## CHAPTER 9

## EFFECT OF MATRICULATION SERVICES

The previous chapters of this report have examined various aspects of student performance in CCSF's ESL program - enrollment, persistence, level advancement, transitions, achievement in credit programs, and stopping out. Chapters 9 and 10 examine some important components of CCSF's program that are designed to improve student performance and their effects. The focus of Chapter 9 is on the College's matriculation services for non-credit students.

## A. BACKGROUND

In California, community colleges are required to provide matriculation services to entering students: placement testing, orientation, and counseling. While these services are provided to most credit students, they are less frequently provided to non-credit students. The five steps in the matriculation process for non-credit ESL students at CCSF are: application, ESL placement testing, orientation, counseling and registration. This chapter focuses on the effects of three of these services: placement testing, orientation, and counseling.

The non-credit ESL placement test is administered at most major campuses on a weekly basis throughout most of the year. The placement test has two components, both developed by the College's ESL Department: a 30-minute listening test and a 40 -minute reading and writing test. Students are given the listening test first. Based on the results of that test, students are given a lower or higher level reading and writing test. The ESL level at which students are placed is determined by the combined results of the two tests.

The non-credit placement test is not designed to assess Literacy and Level 1 language abilities. The ESL Department believes that the testing process would be a frustrating experience for most Literacy and Level 1 students. As a result, the Department has decided that these students should be enrolled in classes as soon as possible. Admissions and Enrollment staff make a quick initial assessment of the English abilities of students who wish to enroll in non-credit ESL. If they determine that students have limited literacy skills (sometimes using a quick literacy assessment developed by the Department) or practically no English skills, the students are immediately placed in a Literacy or Level 1 class and usually are not directed to a counselor during the initial matriculation process. At one campus, however, Literacy and Level 1 students meet with counselors.

If students meet with a counselor, the counselor has the right to adjust their placement levels up or down using multiple measures. Among the measures counselors use are the oral skills, educational backgrounds, educational goals, and personal issues of students in addition to the results of placement tests. Counselors also advise students on which ESL programs may be best for them - for example, general ESL or vocational ESL.

Interviews with counselors may last a few minutes (especially when a large number of students are to be seen) or up to 20 minutes, if personal issues or other questions are raised.

The Assessment Resource Instructor for the ESL Department has developed a non-credit ESL Placement Test Procedure Manual ${ }^{80}$ that outlines the recommended sequence of matriculation services. The recommended procedure is to offer an orientation and counseling session immediately after the placement test is administered. This makes matriculation a "one stop" service. However, when this is not possible (because of limits on the number of counselors available, or for other reasons), the recommended "express" procedure is to send students who test at Level 3 or lower directly to Admissions and Enrollment, where they are registered in classes. Students who are registered in this way are given appointments to see counselors later.

Bilingual counselors are available to offer services in Chinese to lower level students at Chinatown/North Beach Campus, where most students are Chinese speakers, and in Spanish at the Mission Campus, where most students are Spanish speakers. Orientation books in English, Chinese, and Spanish have been developed and are distributed at the orientation sessions.

Although the placement test is usually administered on a weekly basis, some students apply to enroll in non-credit ESL on days, or at times of the day, when they cannot immediately take the test. As a result, it has been an informal practice for some administrators and ESL coordinators to place students into classes based on a quick assessment. This usually occurs when a large numbers of students are interested in classes and many of them must wait for a considerable amount of time before the placement test is next administered. This practice is based on the belief that it is best to enroll students in a class as soon as possible, because they may not return for a later testing date. Behind the practice is also a fear that classes with low enrollment could be canceled.

This chapter will describe the effect on non-credit student performance of placement testing, orientation, and counselor interviews before or during the first term in which students are enrolled.

## B. MAJOR FINDINGS

- The percent of non-credit students who received matriculation services increased greatly between 1998-2006.
- A majority of students received either no services or three services: placement testing, orientation, and counseling.

[^0]- Intermediate Level 5-8 students were more likely to receive services than were Literacy and Beginning Level 1-4 students.
- Students who received matriculation services attended somewhat more hours of noncredit ESL instruction and persisted for somewhat more terms than students who did not receive services, but the relationship between matriculation services and both hours of instruction and persistence was not strong.
- Receiving matriculation services is strongly related to transition to credit studies. Most categories of students who received all three services were about $50 \%$ more likely to make transitions than students who did not, regardless of the numbers of hours they attended.
- Overall, the matriculation services examined in this chapter are fairly modest and are probably the minimum level of guidance and counseling any ESL program should provide. The fact that this modest level of service has a positive relationship to student performance (and particularly to transitions) suggests that investing in enhanced student services would be even more beneficial.
- In addition, the findings of this chapter suggest that ESL programs should provide the full range of matriculation services to all of their students - including those who begin at the lowest levels of proficiency. In particular, programs should consider finding ways to formally assess the English language and literacy skills of students who begin at the Literacy and Beginning Low levels, as well as to provide them with high quality orientation and counseling services.


## C. ANALYSIS

## 1. Availability of Matriculation Services

Table 9.1 describes how many students received matriculation services at CCSF each year from 1998-2006. The percent of students receiving matriculation services has steadily increased over this nine-year period. Seventy percent $(19,498$ of 27,876$)$ of students received no matriculation services in 1998 compared to only $21 \%$ (5,372 of 25,361 ) in 2006. The number and percent of students who received one or two services also increased over the nine-year period. The percent of students who received all three services - placement testing, orientation, and counseling - rose from $21 \%$ in 1998 (5,974 of 27,876 ) to $48 \%$ in 2001 and 2002, but dropped to $41 \%(10,285$ of 25,361$)$ in 2006.

This increase in the percent of students who received matriculation services is probably due to a reorganization of the way those services are provided at CCSF. Formerly, a limited counseling staff handled all matriculation services for non-credit students. When non-credit matriculation funds from the state became available in 1998, separate offices for admissions and enrollment were established at the non-credit campuses. This provided more staff for the matriculation process as a whole, and it gave counselors more time to provide orientations and individual interviews with students. It took a few years
for the admissions and enrollment offices to become fully staffed and for new procedures to be established, but the results of this study indicate that some of the anticipated benefits of the reorganization have been realized.

Table 9.1 Availability of Matriculation Services by Year

|  | Matriculation Services |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Percent |  |  |  |  |  |  |  |  |
| Academic <br> Year | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3 | Total <br> Number |
| 1998 | $70 \%$ | $5 \%$ | $3 \%$ | $21 \%$ | 19498 | 1460 | 944 | 5974 |  |
| 1999 | $51 \%$ | $8 \%$ | $7 \%$ | $33 \%$ | 14630 | 2362 | 1937 | 9529 | 28458 |
| 2000 | $40 \%$ | $12 \%$ | $8 \%$ | $41 \%$ | 11614 | 3389 | 2348 | 11886 | 29237 |
| 2001 | $34 \%$ | $12 \%$ | $10 \%$ | $44 \%$ | 10499 | 3631 | 3117 | 13792 | 31039 |
| 2002 | $32 \%$ | $9 \%$ | $10 \%$ | $48 \%$ | 9743 | 2665 | 3148 | 14574 | 30130 |
| 2003 | $30 \%$ | $10 \%$ | $12 \%$ | $48 \%$ | 8501 | 2867 | 3248 | 13424 | 28040 |
| 2004 | $26 \%$ | $15 \%$ | $13 \%$ | $46 \%$ | 7027 | 4140 | 3448 | 12255 | 26870 |
| 2005 | $24 \%$ | $18 \%$ | $14 \%$ | $44 \%$ | 6251 | 4823 | 3634 | 11498 | 26206 |
| 2006 | $21 \%$ | $23 \%$ | $15 \%$ | $41 \%$ | 5372 | 5840 | 3864 | 10285 | 25361 |
| Grand |  |  |  |  |  |  |  |  |  |
| Total | $37 \%$ | $12 \%$ | $10 \%$ | $41 \%$ | 93135 | 31177 | 25688 | 103217 | 253217 |

## 2. Receipt of Matriculation Services by First Non-Credit ESL Level

Table 9.2 describes matriculation services by the first level of enrollment for students in the cohort studied - students who first enrolled in non-credit ESL in1998, 1999, or 2000. The Table shows that students were more likely to receive either no services or all three services rather than one or two. This seems to be an indication that the recommended matriculation process - offering all three services at the same time - was the most commonly used procedure.

The percent of students who received no matriculation services at all was somewhat higher for Literacy or Beginning Level students than for Intermediate Level students. The percent of Literacy and Beginning Level students who received no services ranged from $62 \%(987)$ for Level 4 students to $40 \%(2,055)$ for Literacy Level students. The percent of Intermediate level students who received no services ranged from 37\% (114) for Level 8 students to $52 \%$ (525) for Level 6 students.

In part, the finding that Literacy and Beginning Level students were less likely to receive services is probably due to the ESL Department's policy to exempt Literacy and Level 1 students from placement testing. However, apparently some of these students did receive at least some matriculation services, probably some form of orientation or counseling. But they were less likely than Intermediate Level students to receive even these services.

This is probably due to the fact that orientation and counseling interviews are sometimes postponed for students who are placed at Level 3 or below if there are not enough counselors available. Students who were directed to return at a later date may have been less likely to keep their appointments with a counselor.

Table 9.2 also shows that $36 \%$ of students $(13,638)$ received three matriculation services, $15 \%$ received one or two services and $44 \%(18,729)$ received no services. The percent of students who received three services was higher for those whose first level was in the Intermediate range (Levels 5-8). The percent of Intermediate students who received all three services ranged from $43 \%$ (588) of Level 5 students to $53 \%$ (165) of Level 8 students. In contrast, the percent of Literacy and Beginning Level (Levels 1-4) students who received all three services ranged from $29 \%(1,528)$ of Literacy Level students to $33 \%$ (495) of Level 4 students.

Information is unavailable about which matriculation services students received if they received only one or two services. If students received only one service during the period covered by this study it was probably the placement test, because counseling and orientation services were available to fewer students than was the test during that period. But the fact that $29 \%$ of Literacy Level students and $37 \%$ of Level 1 students received all three services indicates that the Department's policy of exempting them from testing of some type was not universally followed. It may suggest that at least some of these students were reported as "tested," although they did not take the standard non-credit placement test.

