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## ABSTRACT

This report describes and evaluates a project that provided instruitional and supportive services. Haitian high school students in 1980-8i. Project gecome at Sarah $J$. BaIe $\operatorname{High}$ School in Heu York City offered social studies: mathematics. and science subjects in ispanish and Erench Creoie, vöcational and career courses, and a rork study program as well as counseling services and oppottunities Eo: parant/comunity involvement. The report describes the program karticipants, program. struccure and organization, implemaitation of instructional and non-instiuctional componants, and program assessment. Evaluation results indicate that: 1) both Rispanic and Haitian students açieved good rates of mastery of the objectives in' a test of English syntax 2) some gains vere mede in English. reading; 3) bilingual stuients generally achievea passing rates in the content areas that exceeded the passing rates of mainstrazm students in comparable classes; 4) passing rates in native language courses and business/vocational courses were generally high; 5) students who took city-kide social studies and reading tests achieved overall passing rates of over 85 . percent; and 6) participants' attendance rates were higher chan the overall rate for mainstream students. The report concludes with recomendations for program improvement. (futhur/mat)

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E.S.E.A. TITLE VII

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SARAH J. HALE HIGH SCHOOL
PROJECF-BECOME:
1980-1981

Principal:
Bernard Holinez.
Diractor:
Alba Del Valle

BILIAGUAL
Prepared by the
EDUCATION EVALUÀTION UNIT
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Overview ..... 1
I. Context ..... 2
Site Characteristics: The School ..... 2
The Neighborly, cod Context. ..... 3
Language life In The Community ..... 3
History of Services to L[P Students at Sarah J. Hale ..... 4
II. Student Characteristics
Student ${ }^{\frac{3}{4}}$ Characteristics in the School as a Whole
Program Students: Background Characteristics ..... 8j
III. Program Description ..... 13
Program Organization and Personnel ..... 13
Funding of the Bilingual Program ..... 15
Staff Characteristics .....  18
IV. Instructional Component ..... 22
Placement and Programing ..... 23
English Instruction ..... 26
Instructional in. the Spanish/French Language ..... 28
Content-area Instruction ..... 31
Career Classes ..... 37
Other Mainstream Classes ..... 40
V. Mon-Instructional Component ..... 43
Staff Development ..... 43
Curriculum and Material. Development ..... 45
Supportive Services to Students ..... 46

- Extracurricular Activities ..... 49
Other Student Responses ..... 50
Parental and Community Involvement ..... 51
$=$
(


## LIST. OF CHARTS AND TABLES

Chart 1. Organizational and staffing chart of Project Become. ..... 13
Chart 2. Sequence of experiences of students in the career sequence of Project Become: ..... 38
Table.1. Population changes at Sarah J. Hale High Şchool, 1974/75-1980/81. ..... 5
Table 2. Home languages of students in the school as a whoje. ..... 6
Table 3. Number and percentages of bilingual program students by sex and grade. ..... 7.
Table 4. Number of Project Become stugents by language and country of birth. ..... 8
Table 5. Number of Project aacome students by aga and.grade. ..... 11
Table 6. Funding and staffing of instructional seirvices to both Hispanics and Haitians, spring 1980. ..... 15
Table ${ }^{\circ}$ i. Instructional services provided for Hispantic students, spring 1980. ..... 16
Table 8. Funding and staffing of instructional services to Hattain students, spring 1980. ..... 17.
Table 9. Funding of the non-inst.uctional-components of Project Become: services to Hispanics and 'Hatitans. ..... 18
Table 10. Staff charactiertistics: professional and paraprofessional staff.s. ..... 20
Table 11. Typical student programs for academic and career tracks. ..... 24
Table.12.- Instruction in English as a second language and English reading. ..... 28
Table 13. Texts and materials for use in E.S.L., French, and Span! sh classes. ..... 30
Table 14. Bilingúa instruction in content areas, by lanquage, spring 1981. ..... 35

## LIST OF CHARTS AND TABLES

 (continued)Table 15. 'Textbooks in use in bilingual content-areácolasses,
by lanyuage. ..... 36
Table 16. Mainstream classes in which program students are enrolled. ..... $\$ 1$
Table 17. Textbooks for use in bilingual career classes, by subject area. ..... 42
Table 18. Resuits of: the Criterion Referenced English Syntax Tést (Spanish-speakifg students, ${ }^{\text {Witilit. }}$ ..... 58
Table 19. Performance of students tested on the Criterion Reiereniced English Syntax Test (Spanishuspeaking stadents, fall). ..... 59
Table 20. . Results of the Criterion Referenced English Syntax Tost (Spanish-speaking students, spring). ..... 60
Table 21. 'Performance of students tested on the Criterion Referenced English-Syntax Test (Spanish-speaking students; spring)., ..... 61
Table 22. Results of the Criterion Referenced English Syntax Test (French/Haitian Creole-speaking students, fall). ..... 63
Table 23. Performance of students tested on the Criterion Referenced English Syntax Test (French/Haitian Creole- speaking students, fall). ..... 64
Tabie 24. Results of the Criterion Referenced English Syntax Test (French/Haitian Creole-speaking students, spring). ..... 65
Table 25. Performance of students tested on the 'Criterion Referenced Syntax Test (French/Haitian Creolewspeaking students spring). ..... 66
$\therefore$ Table 26. English achievement for Spanish-speaking students. ..... 68
Table 27. English achtevement for French/Haitian Creole-speaking students. ..... 69
Table 28. Native language reading achievement for French/Hattian Creole-speaking students. ..... 70
-•. ... . LIST OFF CHARTS AND TABEES


Table 29. Achievement on citywide or regents tests of reading in. the native language.
$\qquad$
(cont-1nued) -
 studies.
1.72

Table 31. Mathematics achievement for Franch/Haisian Creolespeaking 'students.
Table 32. Number and percentage of bilingual program and mainstream students passing content -area courses in spring '1981.

- $\therefore$ Table 33: Number of spanish-speaking students attending courses and percent passing teacher -made examfatons in $=$ vocational and business erfuctatonc_,
Table 34: Number of French/Haitian Creoléspeaking students attending courses and percent passing teacher-made examinations in business education, spring 1981:
Table 35. Number of Spanish-speaking students attending courses and percent passing teacher-made examinations in native language classes. $\square$ $\downarrow$

Table 36. Number of French/Haífan Creole-speaking students. attending-qourses and percent passing teacher-made examinations in French language classes.

Table 37. Significance of the difference between attendance $\therefore$ percentages of bilingual students and the attendance. percentage of the school.


- Project Become is designed to provide instructional and supportive.șervices to approximately 350 Hispanic and Haitian students. In addition to academic subjects offered in the native language (Spanish and French/Creole), students have the opportunity to take vocationai or career-oriented courses, and may participate in a work-study program. The three najor career areas offered are business education, cosmetology, -and health careers. Students may opt to particiate in Project Enterprise, an industrial arits production project, and other pratical arts ciasses. They participate in music, art, and physical educatidn classes with mainstream students. In addition to instructional services, students may be placed in work experience internships or after-sēhozl jobs. They also receive guidance counseling, grade advisement, and the services of the program's family assistants. The project director and curriculum/resource specialist provide additional support to students. Extracurricular activities, cultural activities and trips are also offered.


## 1. CONTEXT

## 1. SITE CHARACACTERISTICS: THE SCHOOL

Project Beconte is housed in an ofder three-story stone builiding adjacent to Sarah $\mathrm{j}_{0}$ Hale High School. . The "west wing,." separated by a parking*lot ffom the main school building, is located at 500 Pacific Street near danintown Brooklyn. The mako schpol building is a large three-story stone structure, approximately 50 years old. The west winq is somewhat newerf, with cements and tile intorior kalls reminiscent of the factory which it onçe was:.

Bilingual classes are of rered in the west wing, although students generally have classes, in the main buildina"as well. As littie time is allowed between classes, students must hurry from one building to another: Thus, oflingual social studies, science, and mathematics may be offered in the'west wing, while E. $S_{p} L^{\prime}$, English ceading, Spanisn, typing, cosmetology, 'art, and gym may be taken in, the main building.

- The program 'has offices iand classrooms predominantly on one floor. Although classroom space is adequate, office and storage space is cramped into small fooms apparently not intended for such use. As a result, space for conferencés, student study areas, and materials storaqe is 'limited. Glassiŕoms were formed by adding walls within what had been an open space. These interior walls do not extend to the ceiling. As a resùlt, sounds carry from one class to another, although usually not obtrusively. St'reet, noises aremsométimesloud, but not usually dispuptive.


## THE NEIGHBORHOOD CONTEXT

The imnediate area is one characterized by complex processes of urban decay, change, and renovation, Located near a once thriving commercfal zone, somé, urèas are seriously deterforatediwith many empty stores, decaying muiti-story builitings and brownstones. In other areas, renovation is taking place, and numbers of middle income families are moving into the neighborhoods. On nearby Fulton Street, considerable efforts are being mace to upgrade stores and shopping services in the area.

On the wiole, the area is still one of-pld or aging brownstones, small factories, and struggling businesses. Beçause of fts central locatien, the area is well sefved by public transportation.

The ethnic composition of the imnediate area is largely black American, Hispanics and Hattian, in that order. All of these groups are predominantly working class. .To the west, along Atlantic Avenue, a sizeable Middle Eastern commity is located. Students from these families are not reprejented in any numbers at Sapăh .). Hale.

## LANGUAGE USE IN THE COMMUNITY

The families f Haftian students tend to use creole or French at home and with friends outside their homes. Spanish is spoken in the houses of Hispanics and in some small local businesses, but Engitsh generally prevails in the cominity (much of it black English). While bilingual students (especially Hispanics) tend ta use their native language with their peers and in their classes, the neighborhood is not as a whole linguistically isolated.

HISTORY OF SERVICES TO LEP STUOENTS AT SARAH J. HALE
Sarah J. Hele High School is locatęd near and serves one of the oldest Puerto Rican ccmunities in New Yort City. According to the principal, E.S.L. classes kere initiaced ten years ago. Prior to the $i$ feceipt of a five year Title Vill grant in 1975-75, the school had initiated a pllot project under the mandate of the Aspira Consent Decree for materials development. The Title VII program, Prcject SABER, was an academic basis bilingual program serying Hispanic students. Whan the funding cycle ended, services were refocussed and expanded ta include the a oring Haitian population in tie school, and offering to them and the Hispanics the opportunit; to participate in the career, vocatinnal, and job proarams for which the schooi is well knawn. Project Become is funded for three years, running from 15: 亿ol kifough 1982-83.

## II. STUDENT CHARACTERISTICS

## STUDENT CHARACTERISTICS IN THE SCHOOL AS AHHOLE

The area served by Sarah J. Hale has experienced shifts in population, reflected in the student body. Small numbers of middle dias white fancies are renovating homes in the area (although their children are not represented in the school's population). The percentage of Hispanics and Italians is decreasing, while the proportion of blacks (among whom the Haitians are counted) is rising. Although the Haitians are not: "tabulated separately, "the program staff thinks their numbers are increasing. Table 1 presents a general breakdown of the population at Sarah J: Hale.


Sources: School Profiles, 1974-75 and 1975-77; Office of Educational Statistics, Ethics Surveys of October 31, 1978, 1979, and 1980.

As may be seen in Table 1, there have been some changes in the total school population at Sarah J. Hale High School since the fall of
1974. The overall population of Hispante apparently peaked in 1976-77, and showed a rise in the number of non-Puerto Ricans with a corresponding decline in those of Fuerto Rican descent. Since 1977, the proportion of Hispanics and whites bas declined, while that of blacks (among whom the Haftians are included) has risen.

