

DOCUMENT RESUME

ED 230 641

UD 022 792

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TITLE Walton High School Bilingual Basic Skills Through Interdisciplinary Career Orientation. O.E.E. Evaluation Report, 1981-1982.
INSTITUTION New York City Board of Education, Brooklyn, N.Y. Office of Educational Evaluation.
PUB DATE Feb 83
NOTE 71p.; For related document, see ED 218 410.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Achievement Gains; *Bilingual Education Programs; Career Awareness; *Career Guidance; English (Second Language); High Schools; Limited English Speaking; *Mainstreaming; Mathematics Achievement; Native Language Instruction; Reading Achievement; Social Studies; *Spanish Speaking; Staff Development; Transitional Programs

IDENTIFIERS New York City Board of Education

ABSTRACT

The program discussed in this evaluation provided instruction in English as a second language and native language arts, as well as bilingual instruction in numerous subject fields and career education to approximately 200 Spanish-speaking students of limited English proficiency in grades 9 through 12. The philosophy of the program, which was conducted at Walton High School in the Bronx (New York City), was one of transition, equipping students with the language skills, career awareness and orientation, and general skills necessary for smooth transition from school to the job market. Program staff provided instructional and support services and staff development activities. Evaluation of the program's second year achievement data indicated that many of the program objectives were met by participating students, particularly in the areas of English syntax, native language arts, and social studies, and that the attendance rate among participants was higher than the school-wide rate. Many of the noninstructional activities (resource and curriculum development, academic and career counseling, and staff development) were also judged to be successful. The evaluation concludes with several recommendations, focusing on: (1) establishment of a resource center; (2) systematic followup of participants who are mainstreamed; (3) the need for a bilingual secretary; and (4) revision and modification of the program's proposed scope. (GC)

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ED230641

O.E.E. Evaluation Report
February, 1983

WALTON HIGH SCHOOL
BILINGUAL BASIC SKILLS THROUGH
INTERDISCIPLINARY CAREER ORIENTATION
1981-1982

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ACKNOWLEDGEMENTS

The production of this report, as of all O.E.F. Bilingual Education Evaluation Unit reports, is the result of a cooperative effort of permanent staff and consultants. Dennis Joyce has spent many hours creating, correcting, and maintaining data files. In addition, he has trained and helped others in numerous ways. Joseph Rivera has spent many hours producing, correcting, duplicating, and disseminating reports. Without their able and faithful participation the unit could not have handled such a large volume of work and still produced quality evaluation reports.

A SUMMARY OF THE EVALUATION
FOR BILINGUAL BASIC SKILLS THROUGH
INTERDISCIPLINARY CAREER ORIENTATION
WALTON HIGH SCHOOL
1981 - 1982

This program, in its second year of a three-year funding cycle, provided instruction in E.S.L. and native language arts, as well as bilingual instruction in mathematics, social studies, science, career orientation and career exploration, typing, music, and health careers to approximately 200 Spanish-speaking students of limited English proficiency in grades nine through twelve. The highest percentage of students was in grade nine. Thirty-nine percent of the students were born in Puerto Rico, thirty percent in the Dominican Republic, and thirteen percent in the United States. All students, except one, were Hispanic and spoke Spanish at home. The students varied in English language proficiency, ability in their native language, and overall academic preparedness.

The program's philosophy was one of transition, equipping students not only with language skills, but with career awareness and orientation, attitudes toward work and those general skills necessary for smooth transition from school to job market after graduation. Emphasis was placed on the students' integration into society at large.

Title VII funds supported the following staff positions: the program coordinator; one curriculum specialist/resource teacher; two paraprofessionals; and one family worker. The director's position was supported by tax-levy funds; this position included responsibilities other than bilingual education. Instructional services and additional paraprofessional assistance were provided by a combination of Title I and tax-levy monies. A curriculum was developed for the health careers course and a special writing course for E.S.L. was devised. Supportive services to program students consisted of psychological and career counseling, guidance services, and home visits. Development activities for staff members included monthly departmental meetings, workshops and training sessions, and attendance at conferences and university courses. Parents of program students were involved in a Parent-Student Advisory Committee and attended E.S.L. classes taught by the program coordinator. Although parental involvement was limited by outside commitments and neighborhood safety problems, attendance at meetings improved and the program continued to encourage parental participation.

Students were assessed in English language development (Criterion Referenced English Syntax Test); growth in their mastery of Spanish (Interamerican Series Prueba de Lectura); mathematics, social studies, and science (teacher-made tests); and attendance (school and program records). Quantitative analysis of student achievement indicated that:

- Program students mastered 1.4 objectives for each month of E.S.L. instruction in the fall and 1.1 objectives per month in the spring, thereby meeting the proposed criterion level. Level I students surpassed the objective during both semesters while students at Level III failed to meet the criterion during the spring.
- In Spanish reading, students surpassed the objective of a gain of 3 raw score points, thus demonstrating gains of statistical significance and moderate educational significance.
- In native language arts, overall passing rates for fall and spring were 86 percent and 80 percent respectively.
- Seventy-five percent of program students passed teacher-made examinations in bilingual social studies classes during the fall semester. During the spring semester, the overall passing rate was 77 percent.
- In bilingual science courses, the overall passing rate for the fall was 62 percent, while for the spring it was 51 percent.
- Fifty-eight percent of program students passed teacher-made tests in mathematics during the fall semester and 43 percent passed similar tests during the spring.
- Students in E.S.L. 6 had a 96 percent overall passing rate and those in E.S.L. 7/8 had a 70 percent passing rate, surpassing the stated program objective.
- The overall attendance rate of program students exceeded the average school-wide rate by 16 percentage points.

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

- Establishing a separate resource center to house the program's growing collection of resource materials.
- Formalizing a system of follow-up with the school's guidance office for students who are to be completely mainstreamed.
- Considering the possibility of securing the services of a bilingual secretary to relieve the heavily burdened Title VII staff.
- Reviewing the evaluation objectives in light of the program's proposed scope of work.

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BILINGUAL BASIC SKILLS THROUGH INTERDISCIPLINARY
CAREER ORIENTATION

WALTON HIGH SCHOOL

Location: West 196th Street and Reservoir Avenue
Bronx, New York 10468

Year of Operation: 1981-1982, second year of a three-year cycle

Target Language: Spanish

Number of Students: 200

Assistant Principal: Mrs. S. Sellinger

Project Coordinator: Ms. Norma Cruz-Dunn

I. DEMOGRAPHIC CONTEXT

ENVIRONMENT

Walton High School is located in the Kingsbridge section of the Bronx, a neighborhood of low and middle-income two- and three-family houses, apartment houses, and some co-operative apartment buildings. It is bordered by Lehman College to the north and Public School 86 to the south. Family-owned stores, fast food places, and branches of banks and chain stores can be found along nearby Kingsbridge Avenue. The elevated IRT subway line is visible from the school. The Bronx High School of Science, DeWitt Clinton High School, an armory, and a number of hospitals are among the institutions to be found in the neighborhood.

SITE CHARACTERISTICS

Walton High School is a well-maintained, H-shaped building that was built more than 50 years ago. The bilingual program office is on the third floor, along with classrooms and several other departmental

offices. The office is shared by the program coordinator, the bilingual resource teacher, and the paraprofessionals. In addition, it houses the program's resource center.

ATTENDANCE AREA

Walton High School is a non-zoned school located in Community School District 10, an area that, according to a September 1980 survey made by the program coordinator, has a racial/ethnic composition that is 60 percent black, 37 percent Hispanic, and 3 percent "other." However, as an undistricted school, Walton draws its student body of 3,671 primarily from outside of its attendance area. Most of the students are from the area south of Fordham Road, a low-income, unstable community with many immigrant families and an overall composition that is 99 percent black and Hispanic.