Table 9.2 Receipt of Matriculation Services by First ESL Non-Credit Level

|  | Matriculation Services |  |  |  |  |  |  |  | Total Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent |  |  |  | Number |  |  |  |  |
| First Level ESLN/ESLF | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3 |  |
| 0 | 40\% | 4\% | 27\% | 29\% | 2055 | 200 | 1397 | 1528 | 5180 |
| 1 | 46\% | 14\% | 4\% | 37\% | 7629 | 2311 | 624 | 6147 | 16711 |
| 2 | 58\% | 7\% | 2\% | 33\% | 2214 | 260 | 91 | 1285 | 3850 |
| 3 | 54\% | 6\% | 2\% | 38\% | 1948 | 217 | 72 | 1394 | 3631 |
| 4 | 62\% | 4\% | 2\% | 33\% | 937 | 61 | 24 | 495 | 1517 |
| 5 | 49\% | 6\% | 2\% | 43\% | 674 | 78 | 23 | 588 | 1363 |
| 6 | 52\% | 5\% | 2\% | 41\% | 525 | 55 | 16 | 413 | 1009 |
| 7 | 37\% | 6\% | 2\% | 55\% | 391 | 68 | 22 | 579 | 1060 |
| 8 | 37\% | 5\% | 5\% | 53\% | 114 | 15 | 16 | 165 | 310 |
| 9 | 20\% | 10\% | 0\% | 70\% | 6 | 3 |  | 21 | 30 |
| No Level | 65\% | 4\% | 1\% | 30\% | 2236 | 144 | 31 | 1023 | 3434 |
| Grand Total | 49\% | 9\% | 6\% | 36\% | 18729 | 3412 | 2316 | 13638 | 38095 |

## 3. Relationship Between Matriculation Services and Attendance/Persistence

Table 9.3 presents the enrollment hours and terms taken by students who received either zero or three matriculation services by their first non-credit ESL level. Because the majority of students either received zero or three services, receipt of one or two services is not shown.

Both overall and at any given level, those students who received three services enrolled for more hours and persisted for more terms than students who received no services. However, the differences are not very great and in a few cases the relationships are reversed (i.e. students who received services attended or persisted for fewer hours). The differences also vary by whether mean or median numbers are examined. However, in general there is a regular pattern: students who receive three services attended for more hours and enrolled for more terms than students who did not.

In short, there was a positive relationship between receiving matriculation services and both hours of attendance and terms taken. This relationship was statistically significant, but it was not very strong.

Table 9.3 The Effect of Matriculation Services on Enrollment Hours and Terms by First Non-Credit ESL Level

|  | No Services |  |  |  |  | Three Services |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| First <br> ESLN/ESLF <br> Level | Student <br> Number | Mean <br> Hours | Median <br> Hours | Mean <br> Terms | Median <br> Terms | Student <br> Number | Mean <br> Hours | Median <br> Hours | Mean <br> Terms | Median <br> Terms |
| 0 | 2055 | 441.10 | 204 | 4.76 | 3 | 1528 | 464.49 | 252.75 | 4.92 | 4 |
| 1 | 7629 | 261.76 | 92.5 | 3.27 | 2 | 6147 | 293.08 | 134.9 | 3.76 | 3 |
| 2 | 2214 | 253.47 | 80 | 3.15 | 2 | 1285 | 321.27 | 149 | 3.68 | 3 |
| 3 | 1948 | 229.83 | 87 | 2.83 | 2 | 1394 | 304.24 | 156 | 3.21 | 2 |
| 4 | 937 | 178.86 | 69.5 | 2.50 | 1 | 495 | 209.28 | 90 | 2.70 | 2 |
| 5 | 674 | 183.39 | 71 | 2.53 | 2 | 588 | 218.56 | 98.9 | 2.45 | 2 |
| 6 | 525 | 149.35 | 58 | 2.18 | 1 | 413 | 202.95 | 110.5 | 2.39 | 2 |
| 7 | 391 | 156.41 | 64 | 2.17 | 2 | 579 | 176.09 | 92 | 2.08 | 1 |
| 8 | 114 | 107.44 | 44 | 1.93 | 1 | 165 | 140.51 | 82 | 2.01 | 1 |
| 9 | 6 | 259.67 | 136.25 | 4.50 | 3 | 21 | 383.40 | 240 | 4.38 | 3 |
| Total | 16493 | 264.16 | 93 | 3.25 | 2 | 12615 | 301.02 | 139 | 3.58 | 2 |

-Missing are 3,434 members of the non-credit cohort with no first level.

## 4. Relationship Between Receiving Matriculation Services and Transition to Credit - Controlling for Hours and Terms Taken

Table 9.4 presents the effects of receipt of matriculation services on transition to credit studies by number of hours taken in non-credit ESL. Those students who received three
services transitioned to credit at higher rates than did those who received no services regardless of how many hours of non-credit ESL they attended.

For example, in the case of students who attended 8-49 (represented as " 0 ") hours, $6 \%$ (230 of 3,833) of those who received three services transitioned to credit compared to only $3 \%(220)$ of those who received no services. In the case of students who attended for 250-349 hours (represented as " 300 "), $15 \%$ (165) of those who received three services transitioned to credit compared to only $10 \%$ (115) of those who received no services. Overall, most students who received matriculation services were about $50 \%$ more likely to make transitions than were students who attended comparable numbers of hours and did not receive services. In short, the relationship between receiving matriculation services and transition to credit is fairly strong. It is much stronger than the relationship between receiving these services and hours of attendance or terms taken, and it is not significantly affected by either of these two variables.

Table 9.4 Non-Credit ESL Transition to Credit by Matriculation Services and ESL Non-Credit Hours Taken

|  | Percent Transitioning to Credit |  | Total Number |  |
| :---: | :---: | :---: | :---: | :---: |
| Hours | No Services | Three Services | No Services | Three Services |
| 0 | 3\% | 6\% | 7324 | 3833 |
| 100 | 6\% | 8\% | 4615 | 3582 |
| 200 | 8\% | 12\% | 1915 | 1756 |
| 300 | 10\% | 15\% | 1135 | 1098 |
| 400 | 13\% | 17\% | 754 | 703 |
| 500 | 15\% | 18\% | 561 | 520 |
| 600 | 11\% | 18\% | 425 | 419 |
| 700 | 9\% | 20\% | 348 | 322 |
| 800 | 14\% | 23\% | 306 | 254 |
| 900 | 12\% | 20\% | 222 | 196 |
| 1000 | 14\% | 17\% | 177 | 179 |
| 1100 | 12\% | 22\% | 151 | 143 |
| 1200 | 14\% | 26\% | 115 | 119 |
| 1300 | 8\% | 22\% | 112 | 91 |
| 1400 | 12\% | 24\% | 90 | 71 |
| 1500 | 12\% | 21\% | 78 | 68 |
| 1600 | 11\% | 19\% | 401 | 284 |
| Grand Total | 7\% | 11\% | 18729 | 13638 |

- The numbers of hours in this Table represent hour ranges. Students enrolled for fewer than 8 hours were excluded from the analysis. In the table " 0 " represents $8-49$ hours. All other numbers represent 100 -hour ranges. Thus, " 100 " represents $50-149$ hours, and so forth.


## 5. Effect of Matriculation Services on Transition to Credit - Controlling for First Non-Credit Level

Table 9.5 shows the effect of receiving matriculation services on transition to credit studies by the number of non-credit ESL hours students attended and the first non-credit ESL level in which they enrolled. Those whose first level was higher and who received matriculation services transitioned to credit at higher rates than did those who did not receive matriculation services, regardless of how many hours of non-credit ESL they attended.

For example, in the case of students who began at Level 5, 37\% of students who attended for 300 hours and received three matriculation services transitioned to credit, compared to $32 \%$ of those who received no matriculation services. In the case of students who began at Level 3, $22 \%$ students who attended for 300 hours and received three matriculation services transitioned to credit, compared to $12 \%$ of those who received who received no matriculation services.

Although there are some irregularities in this pattern, and the size of the difference varied between the transition rates of students who received matriculation services and those who did not in each hour/level combination, the overall pattern is strong. For the most part, students who began at all levels and received services were more likely to make transitions to credit than were students who received no services.

Not surprisingly, Table 9.5 reflects the finding of Chapter 6 that students who began at higher levels and attended more hours were more likely to make transitions than were other students. This was the case, whether or not students received matriculation services.

As a result, there is no difference in transition rates between students who received three services and those who did not for most Level 1 students, except for those who attended large numbers of hours. This is because, except for those who attended for large numbers of hours, Level 1 students were not likely to make transitions under any circumstances. What Table 9.5 shows is that receiving matriculation services was associated with a greater probability that those Level 1 students who were most likely to make transitions would do so. And it shows that matriculation services were associated with a greater probability that other students who were likely to make transitions - those who began at high levels and attended large numbers of hours - would do so.

In short, Table 9.5 indicates that matriculation services were only one of many factors that affected transition rates. But they appear to have had a multiplier effect on the other factors that led students to make transitions.

Table 9.5 Transition to Credit by Hours of Non-Credit ESL, Matriculation Services and First Non-Credit Level

|  | Level 1 |  | Level 3 |  | Level 5 |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| ESL Non- <br> Credit Hours | No <br> Services | Three <br> Services | No <br> Services | Three <br> Services | No <br> Services | Three <br> Services |
| 0 | $1 \%$ | $1 \%$ | $4 \%$ | $8 \%$ | $9 \%$ | $20 \%$ |
| 100 | $2 \%$ | $2 \%$ | $7 \%$ | $10 \%$ | $13 \%$ | $18 \%$ |
| 200 | $4 \%$ | $3 \%$ | $12 \%$ | $17 \%$ | $16 \%$ | $31 \%$ |
| 300 | $4 \%$ | $6 \%$ | $12 \%$ | $22 \%$ | $32 \%$ | $37 \%$ |
| 400 | $8 \%$ | $7 \%$ | $19 \%$ | $33 \%$ | $42 \%$ | $53 \%$ |
| 500 | $10 \%$ | $9 \%$ | $35 \%$ | $43 \%$ | $40 \%$ | $33 \%$ |
| 600 | $7 \%$ | $8 \%$ | $17 \%$ | $38 \%$ | $50 \%$ | $50 \%$ |
| 700 | $7 \%$ | $16 \%$ | $20 \%$ | $37 \%$ | $40 \%$ | $56 \%$ |
| 800 | $14 \%$ | $21 \%$ | $16 \%$ | $38 \%$ | $42 \%$ | $50 \%$ |
| 900 | $11 \%$ | $18 \%$ | $21 \%$ | $35 \%$ | $40 \%$ | $57 \%$ |
| 1100 | $11 \%$ | $17 \%$ | $23 \%$ | $39 \%$ | $50 \%$ | $0 \%$ |
| 1200 | $9 \%$ | $16 \%$ | $25 \%$ | $47 \%$ | $100 \%$ | $100 \%$ |
| 1300 | $19 \%$ | $23 \%$ | $0 \%$ | $47 \%$ | $25 \%$ |  |
| 1400 | $7 \%$ | $27 \%$ | $18 \%$ | $25 \%$ | $0 \%$ | $100 \%$ |
| 1500 | $14 \%$ | $26 \%$ | $29 \%$ | $36 \%$ | $0 \%$ | $50 \%$ |
| 1600 | $16 \%$ | $24 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 1700 | $10 \%$ | $23 \%$ | $18 \%$ | $22 \%$ | $14 \%$ | $17 \%$ |
| Total | $4 \%$ | $5 \%$ | $10 \%$ | $19 \%$ | $16 \%$ | $27 \%$ |


