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A STUDY OF ACADEMIC SUCCESS OF COLLEGE READINESS STUDENTS AT THE COLLEGE OF SAN MATEO.

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THE COLLEGE READINESS PROGRAM AT THE COLLEGE OF SAN MATEO, CALIFORNIA, WAS DESIGNED TO INTEGRATE MINORITY YOUTH INTO THE COLLEGE AND THE COMMUNITY. A STUDY OF STUDENTS WHO HAD ENROLLED IN THE PROGRAM SINCE ITS BEGINNING IN 1966 INCLUDED THESE OBSERVATIONS--(1) 95 PERCENT WERE NEGROES, (2) ALTHOUGH 40 PERCENT HAD NOT CHOSEN A MAJOR, ACADEMIC OR TRANSFER GOALS ACCOUNTED FOR 90 PERCENT OF THE MAJORS NAMED, (3) SCORES ON ENTRANCE EXAMINATIONS WERE NOT VALID PREDICTORS OF GRADES FOR THESE STUDENTS, (4) THERE WAS LITTLE DIFFERENCE BETWEEN THE STUDENTS' HIGH SCHOOL AND COLLEGE GRADES, WHICH WERE USUALLY IN THE RANGE OF C OR D, (5) 40 PERCENT WOULD HAVE QUALIFIED FOR ACADEMIC PROBATION IF THE COLLEGE HAD SUCH A STATUS, (6) A STUDENT'S GRADES IN THE SUMMER PRIOR TO HIS FIRST REGULAR SESSION WERE HIGHER THAN IN SUBSEQUENT REGULAR TERMS, AND (7) ACHIEVEMENT IN ENGLISH CLASSES WAS LOWER THAN THAT OF THE STUDENT BODY AS A WHOLE. THE AUTHOR CONCLUDED THAT THE PROGRAM WAS MEETING A SIGNIFICANT NEED, BUT THAT THE COLLEGE'S COMMITMENT OF RESOURCES IS INADEQUATE. (HH)

COLLEGE OF SAN MATEO

RESEARCH REPORT

1968-2

A STUDY OF ACADEMIC SUCCESS OF COLLEGE READINESS STUDENTS AT THE COLLEGE OF SAN MATEO

By Dr. Frank C. Pearce

SAN MATEO JUNIOR COLLEGE DISTRICT
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A STUDY OF ACADEMIC SUCCESS OF COLLEGE READINESS STUDENTS AT THE COLLEGE OF SAN MATEO

INTRODUCTION

The success of students in any educational program is reflected in many endeavors and results. One phase of the success spectrum is academic progress. Although it cannot serve as the sole criterion, the student's academic development plays a large part in any assessment of the effectiveness of an educational program. However, this must be viewed within the perspective that the purpose of the College Readiness Program is "To integrate minority youth into the College of San Mateo and the total community so that equal opportunity of choice may be fully realized." Thus, academic progress represents but one aspect of this basic purpose.

In order to fulfill this purpose, the College Readiness Program has specified twelve objectives that it will attempt to meet.

1. To provide necessary assistance for minority students to stay in college. This includes the details of financial aid, transportation, etc., as well as the broader objective of developing an attitude toward the future, which is equally necessary for college success.

2. To assist students to maintain a good academic standing through an active program of encouragement and support.

3. To actively solicit the attendance and participation in higher education of minority students at the College of San Mateo.

4. To extend the opportunity for minority students to learn skills and content in both academic and vocational fields.

5. To assist minority group members to broaden their vocational alternatives and academic choices at the College of San Mateo so that they may later take advantage of various opportunities at four-year institutions and in industry.

6. To promote understanding of the importance of education among current and future students.

7. To promote the development of individuals by encouraging the development of an attitude of racial pride, inducing self-confidence and a positive frame of mind.

8. To develop an understanding of the culture of minority students among teachers and students at College of San Mateo.

9. To develop among teachers, minority and other students an understanding of one another.

10. To tap the intellectual and cultural resources of minority groups.

11. To enable minority students to be fully functional members of society.

12. To enhance a climate of critical examination and innovation at College of San Mateo.

This study attempts to provide a partial assessment of several objectives by focusing on student achievement.

STUDY PURPOSE

This study has been designed to assess the academic progress of students who have participated in the College Readiness Program. Essentially, this is a study of grades and performance although it does include some information on those factors which could have a direct bearing on the student's grades, such as, potential, withdrawal behavior, and tutor performance.

STUDY OBJECTIVES

1. To provide a limited statistical description of students in the College Readiness Program.

2. To determine the rate of retention among program students as well as the apparent reasons for withdrawal from school.

3. To describe the academic potential of program students.

4. To identify and describe the patterns of academic progress attained by program students as well as factors that could influence this progress.

PROCEDURE

The population for this study included all students who have ever been enrolled or who are at present enrolled in the College Readiness Program. The data required to answer each of the objectives have been obtained from the Registrar's records, Testing Office records, Data Processing permanent record file, and the records maintained by the staff of the College Readiness Program. All coding from the source documents was accomplished in the Office of Research.

DEFINITIONS

Student - Any individual who enrolled at the College of San Mateo, actually took course work, and was identified by the program staff as a participant in the program was considered a student. In addition, students assigned by the staff to help College Readiness Program students on an individual basis were designated tutors. It should be recognized, however, that a number of individuals were considered tutors when, in fact, they had been or were students in the program at the time the study was conducted. In effect, tutors are students, and the distinction was arbitrary and not a reality. Thus, the point could be made that the 256 students and the 87 tutors were actually a total of 343 students rather than two separate entities.

STUDY LIMITATIONS

It must be recognized that this study was not a complete or even reasonably comprehensive evaluation of the program. It provides a partial assessment of one of the program's twelve objectives. Moreover, it only includes information that is usually collected from all students at the College, and no effort was made to develop specific instruments for data collection. Thus, demographic data, test information, grades, units, and grade point averages comprise the basic information. Finally, this program places a great deal of emphasis upon the individual treatment of every student and the modification of attitudes or other intrinsic qualities. These factors can be quantified but were not included at this time. Basically, this study makes every attempt to be as objective as possible and may, therefore, ignore the importance of subjective considerations. This study may provide insight, but it cannot provide an inclusive evaluation of the program's worth; that consideration requires a value judgment which is beyond the confines of the study. Every effort was made to provide factual data that could lead to improving the program and leave subjective or philosophical judgments to the reader.

STUDY FINDINGS

The College Readiness Program (CRP)* was formally initiated during the summer of 1966. Approximately one year later, during fall semester 1967, there were 256 individuals enrolled as program students and 87 enrolled as program tutors. The student-tutor role among these 343 students was found to change from one semester to the next. That is, persons who were students one term might serve as tutors during the subsequent term. Table I includes the 256 individuals considered to be students. Among these persons, 16 percent had been in attendance at College of San Mateo at some time prior to the summer of 1966. It was noted that thirty-eight students had enrolled during the first summer program, and fifty enrolled during the second summer program. At the time of this repor 166 students (65 percent) were enrolled in day classes; 16 students (6 percent) were enrolled in evening classes only; and 74 students (29 percent) were no longer in attendance.

TABLE I - NUMBER OF STUDENTS ENROLLED IN THE COLLEGE READINESS PROGRAM

SEMESTER ENROLLED	CURRENT STATUS: Day Students #	Day Students %	Evening Students #	Evening Students %	Not Currently Enrolled #	Not Currently Enrolled %	Total #
Before Summer 1966	15	35.7	6	14.2	21	49.9	42
Summer 1966	14	36.8	2	5.2	22	57.8	38
Fall 1966	24	55.8	4	9.3	15	34.8	43
Spring 1967	8	66.6	-	--	4	33.3	12
Summer 1967	39	78.0	2	4.0	9	18.0	50
Fall 1967	66	92.9	2	2.9	3	4.2	71

* Initials may be used throughout the report.