The student body is made up of one-third males (1,167) and two-thirds females (2,504). The ethnic composition is: 2,189 black; 1,346 Hispanic; 59 white; 57 Asian/Pacific Islander; and 1 American Indian. Table 1 presents a breakdown of students by home language and the number determined to be of limited English proficiency (LEP).

TABLE 1

Home Language of Students in the School as a Whole
(Other Than English)

Language	Number of Students	Number LEP
Spanish	1,303	513
Chinese	29	10
Vietnamese.	27	27
Haitian/Creole	4	1
Greek	2	--
Italian	2	--
Korean	2	--
Serbo Croatian	2	2
Urdu/Pakistan	1	1

Source: High School Data Form for Consent Decree/Lau Program,
October 15, 1981.

History of Services to LEP Students

The designation of Walton as a site for a Title VII bilingual program reflects the school's growing immigrant population, which is predominantly Hispanic and is an outgrowth of earlier efforts to meet the needs of LEP students. These efforts began over a decade ago when, in 1970, the English department offered two levels of English as a second language (E.S.L.). These courses were moved to the foreign language department four years later, at the same time that native-language arts (N.L.A.) courses in Spanish were introduced, along with Spanish-language

courses in mathematics, science, and social studies. At that time, Title I funded the E.S.L. and N.L.A. classes and tax-levy funding was provided for content-area courses in Spanish.

From the spring of 1977 through the spring of 1979, a Title VII program, with offices at the Central Board of Education, organized and provided bilingual services at Walton, Morris High School, and Tilden High School. Walton and Morris had Spanish components, whereas Tilden had a French component. Under this umbrella program, the Walton program staff was comprised of a curriculum specialist and a paraprofessional, with these two positions being funded by Title VII. It provided two years of N.L.A. classes and four years of E.S.L.

The present program expands the instructional offerings and student services previously offered under the umbrella program. Geared specifically for Walton's Spanish-speaking students, it is in the second year of a three-year funding cycle. Although it was originally designed to also serve 60 bilingual students at St. Catherine's Academy, a Bronx parochial school, budgetary constraints have limited this service to the furnishing of career orientation and exploration bilingual materials for these students.

Due to their small numbers, Walton's non-Hispanic LEP students (see Table 1) participate in mainstream content-area courses, in addition to classes in E.S.L. Additional E.S.L. classes may be audited as needed during free periods.

II. STUDENT CHARACTERISTICS

ENTRY CRITERIA

Students are identified as eligible for the bilingual program when they first enter the school or by recommendation of the feeder school. Those who score at or below the twenty-first percentile on the Language Assessment Battery (LAB) are admitted into the program if they are recommended by program staff and have received parental approval for such participation.

COMPOSITION

The bilingual program consists of 200 students. Thirty-one percent of these are male and 69 percent are female, a somewhat higher percentage of male students than is represented in the population of the school as a whole. Table 2 presents the distribution of students by sex and grade. Students born in Puerto Rico make up 39 percent of program enrollment; Dominican students comprise 30 percent; United States-born Hispanic students, 13 percent; Hondurans, 5 percent; and Ecuadorians, 5 percent. Table 3 presents the number and percentages of students by countries of origin.

TABLE 2

Number and Percentages of Students by Sex and Grade

Grade	Male N	Percent of Grade	Female N	Percent of Grade	Total N	Column Total: Percent of All Students
9	22	28	57	72	79	40
10	18	29	44	71	62	31
11	14	40	21	60	35	18
12	7	32	15	68	22	11
TOTAL	61	31	137	69	198	100

.Female students comprise a majority at each grade.

.The highest percentage of students is in grade nine, followed by grade ten. Student enrollment decreases as grade level increases.

TABLE 3

Number and Percentages of Students by
Country of Birth
Language: Spanish

Country of Birth	Number	Percent
Puerto Rico	76	39
Dominican Republic	59	30
Cuba	1	less than 1%
Mexico	1	less than 1%
Honduras	9	5
Guatemala	2	1
El Salvador	4	2
Nicaragua	4	2
Colombia	2	1
Ecuador	9	5
Peru	1	less than 1%
Venezuela	2	1
U.S.	25	13
TOTAL	195	100

.Thirty-nine percent of the students are Puerto Rican-born. The next highest percentage is Dominican-born.

.Thirteen percent of the students are United States-born.

.All students are Hispanic, and Spanish is their home language.

LANGUAGE PROFICIENCY

As a group, program students show a high rate of proficiency in Spanish. Less than one-third are in remedial courses in Spanish, whereas more than two-thirds are in either advanced honors or advanced literature courses. English proficiency ranges from those who barely speak English to students who have been placed in advanced E.S.L. classes. The use of English outside the classroom setting tends to be dependent on the length of a student's stay in the United States. Hispanic students who were born in this country seem more likely to use English with others who speak it. Recently-arrived immigrants tend not to use English outside of school, since they can function monolingually in their native language in their own community settings and in their interactions with their peers.

Because many students are immigrants with varied lengths of residence in this country, their educational histories may vary considerably. Many have suffered interrupted schooling, or because of a lack of opportunity in their countries of origin, have received fewer years of education than their grade levels would indicate. Table 4 presents program students by age at the end of the school year and grade.

TABLE 4

Number of Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	Total
13	1				1
14	26	1	1		28
15	32	12	1	1	46
16	15	28	11	1	55
17	6	17	10	5	38
18		4	10	7	21
19			2	7	9
20				1	1
Total	80	62	35	22	199

Overage Students:

Number	21	21	12	8	62
Percent	26	34	34	36	31

Note. Shaded boxes indicate expected age range.

.Thirty-one percent of the students are overage for their grade. This percent is relatively low compared with other bilingual high school programs in New York City.

.The highest percentage of students is 16 years of age. Most of these students are in grade ten.

III. PROGRAM CHARACTERISTICS

PROGRAM GOALS AND OBJECTIVES

The goals of the program are stated in the proposal as a list of long-term objectives which has been included in the appendices.

Specifically, the proposed program lists the following objectives for evaluation during the 1981-1982 period:

1) as a result of participating in the program, 70 percent of students enrolled in E.S.L. classes will advance one level in English oral-language proficiency;

2) as a result of participating in the program, 70 percent of students enrolled in E.S.L. (transitional/remedial reading) English classes will receive passing marks (65 percent or better) in E.S.L.;

3) as a result of participating in the program, 75 percent of LEP students will master an average of one objective per four weeks of treatment on the Criterion Referenced English Syntax Test (CREST);

4) at least 70 percent of the students participating in the program will advance three points in Spanish-language achievement;

5) as a result of participating in the program, 80 percent of the students will pass with 65 percent or better, a mastery test in Spanish-language achievement compared to similar non-program students;

6) as a result of participating in the program, 70 percent of the students will pass course work (65 percent or better) in their native language arts or Spanish class;

7) as a result of participating in the program, the percentage of students enrolled in E.S.L. (transitional/remedial reading) English classes passing (65 percent or better) translated uniform examinations will be equal statistically to the percentage of mainstreamed students passing in mathematics, science, and social studies;

8) as a result of participating in the program, students' attendance will increase five percent in comparison to mainstreamed students;

9) as a result of participating in the program, students will have a dropout rate five percent lower than similar non-program students;

10) as a result of participating in the program, 60 percent of the students will demonstrate increased pride in their native cultural heritage;

11) as a result of participating in the program, students will visit four sites to increase their cultural awareness;

12) as a result of participating in the program, curriculum and supplementary materials will be updated, revised, or developed in the following areas: general science; biology; health careers; English as a second language - terms 1-8; Spanish language and culture/native language arts; bilingual career education; mathematics - fundamentals and algebra; eastern areas - Latin American studies; world history;

13) as a result of participating in the program, bilingual personnel will attend monthly training workshops;

14) as a result of participating in the program, mutual co-operation with Lehman College will be achieved through meetings;

15) as a result of participating in the program, students at Lehman College will be encouraged to do their field work at Walton High School;

16) as a result of participating in the program, staff and para-professionals will have the opportunity to register for college courses in bilingual education;

17) as a result of participating in the program, parents will attend regularly scheduled meetings of the program;

18) as a result of participating in the program, an advisory committee of bilingual parents and students will be established.

