This report offers an objective analysis of persistence, performance, and costs of the Extended Opportunity Services Program for minority and low-income students at Santa Barbara Community College during the fall 1970 semester. The program includes tutorial services, recruiting and special counseling, and direct student financial aid from state (Senate Bill 164) and federal sources. The research topics that formed the basis for evaluation of 152 students were: units completed by tutored students; grade point average for tutored students; measured ability of tutored students as reflected by SCAT test scores; compared performance of tutored vs. non-tutored students in English 42 and Math 1; performance of tutored students, cross-tabulated by race; and performance of students receiving financial aid from Senate Bill 164 funds only. The value of this program cannot be determined entirely on an objective basis and the author, therefore, includes a statement of SBCC's concerns as an institution. (CA)
AN EVALUATION OF EXTENDED OPPORTUNITY SERVICES (SB164)  

at  
SANTA BARBARA CITY COLLEGE  
FALL SEMESTER, 1970
AN EVALUATION OF EXTENDED OPPORTUNITY SERVICES (SB164)
at
SANTA BARBARA CITY COLLEGE
Fall Semester, 1970

Background

Santa Barbara City College has been conducting a series of studies to ascertain special needs among minority and low income students. Making use of the findings of a cooperative research project in Northern California, SBCC identified 78 potential dropouts prior to the beginning of the Fall, 1970 semester. Fifty-five percent of the students thus identified either failed to enter, withdrew, or were on academic probation at the end of their first semester. An additional ten percent completed six or fewer units. The important point is not the history of these students, but the general characteristics associated with individual attrition. These characteristics were:

1) Ability is the key factor in the prediction of attrition, when grouped by sex; low ability males are three times likelier to withdraw than low ability females.

2) The potential dropout is likely to have less perceived parental encouragement for college.

3) The potential dropout shows a lower sense of importance of college to him.

4) The potential dropout is likely to have lower educational aspirations than the persister.

5) Race is a factor in attrition: Minority students are likelier to withdraw than the caucasian majority. (MacMillan, 1970)

During the past three semesters, SBCC has made an effort to respond to the special needs of low income minority students by seeking funding under Senate Bill 164 for Extended Opportunities Programs and Services. Two previous reports have been written on the effectiveness of the tutorial center and the Summer Readiness Program during the Spring and Summer 1970 sessions.

The current report deals with the effectiveness of the EOPS program funded under state resources for Fall, 1970. As described to the State, the program included the following:

A. Tutorial services are provided for all qualified students in a ratio of 1 tutor to 3 students. All academic subject areas are covered, with special emphasis on English and Math skills.

Recruiting and special counseling for students with special needs is provided, both by the counseling staff, and by student organizations such as MECHA and BSU.
B. Direct student financial aid is provided through a "packaged" program combining resources from both state and federal sources, including EOPS.

A total of $30,300 was received from the State for the 1970-71 academic year, including $18,000 for direct EOPS grants to students; $2,300 for related clerical tasks associated with the program; and 10,000 for tutorial salaries.

The research questions listed below are intended to provide data on the basis of which an evaluation of the effectiveness of the use of these State funds might be made.

Research Questions:

1. How many units were completed by tutored students during the Fall 1970 semester?

2. What was the semester grade point average for tutored students for the Fall, 1970 semester?

3. What was the measured ability of tutored students, as reflected in SCAT test data?

4. What was the performance of tutored vs non-tutored students in English 42?

5. What was the performance of tutored vs non-tutored students in Math 1?

6. What was the performance of tutored students, crosstabulated by race?

7. What was the performance of students receiving financial aid from SB164 funds only?

Question 1: How many units were completed by tutored students during the Fall, 1970 semester?
Table 1
Number of Units Completed:
124 Tutored Students
Fall, 1970 SBCC

<table>
<thead>
<tr>
<th>Units Completed</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>19</td>
<td>15.3%</td>
</tr>
<tr>
<td>.5-6.0</td>
<td>16</td>
<td>12.9%</td>
</tr>
<tr>
<td>6.5-9.0</td>
<td>23</td>
<td>18.5%</td>
</tr>
<tr>
<td>9.5-12.0</td>
<td>27</td>
<td>21.9%</td>
</tr>
<tr>
<td>12.5-15.0</td>
<td>23</td>
<td>18.5%</td>
</tr>
<tr>
<td>15.5 or More</td>
<td>16</td>
<td>12.9%</td>
</tr>
</tbody>
</table>