| Number |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Level 1 |  | Level 3 |  | Level 5 |  |  |
| ESL Non- <br> Credit Hours | No <br> Services | Three <br> Services | No <br> Services | Three <br> Services | No <br> Services |  |  |
| 0 | 2754 | 1675 | 708 | 305 | 262 | Three <br> Services |  |
| 100 | 1844 | 1563 | 508 | 376 | 208 | 177 |  |
| 200 | 834 | 777 | 223 | 203 | 77 | 81 |  |
| 300 | 526 | 489 | 136 | 139 | 38 | 35 |  |
| 400 | 313 | 353 | 85 | 73 | 19 | 34 |  |
| 500 | 245 | 262 | 54 | 63 | 20 | 21 |  |
| 600 | 218 | 223 | 46 | 47 | 6 | 18 |  |
| 700 | 165 | 152 | 35 | 38 | 5 | 18 |  |
| 800 | 148 | 119 | 31 | 34 | 12 | 4 |  |
| 900 | 92 | 88 | 19 | 23 | 5 | 7 |  |
| 1000 | 70 | 90 | 22 | 18 | 2 | 1 |  |
| 1100 | 58 | 73 | 20 | 15 | 2 | 4 |  |
| 1200 | 53 | 62 | 12 | 15 | 4 |  |  |
| 1300 | 55 | 37 | 11 | 4 | 4 | 1 |  |
| 1400 | 37 | 31 | 7 | 11 | 2 | 2 |  |
| 1500 | 43 | 38 | 3 | 3 | 1 | 2 |  |
| 1600 | 174 | 115 | 28 | 27 | 7 | 6 |  |
| Grand Total | 7629 | 6147 | 1948 | 1394 | 674 | 588 |  |

- The numbers of hours in this table represent hour ranges. Students enrolled for fewer than eight hours were excluded from the analysis. In the table " 0 " represents $8-49$ hours. All other numbers represent 100 -hour ranges. Thus, " 100 " represents 50-149 hours, and so forth.


## D. DISCUSSION

The important finding in this chapter is that the three non-credit matriculation services examined had modest relationships to persistence and hours of study, and a fairly strong relationship to transitions to credit studies. This study cannot explain why these services had a stronger relationship with transitions than with other factors that (in previous chapters) showed increase transitions. That finding merits further research. However, the fact that matriculation services had a fairly strong relationship to any measure of student performance testifies to the value of those services and the importance of providing them.

One reason this study cannot explain why matriculation services had a stronger relationship with transitions is that it did not investigate the reasons that they had a positive relationship with any measures of student performance. However, findings of the study, together with the authors' professional experiences, provide the basis for some informed speculation about why each service may have been related to at least some aspects of student performance. They also provide a basis for some observations about the implications of the findings in this chapter for ESL policy and practice.

Placement. The finding that students who receive all three matriculation services persist for more terms suggests that it is important for all students to take a valid and reliable placement test. As noted, taking the non-credit ESL placement test was the matriculation service students were most likely to receive. As a result, placing students on the basis of the test was most likely to account for the greater persistence of students who received matriculation services.

This makes sense, because if students take a valid and reliable placement test, they are more likely to be placed in a level where they can succeed. An inaccurate placement may cause students to become frustrated and stop attending classes. ESL instructors have found that non-credit ESL students are often reluctant to ask questions, make requests, or express dissatisfaction when they are having problems. This is particularly true of students who are new to the program, are unclear on how the American educational system works, and have limited English skills. Many instructors say that students "vote with their feet" - i.e., they leave when they become frustrated because of incorrect placement or for other reasons, rather than try other ways to deal with their concerns. One way to reduce student frustration and to increase persistence is to make sure that as many non-credit ESL students as possible take a valid placement test, and that the results of the test are used to direct students to classes that best meet their needs.

Orientation. Orientation to ESL programs and to the institutions that provide them, however brief, may increase persistence by providing students with a better understanding of what to expect and making them feel more comfortable as they begin their studies. It can be intimidating to take ESL classes in an educational system that is new to the students' experience or for the students to suddenly find themselves in a class that is large and ongoing. Effective orientation services should help overcome these problems. And they should help students understand the opportunities and options
available to them. This may help to expand their goals and increase the chances that they will pursue pathways through ESL that will meet their needs and optimize the benefits they receive.

Colleges and other institutions that provide ESL services have tried different ways to extend orientation beyond the short sessions students usually attend when they first enroll. As mentioned in Chapter 4 of this report, CCSF has developed orientation booklets that instructors can use to help students better understand the ESL program and their campus. Other adult education programs have experimented with offering special orientation classes that students attend (for a day or two to a week) before they are placed into a regular class. This provides a greater opportunity to prepare them for their future studies, as well as to further assess their language ability and make adjustments to their placement if necessary.

Counseling. It may be that the individual attention students receive by having a brief interview with a counselor at the beginning of their college career is a tipping point. The chance to ask questions on a one-to-one basis is much less intimidating than it is in a large orientation session. This brief interview may also give students an introduction to the counseling office and a contact they can use in the future. The finding that a package of matriculation services that includes brief counseling sessions is associated with improved student performance may suggest that these brief sessions should be the foundation for enhanced counseling services after the matriculation period.

Availability. This study found that Literacy and Beginning Level students were less likely to receive matriculation services than were Intermediate and Advanced Level students at CCSF. This may be one reason for the low persistence rates of students at lower levels discussed in Chapter 4. Because the vast majority of the College's non-credit ESL students place in the Literacy and Beginning Levels, CCSF and other programs with similar student populations would do well to consider the possible benefits of providing the full range of matriculation services to all of their students.

Enhancing services. This chapter did not analyze the effects of other student services that CCSF and other ESL programs offer, or might offer. Nevertheless, the matriculation services examined in this chapter are fairly modest in scope. In fact, they might be considered the minimum level of student services that any well-managed ESL program should offer. If these fairly modest services have a positive effect on student performance, it is seems likely that enhanced student services would have an even greater effect.

As a result, ESL programs should examine how they can enhance and expand their efforts in assessment, orientation, and counseling. In part, they should look to the approaches other programs have adopted to accomplish this. For example, CCSF counselors provide "Steps to Credit Workshops" and regularly schedule other workshops of interest to students on topics such as where to find community resources. Limited services for disabled students are provided at the non-credit campuses.

But ESL programs should also be innovators. In considering how they should enhance student services, they should examine the barriers to success in ESL that students face and seek to provide services that will help to overcome those barriers. Chapters 5 and 6 of this report adopt this perspective. They discuss a wide range of enhanced student services that programs may wish to consider.

Of course, matriculation and other student services come at a price, and non-credit ESL programs frequently do not have the funds to provide students with the level of support they need. Providing sufficient counselors, and even finding the space to offer testing and orientations, are often challenges. Bilingual counselors and support staff are enormously helpful in assessing, orienting, and counseling students with very low levels of English ability, but funds to hire them often are not available.

The findings in this report should encourage colleges, other ESL providers, and policymakers to increase their investments in student services for non-credit ESL students. Too often discussions of the financial needs of adult education focus primarily (or exclusively) on the need for more investment in instructional services. But in examining the factors that make for success in ESL, this report has repeatedly emphasized that improved instructional services by themselves will have limited benefits unless students also receive enhanced supportive services that help them overcome the barriers to taking advantage of instruction. This chapter showed that fairly modest matriculation services have a multiplier effect on the performance rates of students who are well positioned to succeed in non-credit ESL. Enhanced students services may have an even stronger multiplier effect, and they may also increase the number of students well positioned to succeed. If so, they will repay any investment by improved student outcomes.

## CHAPTER 10

## PROGRAM ENHANCEMENTS

## A. BACKGROUND

## 1. Chapter Focus

Chapter 1 of this report explained that CCSF's non-credit ESL program has several components. Members of the cohort examined in previous chapters were all enrolled in the largest of these components: the College's General ESL classes (ESLN). But, as noted in the definition of the cohort (Chapter 3), about one-third was also enrolled in another component: ESL Focus courses (ESLF). And some were also enrolled in various non-credit courses outside the ESL field during the time they took ESLN classes.

The College's ESL Department developed ESLF and other special ESL course options to help non-credit students increase their learning gains, and it has allowed ESL students to enroll in Non-Credit courses outside ESL so that they can use their English language abilities to further their personal and career goals while they are attending ESLN classes. Because ESLN is the primary means by which the College helps students improve their English proficiency, these different options can be seen as enhancements of its mainstream non-credit ESL program. As a result, in this chapter they will be referred to collectively as "Program Enhancements."

Previous chapters of this report did not distinguish between students who took advantage of these enhancements and those who enrolled only in ESLN. As a result, those chapters combined students who had somewhat different learning experiences. This approach was adopted to reduce the analysis of non-credit ESL to manageable proportions and to avoid the innumerable digressions in each chapter that would have been required to explain the effects of different enhancements.

## 2. Enhancements Discussed

This chapter examines the effects of three of the Program Enhancements available to CCSF's ESLN students. It shows what difference they made in the persistence, learning gains, and transitions to credit programs of students who selected them. The three Enhancements examined are:

- ESL Focus courses (ESLF)
- Two-level "Accelerated" ESLN courses
- Enrollment of ESLN students in non-credit courses outside ESL

CCSF also offers other Program Enhancements. These three options were selected because previous analysis showed that they were fairly effective, and because they could
most easily be studied. ${ }^{81}$ To understand their effects, however, it is necessary to understand the nature of each enhancement. Although these are described in various levels of detail in previous chapters, a synopsis of each enhancement follows.
$\boldsymbol{E S L F}$. These courses were described in the Chapter 1 and 3. Briefly, ESLF courses allow students to focus on improving their abilities in only one of the four core ESL skill areas (speaking, listening, reading, and writing). Most ESLF courses are two-level. That is, they enroll students whose ability in a single skill places them in courses at either of two instructional levels and attempt to improve abilities in that skill to the meet the course requirements of the higher of the two levels. As a result, they have titles such as "Beginning Low 1-2 Speaking" or "Beginning High 3-4 Listening." ESLF courses meet five hours per week for the length of each term, but are not offered during the summer term.