PROGRAM PHILOSOPHY

The bilingual program has been designed -- and is fully implemented -- as a transitional program. The transition to the mainstream

is seen not just in linguistic terms, but in terms of career awareness and orientation, attitudes toward work, and general skills that can facilitate the students' entry into the labor market after graduation. Emphasis is thereby placed on the students' becoming integrated into society at large.

The philosophy of the bilingual program is entirely shared by both the program staff and the school administration. The principal regards bilingualism, or even trilingualism, as an advantage that unfortunately is not shared by those students whose native and only language is English. These students have the opportunity to improve their language skills by taking N.L.A. classes with Hispanic students; the evaluator identified a number of non-Hispanic students in an advanced Spanish class who showed remarkable proficiency in Spanish. In addition, a number of mainstream teachers are taking Spanish lessons from the program coordinator.

Along with the general success of program students in mainstream courses, these activities on the part of native English speakers in the student population and among the faculty indicate the positive way in which the program is seen in the school as a whole. In addition, they reflect the degree of success of the program in communicating the value to the school community. Within this context, development of students' abilities in Spanish is understood as a vehicle to an effective transition, rather than as keeping students from full participation in the life of the school.

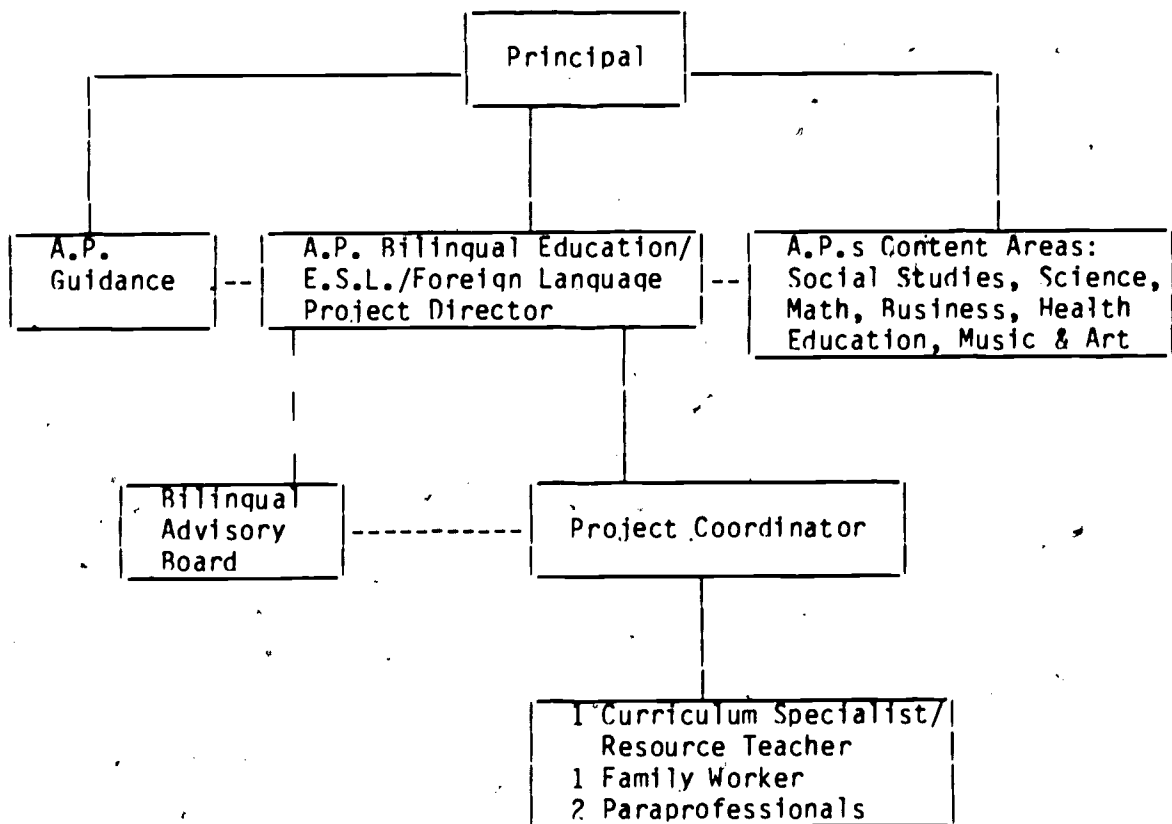
ORGANIZATION AND STRUCTURE

The program is under the direction of an assistant principal in charge of bilingual education who also directs the departments of E.S.L. and foreign languages. She reports directly to the school principal. Directly under her supervision is a program coordinator who implements all decisions and who supervises the program staff. Her responsibilities include administrative, supervisory, and fiscal matters of the program. The Title VII staff consists of one curriculum specialist/resource teacher, one family worker, and two paraprofessionals.

At the director's level, the program is articulated with the following departments of the school: foreign language, guidance, mathematics, music and art, physical education, science, secretarial studies, and social studies. Figure 1 presents the program's organizational arrangement within Walton's administrative structure.

FIGURE 1

Bilingual Program Organization Structure



—————Supervisory Relationship

-----Collaborative Relationship

FUNDING

Title VII of the Elementary and Secondary Education Act provides funding for the following staff: the program coordinator; one curriculum specialist/resource teacher; two paraprofessionals, and one family-worker. The director's position is supported by tax-levy funds; her position as assistant principal in charge of several departments includes duties not related to bilingual education. Instructional personnel, including four paraprofessionals, are funded either by Title I or tax-levy. Table 5 details funding sources for the instructional component of the program. Funding sources for the non-instructional component of the program are presented in Table 6.

TABLE 5
Funding of the Instructional Component

Area	Funding Source(s)	Number of Teachers	Number of Classes	Number of Paras ^a
E.S.L.	Title I	5	2,3,5,5,5	3.6
Native Language	Tax-levy	1	3	
	Title I	2	1,3	.4
Mathematics	Tax-levy	1	5	
	Title VII			.2
Social Studies	Tax-levy	3	1,1,5	
	Title VII			.4
Science	Tax-levy	1	5	
	Title VII			.4
Career Orientation	Title I	1	2	
	Title VII			.4
Career Exploration	Title I	1	3	
	Title VII			.6
Typing	Tax-levy	1	3	
Music/Piano	Tax-levy	1	1	
Health Careers	Tax-levy	1	1	
	Title VII			.2

^aParaprofessionals are present in all Title I funded E.S.L. and N.L.A. classes. The two Title VII paraprofessionals are placed in mathematics, science, and social studies classes where needed.