Of the students at Sarah J , Hale who are from other-thanEnglish language backgrounds, most continue to be Hispanics. The estimated language background of Serah J. Hale students is as follows:

| Table 2. He languages of students in the school as a whole (as of spring, 1981). |  |  |  |
| :---: | :---: | :---: | :---: |
| LANGUAGE | N | PERCENT OF TOTAL ENROLLMENT | APPROXIMATE NUMBER <br> L.E.P. |
| Spanish <br> French/Crpole | 1,520 164 | $\begin{array}{r} 57 \\ 6 \end{array}$ | $150$ |
| Arabic | 10 | Negligible | ? |

Source: Program records; Consent Decree Repdct, fall 1980.
As may be seen from Table 2, Project Become prodospd to serve all those students identified as of limited Enalish proficiency. The native Arabic speakers, however, can not be provided with native languaqe instruction because of their small nubers. They receive intensive Instruction in English as a second language and are served in mainstream classes.

In the sthool as ayhole, approximately two-thirds of the students are gikls, reflecting the school's history as a giris' vocational high school, spectalizing in cosmetology, health careers, and office skills. Bojs were admitted seeven year's ago, and vocational offerings have been expanded. The school was designated a; a comprehensfive açadenic high school in 1976.

In the bilingual program, the balance of male and female students. is somexhat more equal, although girls tend to outnumber boys in grades ten and twelve. Table 3 presents these data, as well as the total number of students served in each grade. Relatively little attrition of female students appears in the upper grades, while that for males is sonewhat greater.


## - PROGRAM STUDENTS: BACKGROUHD CHARACTERISTICS

The breakdownof countries of origin of program students reflects the generiat shifts in population noted for the whole school. Table Il presents $^{\text {information on the countries of origin reported for }}$ program students.


Source: Individual student data capture forms submitted by Project Become.
As may be seen from the table;' 73 percent of the students for whom data forms were submitted were Hispant. ${ }^{\prime}$. of these 132 students, 59 (45 percent) are Puerto Ricans. Students from the Dominican Republic constitute about 17 percent of the Hispanics. Students from Central American countries make up 3.4 percent of the Spanish-speaking students, forming the second largest group among them. Thus, while Puerto Ricans
still form the largest single group of Hispanics served, they no longer coristit'so the majority of program students.

These differing proportions of nationalities represented may have implications for the program in the future. While Puerto Rican Immigrants have some exposure to English, students from other countries are less likely to have had this experience. Similarly, the benefits of public education are not equally accessible to all students in Central American and Caribbean countries, resulting fri immigrant populations with varied levels of educational] preparation. Processes of social upheaval and econominhardship often affect families of different social strata differentially, resulting in emigrants of different educational, social, and economic characteristics. As a result, the program will probably . . continue to experience students with diverse backgrounds and needs.

## Educational Backgrounds of Program Students

According to the project director, most of the Hispanic students have fairly well-developed literacy skills"in their first language. There is some variability to be expected, however; a small number of Hispanics have more limited educational experiences than their peers.
$\Gamma^{-}$The Hitting students span a range of educational backgrounds. Most commonly, the native language of Haitian students of all socioeconomic levels is Haitian Creole. French may also be jearned at home, but, is generally acquired in school. It is the language of literacy in Haiti, but as not all Haitians have equal access to education, their levels of proficiency in French vary. According $\mathrm{to}^{\circ}$ the Haitian grade advisor,
about 15 percent of participating Haitians have had rich educational experienças, including exposure to Greek, Latin, Spantish and/or English, in addytion to French. About half of the students have tasic skills in French, while about 35 percent.have had poor educational experiences. Fouf or five students are functionally illiterate. . Providing instruction to students with such diverse linguistic and academic needs is a challenge to program stàff.

Age
While specific documentation is lacking as to the reasons why, many program students are overage for their grade." Possible causes may include limited access to education in the native country (because of geographic or economic constraints), or disruption of education due to social unrest or the dislocations of the migration process. Table 5 . presents the students served in Project Become by age and grade.

Tabie 5．Number of Project Become students by age and grade．

| AGE | GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | 4，\％人 | \％ |  | $\cdots$－ | 19 |
| $16$ | $14$ | 为 |  |  | 31 |
| 17. | $\bigcirc 10$ | $18$ | 苞愘 |  | 39. |
| 18 | 5 | 12 | $15$ | 6 | $4 \overline{1 / 2}$ |
| 19 | $\therefore 1$ | $\therefore \quad 7$ | 6 | 12 | $26^{\circ}$ |
| 20 | $\begin{array}{r} 11 \\ 1 \end{array}$ | 4 | 6. | － 3 | 14 |
| 21 | $\cdots$ | 1 |  | 6 | 7 |
| $\because \quad 22$ | $\cdots$ | 1 |  | 2 | 3 |
| TOTAL | 50 | 58 | $3.37^{\circ}$ | － 35 | ：180 |
| OVERAGE <br> STUDENTS <br> NUMBER | $\therefore 31$ | $\therefore 3$ | 27． | $\because 23$ | $124$ |
| PERCENT ${ }^{\circ}$ | 62 | 74 | 73 | 66 | 69 |

As may be seén， 69 percent of all the students．who were reported were overage for their grade．＇The percentage of older students ranged from 62 in grade nine to 74 in grade ten．According to the data sub－ omitted by the project for analysis，students as old as $2 \pi$ were being served．；This would tend to support the program＇s efforts at job prep－ aration，couriseling，and support services．One might suspect that over－ age young men would expertence some pressure at home to go to work fa hypothesis supported by the tendency for tie number of male students to decline as their grade level increases）．

The pattern of older students (some of whom have had disrupted or incomplete educational histories; also suggests that some students may experience cognitive difficulties in high school and require (but do not necessarily receive) instruction geared to their needs.

IE1. PROGRAM DESCRIPTION

- program organizatión and personnel

The bilingual program at Sarah J. Hale functiors ass a unified department. The program cogrdinator has responsibility for all administration and supervision, including instructionals training, personnel, and fiscal matters, reporting directly to the school'principal. The Project Become sitaff also includes two grade advisors (one for each language group), the bilingual test and curriculum coordinator, four education assistants, two family assistants, and classroom teachers funded under vaitious sources.

- Chart 1. Organizational and staff chart of Project-Become.


[^1]The project directo has responsibility for program adminisa tration and supervision, fincluding instructionaf, trajning, personnel, fiscal, and evaluation marisers, Siee works closely with the grade advisors, who have respohsibility not only for grade advisement but for informal personal counseling, for orgafizins student activities outside the classroom, and for, other suppgrt activitiss. These include following up on abserces, contact with families, coorcination with the family assistants, record keeping, and other assistance offered toustudents as the need artses.㱍e grade advisor for the Hispanic students also teaches two social studies classes in addition to his bther responsibilities.

The Haitian grade adivisor has many areas of responsibility. -Because of the limited availability of staff serving these students, he not only"serves as grade advisor, but obtains, develops, and adapts a curriculum materials; he also has teaching responsibilities for sections of French reading, world history, and general science (offered in French).

Curriculúm development in Spanish and test coordination are the respons/bility of an experiesced staff member, who also teaches two science courses in Spanish.

Supporting instructivn in the classrooms are four educational "àssistants (three Spanish- and one French-speaking). Two family assistants (one Spanish- and one French-speaking) assist the educational advisors in making contacts with students' families and following up on any problems, personal or academic, which may arise.

The program's bilingual secretary carries nobre responsibility than her title implies. - She organizes and facilitates the functioning
of many program activities, including record keeping and clerical tasks which support the project director's work:

The bilingual students are served by approximately eleven. bilingual and mainstream teachers who offer English, native language, and -content-area instruction (please see section IV, Instructional* Component, for a discussion of course offerings and instructional options).

FUNDING OF THE BILINGUAL PROGRAM
The bilingual program at Sarah J. Hale-Higheschogl-is-supported by funds from tax levy; E.S.E.A. Title L, and E.S.E.A. Title VII: Given the variety of tasks and limited staff, staff responsibilities are complex, making charting of funding "sources and program components difficult. Tabular presentations of staffing and funding patterns follow for Hispanic and Haitian students.

*Four bilingual education assistants have responsibilities in the above subject areas. They are paid by Title VII. -15-.

As may be seen from Table, 6, many teachers serve bilingual students part time, teaching one or two bilingual classes in addition to other, mainstream classes.

Table 7 pcovides information on the funding and staffing of courses in which the medium of instruction is' Spanish (native language and content-area instruction). Because services are generally provided by teachers who may serve Hispanic students for only a part of their time, fractions' represent the amount of time devoted to each particular subject area. Thus, a possible "score" may range from . 2 (ore sub,ject) to $1,0^{\circ}$. (fyve subjects).

Table 7. Funding and staffing of instructional services provided for Hispanic students, spring 1981.

*These are ancillary instructional services performed by the testing
coordinator and the Spanish grade advisor.
** Three education assistants have responsibilities in yarious subject
areas including English reading (see Table 6). .

Table. 8 presents the staff members providing courses to Haitian students (in which French and Haftian Creole are the languages of instruction).
-16-

*These are ancillary instructional services performed by the Haitian grade advisor.
** The one Haitlan education assistant works-in two of the above subject areas' (he also assists in an English reading class).

Funding for the non-instructional components of the program is presented in Table 9. The table combines those staff.members providing services to 'Haitian and Hispanic students.


Table 9. Funding of the non-instructional components of Project Become: services to Hispanics and Haitians.

| ACTIVITY | FURDING SOURCE(S) | PERSOHMEL |
| :---: | :---: | :---: |
| Adminilstration and Superyision | Title VII | Project diractor Testing coordinator (SpanisK) Bilinqual secretary |
| Curriculum <br> Daveloment | Title VII | ```Testing coordinator (same as above; Bilinqual grade advisor (Hatítan)``` |
| Supportive Service (counselling ariu ádvising: | Title VII <br> Tax Levy | Bilinqual srade advisor (Spanish) Testing coordinator (saine as above) <br> Bilingual grade advisor (Hattian, same as above) |
| Staff Deyeionutit | - ${ }^{\circ}$. | was coordinated by project director |
| Parentel ard Comunity Involvenent | Tite yt! | Family assistants - 2 (1 Hispanic, 1 Hattion) |

The program is fortunate in having grade advisors, family assistants, and education assistants to serve both Hispanic and Haitian students and to commicate with sheir parents in their native lanquage.

## STAFF CHARACTERISTICS

Many members of the rtaff of Prolect lecome have had a good deal of experierice in bilincsal education, and have taught in Sarah J. - Hale High School for a nimber of years. The Mispanic staff members have generally taught four years or more in the program. Hainstream teachers serving bilingual students have had extensive expofitence in their areas of specialization (E.5.L., stenography, typing, and cosme.
tology) arior to sheir collaboration with the program. Both the Yaitian grade advisor/subjects teacher and the Haitian ieducational assistant were new to teaching fin 1980-81. The Hispanic educational assistants haye had a great deal of-experience in teaching.

As Table 10 indicates, all the teachers serving bilingual. students have at reast the master's degree, and the bilingual mathematics teacher has earned à đoctorate. Hith the exception of the teachers of Englizh, E.SsL., and the career classes, the bilingual staff meabers are native speakérs of elther Spanish or French/Creole. All are certified to tesch in Hew Yory City public high schools. As a new teacher, the Hatitian grade advisor held a french per dien license. With the extaption of the reading teacher (an experienced teacher licensed in Geman, French, and Spanish), the teachers are working within their apeas of certifica-tion:-

Two of the educationel assistants already have bachelor's degrees. The other two educational assistants and the family assistants have af least $\overline{60}$ college credits, while the bilingual secretary has an associate's degree and extensive additional college credits. All tho do not have bachelor's degrees are now taking cqueses toward their complezion.

Tahle in. ftaft characteristics: professional and paraorofessional stalf.