Courses in each of the four skills are available to students at every level of non-credit Beginning and Intermediate courses. The ESLF courses most commonly offered are speaking and listening courses at the Beginning levels. Although a small number of noncredit students enroll only in ESLF courses, almost all ESLF students are concurrently enrolled in ESLN. Courses in ESLF offer students the opportunity to bring all of their skills up to the level of proficiency required to complete the level of ESLN in which they are enrolled (and possibly higher), and many non-credit students take advantage of this opportunity. One-third of the students in the cohort enrolled in ESLF at some time.

Accelerated courses. These special courses combine two levels of ESLN into one course. Like regular ESLN courses, they meet for 10 hours per week for a full term. As a result, Accelerated courses allow ESLN students to complete two levels of instruction in the same amount of time that regular courses would allow them to complete only one level. A few sections of these courses are offered each term (except the summer term) at the Downtown and Ocean Campuses. These are Beginning Low 1-2 Intensive, Beginning High 3-4 Intensive, Intermediate Low 5-6 Intensive, and Intermediate High 7-8 Intensive.

Accelerated courses were developed to serve students identified as having potential to advance quickly and/or were interested in accelerating their learning so that they could make the transition to credit programs. At the Downtown campus, students may be referred to these classes by counselors and/or instructors. In addition, any student who takes the credit ESL placement test and scores below the lowest level of credit ESL is referred to sections of Accelerated courses at the Ocean Campus, where most credit courses are offered.

[^1]Taking courses outside ESL. As discussed in Chapter 1, CCSF places no restrictions on whether non-credit ESL students can take non-credit courses offered by the College in fields other than ESL. A large percentage of the students in the cohort (27\%) took advantage of this option. The most popular courses for non-credit ESL students were courses offered by the Business Department. The second most popular were courses offered through the Transitional Studies Department, which is the department that offers ABE, GED, and High School Diploma instruction. ${ }^{82}$ Although, strictly speaking, the purpose of CCSF's policy with regard to enrolling outside ESL is not to enhance the learning gains or transitions of ESL students, this study revealed that the policy has that effect in some cases.

Students are most likely to take Other Non-Credit courses when these courses are offered at the same campus where they are studying ESL. Moreover, this study found that $81 \%$ of students in the cohort examined who took Other Non-Credit courses did so during the same period of time they were enrolled in ESLN. Only 3\% took Other Non-Credit courses before they first enrolled in ESLN, and $16 \%$ took those courses after they were no longer enrolled in ESLN.

Terminology. It is important to bear in mind that the analysis of Program Enhancements is this chapter is restricted to members of the non-credit cohort examined by this study. Because all members of that cohort were enrolled in CCSF's General ESL program (ESLN), the only students discussed are those enrolled in that program who took advantage of Program Enhancements. That is, this chapter discusses only those students who took ESLF, Accelerated Courses, and Other Non-Credit courses who were also enrolled in ESLN. For convenience, these students will sometimes be referred to as "ESLF," "Accelerated," or "Other Non-Credit" students, but this is with the understanding that they should more precisely be referred to as "ESLF plus ESLN," "Accelerated ESLN," and "ESLN and Other Non-Credit" students.

## B. MAJOR FINDINGS

- A large percentage ( $49 \%$ ) of students in the cohort took advantage of one or more of these Program Enhancement options at some time during the seven-year period during which they were studied.
- Most students who took advantage of these Enhancements selected only one Enhancement option, but 25\% of ESLN students who enrolled in Enhancement courses took both ESLF and Other Non-Credit courses.
- The most popular options were ESLF (selected by $33 \%$ of students in the cohort) and enrollment in Other Non-Credit courses (selected by $27 \%$ ). Only 720 students ( $2 \%$ of the cohort) enrolled in Accelerated Courses - perhaps due in part to the limited availability of those courses.

[^2]- Students who began their ESLN studies at higher levels were more likely to take advantage of all the Program Enhancements than were students who began at lower levels.
- On average, students who took advantage of any of the Enhancements enrolled in non-credit ESL for significantly more terms than did members of the cohort as a whole.
- On average, students who took advantage of any of the Enhancements advanced more levels than did members of the cohort as a whole regardless of the level at which they first enrolled. On average, the number of additional levels taken by ESLN students enrolled in ESLF and in Other Programs was fairly modest, but ESLN students who enrolled in Accelerated Courses took twice as many levels as members of the cohort as a whole.
- Program Enhancements were strongly related to transition to credit studies. In total, $81 \%$ of all students in the cohort who made transitions ( 2,609 students) took advantage of one or more Program Enhancements. These Enhancements were, therefore, part of the pathway to credit for most students in the cohort who made transitions.
- The three Program Enhancements had a cumulative effect. On average, students who selected two of the options had even higher retention rates, took more levels of ESLN, and were far more likely to transition to credit studies than were students who selected only one of the options. Students who selected all three options outperformed students who selected two options, although their number was fairly small due to the small enrollment in Accelerated courses. For example, although only 25\% of students in the cohort who enrolled in enhanced courses (and 12\% of the cohort as a whole) took both ESLF and Other Non-Credit courses, they accounted for $34 \%$ of all students in the cohort who made transitions to credit.
- The three Program Enhancements examined were, therefore, strongly associated with high levels of performance by ESLN students - in terms of retention, levels taken, and especially transitions to credit. This study could not determine whether the educational experiences provided by these options created this relationship, or whether students who selected them were highly motivated and would have performed at higher levels than members of the cohort as a whole even if the Program Enhancements had not been available. Clearly students who selected these options were highly motivated, because they were willing to devote the time required to take extra classes beyond ESLN.
- Given the uncertainty about causality, it is reasonable to assume that most students selected Program Enhancements because they believed these options would increase their chances of success in ESLN. And the strong association between all of the Enhancement options and high levels of student performance suggests that the students were right. As a result, CCSF appears to be providing an extremely valuable
service by offering these options and should continue to do so. Also, it appears that Accelerated courses greatly increase the rate at which students made transitions to credit ESL, and the College may wish to consider offering more of these courses and referring more students to them.
- Finally, other ESL programs should carefully examine the Program Enhancements offered by CCSF and their relationship to improved student performance. Due to the apparent success of the Enhancements in greatly improving virtually all aspects of student performance, and in particular their success in facilitating transitions, other programs should consider adopting them in some form.


## C. ENROLLMENT

Table 10.1 shows that a large percentage of students in the cohort examined by this study took advantage of one or more of the Program Enhancement options at some time during the seven-year period during which they were studied. The Table indicates that $51 \%$ of members of the cohort ( 19,556 students) enrolled in ESLN only - without any Program Enhancements. This means that $49 \%$ of members of the cohort ( 18,535 students) selected ESLN plus one or more enhancement options. Most of these students selected only one option, but some selected multiple options. For example, Table 10.6 (p. 190) indicates that $25 \%$ of ESLN students who enrolled in Program Enhancements (4,703 students, 12\% of the cohort as a whole) took both ESLF and Other Non-Credit courses.

Table 10.1 also shows the number and percentage of students in the cohort who took advantage of each of the Program Enhancement options at some time over the seven years during which they were examined. The Table shows that ESLF and Other NonCredit enrollment were the options most frequently selected, and that significant percentages of ESLN students selected each of them. In total, $32 \%$ of ESLN students $(12,289)$ also enrolled in ESLF at some time over the seven years, and 27\% of the cohort $(10,210)$ enrolled in Other Non-Credit courses. ${ }^{83}$ In contrast, only 720 students $(2 \%$ of the cohort) enrolled in Accelerated courses over the seven-year time period. In the years since members of the cohort first entered the College's ESL program, enrollment in Accelerated courses has gradually increased, but it has remained fairly small. For example, only 179 students enrolled in these courses in 1998, and 234 enrolled in 1999, but 522 students enrolled in Accelerated courses in 2006.

In addition, Table 10.1 also gives some indication of the types of students who selected each option. It shows the level of first enrollment in ESLN of students who took ESLF, Accelerated, and Other Non-Credit courses. It is important to note that the Table does not show the level in which they were enrolled at the time they took these Enhancement courses.

[^3]The "Total Cohort" column of Table 10.1 shows the number of students in the cohort as a whole who first enrolled at various levels. The columns for each option show the number of students first enrolled at each level who took advantage of that option and the percent of the cohort first enrolled at each level that this number represents. For example, of the 5,180 students whose first level was the Literacy Level (represented by"0"), $57 \%$ took ESLN only, $34 \%$ took ESLN and ESLF, $1 \%$ took Accelerated ESLN courses, and 20\% took ESLN and Other Non-Credit courses outside of ESL. Note that these percents do not add up to $100 \%$ because of overlap between the categories. A student may have enrolled in more than one Program Enhancement.

From these columns in Table 10.1, it is apparent that significant numbers and percentages of students who initially enrolled at all levels took advantage of Program Enhancement options. However, it is also apparent that students who initially enrolled at higher levels were more likely to take advantage of all of the options than students initially enrolled at lower levels. For example, $34 \%$ of students in the cohort who began at the Literacy Level and Level 1 enrolled in ESLF at some time, but more than half (53\%) of students in the cohort who began at Level 5 and a larger percent of those who began at Level 7 (55\%) enrolled in ESLF. Likewise, 20\% of students who began at the Literacy Level and $23 \%$ who began at Level 1 enrolled in Other Non-Credit courses, but $39 \%$ who began at Level 5 , and $51 \%$ who began at Level 7 took advantage of this option. ${ }^{84}$

Enrollment in Accelerated courses shows a similar pattern, but it has some peculiar features. Only 1-2\% of ESLN students who began at the Literacy Level or at Levels 1-3 took Accelerated courses at some point in time, but $9 \%$ of students who began at the highest "Beginning" level (Level 4) did so. Only 2\% of students who began at Level 5 and $4 \%$ who began at Level 6 took Accelerated courses, and only one student who began at Levels 7-9 took these courses. In percentage terms, therefore, Accelerated courses were primarily used by students who began at the highest Beginning Level.

