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ABSTRACT
Project SUCCESS, a combined bilingual education and college/career orientation program for Spanish speaking and Asian high school students of limited English proficiency, is described in this report. Located at Theodore Roosevelt High School in New York City, the program, in 1980-81, provided courses in English as a second language, English reading, native language arts, and bilingual mathematics, social studies and science; maintained a Dropout Prevention Clinic (DPC) which offered instruction and guidance to Spanish speaking ninth graders identified as potential dropouts; operated a High Schcol Equivalency Program (HSE) to prepare Spanish speaking and Asian students who were average or had dropped out to take the General Equivalency Diploma examination; and provided college/career orientation services for program participants. The report describes the project background and organization; participant characteristics; instructional services; non-instructional activities; program implementation; and program evaluation. Evaluation results indicate (l) generally favorable student performance on tests of English syntax, with HSE and DPC students performing extremely well; (2) significant improvement; in native language reading achievement among Spanish speaking students; (3) generally high success rates in different subject areas; (4) a program attendance rate that was better than the school-wide attendance rate; and (5) positive student attitudes toward the program. The report recomends program expansion to serve more students and provide more services. (Author/MJL)

THEODORE ROOSEVELT HIGH SCHOOL
PROJECT SUCCESS: STRIVING UPWARD
Principal: Philip Lefton
Project Director: Carmen Miranda THROUGH COLLEGE AND CAREER EDUCATION FOR SPANISH SPEAKERS 1980-1981

Prepared By The BILINGUAL EDUCATION EVALUATION UNIT

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# PROJECT SUCCESS: STRIVING UPWARD <br> through college and career education 

FOR SPANISH SPEAKERS
AND
FOREIGN LANGUAGE/BILINGUAL EDUCATION DEPARTMENT
THEODORE ROOSEVELT HIGH SCHOOL

| Location: | 500 East Fordham Road Bronx, New York |
| :---: | :---: |
| Year of Operation: | 1980-1981 <br> Title VII of the Elementary and Secondary Education Acts, first year of funding <br> Chapter 720 of the New york State Laws of 1973, third year of funding |
| Target Languages: | Spanish and Vietnamese |
| Number of Participants: |  Approximately <br> Spanish 380 <br> Vietnamese 40 <br> Other Asian 17 (Chapter 720) |
| Principal: | Philip Lefton |
| Assistant Principal: | Laraine Marcus Pacheco |
| Project Director: | Carmen Miranda |

I. DEMOGRAPHIC CONTEXT

- Theodore Roosevelt is located on Fordham Road across from Fordham University, in an area of the "devastated South Bronx" that has, over the past ten years, undergone increasingly serious deterioration and decay. More and more, the school is becoming isolated from other buildings in use. The Fordham business area to the west of Webster Avenue still holds it own, with new shops opening as others close, and Alexander's,

McDonald's, and local merchants continue to provide some jobs for Roosevelt students. But the immediate area of Fordham Road, and the areas to the east, north, and south, are blighted by abandoned buildings and empty lots.

The scarcity of decent housing and the frequency of fires create severe physical and emotional problems for residents of the area and have many consequences for the school. The population shifts rapidly, with many families relocating to the North Bronx while other families of even lower income -- recent Hispanic immigrants and a rapidlv increasing number of Indochinese refugees -- enter the area. Daily attendance is difficult to monitor, as students may be suddenly relocated to Manhattan because of fire, or may need to travel back and forth to the Caribbean islands of their recent origin. Vietnamese students sometimes live without families, or with relatives who speak no English, and as yet no community services are available to them.

The Puerto Rican National Forum recently opened offices on Fordham Road, and Theodore Roosevelt was a pilot school in participating in its programs, including the establishment of an after-school program for ninth-graders. Fordham-Tremont Mental Health Center cooperates with the school in the counseling and evaluation of students and in family counseling.

Roosevelt High School admits students from six feeder intermediate and junior high schools in community districts 9 and 10 , as well as accepting walk-in admissions from newly arrived immigrants. The ethnic composition of the total school population $(3,546)$ in Cctober, 1980 showed 2,126 ( 60 percent) Hispanics, 1,275 (36 percent) blacks, 93 ( 3 percent) Asians, and 52 (1 percent) whites.

## BACKGROUND

In the years since 1975, when it received its first Title VII funds and staff, Theodore Roosevelt has transformed a small pilot bilingual program into what staff members consider the largest and most comprehensive service to bilingual students in the Bronx.

In 1974-75, the pilot program was initiated, consisting of three taxlevy teachers. In 1975-76, Project ABLE was funded by Title VII to serve Hispanic and Italian students. Title VII funds supported the services of a project director, two resource teachers (Hispanic and Italian), a bilingual grade advisor, and three paraprofessionals. These augmented the services provided by the three tax-levy staff members who provided instruction. The Italian resource teacher received permission from Title VII to teach contentarea courses so that the Italians could be served in their native language. Four assistant principals and the project director supervised the developinq program.

New York State Chapter 720 funds were received in 1978-79, and provided for the services of three teachers and a paraprofessional. As a result, the number cf subject-area teachers increased to six, with a total of four paraprofessionals in the classrooms.

At the end of 1979 , the program of bilinqual education was consolidated intu a single foreign language/bilingual education department, which now forms the largest department in the school.

In 1980, with the expiration of project ABLE, the entire program as funded by Title VII was kept intact, with not one position lost. Continuity of

Staffing has also been excellent, with only one change last year in personnel.
In 1980-1981, in addition to continued support from Chapter 720, tax levy, Title I, P.S.E.N., and Title II, Theodore Roosevelt received Title VII fundinq for a new set of sub-programs under project SUCCESS.

SUCCESS has established new serifices for the steadily increasing number of students of limited English proficiency:
-- a Dropout Prevention Clinic to provide ninth-qrade studente who have been identified as potential dropouts with the basic skills to function in a traditional academic high school environment;
-- a High School Equivalency Program to retrieve dropouts by providing instruction preparatory to the General Equivalency Diploma Examination;
-- Coliege/Career Orientation to provide college and career advising to all eleventh-and twelfth-grade students of Imited Enqlish proficiency (L.E.P.) and to High School Equivalency Program stidents.

In addition, SUCCESS provides the services of a family assistant to improve conmunications between bilingual parents and the school.

## ORGANIZATION AND FUNDING SOURCES

The bilingual program at Theodore Roosevelt functions under the supervision of an assistant principal for foreign lanquages and bilingual education. She is responsible for the supervision of all teachers providing instruction in the bilingual program as well as the Title VII staff. The project director provides services to the bilingual project staff and teachers by coordinating bilingual program activities and services, providing in-service training, securing materials, and assuming responsibility for the project's administrative needs. She courdinates her activities and services with those of
other programs (such as E.S.L.) providing services to the bilingual students. Chart 1 delineates the nature of these relationships. The solid lines indicate the direction of formal supervision, whereas the dotted lines indicate a coordination of services without implying supervisory responsibilities.

Project SUCCESS combines five sources of funding: Titles I and VII of the E.S.E.A., P.S.E.N. and Chapter 720 of the New York State Laws, and local tax-levy funds. Tax-levy funds support the position of the assistant principal of foreign languages/bilingual education, and onc-half time of the project director. Additionally, it supports one full-time grade advisor and the services of 19 teachers. Title I supports the full-time positions of three teachers and two paraprofessional assistants. Title VII supports one-half time of the project director, and the full-time .. ositions of one college/career advisor, one teacher trainer, one family assistant, four paraprofessionals and one secretary. Of the state funding sources, P.S.E.N. supports the positions of three, and Chapter 720 of two, full-time teachers.

For the Vietnamese language students, Chapter 720 funds slipport the full-time position of a paraprofessional assistant, who aids teachers in the subject areas, prepares and translates materials, and assists in student advisement and parental involvement. Vietnamese students also receive services from personnel funded by tax levy and Title VII. These include classroom instruction, counseling, and administrative services.

Chart 1. Organization of bilingual program at Theodore Rcosevelt High School.


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Tables 1 and 2 show the funding of the instructional and non-instructional services for Spanish-speaking students.

| Spanish |  |  |  |
| :---: | :---: | :---: | :---: |
|  | FUNDING SOURCE (S) | $\underset{\mathrm{TEACH}}{ }$ | EL PAR |
| E.S.L. | $\begin{aligned} & \text { Title I } \\ & \text { P.S.E.N. } \end{aligned}$ | 3 3 | 2 0 |
| Reading (English) | Tax Levy | 6 | 0 |
| Native Language | Tax Levy | 5 | 0 |
| Mathematics | Tax Levy | 2 | 0 |
| Social Studies | Chapter :20 Tax Levy | 1 | 0 0 |
| Science | Chapter 720 Tax Levy | 1 1 | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ |
| H.S.E. Component | Tax Levy Title ViI | 3 0 | 0 3 |
| D.P.C. Component | Tax Levy Title VII | 1 0 | 0 1 |


| Spanish |  |  |
| :---: | :---: | :---: |
|  | FUNDING SOUPCE(S) | PERSONNEL: NO. \& TITLE (S) |
| Administration \& Supervision | Tax Levy <br> Title VII | A.P. Foreign Language/ Bilingual Department . 5 Project Director . 5 Project Director |
| Curriculum Devel opment | Title VII <br> Tax Levy | Teacher Trainer <br> H.S.E. Teachers (3) <br> D.P.C. Teacher |
| Supportive Service | Title VII <br> Tax Levy | Bilingual Family Assistant College Career Advisor Bilingual Grade Advisor |
| Staff Development | Title VII | Teacher Trainer, Project Director (same as above) |
| Parental and Community Involvement | Title VII Tax Levy | All Title VII Personnel <br> Bilingual Grade Advisor Members of Foreign Language/ Bilingual Education Department |
| Other | Title VII | Secretary |

Tables 3 and 4 show the funding of the instructional and non-instructional services provided for the Vietnamese students.

| Vietnamese |  |  |  |
| :---: | :---: | :---: | :---: |
|  | FUNDING SOUTRCE(S) | NUMBER OF TEACHERS | PERSONNEL: PARAS |
| E.S.L. | Title I, P.S.E.N. | 3 3 | 2 0 |
| Reading (English) | Tax Levy | 6 | 0 |
| Native Language |  |  |  |
| Math Mainstream | Tax Levy | 3 | 1 Vietnamese Paraprofessional (Chapter 720) assists these teachers |
| Social Studies |  |  |  |
| Science Mainstream | Tax Levy | 3 |  |


| Table 4. Funding of the non-instructional component. |  |  |
| :---: | :---: | :---: |
|  | FUNDING SOURCE(S) | PERSONNEL: NO. \& TITLE (S) |
| Administration \& Supervision | Tax Levy <br> Title VII | ```1 A.P. Foreign Language/ Bilingual Department .5 Project Director .5 Project Director``` |
| Curriculum Development | Chapter 720 | Vietnamese Paraprofessional has prepared and translated materials |
| Supportive Services | Chapter 720 <br> Title VII Tax Levy | Vietnamese Paraprofessional assists Title VII Family Assistant and Bilingual Grade Advisor |
| Staff <br> Development |  |  |
| Parental \& Community Involvement | Chapter 720 | Vietnamese Paraprofessional has made home contacts and translated for parents |

## III. STUDENT CHARACTERISTICS

Theodore Roosevelt is officially designated a Title I school by the New York City Board of Education, and in 1980-1981, 90 percent of its 629 students of limited English proficiency were entitled to free lunch.

While the total school population has decreased in each of the last four years (3,061 in April of 1981, as opposed to 3,876 in 1979-1980), both the number and percent of students of limited English proficiency continue to rise. The percentage of students at Roosevelt whose native language is other than English exceeds the average for the city and the borough.

The target population of the Title VII/Chapter 720 program is students whose dominant languages are Spanish and Vietnamese.

Spanish
300 Title VII funded eleventh- and twelfthgrade students (125 students are also served by Chapter 720 funds).

200 Chapter 720 funded ninth- and tenthgrade students.

All of the program students were born outside the United States, principally in Puerto Rico (53 percent), the Dominican Republic (23 percent), Ecuador (9 percent) and Vietnam (9 percent), and the majority are recent immigrants (see Table 5).

Program students ranged from students of limited English proficiency who can qualify for advanced placement courses in their native language, to students who are illiterate in both their native language and English.

| COUNTRY OF ORIGIN | NUMBER OF PROGRAM STUDENTS | PERCENT |
| :---: | :---: | :---: |
| Puerto Rico | 235 | 53 |
| Dominican Republic | 100 | 100 |
| Ecuador | 38 | 23 |
| Honduras | 2 | 9 |
| Nicaragua | 2 | - |
| Guatemala | 1 | - |
| El Salvador | 1 | - |
| Panama | 1 | - |
| Peru | 1 | - |
| Vietnam | 40 | 9 |
| Hong Kong | 10 | 3 |
| Laos | 6 | 2 |
| Cambodia | 1 | - |
| TOTAL | 438 | 99 |

Because there may be selective personal and enviromental pressures on students in urban communities the composition of the student body may vary from school to school and grade to grade within a school. Table 6 presents the distribution of bilingual program students by grade and sex. The figures indicate that boys outnumber girls in the ninth and tenth grade. In grades eleven and twelve, however, girls outnumber boys in a pattern which generally increases in these grades, suggesting that more boys leave the program and/or school than girls do.

| ( $\mathrm{N}=440$ ) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| GRADE | N | \% | N | \% | N | \% |
| 9 | 56 | 51 | 55 | 49 | 111 | 25 |
| 10 | 43 | 53 | 38 | 47 | 81 | 18 |
| 11 | 42 | 38 | 68 | 62 | 110 | 25 |
| 12 | 23 | 36 | 41 | 64 | 64 | 15 |
| 15* | 35 | 47 | 39 | 53 | 74 | 17 |
| TOTAL | 199 | 45 | 241 | 55 | 440 | 100 |

* Grade 15 indicates those students who are in the High School Equivalency instructional sequence.
- The percentages of male and female students are roughly equivalent in the ninth grade.
- By the twelfth grade, the percentage of female students has risen to 64 percent, while male students have dropped to 36 percent.
- Seventeen percent of the bilingual program populatio, are enrolled in the High School Equivalency Program.

