/>								

DATA RETRIEVAL FORM

ENGLISH AS A SECOND LANGUAGE

SCHOOL \_\_\_\_\_

TEACHER \_\_\_\_\_

OFFICIAL CLASS \_\_\_\_\_

ESL CLASS \_\_\_\_\_

LAST NAME

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FIRST NAME

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PUPIL NUMBER

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BIRTH DATE

MONTH	DAY	YEAR			

TOTAL DAYS ENROLLED

TOTAL DAYS ABSENT

FALL

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SPRING

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SUPPORTIVE SERVICES

TIMES

HOURS

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X	X	X	X
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X
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NLA

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GRADE LEVEL

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X	X	X	X	X	X
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X	X	X	X
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REASON FOR INCOMPLETE EVALUATION DATA

X	X	X	X	X	X
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X	X	X	X
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X
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X
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SKILL CODE	TEST LEVEL	PRE	POST	SKILL CODE	TEST LEVEL	PRE	POST	SKILL CODE	TEST LEVEL	PRE	POST
0001	02			0010	02			0018	02		
0002	02			0011	02			0019	02		
0003	02			0012	02			0020	02		
0004	02			0013	02			0021	02		
0005	02			0014	02			0022	02		
0006	02			0015	02			0023	02		
0007	02			0016	02			0024	02		
0008	02			0017	02			0025	02		
0009	02										

DATA RETRIEVAL FORM

ENGLISH AS A SECOND LANGUAGE

SCHOOL

TEACHER

OFFICIAL CLASS

ESL CLASS

LAST NAME

FIRST NAME

PUPIL NUMBER

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BIRTH DATE

MONTH	DAY	YEAR			

TOTAL DAYS ENROLLED

TOTAL DAYS ABSENT

FALL

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SPRING

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SUPPORTIVE SERVICES

TIMES

HOURS

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X
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X	X
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X	X
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NLA

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X	X	X	X	X
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X	X
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X	X
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REASON FOR INCOMPLETE EVALUATION DATA

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X	X	X	X	X
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X	X
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X	X
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X
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X
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SKILL CODE	TEST LEVEL	PRE	POST	SKILL CODE	TEST LEVEL	PRE	POST
0001	03			0010	03		
0002	03			0011	03		
0003	03			0012	03		
0004	03			0013	03		
0005	03	/		0014	03		
0006	03			0015	03		
0007	03						
0008	03	/					
0009	03						

CREST CLASS RECORD

SCHOOL: \_\_\_\_\_  
 TEACHER: \_\_\_\_\_  
 ESL CLASS: \_\_\_\_\_ DATE: \_\_\_\_\_  
 LEVEL: BEGINNING

NAME	DATA CONTROL NUMBER	OFF. CLASS	
		1	"To Be" - Present Tense Statements
		2	Subject Pronouns Singular and Plural
		3	"To Be" - Present Yes/No Questions
		4	Articles a, an/ the
		5	Nouns - Reg. and irr. Singular and Plural
		6	"To Be" - Present Negatives
		7	Demonstratives This, That, These, Those
		8	Present Progressive Tense
		9	Contractions - "To Be" and Subject Pronouns
		10	Prepositions of Loc. and Origin
		11	Object Pronouns Direct and Indirect
		12	Question Words - Who, What, When, Where, How
		13	Yes/No Questions "Do" and "Does"
		14	Subject/Verb Agreement Present Tense
		15	"Do" and "Does" Negative Contractions
		16	"Do" and "Does" Information Questions
		17	"To Be" - Past Tense
		18	"To Be" - Negatives and Contractions
		19	"To Be" - Past Tense Subject/Verb Agreement
		20	Past Tense Regular Verbs
		21	"Wh" - Yes/No Question Verb Agreement
		22	Irregular Verbs Past Tense
		23	Cue Words - Present, Past, Progressive, Past
		24	Negatives and Contract "Don't"
		25	Successive Tenses Singular and Plural