Mean (for all completing over 0 units) = 8.97 units

Persistence of 124 Tutored Students: 84.7%

Comment:

The data in Table 1 show that 53.3% of the students receiving tutorial assistance completed fewer than 12 units during the Fall, 1970 semester. In context of the general student characteristics for all Day and Concurrent students, this figure is not inconsistent: 52.2% of all students attempted fewer than 12 units, a figure which parallels the pattern for tutored students almost identically. The comparison further verifies that individual course attrition for students with special needs is of no greater magnitude than for the general student population.

The data in Table 1 also show persistence figures for tutored students. At the February, 1971 meeting of the Board of Governors, the statewide persistence for 8,854 students in 46 programs was 85%. It is of note that the SBCC tutorial program resulted in exactly this level of persistence.

Question 2: What was the semester grade point average for tutored students for the Fall, 1970 semester?

Table 2
Semester GPA:
124 Tutored Students:
Fall 1970 SBCC

<table>
<thead>
<tr>
<th>Grade Point</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (Withdrew)</td>
<td>19</td>
<td>15.3%</td>
</tr>
<tr>
<td>Under 1.49</td>
<td>5</td>
<td>4.03%</td>
</tr>
<tr>
<td>1.50-1.99</td>
<td>11</td>
<td>8.78%</td>
</tr>
<tr>
<td>2.00-2.49</td>
<td>34</td>
<td>27.42%</td>
</tr>
<tr>
<td>2.50-2.99</td>
<td>21</td>
<td>16.93%</td>
</tr>
<tr>
<td>3.00-3.49</td>
<td>26</td>
<td>20.97%</td>
</tr>
<tr>
<td>3.50 +</td>
<td>8</td>
<td>6.48%</td>
</tr>
</tbody>
</table>

Mean (105 Persisting Students) = 2.56
Comment:

The data in Table 2 show that 65.70% of all tutored students achieved a grade point average of 2.00 or above. If the 105 persisting students are considered separately, the figure is 84.76%. Thus combining the data, it is clear that the tutorial service was instrumental in bringing 85 percent of the students served to a level of learning reflecting 85 percent acceptable mastery of course content.

Question 3: What was the measured ability of tutored students, as reflected in SCAT scores?

Table 3
Percentile Rank
Distribution of SCAT - V Scores:
94 Tutored Students
Fall, 1970 SBCC

<table>
<thead>
<tr>
<th></th>
<th>01-24</th>
<th>25-49</th>
<th>50-74</th>
<th>75-99</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>47</td>
<td>22</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>%</td>
<td>50.54%</td>
<td>23.65%</td>
<td>7.53%</td>
<td>18.28%</td>
</tr>
</tbody>
</table>

Mean (N=94): 35.67 percentile
S.D.: 27.09

Table 4
Percentile Rank
Distribution of SCAT-Q Scores
94 Tutored Students
Fall, 1970 SBCC

<table>
<thead>
<tr>
<th></th>
<th>0-24</th>
<th>25-49</th>
<th>50-74</th>
<th>75-99</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>69</td>
<td>16</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>%</td>
<td>73.40%</td>
<td>17.02%</td>
<td>5.32%</td>
<td>4.26%</td>
</tr>
</tbody>
</table>

Mean (N = 94): 22.53 percentile
S.D.: 18.76
Table 5  
Percentile Rank  
Distribution of SCAT-T Scores:  
94 Tutored Students  
Fall, 1970  
SBCC

<table>
<thead>
<tr>
<th>Percentile Range</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 24</td>
<td>62</td>
<td>65.96%</td>
</tr>
<tr>
<td>25 - 49</td>
<td>17</td>
<td>18.08%</td>
</tr>
<tr>
<td>50 - 74</td>
<td>10</td>
<td>10.64%</td>
</tr>
<tr>
<td>75 - 99</td>
<td>5</td>
<td>5.32%</td>
</tr>
</tbody>
</table>

Mean (N = 94): 26.86 percentile  
S.D.: 20.36

Comment:

SCAT test data were available for 94 of the 124 students receiving tutorial assistance. The data in Tables 3, 4 and 5 illustrate that 50-54% of the students were below the 25th percentile rank in measured verbal ability; 73.40% in measured quantitative ability, and 65.96% for the composite measure of ability.