Because so many of the Theodore Roosevelt bilinqual students are immigrants (many having arrived less than a year ago), their educational histories may vary considerably. Many have suffered interrupted schooling, or, because of a lack of educational opportunities in their countries of origin, have received fewer years of education than their grade level would indicate. Bilingual program students are reported by age and grade in Table 7.

| Table 7. Number of students by age and grade*. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGE | GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 | GRADE 15** | TOTAL |
| 14 |  | 1 |  |  |  | 1 |
| 15 |  |  |  |  |  | 23 |
| 16 | 37 | 20 |  |  |  | 61 |
| 17 | 33 | 22 | 28 | 2 . | 2 | 87 |
| 18 | 4 | 13 | 36 | 18 | 28 | 99 |
| 19 | 4 | 7 | 23 | 24 | 29 | 87 |
| 20 |  | 7 | 6 | 13 | 8 | 34 |
| 21 |  | 2 |  | 3 | 1 | 6 |
| 22 |  |  |  | 2 | 3 | 5 |
| 25 | 1 |  |  |  |  | 1 |
| TOTAL | 96 | 78 | 97 | 62 | 71 | 404 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

* Shaded boxes indicate the expected age range for each grade.
** Grade 15 indicates those students who are in the High School Equivalency instructional sequence.
- Seventy-one percent of the program students are overage for their grade.
. The highest percentage of overage students occurs in th. ninth grade.

As Table 7 indicates, the fact that so many students are overage may have implications for interpreting students' outcomes and setting standards for expected rates of growth. These are students who have missed a year or more of school, whose grade placement may reflect their age more than their prior educational preparation. As a result they may have a lack of cognitive development in their native language which must be addressed, as it has implications for their ability to acquire literacy skills in English.

Table 8 presents an overview of the students involved in the bilingual program for whom information was reported, by instructional sequence and grade.

| Table 8. Number of students by instructional sequence and grade. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INSTRUCTIONAL <br> SEQUENCE | GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 | GRADE 15 | TOTAL |
| Academic | 87 | 82 | 14 | 13 |  | 196 |
| Career | 1 |  | 97 | 51 |  | 149 |
| Dropout <br> Prevention | 26 |  |  |  |  |  |
| High School <br> Equivalency | 114 | 82 | 111 | 64 | 74 | 445 |
| TOTA! |  |  |  |  |  |  |

In an attempt to better understand the factors underlying the movement of students through and out of the program, data were collected on the reasons given for students leaving the program during the 1980-81 school year (see Table 9).

| REASONS FOR IEAVING | GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 | GRADE 15* | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oi scharged/trans ferred to alternative program | 1 |  | 3 |  | 5 | 9 |
| Transferred to another school | 1 |  | 3 |  |  | 4 |
| Graduate |  |  |  | 61 |  | 61 |
| Returned to native country | 3 | 1 | 12 |  | 3 | 19 |
| Discharged ( job) |  |  | 1 |  | 4 | 5 |
| Discharged (married) |  |  | 1 | 1 | 1 | 3 |
| Discharged (reason unknown) | 1 |  |  | 1 | 5 | 7 |
| Truant | 3 |  | 1 |  | 2 | 6 |
| Dropout |  |  |  |  | 6 | 6 |
| Ot her |  |  |  |  | 8 | 8 |
| TOTAL | 9 | 1 | 21 | 63 | 34 | 128 |

* Grade 15 indicates those students who are in the High School Equivalency instructional sequence.
. Forty-nine percent of the students leaving the progran were twelfth graders who graduated.
- Fifteen percent of these students returned to their native country.
. Almost half of the ligh School Equivalency students ( 34 out of 74 ) left the progran during 1980-81. The reasons given were dropouts or truants (8), discharges for unknown reasons (13), and transfers to alternate programs (5).
- Grade nine, in wich all students in the Dropout Prevention Clinic were enrolled, experienced only three students leaving because of truancy (this figure may include ninth graders not in the D.P.C.)

$$
-16-\quad 2 ;
$$

NOTE: Because most features and procedures of the total bilingual instructional program have remained intact in the transition from the earlier project $A B L E$ to the present foreign language/hilingual education department, this section will briefly summarize, and present tables documenting the instruction provided to all bilingual students. Later chapters will focus on the services provided by SUCCESS. The evaluator refers the reader to the Office of Educational Evaluation final evaluation report of 1979-1980 for a more detailed examination of the program and its services.

## ENGLISH INSTRUCTIONAL PROGRAM

Theodore Rocsevelt provides intensive instruction in English as as second language (E.S.L.) to permit a transition from Spanish to English as rapidly as possible. Table 10 shows the structure of courses in English instruction, all of which are taught 100 percent in English.

## NATIVE LANGUAGE INSTRUCTION

Table 11 shows the range of courses for Hispanic students in the study of their native language. These courses are taught 100 percent in Spanish. Because of the small number of Indochinese students served, no classes in Vietnamese or Chinese could be offered, due to the lack of qualified personnet.

## BILINGUAL CONTENT-AREA COURSES

Spanish-speaking program students are allowed to progress in the content areas of history, economics, math, and science through instruction in their native languages, especially since students who have come from other countries have had previous instruction in those areas. Teachers begin introducing English vocabulary immediately, however, and the use of English steadily increases as the course progresses. It is possible that classes that are technically listed as bilingual may have more instruction in English than in Spanish.

Table 12 shows the bilingual courses in which program students are enrolled. The content materials are identical to those in mainstream classes, permitting a student to transfer from Bilingual Math I to mainstream Math II with no discontinuity. All courses are primarily conducted in Spanish, and meet five periods per week.

## MAINSTREAM COURSES

Table 13 shows the mainstream courses in which program students, including High School Equivalency Program students, are enrolled. All courses meet five periods per week.

Table 10. Instruction in English as a second language.

| COURSE TITLE ANO LEVEL | $\begin{aligned} & \text { MMEER OF } \\ & \text { CLASSES } \end{aligned}$ | average class REGISTER | CLASS perioos PER MEEK | DESCRIPTION | CURRICULUM OR material in use |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LEIN | 1 | 20 | 10 | E.S.L. Structure for slow learners |  |
| LEI | 2 | 20 | 10 | E.S.L. Structure - Beginners |  |
| LE2 | 3 | 20 | 10 | E.S.L. Structure - Beginners | Lado Series Books 1-5 |
| LE3 | 3 | 20 | 10 | E.S.L. Structure - Intermediate | Teacher prepared materials |
| LE4 - 4A | 3 | 20 | 5 | E.S.L. Structure - Advanced |  |
| LE5 | 5 | 20 | 5 | E.S.L. Structure - Advanced | - |
| LEIR | 2 | 34 | 5 | E.S.L. Reading - Beginners |  |
| LE2R | 2 | 34 | 5 | E.S.L. Reading - Beginners | E.S.L. Reading Curriculum |
| LE3R | 2 | 34 | 5 | E.S.L. Reading - Intermediate | Teacher - prepared materials |
| LEAR - 4AR | 4 | 34 | 5 | E.S.L. Reading - Advanced |  |
| LESR - 5AR | 4 | 34 | 5 | E.S.L. Reading - Advanced |  |

Table 11. Instruction in native language skills.

| COURSE TITLE AMO LEVEL | MUMBER OF CLASSES | AVERAGE CLASS REGISTER | CLASS PERIOOS PER WEEK | DESCRIPTION | CURRICULUM OR material in use |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LM1/2 | 1 | 20 | 10 | Spanish for slow learners | 1) Revised Curriculum for native speakers |
| LM3/4 | 1 | 20 | 5 | Spanish for slow learners | 2) Teacher-made materials |
| LSG-ungraded | 2 | 34 | 5 | Spanish grammar and composition | 3) Textbooks for native speakers |
| LS3S 10th grade | 2 | 34 | 5 | Spanish grammar and literature |  |
| LSAS 10th grade | 2 | 34 | 5 | Spanish grammar and literature |  |
| LS5S 1lth grade | 2 | 34 | 5 | Spanish American literature |  |
| LS6S 11th grade | 1 | 34 | 5 | Spanish American literature |  |
| LS7/B 12th grade | 1 | 34 | 5 | Spanish literature |  |
| LS AP | 1 | 20 | 5. | Advanced placement |  |


| COURSE TITLE | NUMBER OF CLASSES | AVERAGE REGISTER |
| :---: | :---: | :---: |
| American History | 1 | 34 |
| Economics | 1 | 34 |
| Latin American History | 2 | 34 |
| World History | 5 | 34 |
| 9th Grade Mathematics | 4 | 34 |
| Al gebra | 2 | 34 |
| Mathematics Skills | 3 | 34 |
| Biology (Modified) | 2 | 34 |
| Biology (Regents) | 1 | 34 |
| General Science | 4 | 34 |



## V. NON-INSTRUCTIJNAL COMPONENT

## CURRICULUM DEVELOPMENT

Teachers in the foreign language/bilingual education department have continued to produce valuable materials that are widely used in other schools, including an E.S.L. course of study for the English-fluent bilingual student, as well as materials used in other departments of the school, such as Regents Competency Test materials. Eight teachers regularly develop materials on a per session basis. The Dropout Prevention Clinic, the High School Equivalency Program, and the college/career advisor also develop relevant curricula and materials for program students (see sectiors VI, VII, and VIII).

## PARENTAL AND COMMUNITY INVOLVEMENT

Title VII funding provides the services of a bilingual family assistant to pror:ote the relationship between families of bilingual students, including 300 students of limited English proficiency, and the school, with the aim of improving attendance and academic achievement. The family assistant lives in the community and is popular with the residents, allowing her to make frequent informal contacts with both parents and students and to follow up on family situations that affect attendance or performance. Such follow-up has included accompanying parents to the hospital to act as interpreter.

The family assistant notifies parents of attendance and cutting problems or school failure through letters, telephone calls, appointments at school, and home visits. Parents of Dropout Prevention Clinic students are telephoned after two absences. Since appointments at school provide an opportunity to review the records and to sbtain parent signatures on evaluation
forms, they are particularly encouraged, and flexible arrangements have been made to allow working parents to visit before, after, or during school hours. During 1980-1981, the family assistant made formal contact with parents by a weekly average of 35 school appointments, 50 telephone calls, and five home visits.

In October, 1980 a Parent Advisory Committee was established, consisting of four parents of High School Equivalency Program students, two students, and two staff members. The family assistant has also been active in involving parents in city-wide parental meetings held at the New York City Board of Education and the State Office of Bilingual Education. For the first time, in 1980-1981, five bilingual parents not only attended the city-wide conferences in May, but also the preliminary planning meetings.

An important and effective means of involving parents in their children's education has been the offering of educational programs for the parents. One evening E.S.L. class continues to attract a very high attendance and an overwhelming positive response from parents. A High School Equivalency Program evening class, funded by Title VII, was started in November and holds two-hour sessions twice a week. Of 20 Hispanic adults registering, 15 attended regularly and 15 took the G.E.D. examination in May. The demand for both courses is rapidly increasing.

In addition to courses, regular monthly Parent Advisory Committee meetings and six bilingual parent meetings are held during the year. Parents are actively encouraged to visit the school for special events. For example, the school bought tickets for bilingual parents for both the

Spanish and English school plays. Parents were also involved in Puerto Rican Heritage Week and Pan American Week. An assembly program was held, and also a party at which Puerto Rican food was prepared by the parents.

The program's bilingual newsletter, Noticias, which helps to develop community awareness, won first place in the Columbia Scholastic Press Association Prize in October, 1980.

## STAFF DEVELOPMENT

Activities designed to upgrade the skills and knowledge of program staff were carried out both in and outside of school. In-school activties included conferences, workshops, and monthly meetings conducted by the project director which included presentations on curriculum development and individual instruction. The outside workshops, conferences, and university courses attended by the project staff are outlined in Tables 14 and 15.

## VI. DROPOUT PREVENTION CLINIC

## STUDENT SELECTION CRITERIA

The Dropout Prevention Clinic (D.P.C.) offers instruction and guidance to 30 ninth graders who have been identified as potential dropouts.

Selection Criteria<br>Grade of 29 T (excessive absences) or 49 T (excessive cutting)<br>Below twenty-first percentile on English LAB<br>Higher percentile on Spanish LAB

Willingness and desire to

participate in program $\quad$| $1 / 2$ hour interview with |
| :--- |
| student and parent |

## Data Base

Permanent records from all 9 truant classes

English LAB III

Spanish LAB III
$11 / 2$ hour interview with
student and parent

## INSTRUCTIONAL COMPONENT

The clinic provides four consecutive periods of intensive, highly individualized instruction in math, social studies, and E.S.L., with one teacher and one paraprofessional.* The program's curriculum consists of an adaptation of the full scope of the Title I, ninth-grade curriculum. Thus, after completion of the program, the student is prepared to enter the tenth-grade, mainstream or bilingual, curriculum of the school.