TABLE 6

Funding of the Non-Instructional Component

Purpose	Funding Source(s)	Personnel: No. & Title
Administration & Supervision	Tax-levy Title VII	.2 A.P. Supervision (Director) Project Coordinator
Curriculum Development	Title VII	Curriculum/ Resource Teacher
Support Services	Title VII Tax-levy	Family Worker Bilingual Guidance Counselor
Staff Development	Title VII Title VII	Project Coordinator Curriculum/Resource Teacher
Parental & Community Involvement	Title VII Title VII	Project Coordinator Curriculum/Resource Teacher

STAFF CHARACTERISTICS

The bilingual teaching staff is made up of four E.S.L. teachers, one teacher of both E.S.L. and N.L.A., one bilingual chemistry and science teacher, two Spanish teachers, three social studies teachers, and one bilingual teacher of mathematics. During the 1981-1982 year, the regular program mathematics teacher was on sabbatical leave and was replaced by a substitute who is not bilingual. Table 7 details staff characteristics for these and other program staff members.

TABLE 7

Staff Characteristics: Professional and Paraprofessional Staffs

Function(s)	% Time Spent in Function	Date Hired	Education	Certification & License	Years of Monolingual Experience	Years of Bilingual Experience	Years of Experience (ESL)
Coordinator	100	9/63	B.A. Spanish M.A. Spanish M.A. Linguistics ABD M.A. Ed. Adm. (27 credits - expected date of graduation 6/83)	NYC Spanish NYS DHS JHS		18	8
Bilingual Curriculum Resource Teacher	100		B.A. Spanish/French M.A. (32 credits)	NYC Spanish NYS DHS		4	4
E.S.L./N.L.A. Teacher	40/60		B.A. Spanish B.A. Spanish	NYC Spanish DHS NYS Spanish NYC DHS		1 1	1 1
E.S.L. Teacher	100	10/82	B.A. French M.A. French M.A. Superv. & Adm.	NYC E.S.L. HS NYS French HS, JHS		10	3
E.S.L. Teacher	100	9/82	B.S. Music M.A. Music Education Ed. M. Music Ed.	NYC DHS, JHS NYS Music NJ E.S.L.	3		4
E.S.L. Teacher	100	9/70	B.A. & 60 credits B.A. Spanish & 30 credits B.A. Spanish	NYC Spanish, Fls E.S.L. DHS NYC Spanish JHS/HS NYS E.S.L. HS	10 (Spanish) 10 (Spanish)		16 10
Spanish Teacher	20		B.A. Spanish	NYC Spanish NYS DHS			
Spanish Teacher Bilingual Chemistry Science Teacher	60 100	9/80	B.S. Science M.S. Chemistry	NYC Bilingual Chemistry General Science DHS	4	4	
Bilingual Math Teacher	100	9/78	B.S. Math	NYC HS Math NYS	10	4	
Bilingual Paraprofessional	100	9/78	B.A. Social Studies	NYC Per Diem Social Studies	5	5	5
Bilingual Paraprofessional	100	9/78	97 Undergrad. credits	NYC	4	4	4
Bilingual Family Worker	100	9/79	B.A.	NYC	3	3	3

IV. INSTRUCTIONAL COMPONENT

STUDENT PLACEMENT, PROGRAMMING, AND MAINSTREAMING

Upon entering the program, students are placed at the appropriate language level for English and Spanish based on individual placement tests given by the director or the coordinator, as well as on the recommendations of their teachers or guidance counselor. Special needs or abilities of the students are taken into account in student placement and programming.

Because the students in the program tend to be quite literate in Spanish, N.L.A. 1 and 2, designed for those who are functionally illiterate in Spanish, were not given in the 1981-1982 year. Courses were given, however, in N.L.A. 3 and 4, to students who are literate but in need of remediation. In addition to offering Spanish 5 and 6, aimed at enrichment, the program offered an advanced literature class in Spanish, (Spanish 7/9 and Spanish 8/10), to students during both the fall and spring terms. Table 8 lists offerings in N.L.A. and Spanish.

The evaluator observed both a beginning N.L.A. class and an advanced one. The former was small and the teacher was assisted by a paraprofessional who walked around the class responding to students' questions and working individually with those in need of additional help. While Spanish was used 90 percent of the time by the teacher when addressing the students, key terms in the lesson were translated into English. The advanced class was much larger and had no paraprofessional in it. Focused on the novel Pepita Jimenez, instruction was exclusively in Spanish.

TABLE 8
Offerings in Native Language Arts (Spanish)

Fall				
Level	Number of Classes	Average Class Reg.	Description	Curriculum or Material in Use
3	3	20	Intermediate remedial	Ya escribimos; Ortografia 3 Cuentos Corrientes (Funding: Title I)
5	1	33	Advanced honors	El espanol al dia Aventura en la ciudad
7/9	3	35	Advanced literature course	Espana y su civilizacion; Veinte Cuentos hispanoamericanos del siglo XX; Los arboles mueren de pie
Spring				
4	3	20	Intermediate remedial	Ya escribimos; Ortografia 4; Cuentos corrientes (Funding: Title I)
6	1	33	Advanced honors	El espanol al dia Aventuras en la ciudad
8/10	3	35	Advanced literature course	Espana y su civilizacion; Veinte cuentos hispanoamericanos del siglo XX; Pepita Jimenez

Program students are offered a four-year sequence of E.S.L. classes. E.S.L. 1 through 3 are supplemented by career orientation and exploration courses. E.S.L. 4 and 5, intermediate and advanced classes, are supplemented by additional English classes. E.S.L. 6 through 8 are designed as transitional courses intended to prepare students for mainstream English. Table 9 lists E.S.L. courses offered during the 1981-1982 year.

TABLE 9
Offerings in English as a Second Language
(Fall and Spring)

Level	Number of Classes		Average Class Req.		Description	Class Pds/Wk	Curriculum or Material in Use
	Fall	Spring	Fall	Spring			
1	2	1	20	15	Elementary	10	Lado-English Series 1
2	3	2	20	20	Elementary	10	Lado-English Series 2; No Hot Water Tonight
3	2	2	22	20	Intermediate	10	Lado English Series 3 Turning Point
4	1	2	20	20	Intermediate	5	Lado English Series 4
5	1	2	20	20	Advanced	5	Lado English Series 5
6	1	1	20	20	Advanced	5	Lado English Series 6; American Literature
7/8	1	1	15	15	Advanced	5	Stories, American Readings-3 English Composition Short World Biography Modern Biographies Be A Better Reader Barnell Loft Series- Levels C&D 20 Passages

The bilingual courses in career exploration and career orientation are an important part of the students' education, since they focus on practical issues of concrete and long-range benefit to the students. The evaluator observed a career orientation class whose topic was a job interview and a career awareness class whose topic was handling a checking account. Both courses provide students who are in the beginning or intermediate levels of E.S.L. the opportunity to begin to understand and communicate in English in a setting where their questions can also be answered in Spanish. Both classes are taught by a bilingual teacher and

a bilingual paraprofessional. In one class both teacher and students addressed each other in English 100 percent of the time. In the other class the teacher always addressed the students in English, and they addressed her half of the time in English and half in Spanish.

The students' E.S.L. levels determine whether they have a full or partial bilingual program. Their scores on the math placement test determine where they will be placed in the math sequence from grades 9 through 12. The remainder of the programs are completed with required and elective courses designed to allow them to meet requirements for high school graduation. After the tenth grade, students can take an increasing number of elective courses, which they select on the basis of interest.

Some "tracking" results from grouping students according to their linguistic abilities. Placement, however, is reviewed regularly, so that students are scheduled for classes that provide challenges for them without being too difficult.

