



Instruction with Placement in English and Math - Spring 2014

Background

In Fall 2013 a working group of English and math faculty, the Dean of Science, Language Arts, and Math (SLAM), and the Director of Research and Planning met to review our placement test results. A review of our documents showed the previous study on satisfaction with placement was conducted in fall 2009. State regulations require colleges to evaluate consequential validity on a regular basis; therefore the working group reviewed survey instruments and agreed on the timeline for data collection. The group requested surveys for all English and math sections to be implemented during the fourth week of the spring 2014 semester.

Data Collection Process

Nearly all English and math courses offered in spring 2014 were included in the study. Specifically the list of courses includes all foundational skills and the first transfer level course in each subject: ENGL-280, ENGL-270, ENGL-260, ENGL-190, ENGL-1A, MATH-260, MATH-240, MATH-220, MATH-100, MATH-101, MATH-102, MATH-110, and MATH-14.

The study consisted of two surveys: one for students and one for faculty. We used a paper survey for students to complete in class. Due to low response rates, we elected not to survey online sections at this time. The student survey was designed to elicit each student's perception of the appropriateness of their course placement, the method they were placed into the course, and their student ID. Instructors were provided a student roster where they could record their perception of each student's appropriate course placement. Faculty returned their annotated rosters to the research office with student responses for processing. The research office used student IDs to match responses.

Response Rates

The survey population consisted of 3,141 students enrolled at census. There were 1,183 students enrolled in English and 1,958 enrolled in math. We received 2,335 valid responses for a 74.3% response rate overall, with 857 (72.4%) in English and 1,478 (75.5%) in math.

We received responses from all 26 English faculty across 54 sections and from 23 math faculty across 70 sections. Of the 2,335 student responses, the research office was able to match 845 English students and 1,464 math students with both a student and faculty response -- or 98.9% of all valid responses.

Approximately one-third of the students (n=852, 36.5%) reported that their course placement was the result of taking an assessment test at Shasta College. Less than half (n= 1027, 44.0%) enrolled in the target course by passing the prior course within the sequence. Fourteen percent were placed by multiple measures with a counselor. Less than 6% of students self-placed into math (n=86, 5.8%). See Table I below.

Satisfaction with Placement in English and Math - Spring 2014

Table 1. How student met course requirements

| | English | | Math | | Total | |
|------------------------------|------------|---------------|-------------|---------------|-------------|---------------|
| | n | % | n | % | n | % |
| Passed previous course level | 329 | 38.4% | 698 | 47.2% | 1027 | 44.0% |
| Placement test | 397 | 46.3% | 455 | 30.8% | 852 | 36.5% |
| Self placed | | 0.0% | 86 | 5.8% | 86 | 3.7% |
| Spoke to a counselor | 122 | 14.2% | 206 | 13.9% | 328 | 14.0% |
| Unknown | 9 | 1.1% | 33 | 2.2% | 42 | 1.8% |
| Total | 857 | 100.0% | 1478 | 100.0% | 2335 | 100.0% |

Results

Ninety-two percent of English students reported they were placed in the right course (see Table 2).

Table 2. English Students' Ratings by Placement Method

| | I should be in a higher level | | Right course | | I should be in a lower level | | Total | |
|------------------------------|-------------------------------|-------------|--------------|--------------|------------------------------|-------------|------------|-------------|
| | n | % | n | % | n | % | n | % |
| Passed previous course level | 10 | 3.0% | 314 | 95.4% | 5 | 1.5% | 329 | 100% |
| Placement test | 28 | 7.1% | 360 | 90.7% | 9 | 2.3% | 397 | 100% |
| Spoke to a counselor | 8 | 6.6% | 110 | 90.2% | 4 | 3.3% | 122 | 100% |
| Unknown | 2 | 22.2% | 7 | 77.8% | | 0.0% | 9 | 100% |
| English Total | 48 | 5.6% | 791 | 92.3% | 18 | 2.1% | 857 | 100% |

Ninety-four percent of math students reported they were placed in the right course (see Table 3).