These figures may also be placed in the context of a comparison of 1968 and 1970 SCAT test performance among SBCC entering students. A recent study showed the following 1970 mean score profile for 185 entering students:

- SCAT-V: 43rd percentile
- SCAT-Q: 31st percentile
- SCAT-T: 37th percentile

On each measure, the tutored students showed a pattern of measured ability between 8 and 10 percentile points below the total sample of 1970 entrants.

The data in Tables 3, 4, and 5 also show that tutoring service was available to students other than those with low measured ability, although the clear impact of the service was on the least talented academically, as measured by SCAT. The funding of 85 percent persistence and 85 percent satisfactory performance needs to be understood in light of the measured differences in academic aptitude for the students receiving tutorial assistance.
Question 4: What was the performance of tutored and non-tutored students in English 42?

Table 6
Distribution of Grades in English 42: 28 Tutored VS 231 Total Enrollment

<table>
<thead>
<tr>
<th></th>
<th>A, B, or C</th>
<th>D of F</th>
<th>I or E</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Tutored</td>
<td>16</td>
<td>57.14%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>All</td>
<td>109</td>
<td>47.20%</td>
<td>2</td>
<td>.90%</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>28.58%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comment:

Although tutoring was available to all students enrolled in English 42, it was on an entirely voluntary basis, so only those students who were assigned a regular tutor for a sustained period were counted as having been given tutorial assistance; the drop-in student who used the service on an irregular basis was not assumed to have benefited from the service.

The comparison in Table 6 speaks for itself. Nearly a ten percent greater proportion of achievement grades were awarded to tutored students, and nearly twenty percent fewer withdrew from the course.

The attrition from English 42 for all students (47.20%) may be compared with an English department pattern of 29% for all courses offered in English. Given the comparison, it may be that a more structured assignment of students to tutored labs in English 42 would be desirable. This would be particularly true if the English 42 class were to be included in the district program of coordinated instructional systems, since more specific accounting procedures for the non-certificated tutorial service to this class would be required.

The evidence further suggests that the clear gains in persistence and performance for tutored students may justify requiring a more formal and regular assignment of all students to tutorial services during English 42 lab periods.
Question 5: What was the performance of tutored vs non-tutored students in Math 1?

Table 7
Distribution of Math 1 Grades:
45 Tutored vs 619 Total
Number of Students enrolled as of the Fourth Week, Fall 1970, SBCC

<table>
<thead>
<tr>
<th></th>
<th>A, B, C</th>
<th>D, F</th>
<th>I or E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Tutored</td>
<td>24</td>
<td>55.81%</td>
<td>ø</td>
</tr>
<tr>
<td>All</td>
<td>259</td>
<td>41.18%</td>
<td>ø</td>
</tr>
</tbody>
</table>

(14.63) (18.75)

Comment

As in the case of English 42, there was a measurable difference in both persistence and performance for tutored vs non-tutored students in Math 1. A fifteen percent greater proportion showed achievement grades, and nearly twenty percent fewer withdrew.

The persistence of Math 1 students may be compared with Math Department attrition of 40% for all math courses in the Fall, 1970. It is noteworthy that the tutored students showed persistence above the departmental level. At the same time, an attrition rate of 55.96% for all Math 1 students suggests that, as in the case of English 42, a more formal assignment of students to lab tutors may be desirable.

Question 6: What was the performance of tutored students, crosstabulated by race?
### Table 8
Racial Distribution and GPA:
124 Tutored Students

<table>
<thead>
<tr>
<th>Race</th>
<th>N</th>
<th>MEAN GPA</th>
<th>NW</th>
<th>% W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo</td>
<td>47</td>
<td>2.61</td>
<td>6</td>
<td>11.32%</td>
</tr>
<tr>
<td>Chicano</td>
<td>32</td>
<td>2.23</td>
<td>8</td>
<td>20.00%</td>
</tr>
<tr>
<td>Black</td>
<td>13</td>
<td>2.18</td>
<td>3</td>
<td>18.75%</td>
</tr>
<tr>
<td>Foreign</td>
<td>6</td>
<td>2.66</td>
<td>2</td>
<td>25.00%</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>2.96</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>105</td>
<td>2.56</td>
<td>19</td>
<td>15.32%</td>
</tr>
</tbody>
</table>