The decision to offer a bilingual elective course depends on enrollment. During the 1981-1982 year, the program provided the following bilingual elective courses: career orientation, career exploration, typing 1 and 2, piano, and ceramics. Table 10 lists fall and spring bilingual content-area courses. Curricula used in these courses parallel that in mainstream courses. Some courses use materials printed in Spanish exclusively and all courses are reported to use materials appropriate to the students' reading levels.

TABLE 10-

Bilingual Content-Area Offerings

Courses	Number of Classes		Average Register		Percent of Spanish Use	
	Fall	Spring	Fall	Spring	Fall	Spring
Global History 1-2	3	3	34	34	100	60
World History 1-2	3	2	34	34	100	100
American History 2	1		34		100	
Economics 1		2		34		100
General Science	3	3	34	34	100	100
Biology 1-2	2	2	34	34	100	100
Health Careers 1-2	1	1	34	34	40	30
Ninth-Year Math 1	3	3	34	34	100	30
Ninth-Year Math 2	1	2	34	34	100	30
Tenth-Year Math	1		34		100	
Typing 1	2	1	30	30	30	40
Typing 2	1	2	30	30	30	30
Bilingual Career Orientation	3	2	20	20	50	50
Bilingual Career Exploration	3	2	20	20	50	50
Piano	1		30		30	
Ceramics		1		30		50

Note. All courses are offered for 5 periods per week; all carry academic credit. Their materials correspond to the mainstream curriculum and are appropriate for the students' reading level. In all cases, the criteria for selection are based on the Prueba de Lectura, LAB, and CREST scores.

Language usage varies from class to class. In a health careers session on blood coagulation, for instance, the monolingual teacher addressed the students and received questions from them only in English. At intervals during the class meeting, the bilingual paraprofessional translated the teacher's lectures into Spanish. At different points during the class, students who did not appear to have the English facility to address the teacher in that language asked questions in Spanish of the paraprofessional. An algebra class taught by a substituting non-Spanish-speaking teacher was also conducted primarily in English, except for the introduction of some Spanish words; here too the paraprofessional worked individually with students, tutoring them and answering questions in Spanish. An economics class, however, which had no paraprofessional was conducted almost entirely in Spanish, a fact consistent with the percentage of Spanish expected to be used in that course. In all of these classes, Spanish-language assignments were used.

Students with partially mainstreamed programs take one or more content-area courses in English. Physical education, art, and music, are offered as mainstream courses. Bilingual students can choose a mainstream elective if they qualify linguistically. Table 11 lists fall and spring mainstream courses in which students are enrolled.

TABLE 11

Mainstream Classes in Which Students are Enrolled
(Fall and Spring)

Course	Number of Students
Physical Education	200
English	35
English 4th	21
English 5th	11
English 7th	3
English 8th	2
Ninth-Year Math	30
Tenth-Year Math	29
Biology	2
American History	9
World History	5

The program is designed to prepare students for full participation in the mainstream. It is expected that after grade ten all bilingual courses will use English as the principal language of instruction, and that by the end of the eleventh year it is to be the only language of instruction. There are no twelfth-grade bilingual courses offered unless there is a need. Otherwise, all program students are to be mainstreamed. According to the project coordinator, since only the first two years of the program have been completed, only a few students have been completely mainstreamed.

Exit criteria from the program consist of a LAB score above the twenty-first percentile, CREST scores, recommendations from teachers and guidance counselor, and both student and parental consent. Based on their experience with the school's previous bilingual program population, staff reports that parents tend to be amenable to mainstreaming, while students tend to be more resistant to it. The guidance counselor meets with students to discuss mainstreaming prior to seeking student consent for it.

V. NON-INSTRUCTIONAL COMPONENT

CURRICULUM AND MATERIALS DEVELOPMENT

Many of the materials developed through the umbrella bilingual program are still used extensively in the current Title VII program. During the 1981-1982 year, a whole curriculum has been developed for the course in health careers and a special writing course was developed for E.S.L. that was designed to prepare students for the Regents Competency Test (R.C.T.). The paraprofessional aiding in the health careers and other courses has translated into Spanish class notes and examinations that can be used as ongoing resource material. The curriculum/resource specialist is involved in researching and ordering new materials suitable for the program's curricular needs as well as the development of new course curricula. In addition, the resource specialist is involved in other activities such as translation, modifying teaching materials, and orienting teachers on the use of supplementary instructional aids.

Some specially developed or commercially-produced materials in program use have been provided by other resource centers, especially DeWitt Clinton High School, where the resource specialist previously worked, and the Title I office at Monroe High School. Such resource sharing has been facilitated by the resource specialist's contacts with staff at both schools. These and other materials are located in a corner of the project office. The resource center's holdings have grown substantially in the second year of project operation.

SUPPORTIVE SERVICES

Although the program staff provides guidance on an informal basis to program students, guidance is the formal responsibility of the school's guidance office. A bilingual guidance counselor in that office is assigned the program students. Career counseling is also available within the school and is especially important since the program's focus is vocational.

The program's family worker works closely with the guidance counselor. She devotes 20 percent of her time, one day per week, to home visits related to attendance, discipline, and other school-related problems, as well as such problems as child abuse, peer social pressure, and family economic problems. Home visits and telephone contact are initiated by the family worker, the guidance counselor, the student, or the parents. Frequently parents call the family worker to let the program staff know that their children will be absent that day.

Psychological counseling is provided at the school. Such services are usually provided when a student is referred by the guidance counselor. There are no bilingual professionals providing psychological counseling at Walton.

STAFF DEVELOPMENT

Tables 12 and 13 summarize staff development activities throughout the 1981-1982 school year.

Several staff members are attending university courses: the project coordinator is seeking an M.A. degree in Administration and

TABLE 12

Staff Development Activities Outside School

Strategy	Description(s) or Title(s)	Sponsor/Location	Speaker or Presenter	No. and Titles of Staff Attending	Number or Frequency of Sessions
Workshops held outside school	Leadership in management institute	Bilingual Education Service Center (BESC) N.Y.C.	Various	1 Project coordinator	9 Sessions from Oct. - May
	Testing procedures CREST, LAB, Correct Issues and Strategies	NYC Board of Education	Various	1 Project coordinator	2 each semester
	Title VII Training	NYC ORE	Various	1 Project coordinator	1 each semester
Conferences and symposia	Statewide Bilingual Educator Management Conference	NY State Department of Education, Albany	Various	1 Project coordinator	2 days
Other	Workshop for Career Planning	Bilingual Education Service Center (BESC) N.Y.C.	Various	1 Curriculum resource Teacher	1 session

TABLE 13

Staff Development Activities in School

Strategy	Description(s) or Title(s)	No. and Title of Staff Attending	Speaker or Presenter	Frequency or Number of Sessions	Goal
Dept. meetings	Dept. Conferences	16 Staff members	A.P. Supervision Title VII Coordinator Curriculum/Resource Teacher	Monthly	To familiarize the foreign language and E.S.L. staff with the goals of the Title VII program To report on the progress of the program To demonstrate newly-acquired materials and teacher aids
Workshops	Bilingual Workshop and Spanish for teachers workshop	15-20 Teachers from general staff	Title VII Coordinator	Two times weekly - Sept to June, 1982	To foster understanding of bilingual students and the goals of the Title VII program To help teachers acquire a basic knowledge of Spanish to help them communicate with their students
Other demonstration lessons, lectures, etc.	Demonstration lessons in N.L.A. and E.S.L. Demonstration lessons at dept. conferences	Teacher of class and 1 Title VII staff member	Title VII Coordinator	Frequently throughout term	To familiarize teacher with techniques and methodology of teaching N.L.A., E.S.L. and content-area taught bilingually

Supervision at Pace University. The curriculum and resource specialist is enrolled at New York University, her goal being a Master's degree in Spanish language and literature. Members of the teaching staff are taking courses at Columbia University, the State University of New York at New Paltz, and New York University. Finally, two staff members are enrolled in a Master's program in guidance at Lehman College of the City University of New York.