CREST CLASS RECORD

SCHOOL: \_\_\_\_\_  
TEACHER: \_\_\_\_\_  
ESL CLASS: \_\_\_\_\_ DATE: \_\_\_\_\_  
LEVEL: INTERMEDIATE

NAME	DATA CONTROL NUMBER	OFF. CLASS	
	1		Question Words-How, What, Where, When, Which, Who Information Questions "Mid"
	2		Possessive Adjectives and Pronouns
	3		Past Progressive Tense
	4		Tag Questions - Affirmative and Negative
	5		Question Words-Why, Whose, Which one. Which ones
	6		Verb Form After to
	7		Verb + to + Verb
	8		Yes/No Questions
	9		Count and Mass
	10		How much & How many Modal Auxiliaries
	11		Modal Auxiliaries. Yes/No and Tag Questions
	12		Modal Auxiliaries in Information Questions
	13		Modal Auxiliaries Contractions
	14		Future Tense -going to- as
	15		Simple Adjectives -er than
	16		Comparative -est
	17		Superlative Adjectives
	18		Indefinite Adjectives & Pronouns - some, any, etc. more than
	19		Comparative Most
	20		Superlative
	21		Irregular Comparatives and Superlatives
	22		Adverbs of Frequency always, often, usually, etc.
	23		Present Perfect Tense Regular & Irregular
	24		Present Perfect in 2 Yes/No & T. S. Questions
	25		Contractions

107

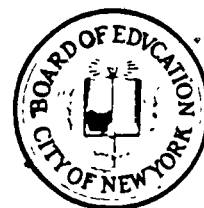






SOUTH BRONX HIGH SCHOOL  
701 St. Ann's Avenue  
Bronx, New York 10455

(212) 993-6353



Prepared by: Ruthellyn Weiner  
Title VII

ESL BOOK LIST 1979 - \_\_\_\_\_

Suggested levels:

B = Beginning	2 ESLR - Beginning Reading
I = Intermediate	3 ESLR - Intermediate Reading 1
A = Advanced	4 ESLR - Intermediate Reading 2
EL = English Dominant	

IN USE

- |   |                     |
|---|---------------------|
| 1. All In A Day's Work - Baygell/Ackerman   | <u>EL</u>           |
| 2. Advanced Dictionary (Scott, Foresman)  | <u>A, EL</u>        |
| 3. American Heritage Dictionary. (Sell)   | <u>I,</u>           |
| 4. COMP - Alexander/Cornelius   | <u>I, A, EL</u>     |
| 5. Elementary Anecdotes   | <u>3ESLR</u>        |
| 6. English For a Changing World Bks. 1-6, Workbooks 1-6,<br>(Scott, Foresman) Basic serves for ESL<br>Teachers annotated editions 1-6 | <u>          </u>   |
| 7. The English Notebook: Exercises Mastering the Essential<br>Structures - Yorker   | <u>B, I, A</u>      |
| 8. English Step by Step with Pictures - Boggs/Dixon   | <u>B</u>            |
| 9. Elementary Composition Practice Bks. 1 & 2 Blanton   | <u>2ESLR, 3ESLR</u> |
| 10. Graded Exercises In English - Dixon   | <u>B, I, A</u>      |
| 11. Growing In English Language Skills - Finocchiaro/Lavenda  | <u>A, EL</u>        |
| 12. Journeys to Fame - Kieszak  | <u>4ESLR</u>        |
| 13. Little Stories for Big People - Gonshack  | <u>A</u>            |
| 14. Modern Short Stories In English - Dixon   | <u>A</u>            |
| 15. Multiple Skills Series - Boring   | <u>EL</u>           |



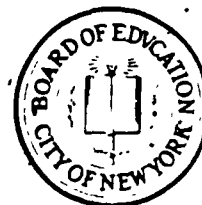
REFERENCE/ENRICHMENT - (Available in Bilingual Office, Room 510)