Table 3. Math Students' Ratings by Placement Method

| | I should be in a higher level | | Right course | | I should be in a lower level | | Total | |
|------------------------------|-------------------------------|-------------|--------------|--------------|------------------------------|-------------|-------------|-------------|
| | n | % | n | % | n | % | n | % |
| Passed previous course level | 16 | 2.3% | 670 | 96.0% | 12 | 1.7% | 698 | 100% |
| Placement test | 32 | 7.0% | 413 | 90.8% | 10 | 2.2% | 455 | 100% |
| Self placed | 1 | 1.2% | 85 | 98.8% | 0 | 0.0% | 86 | 100% |
| Spoke to a counselor | 13 | 6.3% | 191 | 92.7% | 2 | 1.0% | 206 | 100% |
| Unknown | 3 | 9.1% | 30 | 90.9% | 0 | 0.0% | 33 | 100% |
| Math Total | 65 | 4.4% | 1389 | 94.0% | 24 | 1.6% | 1478 | 100% |

Perception of the Appropriateness of Placement

Overall, 93.4% of students report they are in the appropriate level course (see Table 4 below). The percentage varies slightly with subject and course. Students in transfer levels courses consistently report that they are in the appropriate level course (93.6% for English, 96.0% for math), while those in lower levels are somewhat less satisfied. Interesting exceptions are students in MATH-100 and MATH-220. The following table displays these results.



Correlation with Placement in English and Math - Spring 2014

Table 4. Student Ratings of Placement

| | | I should be in a higher level | | Right course | | I should be in a lower level | | Total | |
|-------------------------|----------|-------------------------------|------|--------------|---------------|------------------------------|-------|-------|------|
| | | n | % | n | % | n | % | n | % |
| ENGLISH | | 48 | 5.6% | 791 | 92.3% | 18 | 2.1% | 857 | 100% |
| Transfer level | ENGL-1A | 26 | 5.0% | 486 | 93.6% | 7 | 1.3% | 519 | 100% |
| 1 level below transfer | ENGL-190 | 14 | 6.8% | 186 | 90.7% | 5 | 2.4% | 205 | 100% |
| 2 levels below transfer | ENGL-280 | 4 | 5.3% | 70 | 92.1% | 2 | 2.6% | 76 | 100% |
| 3 levels below transfer | ENGL-270 | 3 | 7.9% | 33 | 86.8% | 2 | 5.3% | 38 | 100% |
| 4 levels below transfer | ENGL-260 | 1 | 5.3% | 16 | 84.2% | 2 | 10.5% | 19 | 100% |
| MATH | | 65 | 4.4% | 1389 | 94.0% | 24 | 1.6% | 1478 | 100% |
| Transfer level | MATH-14 | 11 | 3.2% | 335 | 96.0% | 3 | 0.9% | 349 | 100% |
| 1 level below transfer | MATH-102 | 14 | 3.3% | 404 | 95.3% | 6 | 1.4% | 424 | 100% |
| 1 level below transfer | MATH-110 | | 0.0% | 24 | 92.3% | 2 | 7.7% | 26 | 100% |
| 2 levels below transfer | MATH-100 | | 0.0% | 21 | 100.0% | | 0.0% | 21 | 100% |
| 2 levels below transfer | MATH-101 | 32 | 8.4% | 341 | 90.0% | 6 | 1.6% | 379 | 100% |
| 3 levels below transfer | MATH-240 | 4 | 2.4% | 158 | 93.5% | 7 | 4.1% | 169 | 100% |
| 3 levels below transfer | MATH-260 | 3 | 9.7% | 28 | 90.3% | | 0.0% | 31 | 100% |
| 4 levels below transfer | MATH-220 | 1 | 1.3% | 78 | 98.7% | | 0.0% | 79 | 100% |
| Grand Total | | 113 | 4.8% | 2180 | 93.4% | 42 | 1.8% | 2335 | 100% |

Instructors report that 86.9% of English students and 86.7% of math students are in the appropriate course. Results vary by course with ENGL-260 falling below 75% (n=18). In ENGL-260, faculty rated five students placed too high; however this is the lowest credit course we offer. See Table 5 below.