This study cannot explain the clustering of Accelerated students around Level 4.
However, as noted above, some of the students enrolled in Accelerated courses attempted to enroll in credit ESL, but were referred to these courses because they could not pass the

[^4]credit placement test. As a result, the clustering effect may to some extent be a result of the pattern of referrals. ${ }^{85}$

In short, Table 10.1 shows that substantial numbers of students who began at almost all levels selected one or more of the Program Enhancement options offered by CCSF. However, students who began at higher levels were significantly more likely to select each of the Enhancement options.

Table 10.1 Enrollment

|  | Cohort | ESLN Only |  | ESLN and ESLF |  | Accelerated ESLN |  | ESLN and Other <br> Non-Credit |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| First <br> Level | Number | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| 0 | 5180 | 2967 | $57 \%$ | 1748 | $34 \%$ | 48 | $1 \%$ | 1024 | $20 \%$ |
| 1 | 16711 | 8916 | $53 \%$ | 5739 | $34 \%$ | 302 | $2 \%$ | 3795 | $23 \%$ |
| 2 | 3850 | 2199 | $57 \%$ | 1022 | $27 \%$ | 95 | $2 \%$ | 1053 | $27 \%$ |
| 3 | 3631 | 1349 | $37 \%$ | 1678 | $46 \%$ | 85 | $2 \%$ | 1208 | $33 \%$ |
| 4 | 1517 | 764 | $50 \%$ | 301 | $20 \%$ | 132 | $9 \%$ | 549 | $36 \%$ |
| 5 | 1363 | 399 | $29 \%$ | 718 | $53 \%$ | 21 | $2 \%$ | 536 | $39 \%$ |
| 6 | 1009 | 469 | $46 \%$ | 250 | $25 \%$ | 36 | $4 \%$ | 417 | $41 \%$ |
| 7 | 1060 | 230 | $22 \%$ | 580 | $55 \%$ | 1 | $0 \%$ | 545 | $51 \%$ |
| 8 | 310 | 104 | $34 \%$ | 36 | $12 \%$ |  | $0 \%$ | 196 | $63 \%$ |
| 9 | 30 | 4 | $13 \%$ | 9 | $30 \%$ |  | $0 \%$ | 25 | $83 \%$ |
| No Level | 3434 | 2155 | $63 \%$ | 208 | $6 \%$ |  | $0 \%$ | 862 | $25 \%$ |
| Grand |  |  |  |  |  |  |  |  |  |
| Total | 38095 | 19556 | $51 \%$ | 12289 | $32 \%$ | 720 | $2 \%$ | 10210 | $27 \%$ |

## D. PERSISTENCE

Table 10.2 compares the persistence of ESLN students who enrolled in each of the Program Enhancement options with the persistence of members of the cohort as a whole. Persistence is indicated by terms taken over the seven-year period.

[^5]As Chapter 2 indicates, members of the cohort who began at higher levels enrolled for fewer terms than did those who began at lower levels. This is a strong and systematic relationship for the cohort as a whole. The number of terms taken by members of the cohort decreases with each higher level at which they were first enrolled (with the exception of the small number of students enrolled at Level 9). This same relationship is seen in the terms taken by students who selected each of the Program Enhancement options (again, with the exception of levels at which very few students who selected each option were enrolled). For example, the mean number of terms taken by ESLN + ESLF students who began at Level 1 was 5.57 , but the mean number taken by students who began at Level 6 was 3.80.

More importantly, Table 10.2 shows that the persistence of students who selected each of the options was significantly higher that the persistence of students in the cohort as a whole, regardless of the level at which they first enrolled in ESLN. These differences are summarized by the "weighted average mean" numbers in the "Total" row at the bottom of the Table. These numbers represent the average of the mean numbers of terms taken by students at the various levels weighted by the number of students enrolled at each level. ${ }^{86}$ For convenience, this will be referred to as the "mean average."

The mean average of terms taken by members of the cohort as a whole was 3.60 terms. But the mean average of terms taken by students who enrolled in ESLN + ESLF was 5.38 terms. The mean averages of terms taken by students who took Accelerated and ESLN + Other Non-Credit courses were 5.01 and 4.98 terms, respectively. As a result, students who selected any of the Program Enhancements enrolled for between 1.4 and 1.7 more terms, on average, than did members of the cohort as a whole - a difference of between $39 \%$ and $47 \%$.

The differences in persistence for students who began at some levels were even greater. For example, the mean number of terms taken by members of the cohort as a whole who began at Level 1 was 3.64, but the mean number of terms taken by ESLF, Accelerated, and Other Non-Credit students who began at Level 1 were 5.57, 5.60, and 5.71 terms, respectively - a difference of between 1.9 and 2 terms.

Overall, the differences in terms taken between students who selected any of the program options and members of the cohort as a whole diminished as the level at which students were initially enrolled increased. This may reflect the fact that all students who began at higher levels had fewer levels to which they could advance than did students who began at lower levels. However, the differences at most levels are still substantial. The number of levels taken by students who first enrolled in the Literacy and Low Beginning levels (Levels 1-2) and who selected any of the Program Enhancements is especially impressive. If these students advanced a level for each term taken, they would have been able to advance from the Literacy or Low Beginning level to the Intermediate

[^6]levels of ESL and, in some cases, beyond. This was not the case for students in the cohort as a whole.

For example, if ESLN + ESLF students who began at Level 1 advanced one level for each of the 5.57 average number of terms in which they were enrolled, they would have advanced to the Intermediate Levels 5 or 6 . But if members of the cohort as a whole who began at Level 1 advanced a level for each of the 3.64 terms in which they were enrolled, they would have advanced only to the High Beginning Levels 3 or 4.

There do not appear to be any systematic differences in the numbers of ESL terms taken by ESLN students who selected ESLF and those who selected Other Non-Credit courses, when they are compared by the level at which they first enrolled. This is somewhat surprising, because it might be expected that some students who enrolled in ESLF would take more terms, due to the fact that they can enroll in only ESLF or only ESLN in different terms. On average, it appears that they did not do so. As mentioned above, most students who took ESLF and ESLN enrolled in both courses during the same term.

The pattern of terms taken by students who enrolled in Accelerated courses is somewhat erratic when they are compared by the level at which they began. It might be expected that students in Accelerated courses would take fewer terms, because they can advance more quickly toward their goals. If the two levels at which most Accelerated students began (Level 1 and Level 4) are compared, a mixed picture emerges. Accelerated students who began at Level 1 took about the same number of ESL terms as ESLF and Other Non-Credit students. But Accelerated students who began at Level 4 took significantly fewer terms ( 2.49 terms) on average than did ESLF students ( 4.90 terms) and Other Non-Credit students (3.39 terms).

These distinctions among terms taken should not obscure the major finding that can be drawn from Table 10.2. If terms taken reflect the motivation of students to advance in ESLN, the students who selected each of the Program Enhancement options were, on average, significantly more motivated than other students in the cohort. Not only did they take many more terms, but they also took enough terms to allow them to advance fairly far up the ladder of English language proficiency.

Table 10.2 Terms Taken

|  |  |  | ESLN and <br> ESLF |  | Accelerated <br> ESLN |  | ESLN and <br> Other Non- <br> Credit |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| First <br> Level | Mean | Median | Mean | Median | Mean | Median | Mean | Median |
| 0 | 5.2 | 4 | 7.95 | 8 | 9.27 | 9.5 | 7.87 | 8 |
| 1 | 3.64 | 2 | 5.57 | 5 | 5.6 | 5 | 5.71 | 5 |
| 2 | 3.45 | 2 | 5.84 | 5 | 5.76 | 5 | 4.89 | 4 |
| 3 | 3.05 | 2 | 4.03 | 3 | 4.98 | 4 | 4.06 | 3 |
| 4 | 2.61 | 2 | 4.9 | 4 | 2.49 | 2 | 3.39 | 2 |
| 5 | 2.52 | 2 | 3.13 | 2 | 4.38 | 3 | 3.24 | 3 |
| 6 | 2.29 | 2 | 3.8 | 3 | 2.11 | 2 | 2.97 | 2 |
| 7 | 2.13 | 2 | 2.6 | 2 | 6 | 6 | 2.52 | 2 |
| 8 | 2 | 1 | 3.56 | 2 |  |  | 2.18 | 2 |
| 9 | 4.37 | 3 | 6.11 | 4 |  |  | 4.56 | 3 |
| Total | 3.6 | 2 | 5.38 | 4 | 5.01 | 4 | 4.98 | 4 |

-Totals are the weighted (by the number of students at each level) average mean and median for each group. It is consequently not simply the average of the first level averages but each average weighted by the number of students at that level.

## E. LEVELS TAKEN

Table 10.3 shows how students who selected each of the Program Enhancements translated their additional terms of enrollment into the numbers of levels in which they were enrolled (levels taken), and hence into the number of levels they advanced.

## 1. Increase In Levels Taken

Table 10.3, like the preceding Table, shows that students who selected any of the Program Enhancements outperformed members of the cohort as a whole, but the differences are less striking. The average mean number of levels taken by members of the cohort as a whole was 1.94 levels, about a one level advance. For ESLN students who enrolled in ESLF, the average mean number of levels taken was 2.66, and for students who enrolled in Other Non-Credit courses, it was 2.57 levels. These averages exceed the number of levels taken by members of the cohort as a whole by less than one level. They suggest that while ESLN students who enrolled in ESLF and Other Non-Credit courses took more levels than did members of the cohort as a whole - and some of them may have advanced multiple levels - on average they advanced less than two levels.

In contrast, the average mean number of levels taken by students who enrolled in Accelerated courses was 3.22 levels. This exceeded the number of levels taken by ESLN plus ESLF or Other Non-Credit students, and it exceeded the number of levels taken by members of the cohort as a whole by more than one level. Moreover, Accelerated
students advanced farther than ESLF or Other Non-Credit students. On average, they advanced more than two levels. This greater level advancement by Accelerated students makes sense, because Accelerated courses combine two levels of ESLN. Thus, if students completed even one of these courses they could have advanced two levels - more than members of the cohort as a whole.

The only way to determine from this Table whether Accelerated students completed an Accelerated course would be if they enrolled in more than two levels. This would show that they completed the two levels of the Accelerated course and were promoted to the next level. Apparently, on average they did so, because on average they enrolled in 3.22 levels.

Hence, although the average mean number of terms taken by Accelerated students is about the same as the number taken by ESLF and Other Non-Credit students, Accelerated students translated these terms into somewhat more levels taken and levels advanced than students who select other Program Enhancements.