Project, Become offers instructional services to Hispanic and Hottian students in two basic tracks. The academic track for both language groups consists of content-area classes in mathematics, science, and social studfes, as well as English as a second language and Spanish/ French language arts. Students may, opt for an alterative vocational * track which will prepare them to qualify for the vocational career areas offered at Sarah 3 . Hale - business education, cosmetology, and heaith assistance. The first two years of a student's program focus on deveiopment of the native language, intensive English instruction, content-area instruction required for graduation, and physical education. pstudents in the career track are also gradually introduced to the career area of their choice.

In 1980-81, all ninth-grade students took personal typing as part of the one semester requirement in practical arts. (All. students must take at least one semester in the practical arts before graduating.)

- In the third and fourth years, career students will have three and four pertods of career, instruction dally, plus an afternoon internship or job placement. Students in the academic track will take four years of English. sacial. studies, French or Spanish language arts (or literature), and three and four yedérs of science or mathematics. Physical education is taken for four years, while art, music, and other electives , may be taken in the sentor ylear.

Project Become students have the bption to tramsfer between" "tracks" if they choose to do so.

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Project Beccme students have the botion to transfer between ${ }^{6} 6$ "tracks" if they choose to do so.

## PLACEMEMT AND PROGRAMMING

Students are personally incerviewed by the project director and/or grade advisor at intake, and meet each term thereafter with their advisor to discuss their programs and any other matters which may arise. . Each teacher also does his or her own assessment of each student, and makes an effort to see each new student prior to adnittaly Staff members share their assessments and insights, as well as review academic records, LAB and other test scores when accepting and placing students.

Instructional programs are designed within a track to meet individual needs. Programing done by the grade adyisors (and with assistance from the rescurce teacher) considers each student's competefte in English and the hative Janguage, the student's pasteducational record, and his or her academfic and vocational plans and needs. As a result; programs are individualized withfor the overam structure of the program. 'Sample programs follow; findicating the general sequence of a student's program over his or her high school career.

Tabte 11. Typical student programs for academic and carder-tracks.


Yey bob bocational and academic areas, students are exposed "to multiple periods of Englis sh" ás a second language (E.S.L.). A "beginning" student will receqfe two periods of E.S.L. every day in addition, students in the acadedic track receive a datily period of English reading instruction: As English proficiency increases to the intermediate and advanced levels, the number of E.S.L. classes is reduced to one period a day (plus the additional reading, class). Students in the acadenic track (who, may be taking most of their subject-area instruction in the native language) continue to receive double periods of English instruction everyday: a daily period of English reading, corrective Engitsh or regular Englishi, dejpending on their level of proficiency, with or without E.S.L. .

According, to the project director, all program students were still enrolled in E.S.L. classes at the end of $\mathbf{2 9 8 0} \mathbf{8 1}$, the itrst year of the project. Clásses in E.S.L. span four levels of difficulty, iranging from basic to transitional. More advanced students may be placed in other English classes as well, as has been indicated previously. , Placement is m made according to ability, altnough, according to one of the E.S.L. teachers, conflicts in scheduling occasionally arise between bflingual classos and English classes. In án intermediate level E.S.L. class, for example; some. students demonstrated a relatively high degree of oral proficiency in Engitish, while'other newly admitted students apparently had no knowledge of English (these were learning color terms in English with the assistance of an educational assistant). it-also appeared that scheduling had resulted in E.S.L. classes predominantly composed of Haitians or Hispanics.



 their atquisition of English.

的a和 120 students were rapsred by the coordinator as betng encolled fobilingual reading curses in addition to E.S.L. instruction. These classes, were teught by malnstream teachers for bilingual program stuoients - ." two classes for Hispanics and one for Haitian students. The reading classes are taught in English with the assistance of a Spanishor French-speaking educational assistant. According to the English teacher who works primarily with the Hispanics, elassroom lessons focus on English structure, reading, and writing, Each class contained a diversity of ability levels. According to the teacher intervtewed by the evaluator, if students in her class had been given a standardized test. of proficiency in reading in English, they would have tested from "grades two to eight.". None would have been able to take the Regents Competency Test, she felt, and most had difficulties in speaking English.

Students were grouped for instruction in her classes into two or three groups on the basis of profictency. She encouraged discusston groups; describing them as "lively and notsy...but it works. Most make good progress." The teacher noted that although both follow New York State curricula, there is no formal coordination between E.S.L. and English classes serving bilingual students. The two do try to use complementary approaches and may exchange thformation informally. In
respense to a-felt need-for a-more cinordinated approach, one of the E.S.L. teachers had met with a ritle representative from the central Board of Education and wasetrying to organize a joint meeting with the I representative from Title I along with members of the E.S.L., English, btlinguai, and güdance staffs to, èncourage communication'and coordination. between ther.

Table 12 presents a summary of the classes offered to bilingual students in English as a second language and English reading. .


## IMSTRUCTION IN THE SPANISH/FPENCH LANGUAGE

For cultural enrichment and enhancement of theit cultural selfe esteem, program students have one period of instruction each day in their native language and culture, Instruction aisd serves to strengthen linguistic and cognitive skill.s as a basisifor mastery of English.

Placement for instruction in the student's native lànguage (Spantsh or Freṇch) is based on each student's ability level. Native language instruction is offeced on four levels ranging from basic skills and grammar (lievèl i) to college level literature (level 4), arcourse covering major Spanish/Erench writers and poets. These classes also brtefly cover the history, geography, and cultures of program students. One class is offered at each level avery tem: Clapses meet five periods per week, ${ }^{\prime}$ and have an average register of 25 to $30^{\prime}$ students per class.

In the Spanish courses, teachers have extensive teacher-made -and purchased materíais. French courses use Le Francais, as well as novels. x =
: - and storiess but materials in french are still lacking.
A list of available texts for E.S.L., Spanish, and French appears as Table 13.

| Table 13. Texts and materials for use in E.S.L., <br> French, and Spantish classes. |  |
| :---: | :---: |
| Lado English Series <br> Readers Digest Readers <br> English 900 . Series <br> American Eniglish in Twenty Lessons <br> Learning American English. <br> Selections for Developing English Language Skitls <br> Webster's New Horld Dictionary of the American Language <br> Hebster's Spanish-English Dictionary <br> Family Life in the U.S.A. <br> How We Live <br> Your Family and Your Job <br> People Speak <br> Scenes of America <br> Ya Escribimos <br> Spanish Textbooks <br> A First Course in Spanish <br> A Sacond Course in Spanish <br> Review Textbook in Thir <br> Year Spanish <br> Cuentos y Mas Cuentos <br> Primer Libio <br> Segundo Libro <br> A.L.M. Spạnish <br> Espanol Comencemos <br> Espanol Sigamos <br> Sol y Sombra <br> Litgratura hispanoamericana <br> Dicetonario Larousse <br> I?ústrado <br> French Textbooks |  |
|  |  |
|  |  |

To sustain and develop the cognitive skills of participating
: students, they are offered instruction in the basic content areas (social studies, mathematics, and science) in their native language while they are 'acquiring-profictency in English. It is expected that by their third year in the program they will be able to participate in concent-area courses taught in English, will be able to study from English textbooks, and/or will be able to hold a job in an environment where. English is spoken. At the end of their third year in the program, participating students will have the option of taking their regents and city-wide examinations in either their native, language or English.

## CONTENT-AREA INSTRUCTION

In the subject areas, students are offered bilingual courses equivalent to those given in mainstream classes. ، These courses cover. - all the topics required by the state and city. The bilingual teachers provide the students with English vocaioulary and concepes which wifl be needed if the students trănsfer to mainstream classes.

The stbjert-area courses which were observed were generälly taught in the native, language, although the use of language (for instruction) was adapted to the different needs of Haitian and Hispanic students. Courses in science; mathematics, and social studies were offered to Hispanis students ih Spanish, although English terms were incroduced, and books in English were sometimes used along with Spanish texts.

## Courses Offered In Spanish

The classes observed in Spanish -- geometry, general science, biology, and American studies -- tyere taught by experienced teachers. The students were discinilned and attentive, and participated in, wariety of. ways. Students,presented and commented on reports given in general sciance. In American studies, the teacher facilitated a lively discussion on the role of government in society, comparing systens of government with which the students were familiar. In other classes, responses were elicited by the teachers.

Bilingual staff members drew upon and developed the students' knowledge of their native countries and cultures in both social studies and science classes; student responses were consistently positive.

Matheratics is emphasized in.the Spanish cumponent of the orogram, Which offers remedial and fundamental math classes, as well as algebrá (1, 2, and 3) and geqnetry. The first two courses can be repeated as many times as needed. Special heip is aiso offered by the Hispanic mathematics teacher for advanced students or those needing help.

General science and biology are offered ir Spanish, to meet the four term graduation requirement in science. 'In social, studes, caribbean' history, "American : *udies, American history, and economics are.offered; to be taken by Hispanic students in grades nine, ten, eleven, ajid tweilve, respectiveky.

## Subject-Area Classes Taught In French/Hatitan Creoie

In subject-area classes offered to the Haitians, the use of language for instruction was more complex, 'responding to the different linguistic characteristics and abilities of the students. In classes observed, more advãnced students were taught, in French, with concepts introduced in English, and books and materials also fin English. For chose students with poorly developed French 5*ills, instruction was carried on largely in Creole and French, with materials in English. For this group esppacially, linguistically appropriate materals were in short supply. The use of three languages for instruction and the shortage of materials suggest that this is an area which would profit from planning and materials development (see recomendations).

All French subject-ditea courses were given in two groups in one large classroof, Fith the teacher and educational assistant each , providing instruction. In the warld history class whish was observed, -32-
abost 30 students in grades nine and ten were divided by academic achieve. ment and linquistic characteristics. Eighteen more advanced students yere studying the Soviet govermental systern in comparison with that of the United States, while approximately twelve students with limited coqnitive skills kere studying concepts of climate and map skills.

Teacher-directed instruction was provided simeltaneousiy to both groups, with the teacher worijing with the advanced group and the educatonal assistant teaching the basic group. The rumber of students (sitting back-to-back) and dual instruction created a good deal of noise and the fibgression of dforganization, although most students mere attentive. Whine the "bastc" group was quitety attentive, the advanced group contained a core af articulite and active participants. Oehers, soward the back of the group, appeared distracted.

Overall, the classiroon observation and subsequent interviews with the Haitian-staff suggest that content-apea instruction for Hatitans suffered from a lack of resourges -- personnel, materials, and soace. Giyen the limited staff, the range of course offerinus was necessarily restricted. Haftians here offered Auctican studies, world history, and general science in the spring of 1981 -- all taught by the same staff: This appears to be a problem not easily resolved with the current funding structure, but may be dmelforated to some dearee zhrough individualized materials develoment (see recumendactors).

The problen of language use is an especially complicated one for these students, but is one which needs to be adddressed to facilitate a.systmatic use of the trree languages :- Creole, French, and Enqlish .-
to sacilitate boch cognitive development and the students' growth in their conpetence in English.

Table 14 presents a sumary of the bilingual courses offered in the spring tem of 1981, by language group. All met every day for añ period. The curricula in use corresponded to those used in mainstream classes. Table 15, following, presents a list of iexts in use in bilingual subject-area classes.