Table 5. Faculty Ratings of Student Placement

| | | Placed too low | | Placed correctly | | Placed too high | | Total | |
|-------------------------|----------|----------------|-------|------------------|---------------|-----------------|-------|-------|------|
| | | n | % | n | % | n | % | n | % |
| ENGLISH | | 37 | 3.8% | 837 | 86.9% | 89 | 9.2% | 963 | 100% |
| Transfer level | ENGL-1A | 13 | 2.2% | 532 | 90.5% | 43 | 7.3% | 588 | 100% |
| 1 level below transfer | ENGL-190 | 11 | 4.7% | 198 | 84.6% | 25 | 10.7% | 234 | 100% |
| 2 levels below transfer | ENGL-280 | 5 | 6.1% | 66 | 80.5% | 11 | 13.4% | 82 | 100% |
| 3 levels below transfer | ENGL-270 | 8 | 19.5% | 28 | 68.3% | 5 | 12.2% | 41 | 100% |
| 4 levels below transfer | ENGL-260 | | 0.0% | 13 | 72.2% | 5 | 27.8% | 18 | 100% |
| MATH | | 30 | 1.7% | 1501 | 86.7% | 201 | 11.6% | 1732 | 100% |
| Transfer level | MATH-14 | | 0.0% | 376 | 90.2% | 41 | 9.8% | 417 | 100% |
| 1 level below transfer | MATH-102 | 24 | 4.9% | 370 | 75.4% | 97 | 19.8% | 491 | 100% |
| 1 level below transfer | MATH-110 | | 0.0% | 35 | 100.0% | | 0.0% | 35 | 100% |
| 2 levels below transfer | MATH-100 | | 0.0% | 21 | 100.0% | | 0.0% | 21 | 100% |
| 2 levels below transfer | MATH-101 | 4 | 0.9% | 416 | 95.0% | 18 | 4.1% | 438 | 100% |
| 3 levels below transfer | MATH-240 | 2 | 1.0% | 175 | 85.0% | 29 | 14.1% | 206 | 100% |
| 3 levels below transfer | MATH-260 | | 0.0% | 33 | 100.0% | | 0.0% | 33 | 100% |
| 4 levels below transfer | MATH-220 | | 0.0% | 75 | 82.4% | 16 | 17.6% | 91 | 100% |
| Grand Total | | 67 | 2.5% | 2338 | 86.8% | 290 | 10.8% | 2695 | 100% |



Congruence with Placement in English and Math - Spring 2014

To examine the congruence between student and faculty perceptions, we reduce the sample to include only those students for whom we have both student and faculty perception data. Within this sample, 84.2% of students and faculty agreed with the course placement. Only a few (1.5%) agree the student was placed too high (12) or too low (21). The remaining 1,889 students agreed with faculty that they were placed into the correct course. Tables 6 and 7 illustrate.

Table 6. Congruence of Ratings for English

| Faculty Ratings | Student ratings | | |
|------------------|-----------------|------------|----------|
| | Low | Correct | High |
| ENGL-1A | | | |
| Placed too low | 2 | 18 | |
| Placed correctly | 5 | 433 | 22 |
| Placed too high | | 6 | 4 |
| ENGL-190 | | | |
| Placed too low | 3 | 17 | 1 |
| Placed correctly | 1 | 157 | 10 |
| Placed too high | | 8 | 3 |
| ENGL-280 | | | |
| Placed too low | 1 | 10 | |
| Placed correctly | 1 | 57 | 2 |
| Placed too high | | 2 | 2 |
| ENGL-270 | | | |
| Placed too low | 2 | 3 | |
| Placed correctly | | 22 | 2 |
| Placed too high | | 6 | 1 |
| ENGL-260 | | | |
| Placed too low | 2 | 3 | |
| Placed correctly | | 12 | 1 |
| Placed too high | | | |

| Faculty Ratings | Student ratings | | |
|------------------|-----------------|--------------|-------------|
| | Low | Correct | High |
| ENGL-1A | | | |
| Placed too low | 0.4% | 3.7% | 0.0% |
| Placed correctly | 1.0% | 88.4% | 4.5% |
| Placed too high | 0.0% | 1.2% | 0.8% |
| ENGL-190 | | | |
| Placed too low | 1.5% | 8.5% | 0.5% |
| Placed correctly | 0.5% | 78.5% | 5.0% |
| Placed too high | 0.0% | 4.0% | 1.5% |
| ENGL-280 | | | |
| Placed too low | 1.3% | 13.3% | 0.0% |
| Placed correctly | 1.3% | 76.0% | 2.7% |
| Placed too high | 0.0% | 2.7% | 2.7% |
| ENGL-270 | | | |
| Placed too low | 5.6% | 8.3% | 0.0% |
| Placed correctly | 0.0% | 61.1% | 5.6% |
| Placed too high | 0.0% | 16.7% | 2.8% |
| ENGL-260 | | | |
| Placed too low | 11.1% | 16.7% | 0.0% |
| Placed correctly | 0.0% | 66.7% | 5.6% |
| Placed too high | 0.0% | 0.0% | 0.0% |

English student and faculty ratings agree (match) for:

- 89.6% of students in ENGL-1A with 88.4% correctly placed
- 81.5% of students in ENGL-190 with 78.5% correctly placed
- 80.0% of students in ENGL-280 with 76.0% correctly placed
- 69.4% of students in ENGL-270 with 61.1% correctly placed
- 77.8% of students in ENGL-260 with 66.7% correctly placed