Of the 87 students who were serving as tutors during the fall semester of 1967, it was noted that 31 had enrolled for the first time at College of San Mateo prior to the summer semester 1966, and ten had enrolled during the first summer program in 1966. During the fall semester 1966, 30 student tutors enrolled in the program, seven entered during spring semester 1967, two entered during summer 1967, and seven entered during fall 1967. Of the total College Readiness Program student body, including tutors, seventy-three students (21 percent) were enrolled prior to the summer of 1966, forty-eight students (14 percent) enrolled during the first summer program, fifty-two students (15 percent) enrolled during the second summer program. During the fall of 1966, seventy-three students (21 percent) enrolled, nineteen more (5 percent) enrolled the following spring, and seventy-eight students (23 percent) enrolled during the fall of 1967.

It was found that a number of students and tutors had enrolled at College of San Mateo as early as 1959, 1960, and 1961. In effect, some students had attended, then dropped, enrolled again, and then dropped again. This finding raised the question of how many semesters (including summer sessions) students and tutors had been in attendance. Students who enrolled for the first time prior to the first summer program in 1966 had attended an average of five semesters. Specifically, fifteen of these students were enrolled for four semesters or less, and ten students had attended between six and eight semesters. Among students who entered College of San Mateo during the summer of 1966, ten (26 percent) had attended during that summer only; nine had attended two semesters; six had attended three semesters; and thirteen had attended every semester (including summer) since the summer of 1966. Among students who entered during the fall semester 1966, three attended that semester only; twelve attended a second semester; and twenty-eight enrolled in each subsequent semester. Among students who enrolled during the spring semester 1967, five attended that semester only. Nine of the students who enrolled during the summer term of 1967 attended that summer only. Generally, program students had attended approximately two semesters, while program tutors had attended three semesters.

The proportion of program students attending one or more semesters is shown in Table II. This table also provides an overall view of the withdrawal rate from one semester to the next. For example, during the first summer program 26 percent of the students did not return for the fall term, while 18 percent of the students in the second summer program did not return for the fall semester.

TABLE II - PROPORTION OF STUDENTS ATTENDING ONE OR MORE SEMESTERS

	NUMBER OF SEMESTERS						
SEMESTER ENROLLED	One %	Two %	Three %	Four %	Five %	Six or More %	Total %
Before Summer 1966	--	8	5	25	36	26	100
Summer 1966	26	24	16	34	--	--	100
Fall 1966	7	28	58	7	--	--	100
Spring 1967	42	50	8	--	--	--	100
Summer 1967	18	82	--	--	--	--	100
Fall 1967	100						100

By combining all students (256), it would appear that the withdrawal rate was 35 percent--ninety students were no longer attending day classes. However, this would not be an accurate figure since fifteen of the ninety students had completed sixty units or had transferred,* while sixteen students were currently enrolled in night classes. Depending upon one's point of view, the withdrawal rate would be reported as 29.3 percent (fifteen students graduated or transferred) or as 23 percent (including those taking evening classes).

* During the spring semester three students transferred to San Francisco State and one transferred to the University of California at Santa Cruz.

It was also noted that those students who had the apparent lower potential as measured by the total score on the School and College Ability Test (SCAT) tended to remain in college for the least number of terms. For example, 75 percent of the students who tested at or below the tenth percentile on the SCAT remained in school one or two terms (including summer session), while one-half of those who tested above the tenth percentile remained three or more terms--at least one full school year. As has been generally noted among other studies of college students, men in the College Readiness Program had been enrolled for more terms than women.

Although the length of time a student remained in the program was of general interest, it did not answer the basic question: "Educationally, did he leave at the right time?" Moreover, it should be recognized that the reasons a student may give for withdrawing are subject to a certain amount of distortion. In the College Readiness Program, however, the relationships between students and staff appeared to be much closer; and the actual reasons for withdrawal could be determined more easily. Yet, one cannot include a detailed description (case study) of each student's reason for withdrawing. Thus, the categories of reasons lose a great deal of their meaning. For example, the category "family problems" includes situations in which the family objected to the attendance of the student at College of San Mateo, and the student was physically abused. In the financial category many students had to work to pay hospital bills or traffic fines. Based upon this limitation of description and the advantage of valid reasons being known, it was found that fifty-nine of the 256 students included in the study had actually withdrawn. Twenty-seven percent had to go to work due to financial problems, 10 percent moved, 8 percent had health problems, 7 percent had family problems, 10 percent left due to personal difficulties, 20 percent because of academic difficulties, 8 percent went into the armed forces, and the reasons why five students withdrew were not known. Essentially, it would appear that the withdrawal rate could be reduced from 29 to 23 percent (or 23 to 17 percent) simply by increasing the financial support for students.

A general statistical description of College Readiness Program students and tutors indicated that 59 percent were males and 41 percent were females; 81 percent were single, and 19 percent were married. The class status of tutors and students was 48 percent freshmen with between zero and fifteen units completed, 16 percent with between sixteen and thirty units completed; 12 percent were sophomores with between thirty-one and forty-five units completed, and 20 percent had completed forty-six to sixty units; 4 percent graduated (61 or more units completed but without an A. A. degree). At the time the study was conducted, 72 percent of the students were considered to be continuing, 10 percent were new to college classes, and 18 percent had transferred from other colleges. In terms of age, 23 percent were less than twenty years old, 31 percent were twenty years old, 36 percent were between twenty-one and twenty-five years old, 7 percent were between twenty-six and thirty, and 3 percent were between thirty-one and thirty-eight years of age. It was also found that 244 , or 95.3 percent, of the program students were Negroes; eight, or 3.2 percent, had Spanish surnames; three students, or 1.1 percent, were Caucasian; and one student (0.4 percent) was Oriental.

Another characteristic examined in this study was that of the majors selected by students and tutors. The majors of sixty-seven students (19.9 percent) were unknown; sixty-nine (20.5 percent) had not decided what their major would be; three students (0.9 percent) were unclassified; and five (1.5 percent) were considered special students.

Major	Number of Students	Percentage
Unknown	144	42.8 %
Liberal Arts	42	12.5
Business	30	8.9
Psychology	14	4.2
Aeronautics	12	3.6
Manufacturing Technology	11	3.3
Art, Sociology, Political Science	10	in each major 3.0
Education	9	2.7
Physical Education and Forestry	5	in each major 1.5
Engineering, Architectural Drafting, Nursing, Pre-optometry, Mathematics, Speech and Drama	3	in each major 0.9
English, Foreign Languages (Spanish), Home Economics, Music, Vet. Medicine	2	in each major
Criminology, Economics, Pharmacy, Philosophy, and Public Health	1	in each major

The third objective of this study was an assessment of the academic potential of program students. Usually, a student's academic potential is measured, in part, by the scores he obtains on standardized tests. However, today's journals include a great many studies that report these tests do not accurately reflect the true ability of students whose background and educational experiences are somewhat limited. At the same time, they can provide a general indication of potential within broad limitations or for some extreme scores.

Table III shows that approximately three-fourths of the College Readiness Program students scored at or below the 25th percentile on all parts of the S.C.A.T., while approximately ten percent scored at or above the 50th percentile. In addition, the proportion of students who scored at or below the 25th percentile on the quantitative subtest was somewhat higher than the proportion who earned the same scores on the verbal subtest. College Readiness Program students who scored above the 25th percentile tended to score higher on verbal ability than they did on quantitative ability. The reverse tended to occur when the student earned scores below the 25th percentile, in that the quantitative score of such students was higher than their verbal score.

TABLE III - ACADEMIC POTENTIAL
AS MEASURED BY THE SCHOOL AND COLLEGE ABILITY TEST

	Student SCAT Subtest Scores					
SCAT	Verbal		Quantitative		Total Score	
PERCENTILE SCORES	#	%	#	%	#	%
10th or Less	108	44.1	122	50.4	134	55.3
11 to 25	58	23.7	67	27.7	50	20.7
26 to 50	44	18.0	29	12.0	35	14.5
51 to 75	19	7.7	23	9.5	15	6.2
76 or more	16	6.5	1	0.4	8	3.3
Total	245	100	242	100	242	100

Despite the apparent differences, however, the questionable value of such tests was clearly reflected by the very large standard deviations (21.1 on the total SCAT for CRP students as compared to 12.1 for all College of San Mateo students). Specifically, a student who received a total SCAT score in the 50th percentile may actually possess the kind of ability that would be reflected in a score anywhere between the 30th and 60th percentile. Thus, the variance is so great that the reliability of the School and College Ability Test for program students is practically non-existent. The capacity of the test for accurately reflecting the ability of program students was very limited, and they could have considerably more or less ability than the test scores indicated.