The language of instruction in the content areas for 27 of the 30 students is often English, since many of the students, although of limited English proficiencs', nevertheless speak English more easily than Spanish. Some students receive social studies instruction in Spanish but math in English.

[^0]Small-group instruction is held once a day in one of the two content areas of math or science, or in E.S.L. During the rest of the four periods, each student works, under the supervision of the teacher and paraprofessional, from three personal folders, one for each different area, and the student is placed within that sequence on the basis of his or her record, the interview, and diagnostic tests in math, English, and Spanish.

Each student is required to complete at least one assignment each period, although four or five students are able to complete two. Students work on their own, seeking teacher resource help as needed. When finished, students advise the teacher or paraprofessional who corrects the work, giving immediate feedback on the performance.

The individualized instruction permits great flexibility in helping students to achieve their goals. Some students need to develop their basic math skills, while others are already working in algebra. A student may work on math for two periods one day and on social studies for two periods the next day.

Texts, in both Spanish and English, are identical to those used in the mainstream and in the foreign language/bilingual education classes.

The student spends the last four periods of the day in large-group mainstream or non-D.P.C. bilingual classes. Schedules for one E.S.L. beginning and one E.S.L. advanced student provide examples of the instructional sequence for D.P.C. students:

Instruction

|  |  | E.S.L. Beginning | E.S.L. Advanced |
| :---: | :---: | :---: | :---: |
|  | 1. | Individualized Math (Spanish) | Individualized Math (English) |
| Dropout Prevention Clinic Classes | 2. | Individualized Social Studies (Spanish) | Individualized Social Studies (Spanish) |
|  | 3. | E.S.L. Structure -Lado Book 2 | E.S.L. Structure .Lado Book 5 |
|  | 4. | E.S.L. Reading -- <br> All in a Day's Work | E.S.L. Reading -Journeys Through Fame |
|  | 5. | (Lunch) | (Lunch) |
| ```Non-D.P.C. Bilingual or Mainstream Classes``` | 6. | General Science (100 percent Spanish) | Spanish 4 |
|  | 7. | Spanish 6 | Physical Education |
|  | 8. | Physical Education | ```General Science (60 percent) English, 40 percent Spanish)``` |

## CURRICULUM AND STAFF DEVELOPMENT

## Curriculum Development

Curriculum development for the D.P.C., under the supervision of the Title VII teacher trainer, is a part of the responsibility of the Dropout Prevention Clinic teacher. All assignments are individualized and, in addition, the teacher designs an individual weekly quiz for each student, an individual full-period test every two weeks, and an individual end-of-year test.

## Staff Development

Staff development is implemented by the teacher trainer, who has six and a half years' experience in bilingual education and was selected by the Office
of Bilingual Education in New York City in 1980-1981 to give a presentation on dropuout prevention to administrators and program coordinators. In the early weeks of the year, during the planning stages of the program, the teacher trainer held five or six meetings a week with the teacher and paraprofessional. Thereafter, they have met monthly to discuss improvements and further resources for the program.

A monthly meeting conducted by the project director and monthly department meetings also regularly provided presentations on curriculum development and on developing techniques for individualized instruction.

## AFFECTIVE DOMAIN

From the initial interview, Dropout Prevention Clinic students showed great interest in the program, and in the course of the year there have been no discipline problems.

Since the Dropout Prevention Clinic student has a history of very poor attendance, it is significant that attendance records show that one-third of the students were absent no more than five times. One student was absent 30 times, but her attendance record is nevertheless a dramatic improvement over 100 absences the previous year. Records for February showed 69 percent attendance.

Improvement in attendance is attributed to a "family-like" atmosphere. Students believe that they are motivated to work harder and to attend classes by the individualized instruction and by the four consecutive periods that reduce the temptation to cut.

Chart 2 presents an overview of services provided to the Dropout Prevention Clinic student, with their funding sources.

Chart 2. Overview of services to Dropcut Prevention Clinic student.

VII. HIGH SCHOOL EQUIVALENCY PROGRAM

## STUDENT SELECTION CRITERIA

The High School Equivalency Program (H.S.E.) provides intensive instruction in preparation for the General Equivalency Diploma (G.E.D.) examination to 75 students, between the ages of 17 and 21 , who had previously dropped out or were overage. Students are retrieved by way of:
-- letters sent home;
-- telephone calls to former dropouts;
-- notification to community agencies and radio stations.
Students who respond are selected by the following criteria:
Selection Criteria
Data Base
$\frac{\text { Instruction Primarily }}{\text { in Spanish }}$
(50 students)

| Below twenty-first percentile on English LAB | Enqlish LAB III |
| :---: | :---: |
| Over twenty-first percentile on Spanish LAB | Spanish LAB III |
| Minimum Spanish reading score of 60 Minimum math score of 6.0 | Prueba de Lectura <br> P.S.E.N. or standard test on permanent record |
| Willingness and desire to participate in the program | 1 1/2 hour interview with parent and student |
| $\frac{\text { Instruction Primarily }}{\text { in Eng/ish }}$ |  |
| (25 students) |  |

Between fifteenth and twenty-first percentile on English LAB
Below 50 percentile on Spanish LAB
Sufficient verbal ability in English
Minimum English reading score of 6.0
Minimum math score of $\underline{6.0}$

Willingness and desire to participate in the program

English LAB III
Spanish LAB III
Rating of $D$ or better on Lanquage Fluency Scale
P.S.E.N., Nelson or other standardized test on permanent record

1 1/2 hour interview with . urent and student

The program provides four consecutive periods a day of preparation in the skills and knowledge required to pass the G.E.D. examination in either Spanish or English. On the basis of placement information, each student is placed at an appropriate point in an ungraded course of study for each curriculum area. From there, each advances at his or her own pace. When students complete the curricular sequences, they are allowed to take the G.E.D. examination, although students are encouraged to stay in the program for at least six months before taking the test. Students who do not pass the test can enroll in the program again if they are within the age limits.

The 75 scudents are divided into three groups, each with one tax-levy teacher and one Title VII paraprofessional: two groups rece: nstruction primarily in Spanish and one primarily in English. Thirty students have also elected the option of an additional period of business education or manual arts in the mainstream. Two of the groups meet in the morning and one in the afternoon with the following schedules:

Group 1.
Instruction Primarily in English
(25 students)

Giroup 2.
Instruction Primarily in Spanish
(25 students)

Periods 1-4 in High School Equivalency Program

Readinq
Math
Science
Social Studies
Spanish -- 2 or 3 times per week with Project Director or College/Career Advisor

Readinq
Math
Science
Social Studies
E.S.L. -- 2 or 3 times per week.

Optional periods
5. (Lunch)
6. Business Ed. or Manual Arts

Group 3.
Instruction Primarily in Spanish
(25 students)
Optional periods
3. Business Education or Manual Arts
4. (Lunch)

Periods 5-8 in High School Equivalency Program
Reading
Math
Science
Social Studies
E.S.L. -- 2 or 3 times per week.

Although instruction is highly individualized, small and large group instruction is held occusionally. Small group instruction is used for problems common to a group of students, such as fractions in math. Large qroup instruction is used for explanations of curricular units in areas such as Spanish literature or sor:ial studies.
A.s in the D.P.C., the paraprofessional offers individual instruction under t.fe supervision of the teacher, who offers both individual and group instruction. Peer individualized instruction is also done occasionally by advanced students of the class, providing a resource within the class that helps slow students advance and reinforces skills that the advanced studerit possesses.

## CURRICULUM AND STAFF DEVELOPMENT

Curriculum development for the H.S.E. Program is implemented by the teacher trainer, who had had ten years' experience with high school eqivalency programs. In 198.-1981, the program developed extensive new instructional materials for G.E.D. preparation.

The teacher trainer and teachers have developed individual worksheets that are shared and translated back and forth between Spanish and English. Other teacher-developed instructional materials include:
-- science and social studies materials that deal more*succinctly with these subjects thon existing materials for G.E.D. preparation;
-- topical lists of criterion-referenced programs in reading, math, and grammar, more appropriate than existing materials to the starting level of G.E.D.preparation students;
-- the Metropolitan Achievement Test translated into Spanish.

Staff development activities, also implemented by the teacher trainer, have included daily workshops in the planning stages of the program and bi-weekly workshops thereafter. These workshops offer guidance in individualized instruction and in maximizing the use of the paraprofessional, information about equivalency requirements, and sharing of new materials. Frequent conferences are also held with teachers and paraprofessionals, in which students' tests are used as teacher-trainirg tools to examine weaknesses in individualized instruction. In addition, in monthly meetings conducted by the project director, demonstration lessons were made and G.E.D. materials were prepared. (See Tables 14 and 15 for outside workshops and university courses attended by H.S.E. staff.)

## AFFECTIVE DOMAIN

According to Project SUCCESS staff members, the students are highly motivated. Many who previously could not sit still for forty minutes perform concentrated work through four consecutive periods, and some students who might pass the G.E.D. exam prefer to wait until they believe that they can achieve
higher scores. There are no discipline problems, and some students have raised their reading level by thre years. Attendance records for February were 87 percent, and for March 79 percent.

## FUNDING

Chart 3 presents an overview of services provided to the High School Equivalency Program student, with their funding sources.

Chart 3. Overview of services to High School Equivalency students.

Administration
Assistant Principal Foreign Languages/ Bilingual Education (Tax Levy)

Project Director (.5 Title VII . 5 Tax Levy)
G.E.O. Instruction

1 teacher
(Tax Levy)
1 para (Title VII)
4 periods G.E.D. prep. course in

Math
Science
Social Studies
Reading
E.S.L. or native language skills

* See Chapter VIII ror a comprehensive list of the college/career advisor's services to H.S.E. program students.

Table 14. SUCCESS Staff Development: Outside Workshops and Conferences.


Table 15. SUCCESS staff development: university training.


## VIII. COLLEGE/CAREER ORIENTATION

## STUDENT SELECTION CRITERIA

Title VII funding provides the services of a bilingual college/career advisor to all 200 eleventh- and twelfth-grade program students, as well as to all 75 students enrolled in the High School Equivalency Program. Of the eleventh-grade students served, 75 percent are in a full bilingual program and 25 percent are partially mainstreamed (receiving most of their content-area courses in Spanish). Of the twelfth-grade students, 40 percent are partially mainstreamed (taking one or two content-area courses in Spanish because of special needs) and 60 percent are fully mainstreamed.

## SERVICES PROVIDED

The college/career advisor provides a wide range of both individual and group services. These include practical and immediate assistance, such as locating job openings. These services also enable program students, who know little about either career or college opportunities in this country, to plan their futures.

## Services Provided to Eleventh and Twelfth Graders

Individual services to eleventh graders include information on appropriate college and career-oriented prerequisites and opportunities, such as:
-- Scholastic Aptitude Tests (S.A.T.) and Preliminary Scholastic Aptitude Tests (P.S.A.T.);
-- Shared Instruction Program courses at other high schools that provide advanced career instruction in English and Spanish;
-- Upward Bound programs.

Individual services to twelfth graders include:
-- identification of students who have not yet passed the Regents Competency Test (R.C.T.) in reading and writing;
-- admiriistration of the Criterion Referenced English Syntax Test (CREST);
-- tutorial preparation for the Alternative R.C.T., which consists of the R.C.T. in the student's native language and CREST;
-- information on two- and four-year colleges and training assistance programs;
-- assistance with college admissions and scholarship applications;
-- advice on the S.A.T. and P.S.A.T.

Group services provided to eleventh and twelfth graders include trips to career centers and colleges. In 1980-1981, six such trips were made. These trips included a visit to the Bronx Center for Career and Occupational Services, where 20 students took interest and aptitude tests, and a visit by 30 students to the Colleqe Fair at Lehman College.

A speaker's program brings speakers from the working world to introduce students to career opportunities. In 1980-1981, five speakers visited Theodore Roosevelt High School. All speakers were Hispanic, and included: employment counselors; the vice-president of the Banco Popular de Puerto Rico, who met with 70 students; and the executive secretary from the New York Department of Labor, who met with 150 students.

Representatives from colleges and business schools met with students to discuss their programs. In 1980-1981, twelve representatives visited Roosevelt from private colleges, private business schools, and New York City University. Of the 20 program students who graduated in January, 16 were accepted in colleges, two are in training assistance programs, and two returned to their countries of origin.

Of the 38 program students who will graduase between June and August, 23 (61 percent) have been accepted in college, one chose a Latin American business school, and 14 are waiting to hear from culleges.

## Services Provided to High School Equivalency Program Students

College/career orientation is an important part of the High School Equivalency Program, and in 1980-1981 these students received the following assistance in identifying and pursuing career objectives:
-- career-related workshops were held three to five times a week, on subjects ranging from general career decision-making to the job interview;
-- the Harrington-O'Shea Inventory was given to six students to help them define areas of career interest;
-- Shared Instruction Programs were identified and three students took these vocaiional classes at other high schools;
-- appointments were made for four stuents at TAP centers for evaluation and job training;
-- speakers' programs were attended by an average of forty students for each speaker;
-- information on openings for after-school jobs resulted in placing seven students;
-- assistance was given to three students in filing applications for summer job opportunities and training.