Table 14. Bilingual instruction in content area, by lànguage*, 1 spring, 1981.

| COURSE TITLE |  OF THSTRUCTION | CRITERIA for sticction of students | TYite Ar: CREDH才 |
| :---: | :---: | :---: | :---: |
| American Studies | French | LAB; Teacher | 맨 |
| Horld History | French | recomendation: | GRAD. |
| General Science | French | J.H.S. recom- | 6RAD. |
| General setehce | Spanish | ${ }^{3}$ mendations; | CRAD: |
| Caribbean history | Spanish | guidance | GRAD: |
| Intergedjate Aigebra | Spanish | referrai: | 8 |
| Renedial Hath | Spanish | new arrival. | GRRD. |
| Pre- Algebra | Spanish | into country | R |
| Gemetry | Spanish | - | 8. |
| Remedtal Math | Spanish |  | CRAD. |
| Anerican Studies | Spanish |  | C |
| Latin faserican History | Spanish |  | GRAD. |

HOTE
*The average register in each class was 30 students. Spanish was used in instruction 100 percent of the thes; classes. for Hajtians were primarily taught in French, with Creole being used up to half of class time for basic students. English was used about 5 percent of the time for both groups.

$$
\begin{aligned}
* * \text { GRRD. } & =\text { Graduation Credit } \\
\text { CA } & =\text { Citywide } \\
R & =\text { Regents }
\end{aligned}
$$

Table 15. Textoogs' in use in bilingual content-area classes by language.

| SEBUECT REEA. | SPARISH | EHGLISH | FRENCH |
| :---: | :---: | :---: | :---: |
| Whathematics | Hatenaticas Mademas <br> Repaso Matematice Bilingie Algebra: Moderna Geometrfa y Triogononetría Aritmética-Teठrico Practica. | Refresher Hathematics | Multimath - French |
| Science | Biologra Ciencla Introducción a las ciencias Biolbgicas <br> La Tlerra y Sus kecursos | Modern Biology Everyday Problems in Sctence. | - |
| Social Studies | Geograffa de Anérica Historia de America | The Rise of the American - Nation | Matins Caŕafbes Histoire De La Literature |
| $\cdots$ | Viajemos por America Curso de Histarla de América Economía Para Todos. El Hundo Iberoamericano El Viejo Mundo y Sus Pueblos Descubrimiento, Conquista y Colonización de Puerto Rico | Our Horld Through the Ages China; Japan, India. Minorities in U.S.A. | Haitienne Histoire Des Etats - Unils L'Espace Haitien. |

As the student programs indicate, students may elect to follow a career sequence in one of three areas: "health careers, business education, and cosmetology. Those taking a career option may take courses. according to a general schema; starting with introductory classes and culminating in intensive work experiences. Chart 2 presents the process in graphic gorm.

E
Prior to September, 1981 , bilingual students were unable to participate fully in the range of career options which is one of the attractions, of the instructional program at Sarah J. Hale, Each sequence is designed to -lead to a license or a job, and the internship program" ${ }^{\text {gig an }}$ important aspect of the career sequence. Nine courses are offered in the health career sequence, ranging from blisic nutrition to hospital practice to applied chemistry. Fiold work is provided in day care centers, hospitats; and medical offices. Cosmetology is an especially populat program among program and non-program students alike. Eleven courses are offered in this area, leading to a unisex or cosmetology license at the completion of the program. The department of business education offers 21 courses to prepare students for careers in offices and other busingess occupations. Course offerings include typing, stenography, bookkeeping, everyday law, consumer esduçation, ${ }^{\circ}$ and data processing, among others.

During 1980-81, about 25 Project Becoime Hispanic students had selected the academic sequence, while the remaining Hispanic students were, according to the project director, about equally divided between the business and cosmetology sequences. Males generally chose business education, while cosmetology students were all females. About six students -37-

## Chart 2. Sequence of expertences of students in

the career track of Project become.

chose health careers as their area of specialization. The Hatian grade advisor indicated that about 75 percent, of the Hatitan males had chosen the academict track; and about 60 percent of the females. The remaintng fenales were largely in the cosmetology sequence:

In the ôpinion of project staff, the-career options (particularly business and cosmetology) have been enthusiastically received by the students.

Exposure to instruction in Engilish was desiuned to be gradual through the career sequence.. In the ninth and tenth grades, students may take one or two career coùrses taught by a monolingual Engitsh-speaking teacher assisted by a Spanish-speaking educational assisteant. By the third and fourth years, project become students willaxerictpate in mainstream career elasses conducted in English.

During 1980-81, all the ninth'graders took personal typing. This not only selved as an introduction to the career sequence as well as fulfilled a. one-course requirement in the practical arts. The class was taught in English by a highly experienced mainstream teacher who expressed great satisfaction with the students, praising their seriousness and discipline. Thè"teacher, working with a Spanish-speaking educationai assistant, not only taught typing and business skills but spent considerable ctass time discussing vocabulary and correcting-students' pronunctation as the need arose. Students, were called upon to read their work aloud, and the teacher introduced important Englistr concepts in context. The class, offered a solitd combination of instruction, prastics, and feedback. The teacher described the educational assistant as devotere, involved, and
very effective, She circulated among the, students, stopping to correct work, clarify instryctions, and reassure students who appeared to be orderly; serious, and attentive. Table' 17 presents the textbooks fof use in brlingual catreer classes.

## OTHER MAINSTREM CLASSES

In order to expose students to a variety of educiational experiences and to facilitate their integration with their English-dominant peers, Pröject Become students, regardless of "track," are exposed to some of the, practical arts at Sarahul. Hale. Students in grades eleven and twelve could take practical arts courses as electives, including_child care, metal shop, or printing. About half of all program students took a practical arts course in 1980-81. Students were also enrolled in mainstream fine arts', music: gym, and hygiene classes.

The numbers of students taking career and other mainstream classes are reported in Table 16.

Table 16. . Mainstream classies in which program students are 'enfolled.


All classes met for five periods per week with the exception of. sosmetology, which met, for a domble period each day. All students were enrolled in efther physical education or hygiene classes, which are now to be given every other semesțer (because of overcrowding), or will be offęred four days a week.


## V. NOK-INSTRUCTIONAL COMPONENTS

The following sections describe the non-instructional components of Project Become: staff. development activities, curriculum development, support services to students; extracurricular activities, and parental involvement. $\qquad$

## STAFFDEVELORMENT

Activitles destgned to upgrade the skills and knowledge of program staff were carried out both in and uutside of schooi. Althouigh the consultant position proposed for staff development was cut, the following activities took place:

## Pre-Service Orientation



At the beginning of each semester, $\cdot$ an orientation session was provided for all Project Become staff, including tax levy teachers and Title VII personnel. Speakers included the school principal, assistant principal, and the project director.

## Departmental Meetings

Meetings were held monthly and were attended by all bilingual staff members (as above). These dealt with administrative mȧtters, and presentations on topics of interest were made. Presentations were made primarily by the project director and also the Hispanic grade advisor, and included the following topics: mastery learning, diṣcipline, holding power, improving student achievement, and relations with parents.

Workstiops were offered once a month in school to provide indepth information to program staff members. Given by university professors from Long Island and Fordham Universities, topics covered included the ${ }_{\infty}$. snnegnt of guttire; ethnic hackinnunds; and mouthe bilingual child learns.

The project director,: grade adytsor, and testing/curriculum coordinator also attended workshops given once a term at the New York City Board of Education and/or the Office of Bilingual Education.

Demonstration Lessons
These were offered by the testing/curriculum coordinator as they were requested or needed by teachers in both mainstream and bilingual classes. The lessons focussed on science experiments, including volcanoes, the frog, the flower, the planets, and the human body.

## University Courses

Many staff members are enrolled for professional development in courses at local universities. The testing/curriculum coordinator took courses at Long Island -University towards a master's degree in bilingual education. The Hispanic grade advisor was working towards certification in administration and supervision at Furdham University. Paraprofessionals were enrolled in courses in the fall and the family. assistants took courses in the spring. All were working towards the bachelor's degree in education. The bilingual program secretary was enrolled at Lehman college in courses leading towards the bächètor's degree.

The Haititan grade advisor was not enrolled in courses paid for by Title VII, although he was working on a dectoral dissertation during 1980-81. It is to be hoped that new program teachers like him will be encouraged to deyelop their knowledge of bilingual education and their teaching skills in the content areas (see recommendations).

## CURRICULUM AND̄ MATERIAL DEVELOPMENT

During 1980-81, curricula or materiat's 'were developed in Spzith in the following areas: ninth-year mathematics, intermediate algebra, general sçience, general biology, American studies, and economics.. These were adaptations of Board of Education curricula, and are in accordance with the guidelines set by New York State.

In addition to curricura and materials developed and adapted by the staff. Project Become has used materials from. other Title Vil E.S.E.A. programs, and from the State Education Department...

In the Haitian component, the staff member who "Serves as curricuium developer and grade advisor noted an "acute" lack of books and materials. This is to some degree a prodict of the fact that this was the first year of services for Haitians, and materials which reflect and respond to their linguistic needs ${ }^{\text {are }}$ not readily available. Hhile French texts may be found, texts and materials for Haitians with limited French skills are fot generally available, except from other Title VII projects serving sfífilar populations. Unfortunately as distribution of Title VII-Aeveloped materials has tiever been well ar,iculated, contacts between projects are wsüall\} deveioped informally fsee recommendations). The Haitian grade -advisor had spent considerable time attempting to locate texts and materials, -45-

White-ftifiliing advising and teaching responsibilities. cleariy, his. ability to resolve the shortage of materlals was.limited. He was able to translate and adapt curricula_from English to French in the areas of general scfience and intstory. As the isst of courses and books fndicate, offortrige to hattian studgnts wore metnictod; hoth hy the size nf the target population and.by the limited staff. The arade advisur mentioned the special nèeds of the small group of Hattians (probably numbering about five), who have very limited literacy skills, and for whon French textbooks were inappropriates He felt that a special intensive tutoring program on a pull-out basis would be more appropriate for them (see recomendations). Designing an instructional program f3r then is especially difficult, as they must make the transition to English without the benefit of good literacy skills in their native language (in thi, case, their second langrage). Generally, he reported that Hattian parents value French highly and want their children to learn both English and French.

The grade advisor felt that more collaboration and planning were oeeded between the trachers of French and the bilingual Eeachers, to share information on tudent strengths and weaknesses and to maximize the effectiveness of instruction. The French lanquage classes could reinforce concepts learned in subject aress, and could addreșs the problem of limited French literacy directly (see recomendations).

SUPPORTIVE SERYICES $70^{\circ}$ STUDENTS
Project Become offers support to participating students in a yartety of ways. Almost all staff members offer support in some way -
efther through advising, tutoring, home visits and/or contacts, extracurricular activities, follow up, and other out-of-class relationshios.

Staff members nade contacts with feeder and junior high schools to disseatinate information about the program. In adoition, project staff wers (including the director, grade advisors, and some classroom teachers) fnterviewed and screened all new students upon admission. Their records were reviewed and their general preparedness was assessed in Engish, the native language, and mathenatics:

The grade advisors met with each student at least twice during - The yeat to develop his or her program. hispanic seniors met several. tias with thelf grade advisor as a group and individually. All students recefyed group counseling in October. Students also sought out the grade advisors for informal counseling; both advisors were seen by many students as irinndy figures who could be approached for conversation and assistance.

Both made themselves avallable to students outside of school as well as ducing school hours. The itspanic grade advisorg long in the :5chool, was particalarly active'with the students as advocate and friend. He encouraged students to participate in sports with him and socialized with shen in other out of school contexts.

Program students who wished to discuss issues. which were important to then were also free to meet with the school orincioal, who mate himself avallable to thers. During the year, students and parents met with him to discuss the question ofr securty in the schnol.
i The staff secretary also functicnad in an ongoing way as friend, confidant, and facilitation to the students.

About 18 out of the 27 bilingual seniors worked after school in 1980-81, suggesting that efforts by career and business education staff members at creating job opportuntifes were tc a good degree successful. The provision of after-school jobs and internships is a destrable and . mortant aspect of the educational experience of career students at Sarahtow. Hale,

Project Becone has developed and implemented an effective system for following and monitoring the behavior and performance of drogram students in their classes. Each Frtoay, the project distributed forms to classroom teachers, bfingual and mainstream, serving bilinguai students. On the forms, teachers entered information on those students who were cutzing classes, excessively absent ${ }^{*}$ or perfoming poorly:" The forms were collected on the following Monday for follow-up action by_project staff.