## 2. A Modest Effect

These differences in levels taken must be placed in perspective. Advancing one additional level or less over a seven-year period is a welcome but fairly modest improvement in student performance. This is especially true because students who selected each of the three Program Enhancements took five terms or more, on average, and CCSF's curriculum is designed to provide the instruction students need to advance a level in each term. But, on average, students who selected Program Enhancements did not translate their high rates of persistence into equally high rates of level advancement. They took between 2.57 and 3.22 levels (and advanced between one and two levels). On average, it took students who selected Program Enhancements more than one term to advance each level. Although this was a greater rate of level advancement than members of the cohort as a whole (who took 1.82 levels and advanced slightly less than one level, on average), the difference is not dramatic.

In addition, most of the difference in levels taken between students who selected Program Enhancements and members of the cohort as a whole occurred among students who began at the Literacy or Beginning levels. Although ESLF, Accelerated, and Other NonCredit students who began at higher levels often took slightly more levels than members of the cohort as a whole, the differences were fairly small or non-existent.

For example, members of the cohort as a whole who began at Level 1 (the level with the greatest enrollment) took 2.11 levels, on average, whereas ESLF students took 3.00 levels, Accelerated students took 3.87 levels, and Other Non-Credit students took 3.18 a difference of between .89 and 1.76 levels, depending on which Program Enhancement is examined. But members of the cohort who began at Level 6 took 1.08 levels on average, compared to 1.22 levels taken by ESLF students, 1.17 taken by Accelerated students, and 1.54 levels by Other Non-Credit students- a much smaller difference of
between .09 levels and .46 levels. These small differences probably exceed the limits of a table that presents statistical averages to fairly represent any difference at all.

Equally important, even though Program Enhancement students (those who selected any of the program enhancements) who began at the Literacy and Beginning levels advanced the most levels, only those who began at Level 4 advanced enough levels to move to the Intermediate Levels of ESLN. The example of Level 1 students just given illustrates this point. Students who began at Level 1 took between 3.0 and 3.87 levels on average, and hence advanced between two and three levels. But this average level of advancement would, at best, have placed them at Level 4, one level short of the lowest Intermediate level (Level 5). Comparisons of the average numbers of levels advanced by Enhancement students who first enrolled at all Beginning levels, except Level 4 lead to the same conclusion: on average, students at the Beginning levels who selected Program Enhancements did not reach the Intermediate level.

Of course, averages can be deceptive. Because the average number of levels taken by students who selected Program Enhancements was greater than the average for the cohort as a whole, it is likely that more Enhancement students than members of the cohort as a whole advanced to the Intermediate level or beyond. But, on average, those students who appeared to benefit most from Program Enhancements (Literacy and Beginning Level students) did not advance enough additional levels to reach the Intermediate Level.

Table 10.3 Levels Taken

|  |  |  | ESLN and <br> ESLF |  | ESLN and <br> Accelerated |  | Other Non- <br> Credit |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| First <br> Level | Mean | Median | Mean | Median | Mean | Median | Mean | Median |
| 0 | 2.18 | 2 | 3.03 | 3 | 4.96 | 5 | 3.15 | 3 |
| 1 | 2.11 | 1 | 3 | 3 | 3.87 | 4 | 3.18 | 3 |
| 2 | 1.99 | 1 | 2.98 | 3 | 3.74 | 3 | 2.69 | 2 |
| 3 | 1.9 | 1 | 2.45 | 2 | 3.29 | 4 | 2.51 | 2 |
| 4 | 1.4 | 1 | 2 | 2 | 1.41 | 1 | 1.7 | 1 |
| 5 | 1.27 | 1 | 1.43 | 1 | 2.29 | 3 | 1.52 | 1 |
| 6 | 1.08 | 1 | 1.22 | 1 | 1.17 | 1 | 1.24 | 1 |
| 7 | 0.87 | 1 | 0.85 | 1 | -2 | -2 | 0.88 | 1 |
| 8 | 0.69 | 1 | -0.08 | 1 |  |  | 0.6 | 1 |
| 9 | 0.93 | 1 | 0.78 | 1 |  |  | 1 | 1 |
| Total | 1.94 | 1 | 2.66 | 2 | 3.22 | 3 | 2.57 | 2 |

-Totals are the weighted (by the number of students at each level) average mean and median for each group. It is consequently not simply the average of the first-level averages but each average weighted by the number of students at that level.

## F. TRANSITIONS

## 1. Summary Relationship of Program Enhancements to Transitions

The three Program Enhancements were strongly associated with transitions to credit studies. Table 10.4 shows this relationship in a summary form. It shows that only 623 ESLN students who did not select any of the Enhancement options made the transition to credit. This means that only $3 \%$ of these students made transitions. In contrast, 2,609 students who selected one or more Program Enhancements made the transition to credit. For these students, this was a transition rate of $14 \%$. More importantly, the Table shows that $81 \%$ of members of the cohort who made transitions selected one or more Program Enhancements. This is an exceptionally strong relationship.

In short, the overwhelming majority of members of the cohort who made transitions selected one or more Program Enhancement options. These options were, therefore, part of the pathway to credit for most non-credit students who enrolled in CCSF's credit programs.

In addition, Table 10.4 indicates the first level of enrollment of students who made transitions. For students who did not select Program Enhancements and for those who did, the rate of transition increased as the level of first enrollment increased. However, the differential between these two groups of students is striking.

For example, of those students who first enrolled at Level 1, only $1 \%$ of students (104) who did not select Program Enhancements made transitions, but $9 \%$ of students (689) who selected at least one Enhancement did so. This is a particularly striking number, because Chapter 6 showed that only $8 \%$ of the total cohort advanced to credit. Thus, taking at least one Enhancement apparently helped students who started at the lowest Beginning Level to achieve a transition rate that matched the rate of students in the cohort as a whole. Students who first enrolled at Level 2 who took at least one Enhancement had a transition rate almost twice as great as members of the cohort as a whole (15\%). Those who started at the highest Beginning Level (Level 4) had a transition rate ( $21 \%$ ) nearly three times as great as the cohort as a whole.

Another important finding that can be gleaned from Table 10.4 is the very low levels at which Enhancement students who made transitions first enrolled in ESL. The above discussion of enrollment indicated that Enhancement students were most likely to begin at higher levels rather than lower levels. But Table 10.4 shows that a large number and percent of even those who began at fairly low levels made transitions. In fact, $62 \%$ of Enhancement students who made transitions began at the Literacy or Beginning Levels (1-4). This suggests that higher beginning levels were not responsible for the greater transition rates of Enhancement students.

Table 10.4 Transition to Credit by First Non-Credit Level

|  | No Enhancements |  |  | At Least One Enhancement |  |  |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: |
| First <br> Level | Total | Number | Percent | Total | Number | Percent |
| 0 | 2967 | 30 | $1 \%$ | 2213 | 123 | $6 \%$ |
| 1 | 8916 | 104 | $1 \%$ | 7795 | 689 | $9 \%$ |
| 2 | 2199 | 59 | $3 \%$ | 1651 | 240 | $15 \%$ |
| 3 | 1349 | 80 | $6 \%$ | 2282 | 428 | $19 \%$ |
| 4 | 764 | 52 | $7 \%$ | 753 | 160 | $21 \%$ |
| 5 | 399 | 55 | $14 \%$ | 964 | 243 | $25 \%$ |
| 6 | 469 | 46 | $10 \%$ | 540 | 151 | $28 \%$ |
| 7 | 230 | 31 | $13 \%$ | 830 | 251 | $30 \%$ |
| 8 | 104 | 12 | $12 \%$ | 206 | 67 | $33 \%$ |
| 9 | 4 |  | $0 \%$ | 26 | 10 | $38 \%$ |
| No <br> Level | 2155 | 154 | $7 \%$ | 1279 | 247 | $19 \%$ |
| Grand |  |  |  |  |  |  |
| Total | 19556 | 623 | $3 \%$ | 18539 | 2609 | $14 \%$ |

## 2. Relationship Between Each Enhancement and Transitions

Table 10.5 shows rates at which ESLN students who selected each of the Program Enhancements made the transition to credit studies, compared to the transition rates of members of the cohort as a whole. Each column presents the number of students initially enrolled at each level who made the transition to credit courses and the percentage of students in each category (Total Cohort, ESLF + ESLN, Accelerated, and ESLN + Other Non-Credit Courses) that number represents. As noted above, some students selected more than one Enhancement option. The numbers and percentages in Table 10.5 represent the numbers and percentages of both students who enrolled only in each Enhancement option and those who enrolled in each option as well as other options. ${ }^{87}$

The Table indicates that Accelerated students were the most likely to make transitions. Although their number was fairly small, $31 \%$ of these students made transitions. This makes sense because (as discussed above) many Accelerated students were referred to Accelerated courses because teachers and counselors believed they had the potential to advance rapidly and/or expressed the desire to enroll in credit courses.

More than half of all members of the cohort who made transitions were enrolled in either ESLF+ESLN or ESLN + Other Non-Credit courses. Students who enrolled in Other NonCredit courses and those who took ESLF made transitions at about the same rate (17\%

[^7]and $15 \%$ respectively). This is approximately twice the rate at which members of the cohort as a whole made transitions.

One striking aspect of these rates is that enrollment in Other Non-Credit courses is, of course, not enrollment in ESL. Yet Enhancement students who took Other Non-Credit courses made transitions at a rate that was not only higher than members of the cohort as a whole, but also slightly higher than the rate of students who selected ESLF.

Table 10.5 is consistent with Table 10.4 in showing that the transition rates for students who selected each Program Enhancement increased as the level at which they were first enrolled increased. But Table 10.5 also shows that those rates were higher than the transition rates of the cohort as a whole at every level of first enrollment. The only exceptions were the highest levels at which Enhancement students began. But so few Enhancement students began at these levels that the numbers can be discounted.

Table 10.5 is also consistent with the summary transition rates in Table 10.4 in that it shows that remarkably large numbers of Enhancement students who began at very low levels made transitions. Ninety-two percent of Accelerated students, 71\% of ESLF students, and $58 \%$ of Other Non-Credit students who made transitions began at the Literacy Level or the Beginning Levels (Levels 1-4).