A somewhat different pattern was noted for students who served as tutors; for example, 76 percent of all student tutors scored at or above the 50th percentile on the verbal portion of the SCAT; 39 percent made similar scores on the quantitative subtest; and 57 percent made a total score at or above the 50th percentile. Only two student tutors scored at or below the 10th percentile on the verbal portion of SCAT; eight made similar scores on the quantitative portion, and three achieved the same low total score. Essentially, tutors tended to receive high verbal scores and low quantitative scores; for example, the mean verbal percentile was 52, and the mean quantitative score was 33. It should also be noted that five of the student tutors earned verbal scores below the 25th percentile; twenty-one scored this poorly on the quantitative test, and thirteen had total SCAT scores below the 25th percentile. Although these scores were not the sole criterion for the selection of tutors, they were somewhat lower than expected for a student serving as a tutor.

Another usual indicator of a student's potential is his high school grade point average. It was found that among all College Readiness Program students an average grade point average of 1.9 had been earned. Two-thirds of the students had a high school grade point average of 1.4 to 2.4, while the range in grade points was 0.7 to 3.5.

More specifically, three students (1.4 percent) had less than 1.0 GPA; ninety-seven (45.8 percent) had between 1.0 and 1.9 GPA; ninety-five students (44.8 percent) had a GPA between 2.0 and 2.5; twelve students (5.7 percent) had a GPA of 2.6 to 3.0; and five students (2.3 percent) had a grade point average of more than 3.1 in high school. The academic performance of CRP students in high school could be described generally by "C-minus" or"D-plus" letter grades. On the other hand, during the same school years of 1966 and 1967, 31.5 percent of all high school students entering College of San Mateo had a grade point average of less than 2.0; 60 percent ranged between 2.0 and 3.0, and 8.5 percent had a GPA better than 3.0. Relatively, College Readiness Program students had rather poor high school grades.

Among students who served as tutors a mean high school grade point average of 2.4 was recorded. There were no high school grades available on eleven of the student tutors. The range in high school GPA was 0.6 for one student to 3.7 for another student. Twenty-two percent (17 students) had less than 2.0 GPA; forty-nine percent (38 students) had between 2.0 and 2.5 GPA; sixteen percent (12 students) had between 2.6 and 3.0 GPA; and thirteen percent (10 students) had maintained more than 3.0 grade point average in high school. The average GPA among program tutors was 2.3, with a standard error of estimate equal to 0.3. In effect, the high school academic performance of program tutors was at the "C" or "B-minus" letter grade level.

The achievement of College Readiness Program students served as another area of primary concern to the study. The usual criterion in this regard is the student's cumulative grade point average. Eighteen of the 256 students did not have a grade point average at College of San Mateo since they had withdrawn prior to the end of the first semester in which they enrolled. Ten percent had less than 1.0 cumulative GPA; sixty percent had earned between 1.0 and 1.9 GPA; twenty-two percent had earned between 2.0 and 2.5 GPA; and eight percent had earned a GPA of 2.6 or more. The average cumulative grade point average was 1.6 (approximately a "D").

Sixty-seven percent (one standard deviation above and below the mean) of the students in the College Readiness Program earned a grade point average between 0.9 and 2.3. The extremes in grade point averages were 0.2, earned by two students, and a perfect 4.0 attained by one student.

The cumulative grade point averages of students serving as tutors were also examined. None of the tutors had earned less than 1.0 GPA; twenty-eight percent had earned between 1.3 and 1.9 GPA; forty-two percent earned between 2.0 and 2.5 GPA; twenty percent had a GPA between 2.6 and 3.0; and the remaining nine percent (8 tutors) had earned over 3.0 grade point average. The mean for student tutors was 2.3 GPA, and the range was 1.3 to 4.0 grade point average. Seventy percent of the student tutors were maintaining a C average or better in their college work.

The College Readiness Program has maintained the philosophy that one of the advantages of offering a summer program is that students can be prepared in a variety of ways for college. Thus, the probability of the student remaining in college and progressing in a satisfactory manner would be increased. Therefore, a higher grade point average among students who took advantage of the summer program could be expected. Table IV shows that, in general, students who started their college work before the program was initiated tended to have slightly higher grade point averages than did students who entered later. Basically, however, the differences were not significant; each group performed at about the same level. It would appear that students who entered during the summer did no better or no worse than those who entered during either the fall or spring semesters.

TABLE IV - GRADE POINT AVERAGE
OF STUDENTS IN COLLEGE READINESS PROGRAM

SEMESTER ENTERED PROGRAM	Less Than 1.0 GPA		GPA 1.0 - 1.9		GPA 2.0 - 2.9		GPA 3.0 plus		TOTAL
	#	%	#	%	#	%	#	%	#
Before Summer 1966	1	2.4	21	50.0	19	45.2	1	2.4	42
Summer 1966	4	11.1	25	69.4	7	19.5	-	--	36
Fall 1966	3	7.5	25	62.5	11	27.5	1	2.5	40
Spring 1967	-	--	8	66.6	2	1.7	2	1.7	12
Summer 1967	6	15.0	23	57.5	10	25.0	1	2.5	40
Fall 1967	6	9.7	37	59.7	19	30.6	--	--	62

Many studies have indicated that the best predictor of a student's college grade point average is his high school GPA. However, many authorities, particularly those who are familiar with Black students, have outlined a number of difficulties encountered by Black students in high school. It is clear that the Black student lacks the opportunity to develop his talents to the fullest extent. This was partially supported by the finding that the correlation coefficient for high school and college grades was only .36 for program students, which is less than half the coefficient that studies normally report.

Table V shows that students whos grade point average in high school was 0.9 or less also maintained about the same grade point average in college. Among students with a 1.0 to 1.9 high school GPA, approximately one-half were maintaining the same college GPA; one-fourth dropped, and one-fourth increased their grade point average. For those with a 2.0 to 2.9 high school GPA, two-thirds dropped, and one in three had the same college grade point average as they had in high school. There were no high school grade point averages recorded for thirty-six College Readiness Program students.

TABLE V - HIGH SCHOOL AND COLLEGE GRADE POINT AVERAGES

HIGH SCHOOL GPA	COLLEGE GPA: 0.9 or Less #	%	1.0-1.9 #	%	2.0-2.9 #	%	3.0 or More #	%	TOTAL #
0.9 or Less	11	78.6	3	21.4	-	-	-	-	14
1.0-1.9	23	22.3	61	59.2	18	17.5	1	1.0	103
2.0-2.9	12	11.4	52	49.5	39	37.1	2	2.0	105
3.0 plus	--	--	3	42.8	4	57.2	-	--	7

There were no high school grade point averages recorded for twelve individuals who were serving as student tutors; this was about the same as the proportion of program students (14 percent) who did not have a high school GPA on record. Among tutors with 1.0 to 1.9 GPA, it was found that approximately one-third showed no increase, while two-thirds advanced one cumulative grade point. Two-thirds of the tutors with 2.0 to 2.9 high school grade point average maintained the same college GPA, while 16 percent went down one cumulative grade point, and 16 percent went up one cumulative grade point. In effect, the high school grade point average was more predictive of the tutors' college GPA than it was for other program students.

Another potential indicator of a student's college grade point average is his performance on standardized tests, such as, the School and College Ability Test (SCAT). Students who scored at or below the tenth percentile on the SCAT verbal subtest were very likely to earn less than a 2.0 grade point average. The probability, in fact, was eighty percent that they would earn less than 2.0 GPA. Students who scored between the eleventh and twenty-fifty percentile exhibited a 50 percent probability of earning under the 2.0 grade point average, while the probability of earning less than a 2.0 GPA decreased significantly as the SCAT verbal percentile increased beyond the twenty-fifth percentile.