PARENTAL AND COMMUNITY INVOLVEMENT

Parental and community involvement is sought through participation in a Parent-Student Advisory Committee (P-SAC), different school activities, and courses offered by the school to the community.

Consisting of eight parents, several students, and some teachers and program staff, P-SAC meets monthly. Its function is to facilitate and increase communication between school and home. Meetings are tied to E.S.L. classes that are offered to parents by the project coordinator.

The project coordinator gives E.S.L. classes to parents of program students and other interested members of the community, Hispanic and non-Hispanic. While the parents are primarily interested in improving their English-language skills, they sometimes use the classes to seek other help: to fill out an application form or to work out an effective way to negotiate in an unfamiliar environment, like a hospital or clinic.

Parental participation is limited by a number of factors: both parents work or one parent in a single-parent household works; parents

have to travel to get to the school; safety problems in the parents' neighborhood make night-time trips unattractive. The program nonetheless continues to make efforts to reach the parents through a newsletter and mailings notifying them of scheduled events, as well as through phone calls and home visits.

Despite these difficulties, the parents' overall commitment to the program is translated, as the coordinator observed, into a very high rate of attendance for program students. Attendance at meetings has improved since evening meetings were replaced by daytime meetings. The coordinator felt that the relatively small size of the administrative staff makes it difficult to increase substantially certain modes of parent participation.

AFFECTIVE DOMAIN

Program student attendance, calculated at 87.4 percent, is much higher than for the student body as a whole (see Table 24). Program students are active in the bilingual club, assemblies, performances, school excursions, and special holiday programs. The club period held every two weeks at Walton makes it easier for students to attend club meetings. Such a schedule is of particular importance since many of the program students work after school and could not otherwise participate in afterschool extracurricular activities.

Graduation plans of students who belong to the bilingual program include attendance at two- and four-year colleges, working, and joining the Armed Forces. The majority of graduating seniors who plan to attend college are inclined toward attending two-year colleges. (See

Table 14.) Prior to graduation, all program students are actively involved in seeking summer employment.

The program has a relatively low rate of attrition. The reason for leaving is generally completion of requirements and graduation. Table 15 shows the number of students and the reasons for leaving.

Disciplinary problems among program students are limited. Some suspensions were imposed, though, as a result of fights inside or just outside the school.

In addition to the high rate of attendance, the frequency with which students approach staff to discuss their problems is, according to the program coordinator, an indicator of the positive feelings program students have toward the program itself. As the program moves into its third year of operation, such attitudes are expected to continue and to have a positive impact on students' academic performance.

TABLE 14

Post-High School Plans of Twelfth-Grade Students

Plans	Number	Percent
College	8	38
Job	9	43
Undecided	3	14
Unknown	1	5

Most twelfth-grade students plan to go to work after leaving the program. An almost equal number of students plans to attend college.

TABLE 15

Number of Students Leaving the Program
During the 1981-1982 School Year

Reason For Leaving	Grade 9	Grade 10	Grade 11	Grade 12	Total
Fully mainstreamed		3			3
Transferred to another school	4				4
Graduated			1	21	22
Returned to native country		1			1
Removed from program by parental option		1		1	2
Discharge (Reason Unknown)		3	1		4
Other	1	1			2
Total	5	9	2	22	38

.Most students who leave the program do so because they graduate.

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 1981-1982.

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

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

Reading in Spanish -- Interamerican Series, Prueba de Lectura (Total Reading, Level 2, 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

Attendance -- School and program records

The following analyses were performed:

On pre/post standardized tests of Spanish-reading achievement statistical and educational significance are reported.

Statistical significance was determined through the application of the correlated t-test model. This statistical analysis demonstrates whether the difference between pre-test and post-test mean scores is larger

than would be expected by chance variation alone; i.e. is statistically significant.

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.* 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 $1/5 = .20 = \text{low ES}$

a difference of $1/2 = .50 = \text{moderate ES}$

a difference of $4/5 = .80 = \text{high ES}$

*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 students must supply a word or phrase chosen from four possibilities. Mastery of a skill objective is determined by a student's ability to answer at least three out of four items correctly.

This report provides information on the average number of objectives mastered and the average number of objectives mastered per month of treatment at the various test levels for students who were pre- and post-tested with the same test level.

Rates of success of students in mathematics, science, social studies, and native language arts courses taught in the bilingual program are reported by grade. These tables contain the numbers of students reported as taking the relevant courses and the percent passing, for fall and for spring courses separately. Data are also reported for program students who were taking mainstream courses in the same content areas. The program proposed to compare bilingual students' achievement with that of mainstream students in similar classes. The project coordinator

calculated and supplied overall passing percentages for bilingual and mainstream students in content-area courses. These totals are presented in the discussion included in the summary of findings on page 48.

A summary of individual bilingual student achievement in content-area classes is presented in Tables 22 and 23.

The attendance rates of program participants are presented by grade. The overall attendance rate of program participants is then compared with that of the school as a whole. Table 24 presents the percent difference between overall program and school-wide rates, the value of the z statistic for the significance of the difference between proportions, and the level of significance.

TABLE 16

Results of the Criterion Referenced English Syntax Test
 (CREST): Number of Objectives Mastered, and Objectives Mastered
 per Month
 (E.S.L. Title I Spanish-Speaking Students, Fall)

Grade	# of Students	Average Number of Objectives Mastered		Objectives Mastered ^a	Average Months of Treatment	Objectives Mastered Per Month
		Pre	Post			
9	47	12.6	17.8	5.1	3.2	1.7
10	29	14.0	17.4	3.4	3.2	1.1
11	20	10.2	14.1	4.0	3.1	1.3
12	9	8.6	11.9	3.3	3.0	1.1
TOTAL	105	12.2	16.4	4.3	3.1	1.4

^aPost-test minus pre-test.

.On the average, students mastered 4.3 objectives in the fall or 1.4 objectives per month in 3.1 months of treatment.

.The average number of objectives mastered meets the program's criterion level of one objective per month.

.Students at all grade levels show almost equal gains.

TABLE 17

Performance of Students Tested on the Criterion Referenced English Syntax Test
(CREST): Average Number of Objectives Mastered by Grade and Test Level
(E.S.L. Title I Spanish-Speaking Students, Fall)

Grade	LEVEL I					LEVEL II					LEVEL III				
	N	Average Number of Objectives Mastered			Gain/ Month	N	Average Number of Objectives Mastered			Gain/ Month	N	Average Number of Objectives Mastered			Gain/ Month
		Pre	Post	Gain ^a			Pre	Post	Gain ^a			Pre	Post	Gain ^a	
9	34	11.0	16.4	5.4	1.7	12	17.6	22.2	4.6	1.7	1	11.0	11.0	0.0	0.0
10	10	15.8	20.7	4.9	1.6	12	14.7	17.1	2.4	0.8	7	10.3	13.1	2.9	0.9
11	5	10.2	16.4	6.2	1.9	5	12.4	15.8	3.4	1.1	10	9.0	12.1	3.1	1.0
12	1	4.0	7.0	3.0	0.9	3	12.3	15.0	2.7	1.0	5	7.2	11.0	3.8	1.2
TOTAL	50	11.7	17.1	5.4	1.7	32	15.2	18.6	3.4	1.2	23	9.1	12.1	3.0	1.0

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

^aPost-test minus pre-test.