Table 10.5 Transition to Credit by First Non-Credit Level and Type of Enhancement

| First Level | Cohort | Total Cohort Transitioning to Credit |  | ESLN and ESLF Transitioning to Credit |  | Accelerated Transitioning to Credit |  | ESLN and Other Non-Credit Transitioning to Credit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| 0 | 5180 | 153 | 3\% | 102 | 6\% | 14 | 29\% | 85 | 8\% |
| 1 | 16711 | 793 | 5\% | 581 | 10\% | 88 | 29\% | 437 | 12\% |
| 2 | 3850 | 299 | 8\% | 184 | 18\% | 36 | 38\% | 165 | 16\% |
| 3 | 3631 | 508 | 14\% | 359 | 21\% | 36 | 42\% | 304 | 25\% |
| 4 | 1517 | 212 | 14\% | 64 | 21\% | 30 | 23\% | 134 | 24\% |
| 5 | 1363 | 298 | 22\% | 195 | 27\% | 11 | 52\% | 182 | 34\% |
| 6 | 1009 | 197 | 20\% | 82 | 33\% | 7 | 19\% | 126 | 30\% |
| 7 | 1060 | 282 | 27\% | 180 | 31\% |  |  | 209 | 38\% |
| 8 | 310 | 79 | 25\% | 14 | 39\% |  |  | 64 | 33\% |
| 9 | 30 | 10 | 33\% | 3 | 33\% |  |  | 10 | 40\% |
| No Level | 3434 | 401 | 12\% | 45 | 22\% |  |  | 217 | 25\% |
| Grand Total | 38095 | 3232 | 8\% | 1809 | 15\% | 222 | 31\% | 1933 | 19\% |

## G. MULTIPLE ENHANCEMENTS

As noted above, some students selected more than one Program Enhancement. This created a number of possible combinations. The most common combination was between students who selected the two Enhancements with the largest total enrollment - ESLF and Other Non-Credit courses. As noted above, $25 \%$ of students who enrolled in Program Enhancement courses (and 12\% of the cohort as a whole) selected this combination. Only a small number of students selected all three Enhancements, as evidenced by the fact that enrollment in Accelerated courses was relatively small.

This study reviewed many of these combinations and their relationship to the major student outcomes discussed above - persistence, level advancement, and transitions. In all cases, students who selected two Enhancements outperformed students who selected only one Enhancement with regard to each of these variables, and students who selected three Enhancements performed even better. That is, students who selected two enhancements had higher rates of persistence (measured by terms taken), level advancement (measured by levels taken), and transitions (measured by the percent who made transitions) than did students who selected only one option. And the small number of students who selected three options had even higher rates.

For the sake of brevity, only one example of the relationship between multiple Enhancements and student outcomes will be presented here, the effect on transition rates that taking additional Enhancements had for students who enrolled in ESLN + ESLF. This is shown in Table 10.6.

The far left set of columns in Table 10.6 show the total number of students in the cohort who did not select any Program Enhancements (who enrolled in ESLN only), the number of these students who made transitions, and the percent of the total number who made transitions. The next set of columns presents the same information for students who took only ESLF and ESLN. Following is the same information for students who took ESLF and ESLN plus Other Non-Credit Courses. The last set of columns presents this information for students who took ESLN and all three Program Enhancements (ESLF, Other Non-Credit, and Accelerated courses). ${ }^{88}$

The "Grand Total" at the bottom of the Table summarizes the results of these combinations. It shows that only $3 \%$ of the students who took ESLN without any Program Enhancements (623 students) made transitions to credit during the seven-year time period. In contrast, $8 \%$ of the students who combined ESLN with ESLF (556 students) made transitions - a smaller number, but a higher transition rate. Further, 23\%

[^8]of students $(1,104)$ who combined ESLN and ESLF with Other Non-Credit courses made transitions. These students were $34 \%$ of all students in the cohort who made transitions, although they were only $6 \%$ of students who enrolled in Program Enhancement courses and $3 \%$ of the cohort as a whole.

In short, the small number of students who enrolled in both ESLN+ESLF and Other Non-Credit courses accounted for a large portion of the transitions made by the cohort as a whole.

Because only 217 students represented in Table 10.6 selected all three Enhancement options, they did not comprise a very large number or percentage of either Enhancement students or members of the cohort who made the transition to credit. However, their transition rate was very high. Forty-five percent of these students made the transition to credit.

Table 10.6 also shows that there were major differences in the transition rates between students who took only ESLN and students who selected each incremental Program Enhancement regardless of the first level in which the students were enrolled. The only exceptions were students who first enrolled at very high levels, where the small number of students makes these calculations unreliable.

In sum, Table 10.6 shows that the likelihood that students would make transitions increased greatly depending on whether they selected Enhancement options, and it also increased greatly depending on how many options they selected. Judging from the percentages of students who made transitions, students who took ESLF in addition to ESLN were almost three times as likely as those who selected ESLN only to make the transition to credit, and those who also selected Other Non-Credit courses were almost eight times as likely to make the transition. The small numbers of students who also selected Accelerated courses were 15 times more likely than students who took ESLN only to make transitions to credit.

Table 10.6 Transition to Credit by First Level and Multiple Enhancements

|  | ESLN Only |  |  | ESLN + ESLF |  |  | ESLN + ESLF+ Other Non-Credit |  |  | All Three Enhancements |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| First Level | Total | \# | \% | Total | \# | \% | Total | \# | \% | Tota I | \# | \% |
| 0 | 2967 | 30 | 1\% | 1163 | 33 | 3\% | 552 | 59 | 11\% | 18 | 7 | 39\% |
| 1 | 8916 | 104 | 1\% | 3648 | 209 | 6\% | 1930 | 308 | 16\% | 88 | 39 | 44\% |
| 2 | 2199 | 59 | 3\% | 550 | 59 | 11\% | 414 | 99 | 24\% | 36 | 16 | 44\% |
| 3 | 1349 | 80 | 6\% | 898 | 103 | 11\% | 712 | 224 | 31\% | 38 | 19 | 50\% |
| 4 | 764 | 52 | 7\% | 117 | 16 | 14\% | 152 | 42 | 28\% | 20 | 6 | 30\% |
| 5 | 399 | 55 | 14\% | 366 | 55 | 15\% | 339 | 131 | 39\% | 11 | 8 | 73\% |
| 6 | 469 | 46 | 10\% | 99 | 22 | 22\% | 143 | 58 | 41\% | 6 | 2 | 33\% |
| 7 | 230 | 31 | 13\% | 244 | 39 | 16\% | 335 | 141 | 42\% |  |  |  |
| 8 | 104 | 12 | 12\% | 10 | 3 | 30\% | 26 | 11 | 42\% |  |  |  |
| 9 | 4 |  | 0\% | 1 |  | 0\% | 8 | 3 | 38\% |  |  |  |
| No Level | 2155 | 154 | 7\% | 116 | 17 | 15\% | 92 | 28 | 30\% |  |  |  |
| Grand Total | 19556 | 623 | 3\% | 7212 | 556 | 8\% | 4703 | 1104 | 23\% | 217 | 97 | 45\% |

## H. DISCUSSION

## 1. A Success Story

The Program Enhancements discussed in this chapter (enrollment in ESLF, Other Non-Credit courses, and Accelerated courses) are clearly a success story at CCSF in two senses.

First, they are a success because so many ESL students make use of them (with the exception of Accelerated courses). ESL students at CCSF are not required to enroll in any of these courses. They choose to do so, and in choosing they voluntarily take either more courses (in the case of ESLF and Other-Non Credit) or take more demanding courses (in the case of Accelerated students) than they would otherwise. As a result, students who select these options choose to pay a substantial price in terms of time and effort - a price that is not required by the College.

In these circumstances, the fact that $48 \%$ of the cohort studied chose one or more enhancements during the seven-year time period suggests that a large portion of ESLN students value these offerings and see them as a means to improve their English proficiency and/or to attaining their other personal goals. Thus, Program Enhancements are a "success story" in that they give so many students options they want, and are willing to pay for with additional time and effort.

Second, Program Enhancements are a success story because they are associated with success on the part of the students who use them. On average, students who select any of these options have significantly higher retention rates, modestly higher levels of advancement, and far greater rates of transition to credit programs than do other ESL students. The fact that $81 \%$ of the members of the cohort who made transitions to credit selected one or more Enhancement options indicates how strong the relationship is between these options and success.

Moreover, Enhancement students were more successful than other students in retention, level advancement, and transitions regardless of the level at which they first enrolled in non-credit ESL. In fact, in most cases they are more successful if they initially enrolled at lower levels. And students who enrolled in more than one program option were more likely to be successful by all measures than those who selected only one option. Students who combined ESLN+ESLF with Other Non-Credit courses constituted only $3 \%$ of the cohort, but they constituted $34 \%$ of all the members of the cohort who made transitions. This is a stunning relationship to success. And students who also enrolled in the option least often selected (Accelerated courses) were the most successful of all.

In short, whether viewed from the perspective of what students valued or from the perspective of what students achieved, the Program Enhancements examined in this chapter were a success story for CCSF because they gave students services they wanted, and because the students who wanted these services were the most successful of CCSF's ESL students. By itself, this is a compelling reason for the College to continue to offer these options and for other colleges to examine the possibility of implementing them.

Finally, from a parochial point of view, these Program Enhancements are "good business" for CCSF. Enhancement students enroll for more terms than other students thereby generating more state FTE reimbursement funds. And Enhancement students are more likely than other students to make transitions to credit - thereby generating even more funding from both state reimbursements and tuition.

## 2. Cause and Effect

Given the strength of the relationship between Program Enhancements and student success it is tempting to conclude that the Enhancement courses were the cause of higher rates of student success. That is, it is tempting to conclude that if students had not taken these courses they would have performed at about the same lower rate as the $52 \%$ of ESL students who did not do so.

However, as noted in other chapters, observational research of the sort conducted by this study cannot conclusively determine causality. While it seems likely that the learning experiences provided by Enhancement courses caused higher rates of success, there are other hypotheses that would explain the relationship between these courses and better student outcomes.

For example, it is possible that only the most motivated ESL students - or those who encountered the fewest personal barriers to attending courses - selected Program Enhancements. Arguably, these students would have performed better than other ESL students regardless of whether they took Enhancement options. There is undoubtedly some truth to this idea, because taking Enhancement courses clearly demonstrates substantial motivation and the ability to overcome personal barriers, simply because students who took the courses were willing and able to devote more time to their studies.

It is hard to know how large a role self-selection due to motivation played in the higher success rates of Enhancement students. Previous chapters showed that 38\% of CCSF's ESL students enrolled for only one term, $56 \%$ did not advance even one level, and half of those who did not advance even one level enrolled for 50 hours or less. It seems unlikely that any of these students enrolled in Program Enhancements. As a result, the $48 \%$ of students who enrolled in Program Enhancements performed much better than the cohort as a whole because they were primarily members of that portion of the cohort who made a substantial commitment to ESL.