Table VI indicates the student's total School and College Ability Test score was also related to college grade point average. For example, 81 percent of the students who scored at the tenth percentile or less earned under 2.0 grade point average, while two-thirds of the students who scored between the eleventh and twenty-fifth percentile earned less than 2.0 GPA. Conversely, twenty percent of those whose SCAT total score was at or below the tenth percentile had maintained a "C" average or better; one-third of those between the eleventh and twenty-fifth percentile maintained a "C" average; and 40 percent of those whose total score was between the twenty-sixth and fiftieth percentile on SCAT maintained a "C" average or better.

TABLE VI - THE RELATIONSHIP BETWEEN THE STUDENTS TOTAL SCAT SCORE AND CUMULATIVE GRADE POINT AVERAGE

GRADE POINT AVERAGE	SCAT Total Percentile: 10 or Less #	%	11 - 25 #	%	26 - 50 #	%	51 or More #	%
Less than 1.0 GPA	18	14.3	2	4.1	2	5.7	1	4.3
1.0 to 1.9	84	66.7	31	63.3	19	54.3	6	26.1
2.0 to 2.5	19	15.1	13	26.5	13	37.1	10	43.5
2.6 or More	5	3.9	3	6.1	1	2.9	6	26.1
TOTAL	126	100	49	100	35	100	23	100

The findings for students who were serving as tutors showed the same trend; however, the differences between groups of students who scored within the percentile ranges mentioned above were much smaller. For example, two-thirds of the tutors who scored at or below the twenty-fifth percentile earned a "C" average or better, while three-fourths of those who scored at or above the fifty-first percentile had maintained a "C" average. Moreover, the GPA of tutors was found to increase as their verbal or quantitative score increased.

It should be recognized that a student's grade point average represents a composite of subjective considerations by the teacher and the student. In addition to the objective measures of performance as tests and reports, the grade point average also represents the teacher's impression of whether the student performed in accordance with his ability, the student's apparent interest in his work, and the teacher's impression of the student's willingness to participate. It also includes the value a student places on a class, his self-perceived ability to relate to the teacher and to other students, the amount of effort he feels is needed, and his problems and commitments outside the classroom. One way of assigning a numerical quality to the subjective considerations in achieving a given grade point average is to consider the units attempted and completed as an abstraction of motivation-effort.

Table VII shows that among the students who had attempted 15 or fewer units, ten had earned no units, one in three earned 6 units or less, one in five earned between 7 and 9 units, and one-third had earned between 10 and 15 units.

TABLE VII - TOTAL UNITS ATTEMPTED AND EARNED

UNITS EARNED	Units Attempted: 15 or less		16 - 30		31 - 45		46 or more	
	#	%	#	%	#	%	#	%
None	10	8.1	--	--	--	--	--	--
1 - 3	14	11.3	1	1.6	--	--	--	--
4 - 6	27	21.8	1	1.6	--	--	--	--
7 - 9	26	21.0	3	4.9	--	--	--	--
10-15	47	37.8	25	41.0	--	--	--	--
16-20	--	--	18	29.6	--	--	--	--
21-25	--	--	17	11.5	1	3.7	--	--
26-30	--	--	6	9.8	6	22.2	--	--
31-35	--	--	--	--	4	14.8	--	--
36-45	--	--	--	--	16	59.3	5	13.5
46-60	--	--	--	--	--	--	12	32.4
61-plus	--	--	--	--	--	--	20	54.1
TOTAL	124	100	61	100	27	100	37	100

Among students who had attempted between 16 and 30 units, it was found that nearly one-half had earned less than 15 units, while one-fourth of the students who had attempted between 31 and 45 units had earned less than 31 units. On the average it was found that program students had earned four units less than they attempted. Among program tutors, however, it was found that only four attempted and earned less than 15 units. In fact, the average number of units attempted by tutors was 45, and they had earned an average of 44 units.

By examining Illustration 1, it may be noted that students entering the program during the fall assumed a larger unit load during the regular school year than students who enrolled during one of the two summer programs.

ILLUSTRATION 1

SEMESTER STUDENT ENTERED PROGRAM	Units Attempted by CRP Students		
	Fall 1966	Spring 1967	Fall 1967
Summer 1966	30% took 8 units or less 50% took between 9-12 units 20% took more than 12 units	Same pattern	Same pattern
Fall 1966	20% took 8 units or less 50% took between 9-12 units 30% took more than 12 units	Same pattern	Same pattern except: 40% took more than 12 units
Summer 1967			44% took 8 units or less 40% took between 9-12 units 16% took more than 12 units

Obviously, the number of units attempted would be a function of how long the student has been in college. For example, 68 percent of the students who had attended college one or more terms prior to the summer of 1966 had attempted 46 units or more. Among students who entered during the summer of 1966, one-half had attempted 15 units or less; among fall 1966 registrants one-half had completed 23 units or less, and the majority of students who entered the program thereafter attempted less than 15 units. Essentially, persons entering the program during 1967 had completed the fewest units, while students who entered the program during the summer of 1966 had attempted fewer units than was expected. This could be related to the finding that as the student's SCAT total score increased, the probability of attempting more than twelve units during a semester also increased. Moreover, the total units attempted and completed in college was considerably higher for students who scored above the tenth percentile on SCAT than it was for students who scored below this point. It might also be pointed out that it is usually assumed that a student's grade point average can be increased if the number of units he attempts can be decreased. Generally, this asscumption was precisely the case for program students since their grades tended to improve as the unit load they carried decreased.

The meaning of the student's grade point average can also be examined in terms of the grade points he accumulates. Seventeen (or 6.6 percent) of the students had accumulated more than twelve grade points, forty-six (or 18 percent) had gained between one and twelve grade points, thirty-one (or 12 percent) had not gained or lost any grade points (a straight "C" average), 112 (or 44 percent) had lost between one and twelve grade points, and fifty (or 20 percent) had lost more than twelve grade points.

Carrying these findings one additional step, it was found that of students who entered prior to the summer of 1966, 52 percent had maintained a "C" average or better, 24 percent had lost between one and twelve grade points, and 24 percent had lost more than 12 grade points. Among students who enrolled during the summer of 1966, a "C" average had been maintained by 37 percent of the students, 34 percent had lost between one and twelve grade points, and 29 percent had lost more than twelve grade points.

These same relative proportions of students who lost or gained grade points were maintained by students who entered during each subsequent semester.

It was found that 42 percent of the students who had maintained a "C" average or above in high school were able to maintain a "C" average or better in their college work. At the same time, 29 percent of the students who had earned less than a "C" average in high school were able to earn a "C" average or better in college. Table VIII indicates that approximately 18 percent of the students with a "C" average or better in high school had lost more than 12 grade points in college, while 24 percent of those with less than a "C" average in high school lost more than 12 grade points in college. It was also noted that 71 percent of the students whose total SCAT score was under the tenth percentile lost grade points as compared to the performance of those students who placed in the higher percentiles on the School and College Ability Test. That is, only 64 percent of those between the eleventh and twenty-fifth percentile on SCAT lost grade points; 60 percent of those between the twenty-sixth and fiftieth percentile and 30 percent of those over the fiftieth percentile on SCAT lost grade points.

TABLE VIII - COLLEGE GRADE POINTS EARNED BY STUDENTS WITH ABOVE OR BELOW A "C" AVERAGE IN HIGH SCHOOL

COLLEGE GRADE POINTS EARNED	High School Grade Average: "C" or Above #	"C" or Above %	Below "C" #	Below "C" %
More than plus 12.5	13	11.6	1	0.9
Plus 0.5 to plus 12.0	26	23.2	15	13.9
0.0	8	7.1	15	13.9
Minus 0.5 to Minus 12.0	45	40.2	51	47.2
Minus 12.5 or worse	20	17.7	26	24.1
TOTAL	112	100	108	100

This study also sought to determine whether program students earned better grades during one semester than another, as well as how they performed during each semester they attended. Table IX shows that the grades of program students during both summers were approximately one-third A and B grades, 40 percent C grades during the first summer and 23 percent C grades during the second summer, and about 15 to 20 percent of the grades were F and W. During the subsequent fall semester, the proportion of A and B grades decreased by one-half, and the C and D grades tended to remain constant, but the number of F and W grades declined substantially during the following spring semester. During the subsequent fall semester 1967, the proportion of D or better grades tended to remain constant, the F grades increased, and the number of W grades decreased somewhat.