Follow up zas generally the responsibility of the Hispanic grade advisor and the family assistants. In response to a poor report, calls were made to students' homes. A number of! such calls were made formarious easons during 1930-81. When tèlephone contact could not berg made, letters were sent nome advisiag pärents of academic difficulties or excesşive absences. About 15 formal visits were made to soine sţudents.' homes to discuss such problems as cuttinq classes and unfinished assignments. (Informal and social visits were also-made.) Home visits were. made by the family assistants, and the Hispanic grade advisor also made
occastonal visits. Reportso were made on all telephone contacts and home visits, and their outcomes. Students with persistent problems might be referred to the school's guidance counselor for assistance.

In cases where home contact and other staff efforts produced no improvement in attendance or grades, the student was given a probation card, to be signed by all his or her teachers. About 10 probation cards were issued during 1980-81.

Students with personal or academíc problems were afso.referred to agenctes in the community for assistance. Some were referred to a Catholic Charities program for tutoring and counseling, or to a tutorial program in a local church-based community outreach program. Students were also sent to job referral progrems (such as the Manhattan Valley Youth Program) and professional organizations. The Hispanic grade advisor. did express a need for referral services for the small number of students who become pregnant during the year.

## EXTRACURRICULAR ACTIYITIES

There are many ways, beyond academic performance, in which students can demenstrate their feel ngs about themselves and their schooi experiences.

The program offered trips.for bilingual students, and students cited them as one of the advantages of participating in the program. During the spring of 1981 , bilingual students went to see Garcia Lorca's La Casa De Bernarda Alba. They went to Great Adventure and took a boat ride around Manhattan. To help support their trips, the bilingual students, held a cake sale (atutwigh it was reported that most of the profyts were eaten). For graduating seniors, a dinner dance was held in a Queens night
club. A reception was held fo the parents of graduating seniors as well, which was attended by parents, project staff, students, and the principal of Sarah J. Hale High School.

Students were encouraged to participate in conferences, singly or in groups. One student was a keynote speaker at a conference on. "Thè Futüre of Bilinguai Education," held at Fordham University (see appendix A). A whole social studies class participated in a conference at Hostos Commity College on "The Future of Hispanic Women." Another group of students went to a conference on the future of the Hispanic community.

Four Hale bilingual students made a presentation to adult participants of Solidaridad Humana.

OTHER STUDENT RESPONSES
Students interact with each other and are active outside of classes. Many are active in sports, particularly baseball. and soccer. Some contribute to a literary magazine, Panorama, which is produced by the bilingual program. Typically, many students, are friends outside of school, and they meet for sports, picnics, and parties. Their activities frequently involve the Hispanic grade advisor, who is himself active in sports. He is extremely popular with students, is actively concerned for them and makes himself avai\{able to them èxtensively outside of school. The readiness with which students approach staff members indicates the positive feelings which students have about them.

Project Become students have demonstrated high rates of academic success, outperforming their mainstream peers consistently, in those areas

- in which comparisons have been made (see findings). In 1980-81, the , salutatorian of the graduating class was a bilingual student, and bilingual students are typically among the highest achieving students at Sarah J. Hale. The attendance rates demonstrated by program students attest to the value which they place on their participation in the program.


## PARENTAL AND COMMUNITY INVOLVEMENT

$\therefore$ The Project has an Advisory Committee of 20 persons compgsed of parents, teachers, and students. The Committee, formed by selection and election, functions to review the implementation of the program and to act in an, advisory capacity.

Notices of meetings and activities are posted in Spanish and English in places highly frequented by the students' parents. Agendas and minutes of meetings are mailed regularly to parents of the students participating in the project. Additionally, a program newsletter and a student literary magazine further inform the community about the progam.

As has been discussed above, parents were kept informed of their children's progress and problems in school by telephone and letter. When decisions were made about mainstreaming, parents were always involved. Parents are often invited to school functions, and a sipcial celebration was held for the parents of graduating seniors in June, 1981.

Program staff believe that parents feel comfortable comunicating fith teachers in their own language and in their own cultural styles. The personal nature of the relationship and the similarity in cultural back-
ground result in great parental cooperation with the school and, particularly with the project.

The program also disseminated its activities in the community and to both feeder and other junior high schools. Brochures and business cards provided information about the carèer and job internship programs at Sarah J. Hale for both prospective students and employers.

## VI. FINDINGS

The following section presents the assessment instruments and procedures used in evaluating student achievement in 1980-1981 and the resulte's of the evaluation. It should be noted, however, that all conclusions drawn fram the data presented here should be qualified by the fact that these results apply to only a subset of program participants. Data forms were submitted on only. 181 of the 350 students which the program proposed to serve. In, addition, complete data were not reported on most of the forms which were received. This was especially true for the Spanish-speaking students.

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


Reading in Spanish -- Interamerican Series, Prueba de Lectura Thotal reading, forms bS and $A S$, Level III, 1950 versition): New York State Regents Test in SpanTsh; the Kew York City Hide Test in Spanish (Level II) Data are nut presented because scores were dut of range and could not be meaningfully interpreted.

- Reauing in French -- Science Research Associates' Test de A Lecture; the New York Státe Regents Test in French; The New York-Gityolide-Test. in French (LeveTIT)


# Social studies -- New York City-Wide Examination in Bilingual Social: Studies (Spanish and French language versions) 

## Ma'thematics -- New York City Arithmetic Computation Test Mathematics performance -: Teacher-made tests

 Science performance -- Téacher-made testsVocational and business education -- Teacher-made tests
Native language classes -- Teacher-made tests
Attendance - School and"program records

The following analyses were performed:
On pre/post' standardized tests of French reading achievement statistically and educational significance are reported in Table 28. Similar data are reported for the non-standardized New York City Test of Proficiency in English Language Skills in Table 26 and 27 and for the New Yorkicity Arithmetic Compu'iation Test in Table 31. 'Although most Spanish-speaking students were administered this test single time, $0^{\circ} \mathrm{o}$. l ly three of them were reported to have received both a pre. and a post-test. As results for so few students would be largely meaningless, only data on Hattian/Creole-speaking students have been tabulated.

Statistical signiftcance was determined through the application of the correlated t-test model. This analysis detemines whether the difference between pre-test and post-test mean scores is larger than would be expected by chance variation alone; f.e. is'statistically signiffiant.

This analysis does not represent an estimate of how students *" nould have performed in the absence of the program. Ho such, estimate An ... . . . . 54

- 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 ${ }^{1}$. An effect size for the correlated t-test model is an estimate of the difference between pre-test and posttest 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 anailysis is smant. Similary, statistically significant differences often are not educationally meaningful.

Thus; statistical and educational sifnificancépermit a more meaningful appraisal of project outcomes. As a rule of thumb, the following effact size indices are recommended by Cohen as guides ito. interpreting educational significance (ES):

$$
\begin{aligned}
& \text { a difference of } 1 / 5=.20=\text { small } \mathrm{ES} \\
& \text { a difference of } 1 / 2=.50=\text { medium } \mathrm{ES} \\
& \text { a difference of } 4 / 5=.80=\text { large }
\end{aligned}
$$

The Criterion Referenced English Syntax Test (CREST゙) was one of two tests' used to measure growth in English language proficiency. The instrument tests mastery of specific syntactic skills at three leveis.

[^2] (Revised Edition). New York: Academic Press, 1977 Chapter 2.

Levels I and II contain 25 objectives each, such as knowledge of presenttense forms of the verb "to be" (Level I), or possessive adjectives and pronouns (Level II). Material at the advanced Level III is organized into 15 objectives, such as reflexive pronouns. At each level, students are asked to complete four items per objective. The items are multiple choice and consist of sentence frames for which students must choose a word or phrase from four possibilities. Mastery of a skill objective is determined by a student's ability to answer three out of four items correctly.

This report analyzes students' performance at the three test levels. Performance breakdowns are reported in two ways: by grade of the students tested irrespective of test level taken, with information on the average number of objectives mastered and the average number of objectives : * mastered per month of schooling (see Tables 18, $20,22,24$ ), and by bath grade and level of test taken with information only on the average number of objectives mastered (see Tables 19, 21, 23, 25).

In addition to the program-wide tests discussed above, many program participants took che appropriate version of the New York State Regents examination in the Spanish or French languages of the New York CityWide test in the appropriate language. Results of these test administrations are reported in Table 29 for Spanish-speaking and for Haitian students. These tables report the number of program students eligible to take the te est, the number actually tested and the number and percent passing the tests. The same information is presented for those students who took the New York City -Hide Examination in Bilingual Social Studies in Table 30.
W. Comparisons of the success of program students in mathematics, science, and social studies courses taught in the bilingual program with those of non-program students in similar mainstream courses are contained in Table 32. The Chi-square statistic is used to determine in each case how different, statistically, the proportion of passing program students is from that of mainstream students.

Rates of success of students in vocational education, business education, and native language courses are reported by course and 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. The tables reperting this data are listed below by subject content area:

## Subject Area

vocational and business education native language classes

Table \# Soanish- Frenchspeaking speaking students students

33
35

34
36

Comparisons of the attendance rates of program participants with that of the school as a whole are presented by qrade in Table 37. This table contains average rates for the school and for the various. participant groups, the percent differences, values of the $\underline{t}$ statistic, and its level of statistical significance. Although the $t$ statistic used here is slightly different than that described above, it again indicates the extent to which the observed percentage differences vary from what might be expected by chance.

Table 18. - Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered
per month.
(E.S.L: Titie I Spanish-speaking students, fall)

| Grade <br> G of <br> Students | Average Number of <br> Objectives Mastered <br> Pre <br> Post | Objectives <br> Mastered* | Average <br> Months of <br> Treatment | Objectives <br> Mastered <br> Per Month |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 19 | $7.2^{\prime}$ | 12.4 | 5.2 | 2.8 | 1.86 |
| 10 | 14 | 12.0 | 17.3 | 5.3 | 2.6 | 2.04 |
| 11 | 11 | 10.1 | 12.2 | 2.1 | 2.8 | 0.75 |
| 12 | 3 | 15.7 | 20.7 | 5.0 | 2.5 | 2.00 |
| TOTAL | 47 | 9.8 | 14.3 | 4.5 | 2.7 | 1.67 |

*Post-test minus pre,test.
. Just under 37.percent of the Spanish-speaking program participants were tested, with the CREST in the fall.

- Spanish-speaking students in every grade but the eleventh mastered at least 5.0 objectives durikg the fall instructional months. The achievement of this group was restricted by the performance of eleventh graders on Level III (see Table 19).
. Mastery rates ranged from .75 objectives per month in the eleventh grade to 2.04 objectives per month in the tenth grade, for an overall average of 1.67 objectives per month of instruction in the fall.

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, fall)


NOTE: number of objectives for each level: Level I ( 25 ), Level II (25), Level III (15).
*Post-test minus pre-test.
.The level of mastery at post-test time increased with test level. Level I students passed a total of 12.9 objectives (out of 25); Level II stucents passed 17.2 objectives, and Level III students passed an average of 11.9 objectives out of a possible 15.
.Students on Levels I and II made good average gains of 5.4 and 5.7 objectives from pre- to post-test.
. Students on Level III showed lower average gains, primarily because their high scores at pretest and the limited number of objectives on that level reştricted the students' opportunfty to demonstrate grouth.

Table 2f. Reants of the Criterion Referenced English Syntax Test (CREST): nujoer of objectives mastered, and objectives mastered
per month.
(E.S.L. Title I Spanish-speaking students,-fpefing)


- Students mastered an average of 3.4 objectives during the spring. Mastery rates ranged from. 59 objectives per month in the twelfth grade to 1.31 in the ninth grade for an overall average of 1.21 objectives per month of spring instruction.