1. An Annotated Bibliography of English as a Second Language Instructional Materials - New York State Education Department - Bureau of Bilingual Education
2. A Bibliography of English as a Second Language Materials Grades 4 - 12 - National Clearing House for Bilingual Education
3. English as a Second Language/From Theory to Practice Finocchiaro
4. Play and Practice - graded games for English Language Teaching and Duplicating Masters - Chamberlin/Stenberg B,I,A
5. Records:
  - (a) Mister Monday and other songs for the teaching of English B,I,A
  - (b) Hard to Learn that English as a Second Language Blues B,I,A
6. ESP Inc. Spirit Duplicating Masters
  - Jumbo English Year Books 3,4,6,8
  - Developing SEntence Skills 4 - 7
  - Understanding Punctuation 7. - 12, 4 - 7
  - American Holidays 3 - 6
  - Mixty Maxty Word Discovery Puzzles 3 - 5, 5 - 7
  - Impact 1112 (Preparation for Proficiency and Competency Testing) 11 - 12 B,I,A
7. Key Ideas In English Levels I, II, III Duplicating Masters
8. See It Say It - Developing Oral Language - 2 Poster Card Sets
  - (a) Using Regular Verbs
  - (b) Using Irregular Verbs



SOUTH BRONX HIGH SCHOOL  
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Bronx, New York 10455

(212) 993-6353



BOOK LIST 1980-1981  
FOR CONVENT AREAS IN BILINGUAL PROGRAM

I. Science

A. General Science

1. Introduccion a las Ciencias: Coleccion Alinorma
2. Quimica - La Materia: Sus Formas y Sus Cambios - Brandwein/Stollberg/Burnett
3. General Science - Holt/Renehart and Winston Publishers.

B. Biology

1. Biologia - Joseph M. Oxenhorn Publicaciones Culturales, S.A.
2. Biologia - William L. Smallwood/Edna R. Green Publicaciones Culturales, S.A.
3. Concepts in Modern Biology David Kraus Cambridge Book Co.

C. Human Biology (HUB)

1. Biology Joseph M. Oxenhorn Publicaciones Culturales, S.A.
2. Your Health and Safety for Better Living Harcourt Brace Jovanovich

D. Chemistry

1. Quimica Gregory R. Choppin/Bernard/Jaffe/Lee Summerlin/Lynn Jackson Publicaciones Cultural, S.A.
2. Laboratorio De Quimica Investigaciones Ferguson/Schuckler/Caro/Siegelman
3. Quimica: La Materia - Sus Formas y sus Cambios. Brandwein/Stollberg/Burnett Publicaciones Cultural, S.A.
4. Fundamentos De Quimica - Primera Parte y Segunda Parte Dr. Luis Larrazabal/Fernandez Minerva Books, LTD.
5. Action Chemistry Ruth P. Bolton/Elizabeth V. Lamphere/Mario Menesini Holt, Renehart and Winston, Publishers.
6. Laboratory Experiments in Action Chemistry - Same autors and sources.
7. Introduction a la Quimica T.R. Dickson Publicaciones Cultural, S.A.

II. Mathematics

A. General Math

1. Repaso Mathematico - Edwin Stein Allyn and Bacon, Inc.

## BOOK LIST 1980-1981

2. *Matemática Vocacional Para El Comercio*  
Marie Matinka/Cristina Rodriguez South Western Publishing Co.
3. *Principios De Comercio con Fundamentos Matematicos*  
Carmen I. Rodriguez De Roche/Margarita Paez De Abreu

## B. Algebra

1. *Elementos De Algebra Para Bachillerato*  
Irving Drooyan/William Wooton Editorial Limusa
2. *Algebra - Isidore Dressler* Amsco School Publications, Inc.