High School Equivalency Program students also received assistance in locating colleges and making applications:
-- the College Fair at Lehman was visited by two students;
-- 28 students were registered for the Talent Search Program, to obtain information about, and to visit, colleges;
-- assistance in college applications was given to 11 students, three of whom have received acceptances while the others are waiting to hear.

An examination of the post-high school plans of twelfth-grade students revealed the following:

| Table 16. Post-high school plans of twelfth-grade students. |  |  |
| :--- | :---: | :---: |
| PLANS | $N$ | $\%$ |
| College | 49 | 80 |
| Vocational or Career Training School | 3 | 5 |
| Job | 2 | 3 |
| Armed Forces | 1 | 2 |
| Keep a Household | 1 | 2 |
| Undecided | 4 | 6 |
| Other | 1 | 2 |

. 80 percent of the bilingual program seniors planned to attend college.

- Another five percent desired additional vocational or career training.


## CURRICULUM AND STAFF DEVELOPMENT

The college/career advisor has developed materials for the use of E.S.L. teachers to stimulate career discussions in those classes.

The mainstream Career Orientation Resource Center provides resources and the advisor works closely with the mainstream senior counselor. Other resources serving the students include Open Doors, ASPIRA, The Puerto Rican Forum, and the Bronx Talent Search.

In 1980-1981, the career advisor attended a workshop for new advisors at the City University of New York, financial aid workshops at different colleges, workshops on careers for bilingual students at the Board of Education, and a college-credit course in group counseling and vocational advising at Lehman College (see Tables 14 and 15).

## IX. FINDINGS

ASSESSMENT PROCEDURES, INSTRUMENTS, AND FINDINGS
The following section presents the assessment instruments and procedures used in evaluating student achievement in 1980-1981 and the results of the evaluation. Students were assessed in English language development, growth in mastery of their native languages, mathematics, social studies, and science. The areas assessed and the instruments used were as follows:

> English as a second language -- CREST (Criterion Referenced English Syntax Test, Level I, II, and III) English and mathematics -- New York State Regents $\quad \begin{aligned} & \text { Competency Test in English and Mathematics }\end{aligned}$ Reading in Spanish -- Interamerican Series, $\frac{\text { Prueba de Lectura }}{\text { I962 version) }}$ Mathematics performance -- Teacher-made tests Science performance -- Teacher-made tests Social studies performance -- Teacher-made tests Attendance -- School and program records

The following analyses were performed:

On the pre/post standardized test of Spanish reading achievement, statistical and educational significance are reporied in Table 30. Statistical significance was determined through the application of the correlated t-test model. This analysis determines whether the difference between pre-test and post-test mean scores is larger than would be expected by chance variation alone; i.e. is statistically significant.

This analysis does not represent an estimate of how students would have performed in the absence of the program. No such estimate could be made because of the inapplicability of test norms for this population, and the unavailability of an appropriate comparison group.

Educational significance was determined for each grade level by calculating an "effect size" based on observed summary statistics using the procedure recommended by Cohen. ${ }^{1}$ An effect size for the correlated $t$-test model is an estimate of the difference between pre-test and post-test means expressed in standard deviation units freed of the influence of sample size. It became desirable to establish such an estimate because substantial differences that do exist frequently fail to reach statistical significance if the number of observations for each unit of statistical analysis is small. Similarly, statistically singificant differences often are not educationally meaningful.

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

```
    a difference of 1/5 = . 20 = small ES
    a difference of l/2 = .50 = medium ES
    a difference of 4/5 = . 80 = large ES
```

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

The Criterion Referenced English Syntax Test (CREST) was used to measure growth in English language proficiency. This instrument tests mastery of specific syntactic skills at three levels. Levels I and II contain 25 objectives each, such as knowledge of present-tense forms of the verb "to be" (Level I), or posssessive adjectives and pronouns (Level II). Material at the advanced Levei III is orqanized into 15 objectives, such as reflexive pronouns. At each level, students are asked to complete four items per obiective. The items are multiple choice and consist of sentence frames for which studerts 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: first, the percent of students mastering a given number of new objectives are reported by the number mastered over the entire year, by grade and by test level. For those taking the same test level at the beginning and end of the year (as anticipated in establishinq program qoals) this data is reported in Table 17. For those students whose initial high scores necessitated post-testing with a hiqher level of the test, the somewhat more suspect results are reported in Table 18. Computations of gains in this table were based on the questionable assumptions that these students learned all objectives that were not mastered at pre-test on the initial level as well as all objectives mastered at post-test on the new level during the s:tuol year in question.

In the second method of presentation, average pre- and post-test scores are tabulated 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 instru 1 (see Tables $19,21,23,25,27$, and 28), and by both grade and level of test taken with information only on the average number of objectives mastered (see Tables 20, 22, 24, and 26). In all of the above tables, results for students in different subprograms and different language groups are reported separately.

Rates of success of College/Career Orientation students taking the Regents Competency Tes. in Enqlish and Mathematics are reported in Table 29 by grade of student. In Table 31 the results of criterion referenced testing with teacher-made tests on objectives derived from the G.E.D. examination over the entire year are reported for students in the Hign School Equivalency Program. Here the num'jar and percent of students mastering objectives at specified rates are reported by rate of mastery and language of testing.

Rates of success of students in mathematics, science, and social studies courses are reported by course and by qrade in Tables 32 through 43. These tables contain the numbers of students reported as taking the relevant cour s and the percent passinq, for fall and for sprinq courses separately. Again, students in differing subprogram and lanquaqe groups are reported on in separate tables, as are students takinq proqram courses as opposed to those who took mainstream courses in the various content areas.

Comparisons of the attendance rates of program participants with that of the school as a whole are presented by grade in Table 44 for students in general academic, College/Career Orientation, and High School Equivalency programs. This table contains average rates for the school and for the participants, grouped by grade, the percent differences, values of the $t$ statistic, and their levels of statistical significance. Although the $\underline{t}$ 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. A comparison of the attendance rate of Drop-Out Prevention Clinic stıdents with that of a group of matched students not participating in the Clinic is contained in Table 45.

As summary of program objectives and information on the extent to which each objective was or was not met is contained in Table 48.

Table 17. Performance of students tested on the Criterion Referenced
English Syntax Test (CREST), by program and grade: number and percent
of students approaching and exceeding the profect objective.
(Students pre- and post-tested with the same test level)

| Grade | Test Level | Pre-Test Score (Median) | Les | New 0 Than 8 $\%$ | $\begin{gathered} \text { ect } \end{gathered}$ $1$ |  | $\begin{gathered} \text { Maste } \\ 10 \end{gathered}$ | ed <br> or More <br> $\%$ | Total Students |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| College/Gareer Orientation - Spanish-speaking Students |  |  |  |  |  |  |  |  |  |
| 9 | $!$ | $\begin{aligned} & 4 \\ & 9 \end{aligned}$ | 2 | $\begin{aligned} & 22 \\ & 80 \end{aligned}$ | 0 | - | $\begin{aligned} & 7 \\ & 1 \end{aligned}$ | $\begin{aligned} & 78 \\ & 25 \end{aligned}$ | $\begin{aligned} & 9 \\ & 4 \end{aligned}$ |
| 10 | $\begin{gathered} ! \\ !! \end{gathered}$ | 6 9 8 | 1 | $\begin{array}{r} 25 \\ 33 \\ 100 \\ \hline \end{array}$ | 1 1 0 | 25 33 - | 2 1 0 | $\begin{aligned} & 50 \\ & 33 \end{aligned}$ | $\begin{aligned} & 4 \\ & 3 \\ & 1 \\ & \hline \end{aligned}$ |
| 11 | $\begin{gathered} ! \\ 1! \end{gathered}$ | $\begin{array}{r} 5.5 \\ 11.5 \\ 8 \end{array}$ | 1 1 2 | $\begin{array}{r} 25 \\ 25 \\ 100 \\ \hline \end{array}$ | 0 1 0 | 25 | 3 2 0 | $\begin{aligned} & 75 \\ & 50 \end{aligned}$ | $\begin{aligned} & 4 \\ & 4 \\ & 2 \end{aligned}$ |
| All <br> Grades | $\begin{gathered} \text { II } \\ \text { III } \end{gathered}$ | $\begin{array}{r} 5 \\ 10 \\ 8 \\ \hline \end{array}$ | 4 6 3 | $\begin{array}{r} 24 \\ 50 \\ 100 \\ \hline \end{array}$ | 1 2 0 | $\begin{array}{r}6 \\ 17 \\ \hline\end{array}$ | 12 4 0 | 71 33 | $\begin{array}{r} 17 \\ 12 \\ 3 \\ \hline \end{array}$ |
| TOTAL |  |  | 13 | 41 | , | 9 | 16 | 50 | 32 |
| Asian Students |  |  |  |  |  |  |  |  |  |
| 9 | 11 | $\begin{array}{r} 5 \\ 17 \\ \hline \end{array}$ | 0 0 | $\square$ | 0 1 | 100 | 1 | $100$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ |
| 10 | $\begin{array}{r} 1 \\ 1! \\ \hline \end{array}$ | $\begin{array}{r} 4 \\ 14 \\ \hline \end{array}$ | 1 | $25$ | 1 | 25 - | 2 | $\begin{array}{r} 50 \\ 100 \\ \hline \end{array}$ | $\begin{aligned} & 4 \\ & 2 \\ & \hline \end{aligned}$ |
| Both Grades | $\begin{array}{r} 1 \\ 1! \\ \hline \end{array}$ | $\begin{array}{r} 4 \\ 15 \\ \hline \end{array}$ | 1 | $20$ | 1 | 20 33 | 3 | $\begin{array}{r} 60 \\ 67 \\ \hline \end{array}$ | $\begin{aligned} & 5 \\ & 3 \\ & \hline \end{aligned}$ |
| TOTAL |  |  | 1 | 13 | 2 | 25 | 5 | 63 | 8 |
| Total Spanish-speaking and Astan students |  |  | 14 | 35 | 5 | 13 | 21 | 53 | 40 |

High School Equivalency Progran

| $!$ | $\begin{aligned} & 3.5 \\ & 6 \end{aligned}$ | 1 0 | 17 | 1 | $\begin{array}{r} 17 \\ 25 \\ \hline \end{array}$ | 4 | $\begin{array}{r} 67 \\ 75 \\ \hline \end{array}$ | 6 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL |  | 1 | 10 | 2 | 20 | 7 | 70 | 10 |
| Dropout Prevention Clinic |  |  |  |  |  |  |  |  |
| 111 | $\begin{aligned} & 5.5 \\ & 3 \\ & \hline \end{aligned}$ | 0 | 25 | 0 1 | 25 | 2 | $\begin{array}{r} 100 \\ 50 \\ \hline \end{array}$ | 2 |
| TOTAL |  | 1 | 17 |  | 17 | 4 | 67 | 6 |
| Total for those pre- and post-tested on same level |  |  | 29 | 8 |  | 32 | 57 | 55 |

* Aumber of objectivas: Level ! (25), Level II (25), Level !1I (15)

Table 17. (continued)
. Only one-eighth of program participants were reported to have been pre-tested in the fall and post-tested in the spring on the same level of the CREST, while a further eight percent were pre- and post-tested with different test levels (see the next table). This fact is partially a result of the volatility of program enrollment, however. Fully 186 students had either not yet enrolled in the program at the time of fall pre-testing or had already left the program before spring post-testing (see Table 47). Data were reported for 35 percent of those present for the entire year. Because the number of students with complete data remain so small, however, the results presented here may not be representative of the program as a whole.
. The overall rate of 57 percent of reported students mastering ten or more new objectives comes very close to the program goal of 60 percent of students reaching this level. An additional 14 percent of students gained eight or nine objectives.
. With the exceptions of the small High School Equivalency and Asian tenth-grade groups, students had smaller gains on Level III than on Level II and smaller gains on Level II than on Level I. At the same time, initial scores were higher on Level III (as a percent of total objectives) than on I or II and higher on Level II than on I. The fact that high initial scores restricted potential gains is undoubtedly a major factor in determining the overall rates of gain. (For students taking Levels I or II, gains correlated .. 451 with initial score, while for Level III students the correlation was -.765.)
. Though very small, the High School Equivalency group had the highest overall rate ( 70 percent) of meeting the program objective and the highest success rate on Level II (75 percent).

- The even smaller Dropout Prevention Clinic group (representing, however, almost one-fourth of students in this program) did almost as well in spite of having generally been given higher levels of the test (Levels II and III, as opposed to I and II).