TABLE IX - THE PROPORTION OF LETTER GRADES EARNED EACH SEMESTER

LETTER GRADES	Summer # 1/	Summer %	Fall '66 # 1/	Fall '66 %	Spring '67 # 1/	Spring '67 %	Fall '67 # 1/	Fall '67 %
			SUMMER 1966 STUDENTS					
A & B	21	28.0	14	11.1	14	17.3	13	16.2
C	30	40.0	35	27.8	31	38.3	24	30.0
D	8	10.7	18	14.3	18	22.2	21	26.3
F	5	6.6	25	19.8	5	6.2	14	17.5
W	11	14.7	34	27.0	13	16.0	8	10.0
Total	75	100	126	100	81	100	80	100
			FALL 1966 STUDENTS					
A & B			38	21.3	32	21.6	21	16.2
C			55	30.9	44	29.7	48	36.9
D			39	21.9	29	19.6	33	25.4
F			26	14.6	16	10.8	13	10.0
W			20	11.3	27	18.3	15	11.5
Total			178	100	148	100	130	100
			SPRING 1967 STUDENTS					
A & B					11	28.9	2	5.7
C					11	28.9	17	48.6
D					9	23.7	5	14.3
F					1	2.6	4	11.4
W					3	7.9	7	20.0
Total					38	100	35	100
			SUMMER 1967 STUDENTS					
A & B	30	35.7					20	11.2
C	19	22.6					54	30.2
D	22	26.2					36	20.1
F	9	10.7					33	18.4
W	4	4.8					36	20.1
Total	84	100					179	100

1/ Number represents amount of letter grades not the number of students.

The letter grades earned by all students were related to their total School and College Ability Test scores. Table X shows that the proportion of A and B grades earned by students tended to increase as their scores increased. In fact, if one were to draw a line of regression through Table X, the slope of that line (or the correlation coefficient) would be .86, a figure which has statistical and practical significance. That is, the total SCAT score will not adequately predict grade point average, but it is a good indicator of the proportion of the student's letter grades which will be A, B, C, D, and F. For example, a student whose total SCAT score was between 11 and 25 could expect during his junior college attendance to earn one-fifth A and B grades, one-fifth D grades, one-third C grades, and one-fifth F or W grades.

TABLE X - TOTAL SCAT SCORES AND THE PROPORTION OF A & B GRADES EARNED BY PROGRAM STUDENTS

LETTER GRADES	SCAT Total Percentiles: 10th or Less #	%	11 - 25 #	%	26 - 50 #	%	51 or More #	%
A & B	136	17.6	61	20.9	56	23.1	58	42.6
C	232	30.2	105	36.0	103	42.6	46	33.9
D	146	18.9	62	21.2	37	15.3	15	11.0
F	114	14.8	28	9.6	24	9.9	6	4.4
W	143	18.5	36	12.3	22	9.1	11	8.1
Cumulative Total	771	100	292	100	242	100	136	100

Earlier in this report it was noted that program students who enrolled for the first time at College of San Mateo during the summer attempted eight or fewer units during that summer and earned higher grades during that summer than they did during any other term. However, it was found that of the total College Readiness Program student body, regardless of the time they entered, the proportion of A and B grades increased as the number of units attempted increased.

For example, Table XI illustrates that during the fall 1966 semester, students who attempted thirteen or more units had one-third of their letter grades in A's and B's, but students taking eight units or less had earned only 10 percent A and B grades. This same relative pattern of proportions was repeated during the summer and fall of 1967. Table XI also illustrates that the proportion of W grades among students who attempted eight or fewer units was considerably higher than the proportion of W grades among students who took more than eight units.

TABLE XI - THE INFLUENCE OF UNITS ATTEMPTED ON LETTER GRADES FALL 1966 SEMESTER

LETTER GRADES	Units Attempted: 8 or Less #	%	9 - 12 #	%	13 or More #	%
A & B	8	9.8	33	17.6	70	37.4
C	12	14.5	64	34.0	67	35.9
D	8	9.8	40	21.3	26	13.9
F	14	17.1	28	14.9	17	9.1
W	40	48.8	23	12.2	7	3.7
TOTAL	82	100	188	100	187	100

At the same time, the differences in terms of F or D grades were much smaller although the trend did exist. Moreover, if one controls (removes the influence of) the W grades, there are no real differences between the proportion of C and D grades earned by students who take less than eight units and students who take more than eight units. However, the students who took less than eight units earned significantly less A and B grades (19 percent) and more F grades (33.4 percent) than the other students, who were able to earn 39 percent A and B grades and 9.4 percent F grades.

Another aspect of the grades earned by College Readiness Program students was their performance in specific classes. However, because of the large variety of classes selected and the low number of students who took any one type of class, it was decided that only the grades in English classes would be studied. It was found that 95 percent of the program students had enrolled in an English class. Sixty percent took English 50A, nineteen percent took English A, and twenty-one percent took English 1A. It was also noted that 75 percent of the students who scored below the 26th percentile on the SCAT verbal test were placed in English 50A, while 43 percent of those who placed in English A scored below the 26th percentile as did 40 percent of those placed in English 1A. Conversely, two percent of those who scored above the 50th percentile on the verbal SCAT test were placed in English 50A, while 25 percent of those going to English A scored above the 50th percentile as did the 44 percent of those who were placed in English 1A. Students scoring below the 26th percentile were usually placed in English 50A; those who scored between the 26th and 50th percentile placed in English A, generally; and those who scored between the 51st and 75th percentile placed in either English A or 1A; in general those who scored above the 75th percentile placed in English 1A. However, there were enough individual exceptions to these guidelines it was apparent that factors other than the student's verbal score must have influenced the decision regarding placement in English classes.

The next logical question was: What grades did program students receive in the English classes in which they were placed? It was found that 11.4 percent of the students received a B grade, 41.5 percent received a C grade, 16.7 percent a D grade, 7.7 percent an F grade, and 22.7 percent received a W grade. These proportions suggest a grade curve skewed to the right or toward the lower letter grades. An examination of Figure A indicates that program students received fewer A and B grades than the proportion of A and B grades earned by all College of San Mateo students. The differences between the program students and all students in the percentage of C grades for classes in English A and 50A were insignificant.[1] However, program students received significantly fewer C grades in English 1A than did all College of San Mateo students. Conversely, program students received more D grades in English 1A than