.There was an overall relationship between grade and test level. Generally, the students in upper grades took the higher level tests (II and III).

.While in general, students met the proposed criterion for achievement, grade 10 students taking Level II failed to meet the criterion proposed as the program objective.

TABLE 18

Results of the Criterion Referenced English Syntax Test
 (CREST): Number of Objectives Mastered, and Objectives Mastered
 per Month
 (E.S.L. Title I Spanish-Speaking Students, Spring)

Grade	# of Students	Average Number of Objectives Mastered		Objectives Mastered ^a	Average Months of Treatment	Objectives Mastered Per Month
		Pre	Post			
9	57	14.4	17.9	3.5	2.9	1.2
10	35	12.3	15.6	3.2	3.1	1.1
11	26	11.6	14.5	2.8	3.0	1.9
12	12	9.8	13.2	3.3	2.9	1.2
TOTAL	130	12.8	16.1	3.3	3.0	1.1

^a Post-test minus pre-test.

.Twenty-five more students were pre- and post-tested in the spring than in the fall.

.The overall rate of gain meets the criterion proposed as the program objective. However, grade 11 students' gains were slightly below the criterion level.

TABLE 19

Performance of Students Tested on the Criterion Referenced English Syntax Test
 (CREST): Average Number of Objectives Mastered by Grade and Test Level
 (E.S.L. Title I Spanish-Speaking Students, Spring)

Grade	LEVEL I					LEVEL II					LEVEL III				
	N	Average Number of Objectives Mastered			Gain/ Month	N	Average Number of Objectives Mastered			Gain/ Month	N	Average Number of Objectives Mastered			Gain/ Month
		Pre	Post	Gain ^a			Pre	Post	Gain ^a			Pre	Post	Gain ^a	
9	17	10.9	16.3	5.4	1.7	36	16.2	19.1	2.9	1.0	4	13.0	14.0	1.0	0.2
10	6	5.3	11.2	5.8	1.9	17	15.7	19.2	3.5	1.2	12	11.0	12.6	1.6	0.3
11	8	14.2	19.6	5.4	1.8	1	13.0	15.0	2.0	0.6	17	10.3	12.0	1.7	0.6
12	1	7.0	10.0	3.0	1.0	3	11.0	15.7	4.7	1.7	8	9.8	12.6	2.9	1.0
TOTAL	32	10.6	16.0	5.4	1.8	57	15.7	18.9	3.2	1.1	41	10.7	12.5	1.8	0.6

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

^aPost-test minus pre-test.

.In the spring, most students were tested at Levels II and III, while in the fall, the majority was tested at Level I.

.Achievement on all levels was similar to that in the fall.

.In general, students taking Levels I and II met the criterion of achievement as proposed, while grade 9, 10, and 11 students taking Level III failed to meet the program's objective. This result may be due to the higher level of difficulty involved in the mastery of higher level objectives.

TABLE 20

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 Level 2 Total Reading, Forms A and B, by Grade

Grade	N	Pre-Test		Post-Test		Mean Difference	Corr. Pre/Post	t	p	ES
		Mean	Standard Deviation	Mean	Standard Deviation					
9	44	91.4	17.1	97.2	13.7	5.7	.72	3.2	.003	.72
10	33	94.0	16.2	96.8	15.3	2.8	.90	2.2	.029	.34
11	29	93.7	14.6	99.0	12.7	5.3	.68	2.5	.016	.65
12	16	96.8	12.5	102.9	5.5	6.2	.69	2.5	.021	.77
TOTAL	122	93.4	15.7	98.2	13.2	4.9	.76	5.2	.000	.60

.In general, students showed gains in native-language reading achievement which were of high statistical significance and of moderate educational significance.

.As a group, and at each grade level except grade 10, students made mean gains exceeding the program's objective of three raw score points. The mean gains were 60 percent higher than the objective set.

TABLE 21
 Number and Percent of Students Passing
 Teacher-Made Examinations in Native
 Language Arts (Spanish), by Grade

Grade	FALL 1981			SPRING 1982		
	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	72	58	80.6	71	56	78.9
10	53	47	88.7	50	34	68.0
11	30	27	90.0	33	30	90.0
12	19	17	89.5	17	17	100.0
TOTAL	174	149	85.6	172	132	80.2

.In general, students' performance surpassed the program objective, a criterion of 70 percent passing, both in the fall and spring.

.On the average, students in grades 11 and 12 achieved higher rates of passing than did those in grades 9 and 10.

.The passing rate decreased from fall to spring primarily due to a large drop (20 percent) in the passing rate achieved by tenth graders.

TABLE 22

Number of Students Enrolled in Courses and Percent
Passing Teacher-Made Examinations in Subject Areas by Grade

Fall Courses	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	N	% Passing	N	% Passing	N	% Passing	N	% Passing	N	% Passing
Mathematics	77	53.2	60	63.3	23	56.5	10	60.0	170	57.9
Science	73	53.4	54	61.1	30	73.3	13	84.6	171	62.0
Social Studies	77	79.2	59	67.8	33	78.8	15	73.3	185	75.1

Spring Courses	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	N	% Passing	N	% Passing	N	% Passing	N	% Passing	N	% Passing
Mathematics	74	43.2	47	42.6	19	57.9	7	14.2	147	42.8
Science	73	39.7	54	48.1	31	74.2	14	78.6	173	51.4
Social Studies	75	77.3	52	67.3	30	90.0	15	86.7	172	77.3

•With the exception of science, there was no clear relationship between grade level and achievement.

•In both fall and spring terms, passing rates were highest in social studies courses and lowest in mathematics.

•In the fall term, passing rates ranged from almost 58 percent (mathematics) to 75 percent (social studies). In the spring, the figures were almost 43 percent to 77 percent, respectively.

TABLE 23

Number of Students Enrolled in Courses and Percent
 Passing Teacher-Made Examinations in Subject
 Areas, by Language of Instruction

Fall Course	Spanish		English	
	N	Passing	N	Passing
Mathematics	122	53.3	49	69.4
Science	166	62.0	5	60.3
Social Studies	176	75.0	8	87.5

Spring Course	Spanish		English	
	N	Passing	N	Passing
Mathematics	123	38.2	25	68.0
Science	164	51.2	7	57.1
Social Studies	159	79.2	12	58.3

- .Most program students were enrolled in bilingual classes.
- .Achievement rates were generally better for students taking courses in English. The small number of students reported as participating in mainstream classes, however, suggests that these students were selected; they might have been an especially capable group.
- .The performance of students in science classes was essentially similar regardless of the language of instruction. Performance rates in mathematics and social studies differed substantially.

TABLE 24

Significance of the Difference Between Attendance Percentage of Program Students and the Attendance Percentage of the School

Grade	N	Mean Percentage	Standard Deviation
9	75	86.8	13.5
10	54	88.0	13.3
11	34	87.1	10.3
12	20	89.5	7.0
TOTAL	183	87.5	12.3

Average School-Wide Attendance Percentage: 71.4

Percentage Difference = 16.0 $z = 4.79$ $P < .01$

- .The program attendance was 16 percentage points higher than the school-wide attendance rate.
- .The difference was statistically significant at the .01 level.

SUMMARY OF FINDINGS

English Achievement

Students mastered a total of 1.4 objectives per month in the fall and 1.1 objectives per month in the spring on the Criterion Referenced English Syntax Test, thus meeting the stated program objective. Students at Level I surpassed the objective during both semesters (1.7 and 1.8 objectives per month), while students at Level III failed to meet the objective in the spring. This is not surprising because there are fewer objectives at Level III (15) than at Level I (25); the objectives appear to be more difficult at Level III, and students do proportionately better on the pre-test at this level, leaving less room for improvement.