Table 18. Performance of students tested on the Griterion Referenced
English Syntax Test (CREST), by program and grade: number and percent
of students approaching and exceeding the project objective.
(Students pre- and post-tester with different test levels)

| Grade | Test Level | Pre-Test Score* $\qquad$ | Les | ew Ob Than $\%$ | \% | $\begin{aligned} & \text { ves } \\ & \text { r } 9 \\ & \\ & \hline \end{aligned}$ | $\begin{gathered} \text { iste } \\ 10 \\ \hline \end{gathered}$ | $\begin{gathered} \text { red } \\ \text { or M } \\ \hline \end{gathered}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | College/Career Orientation - Spanish-speaking Students |  |  |  |  |  |  |  |  |
| 9 | $I=I I$ | $\begin{gathered} 6 \\ 17.5 \end{gathered}$ | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ |  | 0 0 | - | 1 8 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{aligned} & 1 \\ & 8 \\ & \hline \end{aligned}$ |
| 10 | I-II | 18 | 0 | - | 0 | - | 1 | 100 | 1 |
| 11 | II-II | $\begin{aligned} & 16 \\ & 18.5 \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ |  | 0 1 | 13 | 6 | $\begin{array}{r} 100 \\ 88 \\ \hline \end{array}$ | $\begin{aligned} & 6 \\ & 8 \\ & \hline \end{aligned}$ |
| All <br> Grades | $I=I I$ | $\begin{aligned} & 16 \\ & 17.3 \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & \hline \end{aligned}$ | - | $i$ 1 | 6 | $\begin{array}{r} 8 \\ 15 \\ \hline \end{array}$ | $\begin{array}{r} 100 \\ 94 \\ \hline \end{array}$ | $\begin{array}{r} 8 \\ 16 \\ \hline \end{array}$ |
| TOTAL |  |  | 0 | - | 1 | 4 | 23 | 96 | 24 |


| Asian Students |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 0 \\ & 0 \\ & \hline \end{aligned}$ | - | 0 0 | - | $\begin{array}{ll} 2 & 100 \\ 1 & 100 \\ \hline \end{array}$ | 2 |
|  | 0 0 | $-$ | 0 0 | - | $\begin{array}{ll} 7 & 100 \\ 1 & 100 \\ \hline \end{array}$ | 1 |
| $\begin{array}{lcl} \text { Both } & \text { I }=11 & 16 \\ \text { Grades } & \text { II }- \text { III } & 15.5 \\ \hline \end{array}$ | 0 0 | $-$ | 0 0 | $-$ | $\begin{array}{r} 9100 \\ 2100 \\ \hline \end{array}$ | 9 |
| TOTAL | 0 | - | 0 | - | 11100 | 11 |
| Total for those changing level | 0 | - | 1 | 3 | $34 \quad 97$ | 35 |
| Project Total | 16 | 18 | 9 | 10 | $66 \quad 73$ | 91 |

. Among these students whose high initial scores required post-testing with a higher level of the test, only one student in 35 falled to reach the program objective.
. Due to the questionable nature of the assumptions used in calculating gains (see the introduction to thts section), these results cannot be constdered of equal significance to those of the preceding table, nowever.

- Although of questionable legitimacy, combining data from rables 17 and 18 results in a success rate of 73 percent which exceeds the 60 percent program objective by a wide margtn. In addition, another 10 percent of students almost reached the criterion.

Table 19. Results of the Criterion Referenced English Syntax Test
(CREST): number of objectives mastered, and objectives mastered
per month.
(Academic and College/Career Orientation Programs, Spanish-speaking students, fall)

|  | \# 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 | 31 | 10.8 | 15.3 | 4.5 | 2.46 | 1.83 |
| 10 | 15 | 10.1 | 13.9 | 3.8 | 2.52 | 1.5 .2 |
| 11 | 30 | 13.1 | 17.3 | 4.3 | 2.80 | 1.53 |
| 12 | 4 | 7.8 | 10.3 | 2.5 | 2.91 | 0.86 |
| TOTAL | $81^{+}$ | 11.3 | 15.5 | 4.2 | 2.62 | 1.59 |

*Post-test minus pre-test.
${ }^{+}$One student's grade was not reported.
. Pre/post fall CREST data are available on 36 percent of the Spanishspeaking students in the Academic and Colleqe/Career Orientation subprograms who were enrolled for the full fall semester. Data are available on only 4 of the 64 seniors.
-The overall rate of gain of more than one and one-half objectives per month of instruction is quite good.

- The decline in rate of gain with increasing grade level is probably largely due to the hicher initial scores and to the higher levels of the test taken by the older students (see Table 20).

Table 20. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level. (Academic and College/Career Orientation Programs, Spanish-speaking students, fall)

LEVEL I


LEVEL II


LEVEL III

> Average Number of Objectives Mastered N Pre Post Gain*

| 9 | 14 | 5.7 | 11.5 | 1.8 | 17 | 15.0 | 18.5 | 3.5 | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 10 | 7 | 7.0 | 11.6 | 4.6 | 5 | 14.6 | 19.0 | 4.4 | 3 | 9.7 | 10.7 | 1.0 |  |
| 11 | 12 | 11.3 | 17.0 | 5.8 | 13 | 16.0 | 19.5 | 3.5 | 5 | 9.8 | 12.6 | 2.8 |  |
| 12 | $\ldots$ | $\ldots$ | $\ldots$ | 12 | 18 | 6 | 3 | 6.0 | 7.7 | 1.7 |  |  |  |
| TOTAL 33 | 8.0 | 13.5 | 5.5 | 36 | 15.3 | 18.9 | 3.6 | $12^{+}$ | 8.7 | 10.7 | 2.0 |  |  |

NOTE: number of of jectives for each level: Level I (25), Level II (25), Level III (15).
*Post-test minus pre-test.
${ }^{+}$One student's grade was not reported.
-There was a general tendency to administer higher levels of the CREST to students in the upper grades.
.Pre-test scores on Level II and III were generally higher than those on Level I.
. The apparently greater difficulty of Level III objectives as well as higher initia! scores are probably largely responsible for the smaller qains by those taking higher test levels.

Table 21. Results of the Criterion Referenced English Syntax Test
(CREST): number of objectives mastered, and objectives mastered
per month.
(Academic and College/Career Orientation Programs
Spanish-speaking students, spring)

|  | \# of <br> Giनade <br> Students | Average Number of <br> Objectives Mastered <br> Pre | Post | Objectives <br> Mastered* | Averaqe <br> Months of <br> Treatment | Objectives <br> Mastered <br> Per Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 44 | 10.5 | 14.7 | 4.2 | 2.53 | 1.66 |
| 10 | 15 | 12.1 | 16.1 | 4.1 | 2.62 | 1.55 |
| 11 | 32 | 10.0 | 14.8 | 4.8 | 2.75 | 1.72 |
| 12 | 1 | 6 | 10 | 4 | 2.25 | 1.78 |
| TOTAL | 92 | 10.5 | 14.9 | 4.4 | 2.62 | 1.66 |

*Post-test minus pre-test.
. Although data for only one twelfth grader was reported, 41 percent of the students available for testing in the spring are reported on here.
. In general, spring gains were very good and just slightly better than those made in the fall.
. The average number of objectives mastered and the average rates of gain are quite similar at all four grade levels.

$$
\because
$$

Table 22. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.
(Academic and College/Career Orientation Programs, Spanish-speaking students, sprinq)

LEVEL I Grade $N$ Pre Post Gain*

LEVEL II

Average Number of Ob.jectives Mastered $N$ Pre Post Gain*

LEVEL III

Average Number of Objectives Mastered $N$ Pre Post Gain*

| 9 | 22 | 10.5 | 15.7 | 5.2 | 8 | 13.0 | 17.0 | 4.0 | 14 | 9.1 | 11.9 | 2.8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 7 | 13.3 | 17.3 | 4.0 | 5 | 12.6 | 16.8 | 4.2 | 3 | 8.3 | 12.3 | 4.0 |
| 11 | 7 | 12.3 | 19.9 | 7.6 | 10 | 10.8 | 16.8 | 6.0 | 15 | 8.5 | 11.0 | 2.5 |
| 12 |  |  |  |  |  |  |  | -- | 1 | 6 | 10 | 4 |
| TOTAL | 36 | 10.8 | 16.2 | 5.4 | 23 | 12.2 | 17.7 | 5.5 | 33 | 8.6 | 11.5 | 2.8 |

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).
*Post-test minus pre-test.
. There was only a slight tendency for older students to be administered a higher level of the test in the spring.
. Those taking Level ll did as well as those takinq Level l.
vel III students, however, were faced with a limited ceiling effect (it was possible r these students to gain an average of only 6.4 objectives) as well as a more difficult $t$ and did not do as well as the others.

Table 23. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered
per month.
(Asian students, fall)

|  |  | Average Number of <br> \# of <br> Obectives Mastered <br> Pre | Oost | Objectives <br> Mastered* | Average <br> Months of <br> Treatment | Objective: <br> Mastered <br> Per Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 5 | 11.8 | 21.0 |  | 9.2 | 2.33 |

*Post-test minus pre-test.
+The grade for one student was not reported.

- Better than 70 percent of the Asian students present for the entire fall were reported to have been pre- and post-tested on the CREST.
. Their overall rate of gain of more than two objectives per month of schooling is very impressive.
-The five ninth graders had an extraordinary rate of gain.

$$
\begin{aligned}
& ! \\
& \because
\end{aligned}
$$

Table 24. Performance of students tested on the Criterion Referenced English Syntax Test

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

(Asian students, fall)

Level I Grade $N$ Pre Post Gain*

| 9 | 4 | 11.0 | 20.0 | 9.0 | 1 | 15 | 25 | 1.0 | -------------------- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 11 | 12.6 | 18.1 | 5.5 | 8 | 19.1 | 23.1 | 4.0 | 2 | 8.0 | 12.0 | 4.0 |
| TOTAL | $16^{+}$ | 12.4 | 18.8 | 6.4 | 9 | 18.7 | 23.3 | 4.7 | 2 | 8.0 | 12.0 | 4.0 |

*Post-test minus pre-test.
+The grade of one student was not reported.
. Gains on all three levels of the CREST were quite impressive.
.The average gain of 4.7 objectives on Level II represents 75 percent of the possible gain on this level of the test.
.The gain of 4.0 objectives on Level III represents 57 percent of the possible gain on Level III.

Table 25. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered
per month.
(Asian students, spring)

| Grade | \# of Students | Average <br> Objecti Pre | mber of Mastered Post | Objectives Mastered* | Average Months of Treatment | Objectives Mastered Per Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 10 | 15.0 | 19.4 | 4.4 | 2.46 | 1.79 |
| 10 | 22 | 13.6 | 19.4 | 5.7 | 2.59 | 2.21 |
| TOTAL | $33^{+}$ | 14.0 | 19.5 | 5.5 | 2.56 | 2.14 |
| *Post-test minus pre-test. |  |  |  |  |  |  |
| +The grade for one student was not reported. |  |  |  |  |  |  |
| - Two-thirds of the Asian students enrolled for the full spring term were administered the CREST at both testings. |  |  |  |  |  |  |
| . Gains by ninth graders, though very impressive, were restricted by their high pre-test scores. |  |  |  |  |  |  |

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\therefore
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Table 26. Performance of students tested on the Criterion Referenced Enqlish Syntax Test (CREST): average number of objectives mastered by grade and test level. (Asianstudents, spring)

LEVEL I

LEVEL II

Average Number of Objectives Mastered $N$ Pre Post Gain*

Average Number of Objectives Mastered $N$ Pre Post Gain*

LEVEL III

Average Number of Objectives Mastered Grade $N$ Pre Post Gain*

Table 27. Results of the Criterion Referenced Enalish Syntax Test
(CREST): number of objectives mastered, and objectives mastered
per month.
(High Schooi Equivalency Program)

| Level | $\begin{aligned} & \text { of } \\ & \text { Students } \end{aligned}$ | Average Number of ODjectives Mastered Pre Post | Objectives Mastered' | Average Months of Treatment | Objectives Mastered Per Month |
| :---: | :---: | :---: | :---: | :---: | :---: |


| FALL |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 】 | 9 | 3.8 | 7.7 | 3.9 |  |  |
| 11 | 10 | 10.0 | 14.0 | 4.0 |  |  |
| III | 2 | 3.5 | 8.0 | 4.5 |  |  |
| TOTAL | 21 | 6.7 | 10.7 | 4.0 | 2.20 | 1.82 |
| SPRING |  |  |  |  |  |  |
| I | 11 | 7.1 | 12.2 | 5.1 |  |  |
| II | 13 | 9.9 | 15.2 | 5.3 |  |  |
| III | 8 | 8.4 | 13.3 | 4.9 |  |  |
| TOTAL | 32 | 8.6 | 13.7 | 5.1 | 2.24 | 2.29 |

*Post-test minus pre-test
. Better than two-thirds of students enrolled in the fall and nore than thref-fourths of those in the spring were pre- and post-tested.
. The rates of mastering new objectives were very high in the fall and, even higher in the spring.
. The size of gains were not related to the level taken in either semester.
. Performance of those taking Level III in the spring, where 74 percent of initially unmastered objectives were mastered at post-test, was espectally impressive.
. The better parformance by these students, when compared to the Acadentc and Coilege/Careen Program students, is probably largely due to their lower scores at pre-test which enabled them to demonstrata larger gains.