III. Bilingual Social Studies

## A. World History I, II

1. *Historia Del Antiguo Contienete (Editorial Norma)*, 1977
2. *Consumer Economics- Economia Para Todos*, Benjamin Perles  
(Editorial Continental, S.A.)
3. *The consumer in America - W. Richard Plukett* (Harcourt,  
Brace Jovanovich)
4. *World Culture II - Serie Educacional de Barron, Inc.*  
*El Medio Oriente y Africa Del Norte; Erwin Rosenfeld and*  
*Harriet Geller*
5. *Historia De America*, Augusto Montenegro(Editorial Norma)

# BILINGUAL PROGRAM

SOUTH BRONX HIGH SCHOOL  
SONIA RIVERA, Principal

ALBERT KODJO  
Title VII Project Director

## MINI - RESOURCE CENTER

### SCIENCE

1. Introduccion a las Ciencias: Coleccion Alinorma
2. Quimica - La Materia y sus Formas Cambios - Brandwein/Stollberg/Burnett
3. General Science - Holt/Renehart
4. Biologia - Oxenhorn - Publicaciones Cultural
5. Biologia - William Smallwood/Edna Green - Publicaciones Cultural; S.A.
6. Concepts in Modern Chemistry - David Kraus - Cambridge Book Co.
7. Action Chemistry - Bolton/Lamphere/Menesini
8. Introduccion a la Quimica - Dickson Publicaciones Cultural; S.A.
9. Pathways in Biology - Oxenhorn - Globe Book Co.
10. The Human Body in Health and Disease - Memmler/Wood - Lippincott Co.
11. Your Health and Safety for Better Living - Harcourt Brace Javanovich
12. Quimica - Gregory R. Choppin/Bernard/Jaffe/Lee Summerlin/Lynn Jackson Publicaciones Cultural; S.A.
13. Laboratorio de Quimica - Investigaciones - Schmuckler/Caro/Siegelman
14. Fundamentos de Quimica - I & II Dr. Luis Larrazabal - Minerva Books, Ltd.
15. Laboratory Experiments in Action Chemistry - Renehart and Winston, Pub.
16. Concepts in Science - Brandwein/Cooper/Blackwood - Harcourt, Brace Jovanovich, Inc.
17. Biology and Human Progress - Charles Tanner - Prentice Hall, Inc.

### MATHEMATICS

18. Repaso Matematico - Edwin Stein/Allyn & Bacon, Inc.
19. Matematica Vocacional para el comercio - Marie Martinka/Cristina Rodriguez - South Western Publishing Co.
20. Principio de Comercio con Fundamento Matematicos - Carmen I. Rodriguez de Roche/Margarita Ruez de Abreu
21. Elementos de Algebra Para Bachillerato - Irving Drooyan/William Wooton - Editorial Limusa.
22. Algebra - Isidore Dressler - Amsco School Publications, Inc.
23. Algebra Moderna - Dolciani/Berman Freilich
24. Preliminary Mathematics - Isidore Dressler Amsco School Publications, Inc.
25. General Mathematics - Addison - Wesley - Keedy/Bittinger/Smith/Anderson

### SOCIAL STUDIES

26. Historia del Antiguo Continente, Editorial Norma
27. Consumer Economics
28. Economia para Todos - Benjamin Perles Editorial Continental, S.A.
29. The Consumer in America - Richard Plukett - Harcourt/Brace Jovanovich
30. El Medio Oriente y Africa del Norte; Erwin Rosenfeld and Harriet Geller
31. Historia de America, Augusto Monte-negro - Editorial Norma

CATALOGS

32. Barclay School Supplies
33. Carolina Biological Supply Co.
34. NYSTL - Approved Textbooks Ancillary and Music Catalog
35. Magnacraph - Magnetic Visual Control Systems
36. Lapine Teaching Aids for Mathematics
37. Flame Co. Publications - Materials for better Bilingual Education
38. Pathscope Educational Media, Inc.
39. Educational Record Sales

DICTIONARIES

40. Pequeno Larousse
41. Simon & Schuster's Bilingual Dictionary
42. French Larousse Bilingual Bictionary
43. The American Heritage Dictionary
44. Thorndike Barnhart High School Dictionary
45. Spanish Dictionary - Amsco

LIBROS DE CONSULTA

46. Ideas for Strengtening Mathematics Skills
47. Course of Study.