But this still does not answer the question of whether Enhancement students would have performed less well if enhancement options had not been available to them. Nor does it answer another question: if the students who had very low rates of retention and level advancement had enrolled in Enhancement courses, would their retention, level advancement, and transition rates have improved?

Another alternative hypothesis, is that the higher performance of Enhancement students particularly with regard to transitions - resulted from greater "attachment to the College," rather than from special features of Enhancement courses. That is, it is possible that because Enhancement students attended so many more terms than other students, they may have come to think of themselves as college students and to adopt the value that the College places on success in terms of moving up the ESL ladder. Increased exposure to and participation in learning activities rather than course content and design may have had an acculturation effect. This is quite possible because other chapters have shown that students who took more terms performed better in ESL by most measures.

But this hypothesis does not explain why these students took so many additional terms and courses. After a certain point, increased attendance may have reinforced their motivation to succeed. But why did they begin to take Enhancement courses? This study did not examine data that would answer that question.

## 3. Disproving "The Null Hypothesis"

The most that this study can contribute with certainty to a discussion of cause and effect in the case of Program Enhancements is to "disprove the null hypothesis." That is, if Program Enhancements had no effect on student performance, Enhancement students would not have performed better than other students. Because they did perform better, the possibility exists that the Enhancements by themselves caused all or some of their greater
performance. Beyond this contribution, the study can only offer informed speculation about how these courses, by themselves, may have led to increased learning gains.
$\boldsymbol{E S L F}$. In the case of ESLF, the most likely explanation is that ESLF courses performed precisely the function they were designed to perform: they helped students at any level bring all of their core ESL skills up to the degree of English proficiency required to complete that level. Because most students who took ESLF did so concurrently with ESLN, this would have resulted in a greater likelihood that ESLF students would advance levels, and that they would to do so more quickly than would students who took only ESLN. Moreover, their higher rates of advancement may have increased the likelihood that they would attain levels of English proficiency that allowed them to make transitions. In addition, their success in advancing levels may have had a motivational effect: it may have convinced them that they could succeed and thus resulted in greater efforts to increase their success.

Other non-credit. The increased performance in ESL courses of students who took Other Non-Credit courses was an accidental finding of this study. It can be explained in a number of ways. Possibly students who took Other Non-Credit courses were in a hurry to obtain some real-world benefits from education - particularly economic benefits. Studying ESL alone may have seemed too long a road for them to take before they could improve their employment prospects. The opportunity to take Other Non-Credit courses may have allowed them to gain near-term benefits at the same time they were improving their English. And this combination may have encouraged them to persist in both ESL and Other Non-Credit courses. In short, they may have been students who found a way to "have their cake and eat it, too."

In addition, taking Other Non-Credit courses may have led students to consider making transitions to credit courses by showing them the benefits of further education. Finally, enrollment in these courses may have increased the English language proficiency of students by allowing them to practice their English in challenging, authentic settings with native language speakers.

All of these explanations are plausible, and all of them are probably correct to some degree. Certainly, all of the explanations are consistent with widely-held beliefs about factors that increase English learning gains. ESL professionals have long believed that increasing the near-term benefits of language study, demonstrating its importance, and encouraging ESL students to practice more with native speakers increase student outcomes. Regrettably, this study could not determine whether any of these factors contributed to the increased performance of Other Non-Credit students. Nevertheless, based on their professional experience and judgment, the authors and other ESL professionals who have reviewed these findings are inclined to believe that all of these factors made a contribution. Clearly this is a subject on which further research would be of great value.

Accelerated. The strongest case that Program Enhancements by themselves caused improved performance can be made for Accelerated students. Many of these students
were referred to Accelerated courses because they wanted to enroll in credit ESL and/or were identified by teachers and counselors as students who had the potential to advance rapidly (possibly in part because they had high levels of prior education). It is more than likely that students who wanted to enroll in credit studies used Accelerated courses as an efficient means to achieve their goal. It is not surprising, therefore, that these self-selected students achieved exceptionally high rates of transition.

And even if all Accelerated students did not have credit enrollment as an initial goal, their ability to advance rapidly using Accelerated courses probably made this a more realistic goal for many of them. In short, there is strong "face validity" to the notion that Accelerated programs were, by themselves, a major reason that the students who enrolled in them were so successful - especially in making transitions.

Fast tracks. This tentative conclusion about Accelerated courses has two important implications for CCSF and other institutions that manage ESL programs. First, it suggests that these programs can, in fact, identify some students who will benefit from being on a "fast track" to credit studies or other major educational gains. Second, it suggests that ESL Programs should try to identify more students who could be placed on fast tracks and provide the tracks that will allow them to progress rapidly. The most surprising thing about Accelerated students is that there are so few of them. Perhaps CCSF has guided all of the students who are willing and able to pursue this option into Accelerated studies, but CCSF and other ESL providers should undoubtedly investigate whether more students can benefit from Accelerated courses, both by offering more of these courses and by encouraging more students to consider taking them.

Multiple enhancements. Finally, if any of these explanations of the benefits of Program Enhancements are valid, the multiplier effect of taking multiple options needs little explanation. Students who take multiple options obtain the benefits of all options they take. The surprising finding of this study is that the multiplier effect is very large seemingly greater than the simple sum of the effects of the options combined. This study cannot explain this magnitude. Perhaps students who take multiple options are very highly motivated - particularly to make transitions to credit. They may be "college bound" students who use every option the College provides to achieve their goal. Perhaps, too, the personal and educational experiences of various combinations of Program Enhancements have an interaction effect in terms of motivation and/or in terms of how learning different skills in different ways reinforce each other. Because of the magnitude of the effect, this is another area where further research would be highly beneficial.

## 4. Pathways to Success

In some respects, it does not matter that this study cannot fully explain why students who select Program Enhancement outperform other ESL students. It is sufficient to know that they do. The Program Enhancements are part of the pathways to success (and, importantly, the pathways to credit) for the College's highest performing students. They
are part of those pathways because high performing students select them, not because they are required.

Thus, even if causality is in doubt, CCSF and other ESL providers would be well advised to assume that their students are right to believe they gain value-added from these options. CCSF should continue and strengthen these Program Enhancements, and other ESL programs should consider adopting them. They appear to have a stronger relationship to student success than any other aspect of program design examined by this study. Although the specific form they take at CCSF can certainly be modified in many ways, the basic logic behind each Enhancement and behind combining them seems compelling. As a result, augmenting standard ESL instruction with these Enhancements in some form should be high on the priority list of any ESL program that wants to improve student outcomes.

Finally, the fact that $30 \%$ of the cohort studied were willing and able to enroll in additional or more demanding courses than General ESL suggests that a significant portion of ESL students are prepared to make a larger commitment to improving their English and vocational skills than most programs require. This, in turn, suggests that the proposals for offering accelerated, high intensity tracks discussed in Chapter 5 and 6 are both feasible in terms of student demand and would greatly accelerate learning gains, transition rates, and the achievement of tangible economic benefits for many students.


[^0]:    ${ }^{80} \mathrm{http}: / / \mathrm{www} . c c s f . e d u /$ Resources/Teacher_Resource_Center/handbook.pdf

[^1]:    ${ }^{81}$ Another Program Enhancement of special interest is CCSF's VESL Immersion Program (VIP). This is a high-intensity Non-credit program offered to welfare recipients in conjunction with the San Francisco Department of Human Services. Although the program is highly effective, it is not discussed in this chapter, because participants in VIP were not members of the cohort studied by this report. Also a full analysis of VIP has been published elsewhere. See: Forrest P. Chisman and JoAnn Crandall, Passing the Torch: Strategies for Innovation in Community College ESL (New York: Council for he Advancement of Adult Literacy, 2007) pp. 148-153. Available at: www.ccalusa.org.

[^2]:    ${ }^{82}$ Approximately 12\% of students in the Transitional Studies Department in 2004-2005 took courses to prepare for the GED exam or to meet the requirements for a high school diploma.

[^3]:    83 The percent of members of the cohort who took ESLF in Table 10.1 differs slightly from the percent given in Chapter 3, because 883 students who enrolled in ESLF only were eliminated from the calculations in Chapter 3. In this chapter, these students are included in calculations of the total cohort, but not in calculations of the number of students who took ESLN+ESLF.

[^4]:    ${ }^{84}$ It will be noted that the number (and percent) of students who took ESLF is lower at Levels 2, 4, and 6 than at $1,3,5$, and 7 . As explained in Chapter 3, this is probably due to the opportunities students had to enroll in multi-level courses. For example, those who began at Level 1 might have enrolled in a Level 1-2 ESLF course either when they first enrolled or after they advanced to Level 2. Those who began at Level 2 could only have enrolled in that course at the time of their first enrollment. Hence, students who began at odd numbers of levels had twice the chance of enrolling in a multi-level course (if they advanced a level) as did those who began at even number levels.

[^5]:    ${ }^{85}$ If the numbers of ESLN students who took ESLF, Accelerated, and Other Non-credit courses are examined, Table 10.1 may appear to tell a different story than just discussed (the percentage of the total cohort who selected each option at each level). By far the largest number and percentage of students who selected each option first enrolled in Level 1. Forty-seven percent of those who took ESLF, $42 \%$ of those who took Accelerated courses, and $37 \%$ of those who took Other Non-Credit courses first enrolled in Level 1. This is because the largest number of CCSF's ESLN students (44\%) first enrolled in Level 1. As a result, the chances that students who began at Level 1 would enroll in Program Enhancement (or any other) courses are higher than the chances that students who began at other levels would do so. Also students who began at that level had the opportunity to advance through eight more levels during the seven-year period, and they might have enrolled in Program Enhancement courses at any of these levels. Thus, students who began at Level 1 had a greater opportunity than students who began at higher levels to enroll in other courses during the period examined by this study.

[^6]:    ${ }^{86}$ More precisely, the "weighted average mean" of terms taken was calculated by multiplying the mean number of terms taken at each level by the number of students at that level, adding the totals, and dividing by the total number of students.

[^7]:    ${ }^{87}$ The number of students who selected certain combinations of Enhancement options is discussed in the section on "Multiple Enhancements" below.

[^8]:    ${ }^{88}$ This table shows the differences in transition rates between ESLN only students and students who took only ESLN+ESLF. It then proceeds to show the additional difference in those rates of ESLN+ESLF students who took other Program Enhancements. A table that began by showing the difference in rates of students who took only Other Non-Credit or Accelerated courses and proceeded in the same way would show different numbers and percentages in each cell, but it would show the same cumulative result in terms of the percentage of students who took multiple options. It would also show that students who took both ESLN+ESLF and Other Non-Credit courses were far more likely to make transitions than were other students.