Table 28. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered
per month.
(Dropout Prevention Clinic)

| Level | \# of Students | Average Nu Objectives Pre | mber of Mastered Post | Objectives Mastered* | Average Months of Treatment | Objectives Mastered Per Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FALL |  |  |  |  |  |  |
| I | 1 | 10 | 17 | 7 |  |  |
| II | 2 | 5.5 | 10.5 | 5.0 |  |  |
| III | 4 | 3.8 | 7.0 | 3.2 |  |  |
| TOTAL | 7 | 5.1 | 9.4 | 4.3 | 1.37 | 3.13 |
| SPRING |  |  |  |  |  |  |
| I I | 5 | 11.8 | 19.8 | 8.0 |  |  |
| III | 16 | 5.2 | 10.4 | 5.2 |  |  |
| TOTAL | 21 | 6.8 | 12.6 | 5.9 | 1.70 | 3.45 |
| *Post-test minus pre-test |  |  |  |  |  |  |
| .More ${ }^{f}$ theso students were pre- and post-tested in both fall and spring semesters than were enrolled for the entire respective semesters. |  |  |  |  |  |  |
| - These students demonstrated truly outstandinq qains in both fall and spring when their time actually in class is taken into account. |  |  |  |  |  |  |
| - Although they decrease wih higher test levels, absolute gains are very high for all groups except for the four students taking Level III in the fall. |  |  |  |  |  |  |
| - The fact that these students made apparently larger gains than did Spanish-speaking students in the Academic and College/Career Proqrams is, aqain, probably in part due to this group's lower pre-test scores. |  |  |  |  |  |  |

Table 29. Results of the New York State Regents Competency Test
in English and Mathematics by grade.
(College/Career Orientation, Spanish-speaking students)

> Number
> $\begin{array}{llll}\text { TOTAL } 64^{*} & 62 & 97\end{array}$
> *Includes one student for whom grade level was not reported.
> . All but three of the twelfth-grade students for whom data were provided were reported to have taken the Reqents Competency Test.
> . Ninety-seven percent of those taking the test passed it, far exceeding the project goal of 60 percent.

Table 30. Native language reading achievement
for Spanish-speaking students.

Significance of mean total raw score differences between initial and final test scores in native language reading achievement of students with full instructional treatment on the Prueba de Lectura (total reading, Forms $A$ and $B$, Level 3 , by grade).

| Grade | N | Pre- Mean | Test <br> Standard <br> Deviation | Pos Mean | -Test <br> Standard <br> Ceviation | Mean Difference | Correc. Pre/post | t | p | ES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 22 | 50.4 | 19.9 | 57.4 | 22.1 | 7.0 | . 961 | 5.23 | . 001 | 1.12 |
| 10 | 22 | 64.8 | 15.6 | 72.5 | 20.9 | 7.7 | . 921 | 4.04 | . 001 | . 86 |
| 11 | 42 | 77.0 | 14.8 | 84.7 | 18.8 | 7.7 | . 899 | 5.89 | . 001 | . 91 |
| 12 | 21 | 86.5 | 15.9 | 94.0 | 17.7 | 7.5 | . 907 | 4.63 | . 001 | 1.01 |
| H.S. E | $\begin{gathered} \text { Equi } \\ 48 \end{gathered}$ | $\begin{gathered} \text { al ency } \\ 65.8 \end{gathered}$ | 22.4 | 70.5 | 23.3 | 4.6 | . 940 | 4.05 | . 001 | . 58 |

- Among non-High School Equivalency Span’sh-speaking students, 107 or 28 percent of all students were pre- and post-tested on the Prueba de Lectura. The 107, however, represent 54 percent of students enrolled for the entire year (see Table 47).
- The percent of High School Equivalency students given the test was considerably higher than that for other program students. Sixtytwo percent of these students were pre- and post-tested, and the 48 tested were more than double the 20 students enrolled the entire year.
- Average improvement ranged between 7 and 8 points for ninth through twelfth-grade students but was somewhat less ( 4.6 points) for the High School Equivalency group.
. Al! improvements were highly statistically significant.
. Improvements were also highly significant, educationally for ninth through twelfth graders, but only of medium educational significance for the oldest group.

Table 31. Performance of students on teacher-made criterion referenced mathematics examinations ${ }^{\star}$ : number of objectives
mastered per month of instruction, by language of testing.
(High School Equivalency Program)

| Number of Objectives Mastered Per Month | English |  | Spanish |  | Combined |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number o |  | Number 0 |  | Number of |  |
|  | Students | \% | Students | \% | Students | \% |
| <1 | 1 | 4 | 4 | 17 | 9 | 13 |
| 1-2 | 15 | 65 | 17 | 36 | 32 | 46 |
| >2 | 7 | 30 | 22 | 47 | 29 | 41 |
| TOTAL | 23 | 100 | 47 | 100 | 70 | 100 |
| $\geq 1$ | 22 | 96 | 39 | 83 | 61 | 87 |

. Mathematics test results were reported for all but four of the High School Equivalency Program students.
.The total of 87 percent of students that reached the criterion of at least one new objective per month of instruction easily surpasses the program objective of 60 percent reaching the criterion.
.The objective was exceeded by those taking the tests in English as well as by those taking it in Spanish.
.While only one student ( 4 percent) taking the English-language test failed to reach the criterion, 17 percent of those taking it in Spanish failed to reach the criterion.

- Forty-seven percent of the Spanish-language students mastered more than two objectives per month of instruction, however, while only 30 percent of those taking tests in English did this well.

Table 32. Number of Academic and College/Career Program Spanish-speaking students attending courses and percent passing teacher-made examinations in bilingual mathematics (fall).

|  | GRADE 9 |  | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FALL COURSES | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | $N$ | $\begin{gathered} q \\ \text { PASSING } \end{gathered}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | N | $\begin{gathered} \dot{\%} \\ \text { PASSING } \\ \hline \end{gathered}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ |
| General Math I | 28 | 67 | 17 | 94 | 14 | 100 | 2 | 100 | 61 | 82 |
| General Math III |  |  |  |  | 3 | 100 | 1 | 100 | 4 | 100 |
| Algebra I, Academic | 4 | 100 | 2 | 100 | 1 | 100 | 2 | 100 | 9 | 100 |
| Advanced Algebra Courses* |  |  |  |  | 4 | 100 | 3 | 67 | 7 | 86 |
| Miscellaneous Courses | 18 | 78 | 21 | 81 | 45 | 84 | 6 | 100 | 90 | 83 |
| TOTAL | 50 | 74 | 40 | 88 | 67 | 90 | 14 | 93 | 171 | 84 |

[^1]. Mathematics course outcomes were reported on 219 Spanish-speaking students. This compares to 312 Spanish-speaking, high school aged, program students and to 231 that were enrolled for the entire fall.
. Of the students for whom outcomes were reported, 78 percent took bilingual courses.
. The overall rate of success in bilingual courses, 84 percent, was very high.
. Two out of three ninth graders in General Math I passed their course, while in all other courses and grades the passing rate was close to or better than 80 percent.
. Success rates increased steadily from 74 percent for ninth graders to 93 percer.i for twelfth graders.

Table 33. Number of Academic and College/Career Program Spanish-speaking students attending courses and percent passing teacher-made examinations in bilingual mathematics (spring).

|  | GRADE 9 |  | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPRING COURSES | N | $\begin{gathered} \dot{q} \\ \text { PASSING } \end{gathered}$ | $N$ | $\begin{gathered} q \\ \text { PASSING } \end{gathered}$ | N | $\stackrel{\%}{\text { PASSING }}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | $N$ | $\stackrel{\%}{\text { PASSING }}$ |
| General Math I | 17 | 41 | 2 | 50 | 2 | 100 | 1 | 100 | 22 | 50 |
| General Math II | 20 | 70 | 12 | 100 | 7 | 71 | 1 | 100 | 40 | 80 |
| Algebra I, Academic | 3 | 67 | 1 | 100 | 2 | 50 |  |  | 6 | 67 |
| Algebra II, Academic | 4 | 100 | 1 | 0 | 1 | 100 | 1 | 100 | 7 | 86 |
| Intermedicte Algebra I | 1 | 0 | 1 | 0 | 2 | 50 |  |  | 4 | 25 |
| Intermediace Albebra I. |  |  |  |  | 6 | 100 |  |  | 6 | 100 |
| Miscellaneous Courses | 12 | 67 | 18 | 61 | 42 | 79 | 1 | 100 | 73 | 73 |
| TOTAL | 57 | 61 | 35 | 71 | 62 | 79 | 4 | 100 | 158 | 73 |

. At 217, the number of students with course outcone data in the spring is almost identical to the number in the fall and represents 89 percent of those with full spring enrollment.
. In the spring 73 percent of Spanish-speaking students took bilingual math courses.
. The overall success rate, at 73 percent, though still very high, is cansiderably lower than the fall rate.
. Ninth and tenth graders in General Math I did rather poorly in the spring.
. Only one of four students taking Intermediate Alqebra I passed it.
. Students taking General Math II, Algebra II, and Incermediate Algebra II did quite well.
. Success rates in the spring increase even more dramatically with grade than they did in the fall, going from 61 percent to 100 percent.

Table 34. Number of Academic and College/Career Orientation Program Spanish-speaking students
attending courses and percent passing teacher-made examinations in mainstream mathematics.

|  | GRADE 9 |  | CRADE 10 |  | grade 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FALL COURSES |  | PASSIMG | $N$ | $\begin{gathered} 8 \\ \text { PASSIMG } \\ \hline \end{gathered}$ | N | $\begin{gathered} \% \\ \text { PASSIMG } \\ \hline \end{gathered}$ | $N$ | $\begin{gathered} \% \\ \text { PASSING } \\ \hline \end{gathered}$ | $N$ | $\begin{gathered} 8 \\ \text { ASSING } \\ \hline \end{gathered}$ |
| General Math I | 4 | 75 |  |  | 1 | 0 |  |  | 5 | 60 |
| Algebra I, Acadenic | 2 | 50 |  |  |  |  | 2 | 100 | 4 | 75 |
| Miscellanlous Courses | 2 | 100 | 1 | 100 | 5 | 100 | 30 | 87 | 39* | 90 |
| TOTAL | 8 | 75 | 1 | 100 | 6 | 83 | 32 | 88 | 48 | 85 |


|  | GRADE 9 |  | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPRING <br> COURSES | N | $\begin{gathered} 8 \\ \text { PASSIMG } \end{gathered}$ |  | PASSING | $N$ | PASSIMG | $N$ | $\begin{gathered} 8 \\ \text { PASSING } \end{gathered}$ | N | $\begin{gathered} 8 \\ \text { PASSING } \\ \hline \end{gathered}$ |
| General Math I | 2 | 50 |  |  |  |  | 1 | 100 | 3 | 67 |
| General Math II | 2 | 100 | 2 | 50 | 2 | 50 | 1 | 0 | 7 | 57 |
| Business Math |  |  |  |  | 1 | 0 | 3 | 67 | 4 | 50 |
| Algebra 1, Acadenic | 3 | 33 |  |  | 1 | 0 |  |  | 4 | 25 |
| Miscellareous Courses | 3 | 100 | 5 | 100 | 12 | 100 | 20 | 95 | $41^{*}$ | 98 |
| TOTAL | 10 | 70 | 7 | 86 | 16 | 81 | 25 | 88 | 59 | 83 |

© Includes one student whose grade was not reported.
. Spanish-speaking students taking mainstrean math courses in the fall did just as well as did those taking bilingual courses in math.
. Success rates again improve with grade, progressing from 75 percent in the fall and 70 percent in the spring for the $n$ inth graders to 88 percent for the tweifth graders in both sanesters.
. In the spring, mainstreamed students did just about as well as they did in the fall, outperforming those in bilingual courses by ten percentage points.
. Students taking General Math II, Business Math, and Algebra I in the spring, however, did not do very well.

Table 35. Mumber of Asian students attending courses and percent
passing teacher-mada excminations in mainstream mathematics.

|  | GKADE 9 |  | grade 10 |  | grade 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { FALL } \\ & \text { COURSES } \end{aligned}$ | N | $\begin{gathered} \% \\ \text { PASSIMG } \\ \hline \end{gathered}$ |  | $\begin{gathered} 8 \\ \text { PASSIMG } \\ \hline \end{gathered}$ | $\ldots$ | $\begin{gathered} 8 \\ \text { PASSING } \\ \hline \end{gathered}$ | N | $\begin{gathered} 8 \\ \text { PASSIMG } \\ \hline \end{gathered}$ | $N$ |  |
| Genaral Math |  |  | 18 | 72 |  |  |  |  | 18 | 72 |
| Algebra I, Academic |  |  | 2 | 50 |  |  |  |  | 2 | 50 |
| Advanced Algebra and Irigonometry |  |  | 2 | 50 |  |  |  |  | $3{ }^{*}$ | 33 |
| Miscellaneous Courses | 5 | 60 | 11 | 100 | 2 | 100 |  |  | 18 | 89 |
| IOTAL | 5 | 60 | 33 | 79 | 2 | 100 |  |  | 41 | 76 |


| $\begin{aligned} & \text { SPRIMG } \\ & \text { COURSES } \end{aligned}$ |  | $\begin{gathered} \text { ADE } 9 \\ \mathrm{x} \\ \text { PASSING } \\ \hline \end{gathered}$ | G | $\begin{aligned} & \text { RDE } 10 \\ & \frac{8}{8} \\ & \text { PASS IMG } \\ & \hline \end{aligned}$ | G | $\begin{gathered} \text { ADE } 11 \\ 8 \\ \text { PASSIMG } \\ \hline \end{gathered}$ | G | $\begin{aligned} & \text { NE } 12 \\ & 8 \\ & \text { PASSIMG } \\ & \hline \end{aligned}$ | N | $\begin{aligned} & \text { TIAL } \\ & \text { PASSING } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Math I |  |  | 9 | 78 | 1 | 100 |  |  | 10 | 80 |
| General Math II |  |  | 12 | 92 | 2 | 50 |  |  | 14 | 86 |
| Intermediate Algebra |  |  | 2 | 100 |  |  |  |  | 2 | 100 |
| Advanced Algebra and Irigonometry |  |  | 8 | 75 |  |  |  |  | $9 *$ | 78 |
| Miscellaneous Courses | 12 | 83 | 6 | 83 | 2 | 100 |  |  | 20 | 85 |
| TOTAL | 12 | 83 | 37 | 84 | 5 | 80 |  |  | 55 | 84 |

*Includes one student whose grade was not reported.
. Mathematics course results were reported for 72 percent of all Astan program students. The 41 students reporteo on is 108 percent of those enrolled for the entire fall, however.
. At 76 percent, their overall passing rate is somewhat lower than that of Spanish-speaking students, but still very good.
. Passing rates improved considerably with grade level for these students also.
. Course outcomes are available for $\mathbf{9 6}$ percent of the Asian students in the spring.
. The rate of success of these students increased 8 percentage points from fall to spring, bringing them to the same level as mainstreamed Spanish students.
. In the spring, passing rates are not related to grade level.
. Students did very well in all sourses taken.