1 For all significant items noted in this report $p < .01$

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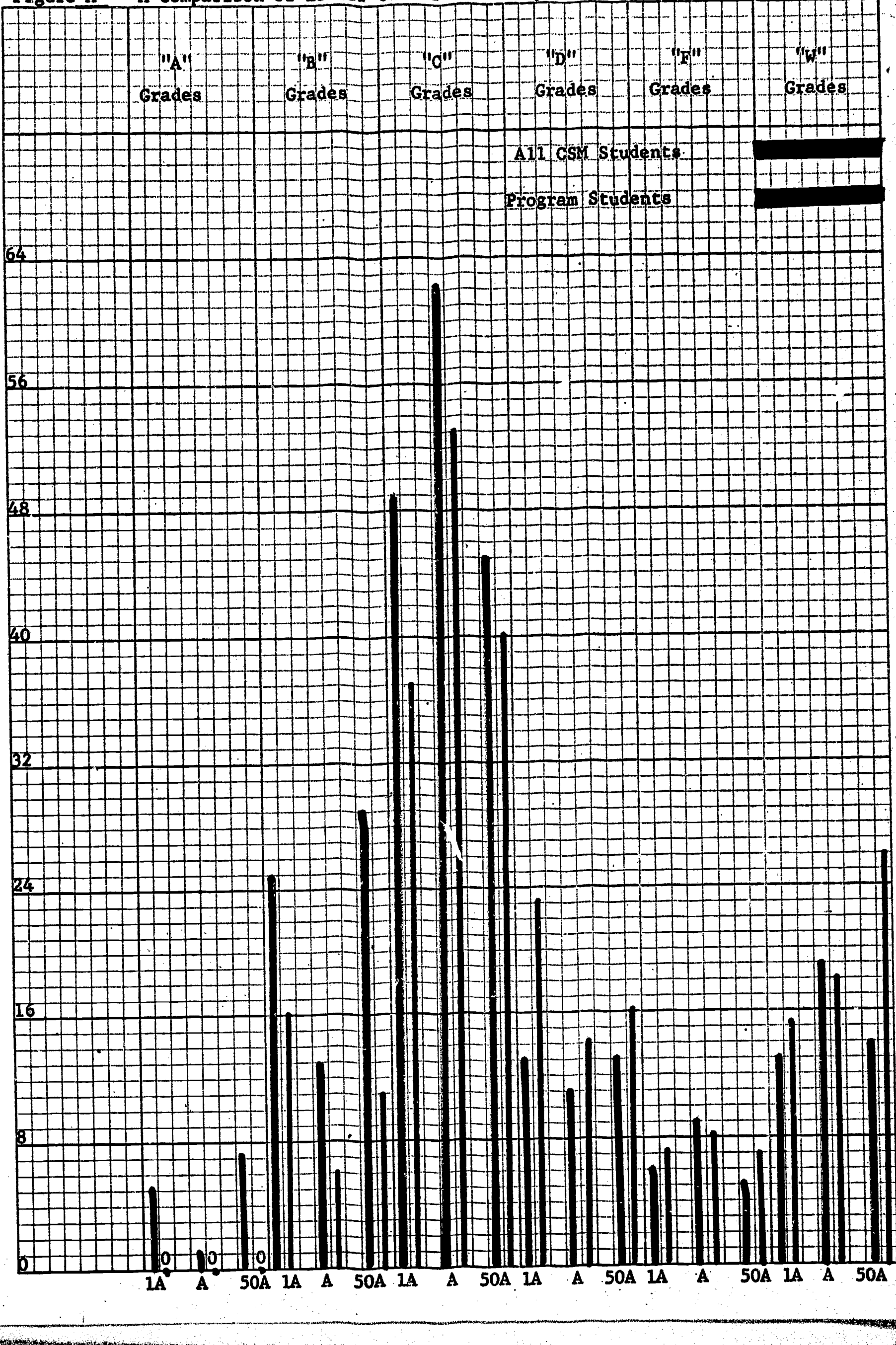
Figure A - A Comparison of Letter Grades Earned by Program and All CSM Students



8 Squares
Inch

the proportion of D grades earned by all College of San Mateo students, while there were no differences between the two groups in the percentage of D grades received in English A and 50A. It was found that the program students received the same proportion of F grades as did the composite of all College of San Mateo students. It was also noted that program students were more likely to withdraw from English 50 A than were the composite of all College of San Mateo students, but there were no differences between the two groups in terms of withdrawal performance in English A and 1A.

Students serving as tutors in the program were found to have much higher grades in English classes. Through Table XII it was noted that eight tutors had not taken English classes when the study was conducted. In addition, it was found that 15.2 percent had taken English 50A, 49.4 percent had taken English A, and 35.4 percent had taken English 1A. Forty-four percent of the tutors received a B grade or better, and 12 percent had received W grades. In effect, approximately 70 percent of the tutors had received C grades or better in English.

TABLE XII - LETTER GRADES RECEIVED BY STUDENT TUTORS IN ENGLISH

	Classes					
	English 50A		English A		English 1A	
GRADES	#	%	#	%	#	%
A	1	8.3	2	5.1	4	14.3
B	7	58.3	9	23.1	12	42.9
C	4	33.3	19	48.7	6	21.4
D	-	-	2	5.1	1	3.6
F	-	-	1	2.6	1	3.6
W	-	-	6	15.4	4	14.3
Total	12	100	39	100	28	100

Many factors could be studied in an attempt to explain the program students' English grading achievements. For example, previous findings indicated that a student's SCAT scores were not stable predictors of ability.

At the same time, extremely low scores (below the 10th percentile) and high scores (above the 50th percentile) were indicative of a student's probable performance. Table XIII shows that students who scored below the 10th percentile on the School and College Ability Test (SCAT) were twice as likely to earn an F or D grade as they were a C or B grade. However, students who scored between the eleventh and twenty-fifth percentiles were just as likely to earn a B as they were an F. In effect, this percentage range was not predictive. On the other hand, students who earned a verbal score above the 25th percentile were more likely to earn a C or B grade than they were a D or F grade.

TABLE XIII - STUDENT VERBAL ABILITY AND HIS ENGLISH GRADE

	SCAT Verbal Percentiles									
	10th or Below		11 - 25		26 - 50		51st or Better		TOTAL	
ENGLISH GRADES	#	%	#	%	#	%	#	%	#	%
B	9	32.2	8	28.5	6	21.4	5	17.9	28	100
C	37	36.3	26	25.5	22	21.5	17	16.7	102	100
D	23	56.1	10	24.4	4	9.8	4	9.7	41	100
F	10	55.6	4	22.2	1	5.5	3	16.7	18	100
W	29	51.8	10	17.9	11	19.6	6	10.7	56	100

Among students who served as tutors, the findings were somewhat different; for example, tutors who scored in the low percentiles (50th percentile and below) were as likely to receive an A grade as they were a B or C grade. But those scoring at the 51st percentile to the 75th percentile tended to earn C or D grades, and those scoring above the 75th percentile earned A or B grades. These findings suggest that the verbal portion of the SCAT does not adequately predict the tutor's grade in English if the score is under the 50th percentile. In fact, this was also the case for the total SCAT score.

If the verbal subtest was higher than the 50th percentile, the School and College Ability Test predicted tutor performance more accurately but in an unexpected way. Students who scored above the 75th percentile tended to earn A or B grades, but students scoring between the 50th and 75th percentiles tended to earn C or D grades. One might speculate that the tutor with high verbal ability found that the English course was not too difficult; the tutor with lower verbal ability could work and earn the grade he chose, while the tutor with mid-verbal ability (50th to 75th percentile score) was able to avoid F grades, but apparently they did not expend the effort needed to earn an A or B grade. If this conjecture seems plausible, a further inquiry by the English Division could explore means for overcoming the lack of effort expended by some student tutors.

Another question on why program students earned certain English grades is: Did students who chose to take the Reading Laboratory perform differently than those who did not take the Laboratory? Through Table XIV it may be seen that 13 percent of the students had completed the Reading Laboratory. Seven percent took it but did not complete, while 80 percent did not choose to take the Reading Laboratory. Because the number of students who completed the Reading Laboratory was so few, the findings that follow must be considered highly tentative. They may indicate general trends, but such a contention lacks adequate support at this time.

TABLE XIV - ENGLISH GRADES OF STUDENTS WHO TOOK THE READING LABORATORY

ENGLISH GRADES	Reading Lab Participation: Completed #	Completed %	Incomplete #	Incomplete %	Did Not Attend #	Did Not Attend %
B	3	9.4	3	17.7	22	12.9
C	19	59.4	4	23.6	80	46.8
D	4	12.5	2	11.8	35	20.5
F	5	15.6	4	23.5	10	5.8
W	1	3.1	4	23.5	24	14.0
Total	32	100	17	100	171	100

A student's cumulative grade point average was not clearly related to whether or not he had completed the Reading Laboratory, with one exception. The proportion of students who earned under 1.0 GPA and had taken the Reading Lab was three to ten times lower than the proportion of students who did not have the Reading Lab or failed to complete it. It would appear that the Reading Laboratory experience clearly helps the student who is earning less than a 1.5 GPA to move closer to the 2.0 average, but the grade point averages of students who earned above 1.5 average cannot be clearly related to their participation in the Reading Laboratory. The proportion of students who received a B English grade was the same whether they took the Lab or did not take the Reading Lab. The proportion of students who received an English grade of C was highest among those students who had completed the Reading Laboratory. Among the D English grades, the students who did not take the Reading Laboratory were represented in the largest proportion. At the same time, F or W English grades were more likely for those who started the Laboratory but did not complete. Incidentally, it was noted that none of the students who were identified as tutors at the time the study was conducted had completed the Reading Laboratory.