Native-Language Achievement

Students surpassed the expected objective of a gain of 3 raw score points on a Spanish reading achievement test (Prueba de Lectura, Level 2, Forms A and B); they gained an average of 4.9 points from pre-test to post-test. The gains were statistically significant and of moderate educational significance. In addition, the project coordinator reported that all program students who took the New York State Regents' Spanish Examination passed it.

Content-Area Achievement

In content-area classes, the passing percentages for fall and spring were as follows:

Native Language: 85.6 and 80.2

Social Studies: 75.1 and 77.3

Science: 62.0 and 51.4

Mathematics: 57.9 and 42.8,

Students surpassed the program's objective for native-language achievement and did well in social studies. However, passing rates were lower in science and mathematics.

According to information provided by the project coordinator, program students did better in Spanish and social studies than mainstream students, but did not do as well in science and mathematics. In the case of mathematics, the project coordinator explained that a substitute teacher who was not bilingual taught these classes, indicating that part of the reason for the poor performance might be due to teacher effects.

E.S.L. Transitional Classes

According to information provided by the project coordinator, students in E.S.L. 6 had a 96.2 percent passing rate and students in E.S.L. 7/8 had a 70.2 percent passing rate, exceeding the stated objective of 70 percent passing.

Other Objectives

The average attendance rate of program students was 16 percentage points higher than the school-wide attendance rate.

Information on the students' growth in oral proficiency in English was not provided (see recommendations), as no reliable instrument was available.

Dropout rates could not be compared with school dropout rates because school-wide figures were unavailable (see recommendations.)

Increased pride in cultural heritage was not measured because a reliable instrument was not developed. However, students participated in cultural activities such as assemblies, acknowledgement and celebration of ethnic holidays, and the school's Bilingual Club.

VII. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Based on the data collected, it is evident that the Bilingual Basic Skills Program at Walton High School is adequately meeting its program objectives during its second year of funding. Program students have met the program's objective for growth in their knowledge of English syntax, and have demonstrated statistically significant gains in reading in their own native language. In the content areas, the program coordinator reports that program students in social studies classes outperformed their peers in similar mainstream courses. Achievement in Spanish and social studies courses was high, while passing rates in science and mathematics were lower. According to the project coordinator, the low overall passing rates in mathematics were possibly due to the lack of a bilingual teacher in this area. Finally, the attendance rate of program students was observed to be significantly higher than the school-wide attendance rate.

Measurement of the attainment of certain objectives (in oral language proficiency and knowledge of cultural heritage) could not be calculated because appropriate instruments were not available. Information on school-wide drop out rates was not available at the time the data were collected.

In the non-instructional areas, the program staff continues to address the students' needs for guidance, career orientation, and appropriate course materials. Curricula have been developed for courses in health careers and E.S.L. writing. Other class notes and examinations have been translated and commercially-produced materials have been

obtained and included in the resource center. Academic and career counseling are available to program students on a formal and informal basis. Staff development activities include attendance at program and school-wide meetings, city- and state-wide conferences, and university courses. Of special note is the "Spanish for Teachers" workshop offered by the project director for 20 teachers from the school-wide faculty, twice a week throughout the school year.

The program continues to be hampered by certain factors beyond its control, such as a shortage of bilingual personnel as substitute teachers and economic and familial responsibilities which limit parental participation in school and program events. It continues, nevertheless, to strive to meet its objectives with the resources available.

RECOMMENDATIONS

On the basis of several site visits, classroom observations, and interviews with program personnel, the evaluation team recommends that consideration be given to changes in the following areas:

- 1) The program's collection of resource materials has grown substantially over the past two years. If possible, the program might consider establishing a separate resource center as an alternative to the materials' present location -- a corner of the office used by all the Title VII staff. The constant parade of students, parents, and teachers into the office can be distracting for those attempting to use the materials and a separate location would make them more accessible to students and staff.

2) The program staff should consider initiating discussions with the school's guidance office to formalize a system of follow-up for students who are to be completely mainstreamed. Such a system will not only monitor and support student progress but will allow better assessment of the program's effectiveness in preparing students for participation in mainstream classes.

3) Since Title VII funding does not provide for a bilingual secretary, the program should consider securing the services of a bilingual secretary. The existence of a skilled bilingual administrative worker would greatly relieve the heavily burdened Title VII staff.

4) It is recommended that the program staff review the evaluation objectives in light of the program's proposed scope of work. Those objectives which require modification should be revised.

VIII. APPENDICES

Performance Objectives

i. Long Range Objectives (Three years)

The following long range objectives are considered to be attainable over a three year period.

1. A comprehensive bilingual program will have served approximately 500 students in grades 9-12.
2. A career awareness not normally available to bilingual students, (i. e. utilization of bilingual skills in the job market) will be acquired through specialized courses of study.
3. The basic skills in English, in Spanish and in Math will be reinforced through ESL classes and interdisciplinary studies.
4. An equal percentage of Spanish dominant students as those from the English speaking body will complete a high school education and receive a diploma.
5. Every year individual students will be evaluated and placed in the mainstream at their own grade level based upon evaluation and consultation with bilingual personnel and parental approval.
6. At least 70% of the Hispanic students in the bilingual program will receive a passing grade in their ESL class as well as in their regular tax-levied English class.
7. All students will develop and maintain listening, speaking, reading and writing skills in English as stressed in their ESL classes.
8. Academic achievement in all subject areas will be increased. Students will pass at least 70% of their courses.

9. As a result of studying their native language and culture, non-English dominant students in the bilingual program will develop and maintain a positive self-image and feel pride in their cultural heritage as measured by pre and post attitudinal survey.
10. All students in the bilingual program will understand and value a culturally pluralistic society as measured by pre and post attitudinal survey.
11. Curriculum will have been developed and/or revised for the following areas: (See Program Description Section for Outlines for courses listed below).
 - a. Health Careers
 - b. Laboratory Techniques
 - c. Emergency Medical Techniques
 - d. Law Enforcement
 - e. Typewriting
 - f. Office Practice
 - g. Business Machines
 - h. Bilingual Career Education
 - i. English as a Second Language 1-8
 - j. Spanish Language and Culture/Native Language Arts
 - k. Mathematics - Fundamentals and Algebra
 - l. Business Communications
 - m. Eastern Areas - Latin American Studies
 - n. American History
 - o. World History

p. Economics

c. Chemistry

12. Materials will be translated into Spanish to bring courses into accord with the New York City Board of Education curriculum guidelines.
13. Student attendance will increase by at least 5% to an average of 75% per day.
14. After completion of a four year high school program students wishing to further their education will enter an accredited college or business school.
15. An internship in a bilingual private or public agency will be arranged to test the appropriateness of career choice and to allow twelfth grade students the opportunity to get first hand experience in the field.
16. A staff aware of the philosophy and methodology of bilingual education will be trained through workshops and faculty conferences.
17. The staff will be encouraged to further their training in bilingual education at institutes of higher learning.
18. A Bilingual Career and Resource Center will be established and maintained by a bilingual resource teacher.
19. At least 70% of the parents of students in our program will show interest and cooperation through interviews and questionnaires.
20. At least 60% of the participating parents will attend meetings, activities and/or activities and/or events sponsored by the total school and by the bilingual program.

21. A viable and active Advisory Council of the bilingual program will be established.
22. Parents will be encouraged to join the Parent's Association of the school.
23. Establishment and consultation with a viable and active Advisory Committee.