Table 36. Number of Academic and College/Career Orientation Program students attending
courses and percent passing teacher-made examinations in bilingual science.
(Chapter 720, Spanish-speaking students)

|  | GRADE 9 |  | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FALL COURSES |  | $\begin{gathered} \% \\ \text { PASSIMG } \\ \hline \end{gathered}$ | N | $\begin{gathered} 8 \\ \text { PASSIMG } \end{gathered}$ | N | PASSIMG | N | PASSING | N | $\begin{gathered} 8 \\ \text { PASSING } \\ \hline \end{gathered}$ |
| Gemeral Science I | 19 | 74 | 11 | 73 | 4 | 75 |  |  | 34 | 74 |
| Blology I, General | 1 | 100 | 1 | 100 | 9 | 89 |  |  | 11 | 91 |
| Miscellaneous Courses* | 19 | 74 | 23 | 78 | 38 | 82 | 1 | 100 | 81 | 79 |
| TOTAL | 39 | 74 | 35 | 77 | 51 | 82 | 1 | 100 | 126 | 79 |


| SPRIMG COURSES | G N | IDE 9 PASSIMG | H | $\begin{aligned} & \text { ADE } 10 \\ & \% \\ & \text { PASSING } \end{aligned}$ | N | $\begin{gathered} \text { ADE } 11 \\ x \\ \text { PASSIMG } \\ \hline \end{gathered}$ | G $N$ | $\begin{gathered} \text { ADE } 12 \\ \frac{1}{8} \\ \text { PASSIMG } \\ \hline \end{gathered}$ | N | $\begin{aligned} & \text { OTAL } 8 \\ & \text { PASSIMG } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Science 1 | 8 | 75 | 1 | 0 | 1 | 100 |  |  | 10 | 70 |
| General Science II, Academic | 21 | 81 | 10 | 90 | 2 | 100 |  |  | 33 | 85 |
| General Science II, General | 8 | 88 | 1 | 100 | 1 | 100 |  |  | 10 | 90 |
| Biology I, General |  |  | 1 | 100 | 2 | 50 |  |  | 3 | 67 |
| 810logy 11, General |  |  | 1 | 100 | 8 | 88 |  |  | 9 | 89 |
| Blology II, Academic |  |  | 1 | 100 | 1 | 100 | 1 | 100 | 3 | 100 |
| Miscellaneous Courses | 13 | 69 | 20 | 85 | 34 | 85 |  |  | 67 | 82 |
| TOTAL | 50 | 78 | 35 | 86 | 49 | 86 | 1 | 100 | 135 | 83 |

[^2]. Forty-six percent of Chapter 720 students were reported to have taken science courses in the bilingual program in the fall.
. The passing rate for these students exceeds the program goal of 60 percent by 19 percentage points.
. Ten of eleven students taking Biology I passed the course.
. As in mathematics courses, fall passing rates improve with grade level, improving from the ninth graders' 74 percent to 82 percent for eleventh graders.
. As in spring fust about one half of the Chapter 720 students were reported in , ilingual science courses.
-The general success rate was even higher in the spring than in the fall.
. Eight out of nine students taking 8tology II. General passed, as did nine out of ten students taking General Science II, General.
. Older students again did better than younger ones.

Table 37. Number of Academic and College/Career Orientation Program Spanish-speaking students
attending courses and percent passing teacher-made examinations in mainstream science.

|  | GRADE 9 |  | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FALL COURSES | N | $\begin{gathered} \text { \% } \\ \text { PASSING } \end{gathered}$ | $N$ | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | $N$ | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | $N$ | $\begin{gathered} \text { \% } \\ \text { PASSING } \end{gathered}$ |
| General Science I | 5 | 80 |  |  |  |  |  |  | 5 | 80 |
| Biology II, Academic |  |  |  |  |  |  | 3 | 100 | 3 | 100 |
| Miscellaneous Courses | 1 | 0 | 1 | 100 | 4 | 75 | 17 | 88 | 23 | 83 |
| TOTAL | 6 | 67 | 1 | 100 | 4 | 75 | 20 | 90 | 31 | 84 |


|  | GRADE 9 |  | GRADE 10 |  | GRADE 11 |  | GRAD ${ }^{-12}$ |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPRING COURSES | $N$ | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | N | $\stackrel{\%}{\text { PASSING }}$ | N | $\stackrel{\%}{\text { PASSING }}$ | N | $\stackrel{\%}{\text { PASSING }}$ |
| Biology II, General | 2 | 50 |  |  | 1 | 0 |  |  | 3 | 33 |
| Miscellaneous Courses* | 2 | 100 | 1 | 0 | 7 | 100 | 10 | 80 | 20 | 85 |
| TOTAL | 4 | 75 | 1 | 0 | 8 | 88 | 10 | 80 | 23 | 78 |

*Includes the following courses that had fewer than three students: General Science II, Academic, feneral Science II, General, Biology I, Academic, and Physics.
. Spanish-speaking students taking mainstream science courses did just as well as did those in the bilingual science courses. The 84 percent passing in the fall is a slightly higher proportion than that for the biliqual courses in the fall, and the spring rate of 78 percent is just 5 percent ress than the spring bilingual rate.
. Again amonq these students, those in the upper grades generally passed more often than did those in ninth grade.

Table 38. Number of Asian students attending courses and percent
passing teacher-made examinations in mainstream science.

|  | GRADE 9 |  | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FALL COURSES | $N$ | $\begin{gathered} \text { \% } \\ \text { PASSING } \end{gathered}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | $N$ | $\begin{gathered} \% \\ \text { PASSING } \\ \hline \end{gathered}$ | $N$ | $\begin{gathered} \neq \\ \text { PASSING } \end{gathered}$ |
| Biology I, General |  |  | 2 | 50 |  |  |  |  | 2 | 50 |
| Physics |  |  | 1 | 0 |  |  |  |  | 1 | 0 |
| Miscellaneous Courses | 1 | 100 | 8 | 88 | 2 | 100 |  |  | 11 | 91 |
| IOTAL | 1 | 100 | 11 | 73 | 2 | 100 |  |  | 14 | 79 |


|  | GRADE 9 |  | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPRING COURSES | $N$ | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | $N$ | $\stackrel{q}{q^{\prime}}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | N | $\begin{gathered} \text { \% } \\ \text { PASSING } \end{gathered}$ | $N$ | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ |
| biology 1, General |  |  | 2 | 0 |  |  |  |  | 2 | 0 |
| Physics |  |  | 7 | 100 |  |  |  |  | 7 | 100 |
| Miscellaneous Courses | 1 | 100 | 1 | 0 | 2 | 100 |  |  | 4 | 75 |
| TOTAL | 1 | 100 | 10 | 70 | 2 | 100 |  |  | 13 | 77 |

. Three-fourths of the Asian students were not reported to have taken a science course in the fall and the same proportion we apparently not enrolled in the spring.
. These students passed their courses at approximately the same high rate as did their Spanish-speaking peers.

Table 39. Number of Academic and College/Career Orientation Program students attending courses and percent passing teacher-made examinations in social studies.
(Chapter 720, Spanish-speaking students, fall)

. The 117 Chapter 720 students reported to have taken a fall bilingual social studies course represent 43 percent of all Chapter 720 students.
. The 85 percent of reported stugents that passed their course is a considerably larger proportion than the 60 percent that the program had anticipated.
. Students at al grade levels and in all courses surpassed the program goal.
. Eleventh graders did especially well in their courses.
. The Latin American Studies course was apparently the most difficult of those reported on.

Table 40. Number of Academic and College/Career Orientatior Program students
attending courses and percent passing teacher-made examinations in bilingual social studies.
(Chapter 720, Spanish-speaking students, spring)

|  | GRADE 9 |  | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPRING COURSES | N | $\stackrel{\%}{\text { PASSING }}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | $N$ | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ |
| American History I, Academic | 3 | 67 | 1 | 100 | 7 | 86 |  |  | 11 | 82 |
| World History I, Academic | 3 | 33 | 5 | 40 |  |  |  |  | 8 | 38 |
| World History I, General | 8 | 63 | 1 | 0 | 2 | 0 |  |  | 11 | 45 |
| World History II, Academic | 1 | 0 | 9 | 100 |  |  |  |  | 10 | 90 |
| World History II, General | 4 | 75 | 1 | 100 | 3 | 67 |  |  | 8 | 75 |
| Western Civilization |  |  |  |  | 3 | 100 |  |  | 3 | 100 |
| Eastern Civilization |  |  |  |  | 2 | 100 | 1 | 100 | 3 | 100 |
| Latin American Studies | 15 | 80 | 1 | 100 | 3 | 100 |  |  | 19 | 84 |
| Miscellaneous Courses | 11 | 82 | 18 | 83 | 30 | S0 |  |  | 59 | 86 |
| TOTAL | 45 | 71 | 36 | 81 | 50 | 86 | 1 | 100 | 132 | 80 |

. Social studies course results were reported for alinost one-half of the Chapter 720 students.
. Students generally were not quite as successful as they had been in the fall but exceeded the nrogram objective by fully 20 percentage points.
. Students taking World History II, Acadenic and those taking Eastern and Western Civilization did especially well while those taking World History I, Academic and General, had poor results.
-There is again a regular progression in passing rates from ninth graders to twelfth graders, with those in the upper grades doing better.

Table 41. Muber of Academic and College/Career Orientation Program Spanish-speaking students attending courses and percent passing teacher-made examinations in malnstrean social studies.

|  | GRADE 9 |  | grade 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FAlL COURSES | N | $\begin{gathered} \% \\ \text { PASSIMG } \end{gathered}$ | N | PASSIMG | N | $\begin{gathered} 8 \\ \text { PASSIMG } \\ \hline \end{gathered}$ | N | $\begin{gathered} 8 \\ \text { PASSIMG } \\ \hline \end{gathered}$ | $N$ | SSSIMG |
| American History 1, Academic | 1 | 0 |  |  |  |  | 2 | 50 | 3 | 33 |
| Morla History I, Acadenic | 2 | 0 |  |  |  |  | 11 | 100 | 13 | 85 |
| Miscellaneous Courses* | 2 | 50 | 1 | 0 | 3 | 67 | 19 | 100 | 25 | 88 |
| TOTAL | 5 | 50 | 1 | 0 | 3 | 67 | 32 | 97 | 41 | 83 |


|  | GRADE 9 |  | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPQING COURSES |  | $\begin{gathered} \% \\ \text { PASSIMG } \end{gathered}$ | $N$ | PASSIMG | N | $\begin{gathered} \chi \\ \text { PASSING } \\ \hline \end{gathered}$ | N | $\begin{gathered} \pi \\ \text { PASSIMG } \\ \hline \end{gathered}$ | N | $\begin{gathered} \pi \\ \text { PASSING } \\ \hline \end{gathered}$ |
| American History I General |  |  |  |  |  |  | 8 | 75 | 8 | 75 |
| Morld History I, Academic | 2 | 0 |  |  |  |  | 2 | 100 | 2 | 50 |
| Miscellaneous Courses******* | 2 | 100 | 2 | 100 | 15 | 87 | 26 | 92 | 45 | 91 |
| TOTAL | 4 | 50 | 2 | 100 | 15 | 87 | 36 | 92 | 57 | 86 |

Includes the following courses that had fewer than three students: American History I, General, World History I. General. World Geography I, Acadenic, and Eastern Civilization.

* Includes the following courses that had fewer than three students: American History I, Academic, Morld History I, General, World History II. Acadeaic, American studies, and Latin American Studies.
. As in math and science courses, Spanish-speaking students taking mainstreain social studies courses did approximately equally well as those in bilingual courses.
- Better than 80 percent of these students passed their courses in both semesters.
. As in almost all other content areas and program grouplings, those in the upper grades passed at higher rate than did younger students.

Table 42. Number of Asian students attending courses and percent
passing teacher-made examinations in mainstream social studies.

|  | GRADE 9 | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FALL COURSES | $N$ PASSING | $N$ | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | $N$ | $\stackrel{\%}{\text { PASSING }}$ | N | $\begin{gathered} \% \\ \text { PASSING } \end{gathered}$ | N | $\stackrel{\%}{\text { PASSING }}$ |
| World : story I, General |  | 5 | 80 |  |  |  |  | 5 | 80 |
| Miscellaneous Courses |  | 1 | 100 | 2 | 100 |  |  | 3 | 100 |
| TOTAL |  | 6 | 83 | 2 | 100 |  |  | 8 | 88 |


|  | $\begin{gathered} \text { GRADE } 9 \\ \% \\ \mathrm{~N} \quad \text { PASSING } \end{gathered}$ | GRADE 10 |  | GRADE 11 |  | GRADE 12 |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPRING COURSES |  | N | $\begin{gathered} q \\ \text { PACSING } \\ \hline \end{gathered}$ | N | $\stackrel{q}{\text { PASSING }}$ | $N$ | $\stackrel{\%}{\%} \text { PASSING }$ | $N$ | $\begin{gathered} \% \\ \text { PASSING } \\ \hline \end{gathered}$ |
| World History 1, General |  | 6 | 83 |  |  |  |  | 6 | 83 |
| World History II, General |  | 4 | 75 |  |  |  |  | 4 | 75 |
| Miscellaneous Courses |  | 1 | 100 | 2 | 100 |  |  | 3 | 100 |
| TOTAL |  | 11 | 82 | 2 | 100 |  |  | 13 | 85 |

. Only a few of the Asian students were reported to have taken social studies courses.
. Those that did, did very well in their courses.