An examination of the School and College Ability Test verbal scores and whether the student took the Reading Laboratory indicated that students who scored in the 26th to 50th percentile range were the most likely to choose the Lab. It would seem that students with lower verbal abilities tended to avoid the Lab, perhaps viewing it as remedial, and thus relating it to previous unsatisfactory and unproductive experiences in high school.

Apparently, a relatively low number of students elected to take the Reading Laboratory, and participation in the Lab did not appear to be strongly related to an improvement in a student's English grade. This raised the question of just how much change were program students able to achieve during the eight-week session. It was found that 40 percent of those whose vocabulary was less than an eighth grade level when they began the Laboratory finished at the same level and 60 percent advanced approximately one year. This was also true of the students' comprehension grade

level. The increase in reading speed was more dramatic since almost every student (78 percent) advanced one to four years in eight weeks. Similar findings were noted for students who entered the Reading Laboratory with better than an eighth grade ability; that is, about 55 to 60 percent of the students gained approximately one year in vocabulary, comprehension, and total reading grade levels.

Table XV depicts that gains generally exceeded losses within each subtest conducted by the Reading Laboratory staff. However, students who gained less than one-half year made the most progress in terms of their vocabulary, while those who gained one to two grade levels increased their comprehension and total scores. Students who advanced two years or more made the largest gains in speed and comprehension. Students who made very little gain tended to advance in vocabulary only, and those who made the largest advances tended to increase their speed and comprehension reading abilities.

TABLE XV - CHANGES IN READING GRADE LEVELS

Change In Years	Subtests: Vocabulary #	Vocabulary %	Comprehension #	Comprehension %	Total #	Total %	Speed #	Speed %
GAINS								
Less than 1/2 Year	7	25.0	5	20.8	11	42.4	4	12.9
1/2 to 1 Year	8	28.6	2	8.3	1	3.8	2	6.5
1 to 2 years	7	25.0	9	37.6	9	34.6	4	12.9
2 years or more	6	21.4	8	33.3	5	19.2	21	67.7
Total	28	100	24	100	26	100	31	100
LOSSES								
Less than 1/2 year	4	50.0	3	27.3	6	66.7	3	60.0
1/2 to 1 Year	2	25.0	-	--	2	22.2	1	20.0
1 to 2 years	1	12.5	5	45.4	1	11.1	1	20.0
2 years or more	1	12.5	3	27.3	-	--	-	--
Total	8	100	11	100	9	100	5	100

The mean gain in vocabulary for all students who made a gain was 1.1 years, the gain in comprehension averaged 1.4 years, the total gain was an average of 1.1 years, and the speed average gain was 1.7 years. Reading subtest losses were registered by fewer students, and the losses (vocabulary equaled -0.8, comprehension equaled -1.3, the total equaled -0.6, and speed equaled -0.7) were approximately one-half that of the gains. On the whole, however, it was found that students gained two-thirds of a year in vocabulary skills, one-half year in comprehension, three-fourths of a year in their total reading score, and 1.3 years in reading speed after completing an eight-week session in the Reading Laboratory.

CONCLUSIONS

1. There were 343 students and student tutors who took part in the College Readiness Program. One-fifth of these students attended the College of San Mateo for one or more semesters before the program was initiated in the summer of 1966. Moreover, it was found that many of these students had attended the College for one or more terms, had withdrawn, enrolled again, and again withdrew. Thus, the exact number of students that the program has attracted cannot be fixed precisely. Who can say which of these former students would have returned and stayed even if there had been no program? In any event, 256 students and 87 tutors took part in the program and college classes.

2. There were 253 students and tutors enrolled in the day program during the fall semester of 1967. Based upon the first two summer programs, it would appear that three out of every four students could be expected to enroll during the following fall semester. Generally, students tend to remain in the College program for one full school year, but those with the lowest measured aptitude will remain the shortest length of time. At the same time, the primary reason for leaving can be attributed to academic difficulties in only one case in five.

The student who withdraws and does not continue his education

at another institution is usually facing several problems. The most pressing of these for one out of four students is a financial problem. The need for additional or perhaps more realistic financial support for program students is obvious. In fact, additional financial support alone could reduce the 25 percent dropout rate by one-fourth. A host of family, health, and legal problems serve as the basis for approximately one-half of the student withdrawals.

3. About 95 percent of the program students are Negroes, 4 percent are Caucasian, and one student is from the oriental race. Sixty percent are males, 40 percent are females. About 80 percent are single, and 20 percent are married. One in five students and tutors have attended another college. One fourth of the students are in their teens, two-thirds are between twenty and twenty-five years of age, and one in ten is between twenty-six and thirty-eight years of age.

Two out of every five students have not identified a specific major; ninety percent of those students who have selected a major indicated an academic or transfer goal. The major in Liberal Arts was chosen by 12.5 percent of all program students, 8.9 percent selected Business, 4.2 percent, Psychology; 3.6 percent, Aeronatuics; 3 percent, Political Science; 3.3 percent, Manufacturing Technology; 3 percent, Art; 3 percent, Sociology, and 3 percent chose Education as a major. The remaining students selected transfer majors in nearly every field provided by the College of San Mateo.

4. The standard error associated with a given School and College Ability Test (SCAT) score is so large, the student's actual score, based on an infinite number of re-tests, could be expected to change upward or downward by twenty points. Thus, in attempting to predict college grade point average from the SCAT score, one could account for only a small portion of the variance. On the other hand, the SCAT scores earned by tutors were much more stable. Each component of their SCAT score was generally twice as high as that earned by other students, while the

measured verbal ability increased in a corresponding fashion; that is, tutors had a much higher verbal ability than other program students. This would suggest that a score above the 25th percentile on SCAT can provide a much more accurate reflection of a student's potential than scores below the 25th percentile.

5. The performance of program students in high school can generally be described by C or D letter grades, but the tutors earned approximately one letter grade better in high school. On the average, both students and tutors could be expected to maintain the same grade point average in their college work as they had maintained in high school. However, this generalization ignores the considerable variation among students, which is noted in the findings. For example, the correlation between high school and college grade point average was only .36 -- positive, but hardly meaningful. Some students will increase a full grade point and others will decrease a full grade point. If a prediction of college grade point average is desired, the high school grade point average is of some value, but one can expect to be wrong as often as he is right.

6. Students who score below the 25th percentile on the School and College Ability Test in either the verbal or total sections are very likely to be unable to maintain a 2.0 college grade point average. Those who score below the tenth percentile have about one chance in five of keeping up a C average or better. Students, in general, who score below the tenth percentile are even more unlikely to maintain a C average. It should be noted also that the college grade point averages of students who attended one of the summer session programs are about the same as those students who enrolled during other semesters.

7. Students who enroll in the summer programs take less than eight units during the summer, while three-fourths will take 12 or less units during the subsequent semesters in which they enroll. Students who enter during the fall or spring will attempt three to four units more during the first term of their attendance than the summer program students attempt. In addition, the number of units a student attempts can be

related to his score above the tenth percentile on the School and College Ability Test. That is, units increase as the score increases. Thus, it would appear that the motivation or academic talent of the student who enters the program during the summer is below that of the program student who enrolls in the fall or spring semesters. That is not to say they perform in an inferior manner but rather, they attempt less course work. It may be generally stated that students who take eight or fewer units during the fall and/or spring semesters will earn considerably fewer A and B grades than students who attempt more than eight units.