There was a cendency for the overall achizvement of Spanish-speaking $\$$ tudents to be lower in spring than in the fall (sae Table 21 for the effects of test level).

Table 21. Performance of students tested on the Criterion Referenced Enqlish Syntax Test (CREST): average number of objectives mastered by grade and test level. (E.S.L. Title I Spanish-speaking students, sprinq)

LEYEL I

Average Number of Dbjectives Mastered Grade $H$ Pre Post Gain*

LEVEL II
LEVEI III

| $9^{\circ}$ | 15 | 11.3 | 15.9 | 4.6 | 12 | 14.0 | 17.3 | 3.3 | 3 | 9.3 | 11.3 | 2.0 |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 10 | 2 | 5.0 | 8.5 | 3.5 | 10 | 11.8 | 15.4 | 3.6 | 1 | 10.0 | 13.0 | 3.0 |  |
| 11 | 1 | 17.0 | 23.0 | 6.0 | 4 | 10.0 | 14.0 | 4.0 | 8 | 9.5 | 11.9 | 2.4 |  |
| $12:$ |  |  |  |  |  |  |  |  | 19.0 | 19.0 | 0 | 2 | 10.0 |
| 12.0 | 12.5 | 2.5 |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL | 18 | 10.9 | 15.4 | 4.5 | 27 | 12.8 | 16.1 | 3.3 | 14 | 9.6 | 11.9 | 2.3 |  |

HOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).
Post-test minus pre-test.
. Forty-seven percent of the students reported were pre- and post-tested wil., the CREST in the spring term.

需
. More students were tested on the nigher levels of the CREST in spring than in the fall.
. Spanish-speaking students mastered an average of 4.5 instructional objectives on Lequel I,
3.3 on Level II, and 2.3 on Level III from pre- to post-test in the spring term.

Table 21
(continued)
.There was a tendency for the number of objectives mastered to decline as the test level increased.
.Restriction of gains may de noted at Level III (see above). Because of lower pretest scores, however, larger gains were made in the spring than in the fall.

Table 22. Results of the Criterion Referenced English Syntax Test
(CREST): number of objectives mastered, and objectives mastered
per month.
(E.S.L. Title I French/Creole-speaking students, fall)

| Grade | fof Students | Average Nu Objectives Pre | mber of Mastered . Post | Objectives Mastered* | Average Months of Treatment | Objectlives Mastered Per Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 4 | - 11.7 | 19.0 | - 7.3 | -2.9 | - 2.52 |
| 10 | 12 | 11.2 | 18.4 | 7.2 | 2.9 | 2.48 |
| 11 | 6 | 12.7 | 19.7 | 7.0 | 2.9 | 2.41 |
| 12 | 7 | - 12.7 | 16.0 | 3.3. | 2.8 | $1: 18$ |
| TOTAL | 29 | $12.0{ }^{\circ}$ | 18.2 | $\overline{6} .2$ | 2.9 | 2.14 |

- Almost 60 percent of the Haitian students reported were pre- and post-tested in the fa?l.
- French/Creole students in the ninth grade through eleventh grade mastered at least 7.0 objectives during the fall instructional months. Grade twelve, students mastered 3.3 objectives during this period.
- Mastery rates among students in the lower grades were equivalent and approached a substantial 2.5 objectives per month of instruction. Grade twelve students' performance increased at a slower pace, about 1.2 objectives per month of instruction.

Table 23. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number- of obiectives mastered by grade and test level.
(E.S.L.Title .I French/Haition Creole-speaking students; fall)


Table 24. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered
per month.
$\therefore$ (E.S.L. Title I French/Creole-speaking students, spring)

| Grade | * of .students | Average Number of Objectives Mastered Pre Post | Objectives Mastered* | nuerage Menths of Treaement | Objectives Mastered Per Month |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\cdots 9$ | 7 | 10.1 . 20.7 | - 10.6 | 3.0 | - 3.53 |
| 10 | पे6 | 14.620 .0 | 5.4 | 3.0 | 1.80 |
| 11 | 8 | 16.621 .9 | .5.3 | 3.0 | 1.77 |
|  | 7 | 11.4 ${ }^{\circ} 18.3$ | 6.9 | 298 | - 238 |
| TOTAL | 38 ' | 13.620 .2 | 6.6 | 3.0 | - 2.20 |
|  | est minus $\therefore \therefore$ 禜 ventyac! gh d pofit-tes he total no leven to a jectiyes verall ave nstruction | re-terst. <br> percent of the Hait ed with the CREST in <br> ber of objectives ma ubstantidal 10.6 in.g <br> stered per munth ran ge of 2.2 objectives n the spring. | n students the spring. ered ranged de nine. from 1.77 mastered for | orted were <br> om 5.3 in <br> 3.53, for ach month of | pe- <br> ade |

# Table 25. Perforiance of students tested on the Criterion Referenced English Syntax Test 

 (CREST): average number of objectives mastered by grade and test level. (E.S.Le: Title Y French/Hattian Creole-speaking students, spring)LEVEL 1
Level II


Avendge number of objectives Mastered N
94
$6.7 \quad 21.7 \quad 15.0$
3
$14.7 \quad 19.3$
4.6
$\begin{array}{llll}5 & 14.6 & 23.8 & 9.2\end{array}$
4
$15.7 \cdots 24.2$
8.5
16.1
20.2
4.1
18.7 2..0 2.3
$\begin{array}{llll}4 & 12.2 & 22.7 & 10.5\end{array}$
$\begin{array}{llll}18 & 15.4 & 20.8 & 5.4\end{array}$
7
11.0
13.0
2.0

Hore: number of objectives for each level: Level I (25), Level II (25), Level III (15). "on Post-test minus pre-test.
. Haitian stadents demonstrated strong patterns of growth at all three test levels.
A.On Level 1, gains from pre- to post-test ranged from 8.5 at grade eleven to 15 objectives at grade nine, or an impressive 10,8 :overall. By post-test, Level I students had mastered most Level 1 objectives.
.Students tested on Level 11 made gains which ranged from 2.3 at grade ten to 10.5 at grade twelve; for an average of 5.4 overally

Table 25 (continued)
-Gains on Level II were, restricted, however, by high pre-test scores. Host students were functioning near the ceiling of the test by post-test. This is especially true for the eleventh graders, with an average pre-test score of 18.7 objectives mastered out of a possible 25.

- "Celling effects" are also visible in the performance of students on level 111. The average number of opjectives mastered at pre-test was 11 out of a possible 15 , clearly restricting growth. Post-test scores, were predictably at the celling of the test.

Tatia26. Engit'sh achievement for Spanish-speaking students.

Stgoffycunce of mean total raw score differences between inftiai and Mral sest sçores in Englist language reading achievement of students on the-Hew York City Test of Proficiency
in Enalish Language SkगTIs.

| Grade ${ }^{\text {N }}$ |  | test <br> Standard <br> Deviation | Mean | t-test <br> St andard Deviation | Mean Difference | Corr. <br> Pre/post | ' |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 95 | 104.2 | 32.9 | $131.6^{\circ}$ | 32.7 | 27.4 | . 622 | 2.15 | . 01 | . 96 |
| 1011 | 135.3 | 41.6 | 150.3 . | 39.0 | $\therefore 15.0$ | . 945 | 了3.66 | . 004 | 1.10 |
| $11 \quad 13$ | $106.0=$ | 29.4 | 144.5 | 32.9 | 38.5 | . $366{ }^{\prime}$ | 3.94 | . 002 | 1.09 |
| 126 | 105.0 | 39.8 | 128.2 | 34,8 | 23.2 | . 798 | 2.35 | . 07 | . 06 |
| TATAL 36 | 113.4 | 37.4 | 139.4 | 36.8 | 26.0 | . 718 | $5.60{ }^{\circ}$ | . 001 | . 93 |

.Thirty-five Spanish-speaking students from all four grades were preand post-tested with this test and all groups had large positive gains. - Qargely due to the small number of students reported to have been pre- and post-tested, ninth and twelfth graders' increases approached but did not reach. stacistical significance. Gains by tenth and eleventh graders, however, were highly significant.

- Gains by students in all grades were considered to be of high educational significance.

Table 27. Engitsh achievement for French/Creole-speaking students.

## Significance of mean total raw score differences-between initial and final test scores in English language reading achievement of students idth full Instructional treabient on the hiew York City - Test of Proficiency in Engitish Lanquage SkTIIS:


. Most Haitian students ( 69 percent) for whom data were reported were pre- and pnst-tested on this test.

Average scores and score ranges for these students are far different from those of ,he Spanish-speaking students taking the same test and may be due to different testing or scoring procedures being. applied to the two groups.
. While ninth graders showed, on average, virtually no change, students in other grades all made substantial pre/post increases with tenth and eleve.th graders having statistically significant changes and twelfth graders nearing statistical significance.
enth through twelfth graders all made gains of substantial educational significance.
-Gains made by Spanish-speaking and Haitian students on this test were generally quite similar.

## - Table 28. Native language reading achievement for

## French/Hattian Creole-speaking students.

Significance of mean total raw score differences between initial and final test scores in French language reading achievement of students with full instructional treatment on the Test de Lecture

- Level 3, by grade.


Seventy-one percent of the students for whom data were reported were prem- and post-tested on this test.

- Average prem to post-test gains ranged from 14.4 raw score points in grade ten to 37.7 in grade nine. In grades nine, eleven, and twelve, average gains were of 20 points and over.
- The pains made by students in grades ten, eleven, and twelve were stat stically significant at or below the .02 level. Because of the small number of ninth graders reported, their gains did not reach statistical significance.
. Students in all grades demonstrated growth in their knowledge of French reading which was highly educationally significant.


Table 29. Achievement on City-wide or Regents tests
-• of reading in the native language.
(Number of program students taking City-wide or Regents examinations in spring, 1981, and percent passing)

## Spanish-Speaking Students

| Test Taken | Number Eligibte | Numbèr ${ }^{\text {. }}$ <br> Taking Test | Percent Passing |  |
| :---: | :---: | :---: | :---: | :---: |
| Spantsh Regents | 37 | 32 | 87 |  |
| -Spantsh City-wide Level II' | 45 | 32 | 78 |  |
|  | Hait | Students |  |  |
| French Regents | 19. | 19 | 100 |  |
| French Cizy-wide Level. II | 25 | 12 | 100 |  |
| TOTAL | 125 | 95 | 38 |  |

. Seventy-eight percent of the Spanish- and 70 percent of the French-- speaking students who were elfgible for these citywide and regents tests did take one.
. One hundred pegcent of the French-speaking students who took these tests passed them. However, since only haif of those eligible for the Level II french exam took it, this passing rate may have been inflated by self-selection.
. An average of 83 percent of the Spanish-speaking students who took these regents and city-wide-examinations passed then.
. Overall, the passing rate of the entire group was 88 percent.

Table 30. Achievement on city-wide examinations in social studies.
(Mumber of program students taking City-wide or Regents examinations in spring, 1981, and, percent passing)

, Eighty-four percent of the Spanish- and 100 percant of the French-. speaking students who were eligible for these city-wide examinations took one.
. Minety percent of the French- and 85 percent of the Spanish-speaking students passed their examinations.

* . The overall passing rate for the combined group was 86 percent.

Table. 31. Mathematics achievement for French/Haitian Creolemspeaking students.

## Signtficance of mean total raw score differences fatween inftiai and final test scores in mathemasics achiavemset of students with full instructional treatment on the few riork city. Arfthmetic Computation Test.



- Sixty-seven percent of the Haltian students for whom data were reported werespre- and post-testad with the Mew York City Aritmetic. Computation Test:
- Rean score gains ranged from 5.8 ram score polnts at che eleventh grade to 18.5 points for the two ginth groders.
-The gains were statistically significant for the tenth ind tweition graders.