Table 43. Number and percent of Dropout Preventioli Clinic ninth-grade students passing teacher-made examations in mathematics, science, and social studies.

. Virtually all Dropout Prevention Clinic participants were reported to have taken mathematics and soclai studies courses in both fall and spring. Well over one-half of students took science courses.
. These students generally did not do nearly as well in the their courses as did students in the main bilingual program.
. The spring rate of 64 percent passing math courses, however, is silghtly better than the spring rate for ninth graders in the main bilingual program taking dilingual mathematics courses.
. Success rates in science courses (an average of 50 percent in both semesters) were pecially poor.

Table 44. Significance of the difference between attendance percentages
of students in the Academic College/Career Orientation and High Senool Equivalency Programs and the attendance
percentage of the school.

Average School-Wide Attendance Percentage: 68.18

| Grade | N | Mean Percentage | Standard Ceviation | Percentage Difference | t | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spanish-speaking Students |  |  |  |  |  |  |
| 9 | 74 | 83.2 | 13.8 | 15.0 | 9.40 | . 0001 |
| 10 | 44 | 80.1 | 13.3 | 11.9 | 5.93 | . 001 |
| 11 | 82 | 88.2 | 9.3 | 20.0 | 19.41 | . 0001 |
| 12 | 45 | 89.3 | 7.8 | 21.1 | 18.20 | . 0001 |
| TOTAL | 24* | 85.4 | 11.8 | 17.2 | 23.10 | . 0001 |
| H.S. | uvalency 70 | 72.3 | 20.8 | 4.1 | 1.64 | . 06 |
| TOTAL | $317^{*}$ | 82.5 | 15.2 | 14.4 | 16.78 | . 0001 |


| 9 | Astan Students |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 13 | 84.8 | 4.6 | 16.7 | 12.98 | . 0001 |
| 10 | 38 | 91.4 | 11.9 | 23.? | 12.08 | . 0001 |
| 11 | 5 | 80.6 | 30.8 | 12.4 | 0.90 | NS |
| TOTAL | $57^{*}$ | 89.0 | 13.4 | 20.9 | 11.73 | . 0001 |

. Student in the Academic College/Career Ortentation Program at all grade levels attended school, on average, more than 80 percent of the time. This compares very favorably with the school-wide rate of 68 percent.
.Except for the very small group of Astan eleventh graders, the difference between program student rates and the school-wide rate are very highly significant, statistically.
. The average attendance rate for High School Equivalency Program student was just four percent higher than the school average and was almost, but not quite, statistically significantly different.
. Asian students, especially those in :enth grade attended somewhat - wore regularly than their Spanish-speaking peers (an average of 89 percent, as opposed to 85 percent).

Table 45. Significance of the difference between attendance percentages of Dropout Prevention Clinic students and the attendance percentage of similar non-program students.

|  | N | Mean Percentage | Standard Deviation | Percentage <br> Difference | t | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Program Students | 26 | 63.3 | 20.3 |  |  |  |
|  |  |  |  | 6.7 | 1.19 | $N S$ |
| Non-Program Students | 20 | 56.6 | 16.7 |  |  |  |

. Students participating in the Dropout Prevention Clinic attended schocl at a seven percent higher rate than did a sample of 20 students who qualified for the clinic program but were not included in it.
. The difference in attendance rates was not siqnificant, statistically.
students who were mainstreamed, dropped, or retained in the program.

|  | Mainstreamed | Dropped <br> Number | From Proqram | Retained in <br> Program or <br> Unknown |
| :--- | :---: | :---: | :---: | :---: |
| Percent | 15 | 1 | 10 | Total |

. The program accomplished its objective of mainstreaming at least 50 percent of Dropout Prevention Clinic participants.

```
groliment, supproyram_ ano language_group.
```

| Subprogr en |  | sed for Entire fall spring $\$$ | $\begin{array}{r} \text { Er } \\ \text { Ent } \\ M \end{array}$ | ed <br> all, buic gring $8$ |  | ed pring fall $4$ $\qquad$ | Enro Ent + | $\begin{aligned} & \text { y } \\ & \text { Year } \\ & 8 \\ & \hline \end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spanish-spoaking Stugents |  |  |  |  |  |  |  |  |  |
| D-apont Preyention | $E$ | 19 | 1 | 4 | 16 | 61 | 4 | 15 | 26 |
| High School Equtyatuncy | 21 | 23 | 11 | 15 | 22 | 30 | 20 | 37 | 74 |
| Acadeatc and Collegel Career Orientation | 32 | 12 | 3 n | 10 | 23 | 10 | 196 | 69 | 286 |
| FOTAL | 58 | 15 | 42 | 11 | 86 | I7 | 220 | 57 | 386 |
| Astan Studentis |  |  |  |  |  |  |  |  |  |
| Acadsait: | 7 | 12 | 0 | $\sim$ | 12 | 3 | 38 | 63 | $5 \%$ |
| Spanish- TuiA $\left.\begin{array}{l}\text { spasing ana } \\ \text { Asitn Szunent. }\end{array}\right)$ | 56 | 15 | $4 ?$ | 9 | 30 | 17 | 2\%E | 53 | 148 |
| Incluast fige stidents for whom language was not, reportec. |  |  |  |  |  |  |  |  |  |
|  <br>  out of three. |  |  |  |  |  |  |  |  |  |
| . More than 60 percent of those in the Dropout Prevent fort Clinic were enrolled for the fuli spring semester bat fot for the entira fall (l.a. they entered during the fall or at the begifining of the spring semestar). |  |  |  |  |  |  |  |  |  |
| . A fluralty ( 30 percent) of those in tha 41 gh School Equivaiency Program also entered duriny the isll or it the bagtining of the sprina semester. |  |  |  |  |  |  |  |  |  |
| . Fiftaen percent of students were sinolled ior neither the full fall nor the entire spring semester. |  |  |  |  |  |  |  |  |  |
| . The High Scnool Equivalency progran has an esperialiy high proportion (28 percent) of its studente in this eategory. |  |  |  |  |  |  |  |  |  |

Table 48. Achievement of program objectives.

| Objective | Objective Accomplished Yes/No | Comments |
| :---: | :---: | :---: |
| High School Equivalency |  |  |
| 1. 60 percent of tested H.S.E. students will pass GED | Yes | ```26 students (65 percent) out of the 40 students who took the test passed it``` |
| 2. H.S.E. students remaining in program for one year will improve in English reading at . 05 level of significance | Not determined | Insuffirient data |
| 3. 60 percent of students enrolled in individualized mathematics instruction will master at least one objective per month on teacherdeveloped tests based on the G.E.D. test | Yes | 87 percent of students met or exceeded the the criteria |
| 4. Participation will improve attendance by 25 percent over previous period | Not determined | No comparison data |
| 5. Participants will have a dropout rate that is significantly lower and an attendance rate that is significantly higher than those of similar nonparticipants | Not determined | No comparison data |
| 6. Percent of graduates continuing education will equal or surpass mainstream graduates | Not determined | No comparison data |

Table 48. Achievement of program objectives. (continued)

| Objective | Objective Accomplished Yes/No | Comments |
| :---: | :---: | :---: |
| High School Equivalency |  |  |
| 7. 80 percent of participants in H.S.E. will apply for college or jobs, and 60 percent will be accepted or placed | Not determined | Data provided on only 8 students |
| Dropout Prevention Clinic |  |  |
| 1. 50 percent of participants will be mainstreamed in bilingual or regular academic program | Yes | 58 percent of participants were mainstreamed |
| 2. Participants will improve attendance by 25 percent when compared with previous year | Not determined | No data |
| 3. Participants will have a dropout rate that is significantly lower than that of similar students | No | Both groups had a dropout rate of 4 percent, 96 percent retention rate |
| 4. Particpants will have a significantly higher rate of attendance than a comparable group | No | At tendance rate for program students was 63 percent, and for comparison group was 57 percent. Not significant at . 05 level. |
| College/Career Orientation Program |  |  |
| 1. 60 percent of participants will pass NYS Regents Competency Test in English and Mathematic (11th and 12 th graders on | Yes <br> s <br> 1y) | 97 percent of students taking Regents passed |

Table 48. Achievement of program objectives. (iontinued)

| Objective | Object ive Accomplished Yes/No | Comments |
| :---: | :---: | :---: |
| College/Career Orientation Program |  |  |
| 2. 80 percent of participants will apply for college or job, and 60 percent will be accepted or placed | Not determined | 77 percent of graduates intend to attend college, 5 percent vocational training, 3 percent job and $\cdot 2$ percent armed forces. A total of 90 percent indicated plans for additional education or wurk |
| 3. Percent of graduates continuing education will equal or surpass mainstrean graduates | Not determined | No comparison data |

## All Program Students

1. 60 percent of E.S.L. students will increase 10 or more objectives when post-tested on same level of CREST
2. Full year students will Yes improve in Spanish reading at the . 05 level of significance.
3. 60 percent of Chapter 720 students taking social studies and science in Spanish will pass course

57 percent of students post tested on the same level increased 10 or more objectives. 97 percent of students who changed levels increased 10 objectives or more

Gains were highly significant at all grades

79 percent passed science courses in the fall; 83 percent in the spring; 85 percent passed social ${ }^{2}$ studies courses in the fall; 80 percent in the spring.
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## X. CONCLUSIONS AND RECOMMENDATIONS

Theodore Roosevelt has a record of impressive achievement in developing, maintaining, and assimilating bilinqual proqrams that are flexible enough to adjust to the needs of students from an unstable and deteriorating attendance area. It has created a smooth transition from project ABLE to a consolidated foreign language/bilinqual education department that rermits staff members to more efficiently pool resources. New Title VII funding of project SUCCESS allows the school to lead the way in important andinnovative services such as the Dropou. Prevention Clinic and the Spanish HiSh School Equivalency Program.

Of special note is the apparently warm and cooperative relationship between the staff members of SUCCESS, between SUCCESS and the lárger bilinqual proqram, and between the bilingual program and the mainstream. These relationships create many advantages for students as instructionàl materials, educational expertise, and other resources are freely shared.

Project SUCCESS in its first year has established titself as providinq vital serices for students who were otherwise destined to find themselves without the skills and credentials essential to rise above unêmployment or menial, low-paying jobs. Decpite the problem, beyond the administration's control, of two teachers' transferring in February that facted both the High School Eqivalency Program and the Dropout Prevent pontinic, the excellence of supervision and the commitment of the staftaparently allowed both programs to function with little loss of auality. ,

The effectiveness of both programs is in part confismed by the principal's decision to include one Hiqh School Equivalency Proqram class and at least one Dropout Prevention Clinic class in the mainstream next September. The principal
has also committed seven tax-levy units to these programs for 1981-1982.
The College/Career Orientation Program pr ides services essential to enable foreign-born and recently arrived immigrant students, who have almost no concept of what job and college opportunities exist in the United States, to plan for their futures.

The evaluation team wishes to offer the following recommendations:

1. The success of the Dropout Prevention Clinic suggests the desirability of additional classes to provide the motivation, guidance, and intensive instruction that can prevent restless and discouraged students from truancy and eventual dropout.
2. Bilingual College/Career Orientation might be effectively extended to reach students earlier than the eleventh grade. Teachers of ninth-graders report that students who are very intelligent and able often leave school because they have little awareness of what they are working towards.
3. The rapidly growing nunber of Vietnamese-speaking students, all of whom are of limited English proficiency, and who are at a critical point between the devastation of war and adjustment to the requirements of a new culture, require more help than can presently be provided by the single Vietnamese paraprofessional. The school is requesting a Vietnamese contentarea program, and additional resources in the form of paraprofessionals and instructional materials.
4. More programs are needed to meet the needs of students who score... beneath the twenty-first percentile of the English LAB but whose Spanish score is below the English score. These students, with low reading and math scores, are frequently potential dropouts.

$$
-83-\quad 1: \therefore .
$$

5. A bilinguàl special education class, included within the foreign language/bilingual education department, would meet the needs of students who are unable to function either in regular bilingual classes or in the , mainstream. Last year, ten program students were referred for evaluation and were found to need special education, but at present no such bilirigual classes exist.

[^0]:    NOTE: Because of licence regulations, the Dropout Prevention Clinic teacher was required to assume two additional classes in Italian in February, and a second teacher was added. However, for convenience, the report will refer to one teacher.

[^1]:    *Includes the following courses that had fewer than three students: Alqebra II and III, Academic, and Intermediate Algebra I and II.

[^2]:    Includes the following courses that had fewer than three students: General Science II, Acaderic, $810 \operatorname{logy~I,~General,~and'Biology~II,~General.~}$