**Comment:**

The distribution by race of tutored students may be compared with total student enrollment figures for Fall, 1970 day students:

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo</td>
<td>3,524</td>
<td>85.58</td>
</tr>
<tr>
<td>Chicano</td>
<td>336</td>
<td>8.16</td>
</tr>
<tr>
<td>Black</td>
<td>96</td>
<td>2.33</td>
</tr>
<tr>
<td>Other</td>
<td>162</td>
<td>3.93</td>
</tr>
</tbody>
</table>

That the particular needs of students of color are being met in part by the tutorial service is illustrated by comparison of racial distribution for the tutored group vs the total student body. That there is a need for further service and support for students of color may be inferred from the differences in attrition, by race. Although foreign students constituted a small fraction of the sample and should perhaps not have been included in the statistics, the clear differences among Chicano, Anglo and Black student persistence figures suggests that, even with the support of the tutorial service, attrition continues higher among students of color.

**Question 7:** What was the performance of students receiving financial aid from SB164?
Table 9
Persistence and Performance for Students Receiving Financial Aid from Alquist Funds
Fall, 1970

<table>
<thead>
<tr>
<th>Race</th>
<th>N</th>
<th>Completed</th>
<th>GPA Mean</th>
<th>WD</th>
<th>% WD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo</td>
<td>18</td>
<td>11.03</td>
<td>2.70</td>
<td>3</td>
<td>17%</td>
</tr>
<tr>
<td>Chicano</td>
<td>13</td>
<td>10.55</td>
<td>2.85</td>
<td>3</td>
<td>23%</td>
</tr>
<tr>
<td>Black</td>
<td>4</td>
<td>14.75</td>
<td>2.76</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>6.00</td>
<td>4.00</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>10.99</td>
<td>2.83</td>
<td>9</td>
<td>24.32</td>
</tr>
</tbody>
</table>

Comment:

Since the tutorial service was partially supported by SB164, an analysis of the other impact of SB164 funds on campus was also analyzed in Table 9. While a variety of financial aids were available, Table 9 contains data for the 37 students receiving EOPS grants from this state source only.

The persistence for grant recipients was 75.68%, as compared with 84.68% for the tutored group suggesting that financial assistance as a single variable may be less effective than a coordinated system which would formalize certain requirements more clearly. Thus only 8 of the 37 students as grant recipients (22%) also took advantage of tutorial assistance on a regular basis, although by need and expectation this group may have benefitted from such service.

An Evaluation of SB164 Services at SBCC

Summary and Conclusions

This study reports the persistence and performance data for 152 students directly affected by the tutorial center or by financial aid from the funding provided under Senate Bill 164.

Seven research questions are posed and the following general findings reported:

1. 85 percent of 124 students completed the semester: 32 percent completed 12 or more units, while 53 percent completed fewer than 12 units. College-wide, 52 percent of all day and concurrent students attempted fewer than 12 units.
2. 85 percent of the persisting students achieved g.p.a.'s of 2.00 or above. Thus the pattern for tutored students is 85-85 (persistence-performance).

3. Measured ability, reflected on SCAT test scores, was nearly 10 percent fewer for tutored than for all entering students on each sub test of SCAT. Over half of the tutored students had measured verbal ability below the 25th percentile rank.

4. There were measurable differences in performance and persistence in Math 1 between tutored and non-tutored students.

6. Fifty-five percent of the tutored students were non-caucasians.

7. Seventy-six percent of the students receiving EOPS financial aid completed the semester with a mean g.p.a. of 2.83.

The impact of tutorial services continues to be positive and measurable in terms of student gains both in performance and persistence.

These data can be put in the context of cost to the district for maintaining the services to students with special needs. In very general terms, direct aid to students may be associated with English 42, Math 1, the tutorial center, and the EOP grants. A summary of such costs is given below.