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Table 7. Congruence of Ratings for Math

| Faculty Ratings | Student ratings | | |
|------------------|-----------------|------------|------|
| | Low | Correct | High |
| MATH-14 | | | |
| Placed too low | 1 | 33 | |
| Placed correctly | 1 | 297 | 11 |
| Placed too high | | | |
| MATH-102 | | | |
| Placed too low | 5 | 67 | |
| Placed correctly | 1 | 312 | 13 |
| Placed too high | | 14 | 1 |
| MATH-110 | | | |
| Placed too low | | | |
| Placed correctly | 2 | 24 | |
| Placed too high | | | |
| MATH-100 | | | |
| Placed too low | | | |
| Placed correctly | | 20 | |
| Placed too high | | | |
| MATH-101 | | | |
| Placed too low | 2 | 14 | |
| Placed correctly | 4 | 299 | 29 |
| Placed too high | | 3 | 1 |
| MATH-240 | | | |
| Placed too low | 3 | 16 | 1 |
| Placed correctly | 4 | 134 | 3 |
| Placed too high | | 2 | |
| MATH-260 | | | |
| Placed too low | | | |
| Placed correctly | | 28 | 3 |
| Placed too high | | | |
| MATH-220 | | | |
| Placed too low | | 14 | |
| Placed correctly | | 61 | 1 |
| Placed too high | | | |

| Faculty Ratings | Student ratings | | |
|------------------|-----------------|---------------|-------------|
| | Low | Correct | High |
| MATH-14 | | | |
| Placed too low | 0.3% | 9.6% | 0.0% |
| Placed correctly | 0.3% | 86.6% | 3.2% |
| Placed too high | 0.0% | 0.0% | 0.0% |
| MATH-102 | | | |
| Placed too low | 1.2% | 16.2% | 0.0% |
| Placed correctly | 0.2% | 75.5% | 3.1% |
| Placed too high | 0.0% | 3.4% | 0.2% |
| MATH-110 | | | |
| Placed too low | 0.0% | 0.0% | 0.0% |
| Placed correctly | 7.7% | 92.3% | 0.0% |
| Placed too high | 0.0% | 0.0% | 0.0% |
| MATH-100 | | | |
| Placed too low | 0.0% | 0.0% | 0.0% |
| Placed correctly | 0.0% | 100.0% | 0.0% |
| Placed too high | 0.0% | 0.0% | 0.0% |
| MATH-101 | | | |
| Placed too low | 0.6% | 4.0% | 0.0% |
| Placed correctly | 1.1% | 84.9% | 8.2% |
| Placed too high | 0.0% | 0.9% | 0.3% |
| MATH-240 | | | |
| Placed too low | 1.8% | 9.8% | 0.6% |
| Placed correctly | 2.5% | 82.2% | 1.8% |
| Placed too high | 0.0% | 1.2% | 0.0% |
| MATH-260 | | | |
| Placed too low | 0.0% | 0.0% | 0.0% |
| Placed correctly | 0.0% | 90.3% | 9.7% |
| Placed too high | 0.0% | 0.0% | 0.0% |
| MATH-220 | | | |
| Placed too low | 0.0% | 18.4% | 0.0% |
| Placed correctly | 0.0% | 80.3% | 1.3% |
| Placed too high | 0.0% | 0.0% | 0.0% |

Math student and faculty ratings agree (match) for:

- 86.9% of students in MATH-14 with 86.6% correctly placed
- 77.0% of students in MATH-102 with 75.5% correctly placed
- 92.3% of students in MATH-110 with 92.3% correctly placed



Conclusion with Placement in English and Math - Spring 2014

- 100% of students in MATH-100 with 100% correctly placed
- 85.8% of students in MATH-101 with 84.9% correctly placed
- 84.0% of students in MATH-240 with 82.2% correctly placed
- 90.3% of students in MATH-260 with 90.3% correctly placed

Conclusion

The above data show that 92-94% of students are satisfied with their placement into math or English courses, regardless of placement method or course. Faculty perceptions agree that 87% of students are placed correctly in math and English. The paired data show high congruence between student and faculty perceptions, except in ENGL-270 with a small number of students (n= 36). These data support all three placement methods including counselor use of multiple measures, student self-placement in math, and the placement tests in English and math. Future studies should include online sections as those students may have different experiences compared to face-to-face, hybrid and ITV.

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