Fll the reported gatns vere judged to be of moderate to high
educational sionfficance. educational siqnificance.

- The average galn oigr all grades mas Aighly significant both stat?stically and educationally.

passing content－area coirses in spring 1981.

HRIMSTREAS CLASSES

| SuRJict |  |  |  |  | HAIHSIREA4 CLASSES |  |  |  | PERCE：TAGE OIFFEPEFKCES | $x^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | mieng OF STHERTS |  | $\begin{aligned} & \text { 被泡ER } \\ & \text { PA5SED } \end{aligned}$ | PRSEn |  0 Of Stuecints |  | $\begin{aligned} & \text { Baskers } \\ & \text { rPasien } \end{aligned}$ | $\stackrel{\neq}{\text { PASSEn }}$ |  |  |  |
| 2exenlithetith | 24 | 1 | 14 | SE | 297 | 9 | 76 | 25 | 33 | 11． 85 | ． 012 |
| Atactrós | 25 | 1 | 17 | 68 | $144^{*}$ | 1 | 5月 | 40 | 28 | 6．88 | ． 01. |
| Pre Algebra | 20 | $1 \times$ | 17 | 明 | 58 | 2 | 28 | 48 | 37 | 8.41 | ． 025 |
| Cegeetry | 24 | 1 | 13 | 54 | $29 \times$ | 1 | 26 | 89 | 35 | 28．88 | ．0001： |
| Th7M Hatheatics | 93 | 4 | $61^{\circ}$ | 68 | 528 | .16 | 188 | 36 | $30 \cdot$ | 23.72 | ． 00001 |
| Gencral Selence | $1)$ | 2 | 34 | 72 | 511 | 16 | 187 | 35 | 37 | 28.01 | ． 1808 |
| 8lalogy | 22 | 1 | 17 | 11 | 581 | 18. | 332 | 57 | 30 | 2.85 | ． 10 |
| Chentisty | 38 | 1 | 34 | 94 | H6 | t Pral |  | $\cdots$ |  |  |  |
| 1070 selente | 105 | 3 | 85 | 81 | 1，318 | 19 | 590 | 48 | 33 | 15.34 | 90912 |
| －imotican 5sudies | 29 | 1 | 24 | 90 | 211 | － | 160 | 76 | 14 | 0.43 | H5 |
| Herld History | 23 | 1 | 11 | 14 |  | $t$ Arai |  | －－ |  |  |  |
| Wray Soctal studins | 52 | $?$ | 4 | 19 | 1，115 | 51 | ！ 131 | 62 | 15 | ＊ 51 | ． 15 |

－Istlatem at 35 startents oer cliss．

- Overall, program students met the criterion for success in the content areas (that their rates of passing would be significantly greater than students in comparable mainstream classes)
- In four of the seven ceurses for which comparable data were available, bilingual program students achieved passing rates which were significantly greater ( $p<0$. i) than students in matnstream classes.
. The differences' in passing rates in a fifth course (biology) was marginally significant ( $p<, 10$ ). The program passing rate in American studies was also higner than that of mainstream studenis but, because of the disparity in the sizes of the two groups, the difference was not statistically significant,
- Only in geometry was the performance of bllinqual students significantly lower than that of mainstream students.

Table 33. Mumber of Spanish-speaking students attending,


- Every Spantsh-speaking student who attended a yocational sưcation courfe passed the course.

Every cne of the 115 ninth- and twelfth-grade students who attended pone of the two business education course passed the coursy.

At least 70 percent of the tenth-grade students who attended a business exucation course passed that course."
. Mo results here reported for aleventh graders.


Table 35. Number of Spanish-speaking students attending courses
and percent passing teacher-made examinations in native ianguage classes.


| $\cdots{ }^{2}$ | GRADE 9 |  | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPRING COURSES | N | $\stackrel{\%}{\text { PASSING }}$ |  | P | N | $\stackrel{\%}{\text { PASSING }}$ | N | $\begin{gathered} \text { \% } \\ \text { PASSING } \end{gathered}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ |
| Native Lanquage, Level 11 (academic) |  | 63 |  |  |  |  |  |  | 27. | 63 |
| Native Language: Literature and Culturē | 1 | 100 | 11. | 100 |  |  | 22 | 91 | 35 | 91 |
| Native Lanquage, Level IV (qeneral) |  |  | 15 | 60 | 1 | 100 |  |  | 16 | 62 |
| TOTAL | 28 | 64 | 26 | 77 | 1 | 100 | 22 | 91 | 79 | 76 |

. Spanish-speaking students' success in native lanquaqe classes increásed from the fall to spring semester in every grade but the ninth.
.Overall success in a particular course ranged from 52 percent (in-N.L. Level IV) to 91 percent (in N.L. Literature and Culture).

Table 36. Number of French/Haitian Creole-speaking students attending courses
and percent passing teacher-made examinations in French language classes.


- Every Haltha gtudent who attanded a French langaqe course during the fall passed the course.
- 'Table 37. Significance of the difference between gttendance percentages'
of bilingual students and the attendance percentage of the school.

Average School-Wide Attendance Percentage: 74.3 * 1



- Haitian and Hispanic program students had attendance rates which were significantly higher than the school-wide rate at every grade. level. on
. The overall average attendance rate of Hatitan students was 96.8 percent, while that of Hispanfc students was 89.4 percent.

Student achíevement in the various curricular areas is summarized below.

## Knowledge of English Syntax

Both Hispanic and Haitian students achieved good rates of mastery of the instructional objectives in the CREST. All the groups which were reported exceeded one objective per month of instruction, ranging from 1.21 objectives per month (Hispanic students in the spring term) to 2.2 objectives per month (Haitian students, spring term). Generally, more students were reported in the spring than in the fall. Of the Hispanics, less than half of the students were pre- and post-tested with the CREST in either term. Somewhat more of the Haftiàns were fully tested -- 60 percent in fail and 78 percent in the spring term. Because of the limited number of objectives on Level III of the CREST, and the tendency for students to masiter objectives at different leveis concurrently, ceiling effects were noted especially at Level Ill of the test. This necessarily depressed gains at this level.

## Reading in English

On' the New York City Test of Proficiency in English Language
Skills, Hispanic students made gains which were statistically significant . In grades 10 and 11. The achievement of the other grades did not reach statistical significance because of the small numbers of students reported. All gatns, however, were judged to be of great educational signlifance. Reported scores ranqed ās high as 150 points (ceiling of the test was reported to be 200).

Haitians tested with the same instrument achieved a different range of scores, suggesting a testing or reporting problem especially in grade 9 , where no gain and a negative pre-post coorelation were reported. The gains reported were of statistical significance in arades 10 and 11 , and at $p_{0}=<.06$ in grade 12. The aains were judged to be of large educational significance in grades 10,11 , and 12. The question of scoring and test administration for the two groups should, in conclusion, be examined for this test.

Reading in the Native Language
On the Test de Lecture, a test of reading in French, Haftian students achieved generally large gains which were statistically significant in, grades 10,11 , and 12 (grade 9 had only 3 students reported). All gains were judged to be of great educational significance.

Gain scores for achievement in reading in Spanish (the Interamerican series Prueba de Lectura) were not reported as they were generally out of range, making interpretation difficult.

Achievement in Mathematics
Relatively few students were pre- and post-tested with the New Y-rk City Computation Test. Besause of the small numbers reported, only limited conclusions can be offered. The few Haitians with matched pre/post scores achieved gains which were statistically significant in two 'grades, and educationally sfignificant in all.

## Achievement in the Content Arsas

In the content areas, 'bilingual program students achieved passing rates which exceded the passing rates of mainstream students in
comparable classes in every case but one (qeometry). In almost all cases, -! the-differences in favor of program students were statistically significant (that is, greater than was likely to have occurred by chance). . On the whole, program students met the criterion for achievement. In the content areas.

## Achievement on City Hide and Regents Tests

Students who took cify-wide social stadies tests in Spanish or French achieved an overall passing rate of 86 percent. Most of the students who were eligible took the test.

Students who took calty-wide or reqents test's in french or SDanizi: rèading achieved hign rates of success on them, although, some students who were efigible to taket the examinations did not acteenly take them. Rates of'passing ranged from 78 percent on the Spanish city-wide exam, '. Level If to 100 percent on the French regents examination and the French city-wide $i$ am, level 11 . The overall passing rate was 88 percent.

Achievement in Native Language Classes
In courses in their native language, hispanic students qenarally
 scrịng. 1981) to 84 percent (Level $V, f a l l$ 19807. Overall passinq rates were 78 percent in the fa' and 76 percent in the spring: -

Hattian students achieved pery hiah rates of passing in their French chasses. In all classes but one, 'passing rates were 100 percent. The ovarall passing rate was 100 percent, in the fall and 93 percent in the spriag.

Achievenent: in' Business Classes
In business and vocational courses, $\cdot \overrightarrow{H z i t i e n ~ a n d ~ H i s p a n i c ~ s t u d e n t s ~}$ - achleved high rates of success (generally achleving passing rates of 90 percent or over).

Attendance
The attendance rates for bilingual students of ail gráde levels and language groups were significantly higher than the overail rate fok mainstream students.

## VII. CONCLUSIONS AND RECOMMENDATIONS

The following sections represent a summation of information gathered by the evaluation team by means of interviews with staff and students, class rom observations, reviews of curricula and materials, and analysis of student achievement and attendance data (these were supplied by the program and analyzed by the Office of Educational Evalualions. *。 \% CONCLUSIONS

At the end of its first year of funding, the Project Become staff has institutionalized i strong program of instructional and support services to students.

Staffing. The staff members are on the whole highly experienced;
allappar combated ${ }^{2} 0$ the program and the students. All staff members, including the project director; , teaching and nonteaching staff, are available 50 students on a daftly basis, and create an atmosphere of active concertos Their involvement with, students in and outside of class is indicative of their tonal vement with the program.

## . Support services. Support services are parted, and students

 respond to them. Particularly effective is the weekly reporting system (with home follow-up) for monitoring student progress and heading off problems as they develop. "Counseling and advising are important activities, but in addition to formal academic advising; students seek out staff members as friends and persona advisors.Instruction. Instructional services are well-developed, particularly for the Hspanic students in the subject areas and in Spanish. Curricula generally follow the mainstream classes, and materials are well-developed. The staff of the Haitian component, as a new staff serving a prevtously under-served population, has made great efforts to address the complex needs of the target students with curricula and materials. The need however, remains great for lingúlsticaily appropriate materials.

The fiefly fipstituted progian $0^{*}$ career classes and experiences has been considered a success by ail the partinipants interviewed :- the principal, the project director, grade advisors, participating teachers; and students. Given that many, students will choose employment father than college after leaving schcol, the need for job-oriented skills and experiences is clear. Given the yisible interest shown by students in choosing career options, this tomponent appears to have addressed a felt need.

Student achievement. The stength of the program is refiected as Hell in the student achievement outcomes, which are generally very positive. Students scored good gains in English reading and their knowiedge of English syntax. They achfeved rates of passing in content-area classes which surpassed the passing rates in parallel mainstream classes, and demonstrated attendance rates which were signtificantly greater than* that of the total school population.

## Data reporting. The data reported were incomplete for many

students. Data shaeds were submitted for 181 students; and many of those were not fully tested. Problems af data entry or scoring inconsistencies made finterpretation of some outcomes dificult. As a result, "conclusions about študent growth coutd not be made in some areas. thon across a range of levels within one ciass. The teachers reported scheduling conflicts as sometimes interfering with E.S.L. placement.