**Tutorial Service**

Total Tutorial salary expenditure (student tutors) for Fall Semester: $17,503.88

Estimated proportion of tutorial time devoted to assigned students: 75%

Cost: $13,127.91

Cost per tutored student: $105.87

Number of credit hours earned: 942

Cost per credit hour earned: $13.93
English 42 (all students)
Total faculty salary cost for English 42: $11,981.39
Total number of students enrolled as of census week: 170
Faculty salary cost per student: $70.48
Total number of WSCH: 917
Cost per WSCH: $13.05

Math 1 (all students)
Total faculty salary cost for Math 1: $2,384.32
Total number of students enrolled as of census week: 692
Faculty salary cost per student: $3.45
Total number of WSCH: 692
Cost per WSCH: $3.45

These figures do not, of course, represent the total institutional commitment for any of the three programs. There were in addition learning materials and equipment for English 42, director's salaries, and other charges outside budget category 213 or direct tutorial salary costs. Nonetheless, comparisons can be drawn between these figures and the average costs for the total institution in the same categories.

Institution-wide, the faculty salary cost per weekly student contact hour for Fall, 1970 was $13.96 as compared with $13.93 (tutors), $13.05 (Eng. 42) and $3.45 (Math 1). Thus, it would appear that the program compares in cost with theirs in the district, as viewed on a cost per WSCH basis.

Perhaps the most useful and important figure in this report is 85-85: eighty-five percent persistence with eighty-five percent satisfactory performance.  In a recent report on multimedia instruction at Mount San Jacinto College, Bruce Monroe noted that "we usually think of standard instruction, a typical lecture-discussion course, as being 75-75: seventy-five percent of the objectives." Although the context of Monroe's remarks is somewhat different, to entertain the possibility of increasing the ratio of performance to 85 is indeed an exciting prospect.

One final comment: although evaluation of the type represented by this "objective" analysis of persistence, performance and costs is important, the value of extended opportunities cannot be reflected entirely in the cursory review of numbers and trends. In our recent application for federal
funds for Special Services to the Disadvantaged, Mr. Jackman LeBlanc included a statement of our concerns as an institution. It is with that statement that this report may conclude most appropriately:

EXTENDED OPPORTUNITY PROGRAM FOR SANTA BARBARA CITY COLLEGE
A STATEMENT OF CONVICTION

The application forms contain a nice, neat quantified and measurable set of objectives for the special services program. That is as it should be, since we need to have a basis for evaluation. But we believe that things can happen to people beyond what can be neatly measured and quantified, and are convinced that the most important outcomes of the special services project may be impossible to measure, and may never be reflected in the number of people getting degrees from this or any other institution.

A community college is unique to the American form of higher education, having grown out of the national commitment that every person deserves the opportunity to pursue his personal goals for learning as far as he can, without proscription. In the community college, academic talent is not alone the criterion for determining how far a student might go in school: also to be considered is the individual student's determination to struggle, even against his own failings, in the process of achieving his personal goals. Only the community college is designed to meet the post-high school needs of all of the people. Only the community college allows for the struggle to be pursued without pre-judgment on the basis of prior performance, but out of respect for the dignity of the struggle itself. While the state's universities continue to be the academic slaughtering grounds for those who don't match the expectations, the city college provides a setting for those earnestly seeking knowledge and skills to find and express knowledge, and provides a variety of reasonable paces within which individual students can find they can best enter the struggle.

If the community college represents the best environment for learning with dignity, the question must still be asked: Have a great many of America's youth, especially her youth from the ghettos and "barrios", been shut out of access to higher learning - not so much by overt acts of racism, but by a systematic neglect of the task of seeing that these children of the streets receive at least the basic survival skills for accomplishing whatever goals they may have set for themselves? It is a profound mistake to assume that the young man or woman from the streets does not want to learn because we don't find them in the classroom. In many cases, we find that the dream of education is frustrated by limitations that the children of the streets recognize too well in themselves, but which can be alleviated with the help of people who care enough to serve as an available resource - an extension of the books and the classroom lectures. This is the ideal of the program which is quantified and objectified in the application: to provide a center in which those who care can be of service to those who are seeking their way toward academic survival. If we can be of just enough help to make it feasible for more of our young men and women in this community to consider higher education a real choice, then we shall have succeeded. Our students may choose not to continue, or they may pursue doctoral degrees: it really doesn't matter. But the dignity of the choice, and our help in making the choice real matters. It matters more than anything we know how to quantify.