8. On the basis of grade points gained or lost, two out of every five program students would be on academic probation, if such a status existed at College of San Mateo, because the cumulative total of grade points was down one to eleven grade points. One student in five was in danger of being disqualified or dismissed (down twelve or more grade points). Using this same rationale, 34 percent of the summer 1966 entrants would be on probation, while 29 percent would be in the category of disqualified or dismissed. This is generally true of students who entered during other terms, except fewer were in danger of being dismissed or disqualified. Students who had maintained a C average in high school are more likely to gain grade points than students who had not been able to keep up a C average in high school. At the same time, 29 percent of the students with less than a C average in high school can maintain a C average or better in college. The high school grade point average is not an adequate criterion in itself for predicting college performance. If, however, high school grade point average and a total SCAT score in the tenth percentile or less were combined, a much more accurate prediction of college performance could be made.

9. Program students earn higher letter grades during the summer sessions than they do during the subsequent semesters. However, after the initial decline, there is a gradual increase from one semester to the next in the proportion of higher letter grades. This is probably due to the withdrawal of students who do not perform well, the improved performance of students who do remain as well as the method used to place

students in particular classes. It should be noted that during the second semester of attendance the proportion of W grades will increase dramatically and then decrease just as dramatically during the semesters that follow. It would appear that program students become more persistent in their effort to complete a course once they have enrolled, or perhaps they are able to make better choices to result in a reduction of W grades.

If one took into consideration all of the letter grades a student might earn while attending the College of San Mateo, it would appear that the percentage of all these grades that would be A grades (or for that matter, F grades) could be related directly to his total SCAT score. As his SCAT score increases, so will the percentage of A and B grades also increase. This relationship is not perfect by any means, but over a period of several semesters a reasonably accurate indication of how the student will perform was apparent. However, a change in curricular emphasis, instructional techniques, tutor selection, or program methodology, in general, could change future patterns.

10. In general, program students earn fewer A and B grades in English 1A, A, or 50A than the proportionate amount of these grades earned by the total student body at College of San Mateo. However, they earn the same proportion of C and D grades in English 50A and A as all College of San Mateo students, fewer C grades in English 1A, and proportionately more D grades in English 1A. There are no meaningful differences in the number of F grades earned by program students and all College of San Mateo students. Program students withdraw from English 50A at a greater rate than do all College of San Mateo students, but there are no differences in the withdrawal rates between the two groups for English A or 1A. It may also be anticipated that a program student who scores below the tenth percentile on the verbal portion of SCAT is more likely to earn an F or D grade than he is a C or B grade. Other than this, the SCAT verbal score does not adequately provide a meaningful indication of the student's performance in English.

11. Conclusions relative to the program students' participation in the Reading Laboratory must be considered tentative because of the small number of students who completed the Reading Laboratory. Students who completed the Lab tended to receive a higher proportion of C grades in English than students who did not take the Laboratory, but there were no real differences between the two groups in relation to other letter grades. The study findings do suggest, however, that taking the Reading Laboratory can benefit the student with a low grade point average (below 1.5) to move closer to a grade point average of 2.0. Students with the lowest verbal scores were very unlikely to take and complete the Reading Laboratory; and as was pointed out earlier, they are inclined to earned lower grade point averages.

It can be said that among those students who did complete the eight-week Reading Laboratory advanced their vocabulary skills by one grade level, comprehension by one-half a grade level, and reading speed by 1.3 grade levels. In effect, most students increased their reading ability, but the gains were generally quite small. Students whose reading level is between the eighth and twelfth grades before taking the Lab can be expected to make the greatest gains.

12. Finally, the need to continue this program cannot and is not in doubt. Moreover, the fact that junior colleges are well suited to making a significant contribution to solving the inequities suffered by the minority students is well established. At the same time, this study clearly indicates that much more needs to be done at College of San Mateo if any real impact is to be achieved. The need for additional resources (financial, staff, and facilities) seems quite clear as does the need to examine carefully program philosophy, methods, and techniques for ways and means to improve the effectiveness of the College Readiness Program.

RECOMMENDATIONS

The comments that follow represent the researcher's point of view and may or may not be supported by the Evaluation Committee or the College Readiness Program students and staff. It is intended that these recommendations will provide a point of departure for dialogue and planning to further improve the College Readiness Program.

A. The commitment of resources to the College Readiness Program is generally inadequate. Considering the limited financing, staffing, and time available to the program, one must conclude that the progress made to date is quite remarkable. At this time planning, in-house evaluation, developing new approaches, and strengthening current techniques receive a minimal amount of attention since the program is continually struggling with a series of crises. The findings clearly indicate that the College Readiness Program has not found the "best way" nor is it maintaining the status quo in seeking to meet its goals. Progress by the program will continue to be slow and at times, haphazard until a substantial commitment of staff and dollars is made by the College of San Mateo.

B. The academic performance of College Readiness Program students is not such that transfer to a four-year institution can be readily achieved by all program students, yet most of the program students are pursuing a non-occupationally oriented curriculum. Some will be successful, but how realistic such a choice may be for a number of students is certainly open to question. It is suggested that additional effort be given to assisting students to consider non-transfer choices as a perfectly proper means of achieving equal opportunity. In addition, existing curricula should be modified, if necessary, or additional programs should be developed that will provide students with a marketable skill upon leaving the college.

In planning such programsit is assumed that consideration will be given to the social impact they may have on the black community as well as the economic impact. In fact, considerable attention should be given to programs that allow horizontal and vertical occupational movement -- general as well as specific preparation.

C. The program serves the black students primarily, yet the need for educational opportunities is just as critical for other minority groups not currently served by the educational programs at College of San Mateo. It is recommended that the college commit the necessary resources to involve other minority students in educational programs at the college.

D. Generally, the placement of students in given curricula or courses cannot be accomplished adequately on the basis of the College and School Ability Tests (SCAT) scores or high school performance. At the same time, the prognosis for students who performed poorly in these areas is not encouraging. It is suggested that students with a SCAT score below the 25th percentile or with less than 1.5 grade point average in high school enroll in a limited or special program in which their capabilities and motivation can be assessed. These performance ratings should be considered as indicators and not rigid guidelines.

E. The purpose and function of the summer program should be examined carefully since, as it is presently constituted, the advantages it may provide over enrolling during the fall or spring semesters are not apparent. The rate of withdrawal and the academic achievement of those who enroll during the summer is no better or no worse than that of students who enroll during other semesters. It may be appropriate to determine the type of student who can best profit from a head start -- the needs and problems of such students, and then design a summer program which will meet those needs and problems.

F. The performance of program students in English classes is clearly below that achieved by the general student body at College of San Mateo. In some instances this can be related to verbal ability, as measured by the School and College Ability Test, while in others it seems to be related to the level of the English course. The performance of some students was apparently related to factors not included in the study. Recognizing the basic affect that a student's performance in English can have on his performance in other classes, plus the variable performance in English, the need to consider additional programs or techniques seems apparent. Areas that could be considered include the Reading Laboratory, other instructional methods or approaches, as well as increased emphasis on English skills in other classes. In any event, the need for an on-going common involvement of the English Division and the College Readiness Program to examine placement, curriculum, and instruction seems apparent.

G. The abilities and academic performance of some students serving as program tutors cannot be described as either consistent or particularly outstanding. It would appear that a specified set of common criteria for tutors should be developed, implemented, and then studied to determine their adequacy. Obviously, such a delineation would include personal attributes as well as academic qualifications.

H. The College Readiness Program is providing a model for other institutions of higher education to emulate. This is not to suggest that the current program can be simply duplicated at various sites throughout the nation. Experience has promoted the identification of principles, values, and procedures that can promote the effectiveness of a program for minority students at college. It would now seem appropriate that a series of studies be designed to assess the effectiveness of various methods, techniques, and approaches to meeting the needs of

black students. The need to clearly delimit what works and what does not work as well as the conditions under which it works is in distinct demand for the College of San Mateo and the nation. Rapid progress toward the goal, "equal opportunity of choice" will require that we build and extend our knowledge through planning, implementation, and evaluation.