Mainstreaming Bilingut-students, espectally in the avademic track, appear to have little flexibility in thelf programs, Few'students Were reported as participating in Aigher lével mainstream content-area classes on - -2 etective basis. Hhile students do take typing and cosmetology in classes taught in Englfsh, these classes were composed of btiningual students in order to maximize the effectiveness of the paraprofessionals.* As a result, however, "the range of courses in which bilingual students participate was restricted to chose offered by the program itself: The second, third, and fourth-year schedules próposed for career students 1 - include. a steadily increasing exposure to the "mainstream," while that does not appear to ba the case for academic track studentṣ: For academic students, the finstructional options appear to be fever.
"Thus, Hatitians might cluster. in one English reading class, and Hispanics in another.

Students'f participation in mainstream classes (depending, of course, mon their linguistic ability, . and the recommendations of program staff) would appear at least in part to be one of scheduling, and thus allied to the question ratsed in the previous paragraph.

Staff development: Project Become staff members have made substantial contributions to the program's success. On the whole, staff members hàve appropriate credentials and mach experience in bilingual education. Ther haye, through participating in ongoing course work, shown their commitment to their continued professional developmentz, The Haitian grade advisor, however, was new to bilinguid, education and was $\Rightarrow$ not enrolled in classes which might have helped firin fulfyll the many responsibifities which were assigned him. He had, it appeared, too many areas of responsibility to work effectively at all of them.

Parenta involvement. The eyaluator found it difficult to describe or assess the activities of the parent advisory committee, as socumentation of its work was nut readily available.

Articulation with other departments: Both English reading and E.S.L. teachers noted that there was no formal planning or coordination between staff members in the two areas. Both expressed the desirability of such collaboration to refnforce the acquisition of English skillis by błlingual studentse Equally, the Haitian grade advisor expressed a need to involve the teachers of French in addressing the needs of basic level students for French instruction and in reinforcing content-area concepts, where nossible. Both seem reasonable areas for coordination.

# development. Teachers in both Hispanic and Haitian components noted the presence of small numbers of students whose literacy skills and cognitive 

 development were weak in their first language, for whom the regular bilingual classes were too difficult. These students may be at risk of "falling between the cracks" of regular student programs, which are not very appropriate for them.
## RECOHMENDATIONS

With recognition for the inchievements of the program in its first year, the following recommendations arg offered to build on the efforts already made.

## Data Reporting

In order to fully document student achievement, it is recomenended that the program make efforts to fully test and report outcomes for all students served., It is also recommended. that the program review its evaluation design with the Office of Educational Evaluation to minimize testing of students and possibly eliminate instruments which "do not contribute significantly to knowledge of the program.

Programming and Mainstreaming
While recognizing that scheduling difficulties may exist in trỳing to program stưdents for both bilingual and non-bilinqual classes, the program is encouraged to try to place students in appropriate E.S.L. and matnstream classes. This may require further coordination with other departments', but would enhance the bilingual students' linguistic and social development, ás well as expand their range of educationd experi-
ences. Towards this end it is recomended that the program develop. partially-matnstreamed schedutes for academic students, as they have for students in the career tracks. In this way, students with sufficiently well-developed English skills would both stengthen those skills and be, exptsed to a wider range, of instructional offerings, whilé not being deprived of the many seryices offered by the program.

## Staff Development

It is recommended that staff developme activities be focussed on the outcomes of the assessed needs, particutariy the newést staff members who may require additional support to function effectively in bilingual classrooms.

## Parentāl Involver.ent

It is recommended that better documentation of parental involvement activities be maintained as part of the program's record keeping. *Suggested data include agendas of meetings, lists of participants; and coptes of minutes.

Articulation with Other Departments
It is recommended that the program staff meet with representatives from the other departments serving bilingual students to facilitate the coordination of "instruction in E.S.L. and Englísh reading classes. Such coordination may also aide in the appropriate placement of students in E.S.L. classes. It is recommended that discussions be held with the French teachers to explore ways in which instruction in each department can strengthen concepts taught in the other.

Instructional Services to Students in Need of Basic Skills Development
While recognizing that their limited nufibers may preclude the assignment of a full time staff members to them, it is recommended that : the program consider a flexible use of the educationar assistants, to work on an intensive, small-group basis with these students. A básic skills laboratory approach might be considered.

Services to Haitians
As has been indicated above, this is a new component in need of development. In addition to staff development and coordination activities discussed in previous recommendations, the program is encouraged to contact other programs serving Hatian students in its search for materials. In addition, the program is urged to continue to develop individualized materials to deal with the diversity of student needs.

If the number of Haitian 'students increases, it is .recommended that the program divide teaching and curriculum development/counseling acṭivities between separate individuals, as the existing staff is over-" burdened.

In conclusion, it is recommended that staff and curriculum development efforts take the Haitian component as a particular focu's, , in 1981-82:

## AMDNCIITS

## First of a Series of Discussions ow:

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Saturday February 7, 1981 - - 10:30 A. 月.
Rdom 818 FORDHAM UNIVERSITY AT LINEOLN' CENIES:- West 60 th' Street and Columbus Avenue, NYC 10023
PRESENTED BY
The Association of Dominican Educators, Fordham University; 8ilingual Education Program, and The Office of Eilingual, Educationnany Board of Education
/ PROGRAM

1. Registration 10:30 -- 11:00 A. M. . .
2. Cultural Presentation -- 11:00 A. M. - 12:00 NOON
3. Jjan Riyaro - Poet
4. Naniel Abreu - Gultarist
5. Bellet Folklorico Juvenil de Nueva York
6. Grupo Musical de JHS 54
7. Opening Remarks -- 12:00 NOON - 12:30 P..M.
8. Dr. Richard E. Baecher, Director, Bilingual Education---Fordham University
9. Mavila Rodas -- Student, Sarah J. Hale High School

1V. Panelists

1. Dr. Ricardo Otheguy - Olrector, City College Bilingual Education Program-
2. Carmen Perez - Chief, Bureaí of 8 llingual Education, NYS Education Department
3. Hon. Herman Baditle - Ex-Congressman and Notable.Lawyer and Politician
4. Awilda Orta - Director, Office of Bilingual Education, NYC Board of Education
V. Questions and Discussion Session - 1:30 P. M. -- 2:30.P. M.

CLOSING REMARKS - Or. Angela L. Carrasquillo, Assistant Professor, Fordham Universiry Coffee and Danish - 2:30 Pe M. to 3:00 P. M.

FOR fURTHER INFORMATIJN PLEASE CALL: Dr. Angela L. Carrasquillo at 841-5515
IV Juañ Trinidad at 855-2412 -- Ext. "g (Day) or 877-5197 (Night)

## GEMERAI ACADEMIC GEJECHITES

1. Participants who wish tó, will be siven an oppoitmity to pariticipate in a bilingual-bicultural program in either the acaderic or career trand.
?. AJE participants wili be given an opportwity to develop fanctionez oilinguin ism, fncludiga Eoglish dominant siadents should they wiah to participate.

3: All stadents in the progean will be given an opportunity to achieve gnado ievel performance in the curniculum areas in the language of their choice.
4. Rach stadent participetiag in the bilingual program will be grouped in each subject area olass according to his ability in that area, and will be changed st such time as be. demonstrates mastery of need for charge at that level.
5. Farticipants for whom farilsh is a second langraga will be tanght in thoir native languase, while thosi are almultanevusly developing commoncation ski,1la in English.
6. Participants for whom English is a second langraše will be abla to maintain and impzove their ability in their native language and cultore while acquiring sensitivity for the now calture.
7. The positive self-image ard pride. in his heritage will be reinforced by using this student's netive language as the language of instruction.
8. All the students in the program will develop a richeri, understanding of the variet of callures surnomaing tinem.
9. All stadents will demonstrate their understanding and appreciation of cuitural heritage by-participating jointly in classroom activities, school observed hoifdays and festivities of cultural significance as well as national eventa.
10. The achool will improve the quality of taducation icr all children by incorporating and expanding the range of choices for all atodents.
11. The school will provide students with direct, active participation in real life settings as a preparation for careers and life in the broadest sense, 12. Participants will be able to increase their acadenic achievement, at éadance, * roxic habits and seli-esteem, marletable sidils, and motivation to contime stadying. .
13. A sifgificantly hienar muber of participentar will meet tominal objectives for the hift. school diplont andfor licensing thareby attaining biza sehool diploma.
14. Participants will develop the akills and attitudes zocrobsary far sdmisaion . to collage and/o empioyment

1. 'Bilingual students will be offered the opportunity to develop skills, not accessible to them in over shcools or programs, winch will facilitate employment and advancement into the world of careers.
2. Partrietpantas wilt be able, upon consultation with counselor end parents, to choose a career as early as in grades tenth, eleventh and twelfth.
3. Participants in the career options program will live the added oppomunity to obtain employment wiflo in school or immediately after school to facilitate on the job training experience for certain skills.
4. Stradents in the career options program will have the opportunity to partake in internships in prorate orptablic agencies to get first-nauc experience in the field and to' test appropriateness of career choice.
5. Participants in the career option program will have. a significentig greater opportunity for permanent placement after completing program.
6. Participantia acquiring basic skilig in the fields of health careers, cosmetrology, and secretarial sciences will experience the sense of pride and abatisfaction associated with being willful; and capable.
7. participantí, under the guidance anis orientation of the bilingual faculty, will develop a greater understanding of how bilingualism can wort for than.
8. Fostering strident's participation into the economic life of the coumuitis will aid in the development of a more positive bond between the school end society.

## For the Staff:

3. To provide the perticipeting atuff with additional opportunities to davelop their own protressional growth in area of bilingun ecucation through an awereness of tine non-Znglish-apeating stugents' neede.
4. Taschsms and paraprofissionels will axpend thoiz knowledge of bilingual teaching methodology by aitending branches of Cusy and by attercance to insarrice courseg and meatings.
5. The staff will becone more avare of the 有ecessity for hoser cooperation
 partioipition sad stimilate pacente enthusiasm for oilingual ec̈ncation.
6. The staff will zetively paxiticipate in the College tavigozy comittio
 as: to the varions college appoxtmities open to them.
7. The staf will hold regular mestings anong thengsives to discuss the zeans
 なuratul gtucents.
8. Tha tabcher in the project gromp will hold meatings sitn teachari in the regular school to foster understranding of the ajng of bilisgnal progran and oliminate the diatrugt whicn at times evidences itrelf in manifestiona of Laplation and/or polarization.
9. Whe teachers in the project ufil covelop now bilingual materials in the aroas of mathmatica, sciface and social studien, es well as in tuo jisingual, Vocational carear areas where tnore is a lack of appropriato materials autable for the
 minteg amoñ otan socoolg.
10. The professional and parayrofessionsi gtaff will gain insight into the yhilosouhy ara practices of bilingriaz ectucation as well, as an appreciation of the cultrically-plurialiatie Amsercan Society
11. The stafi will be kble to fategnate zothoda and philosophies of carcor: acication into 2 vaxiets of leaming isituations.
 " akilis necosagry in oxder to perticipate in a bilingual-bicuitural program.
 comercialiv proinced materials for bitinisum
12. 111 gtaff mombers will leern to adapt.and dovalop rolovant and appropmato curcicilum neterials gearad to the intorest lovel and indivianal needs of tate stredents in the bilingual picgoren.
13. D De to different levels of oducational experience znd proficiency, teachers in the bilinguel progezn will prepare indivigualized ingtruction pacicets for sask saibjoit asea.
 * 4ko will be availaile for triafoing axd diesemination.

- 15. The staff sill be tratinaz and nede arare of cument bilingusi prolications so as to devalop seasititity to the philosophy, nesia and yroblems of billngual aducation.


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    * Reproductions suppliad by EDRS are the best that can be mace from the original document.

[^1]:    *one worked $1 / 2$ year.

[^2]:    - 

    Jacob Cohen. Statistical Power Analysis for the Behavioral Sciences

