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Impact of the Change in English Cutscores on Grades

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ABSTRACT

This study reports on the grades of students in English classes prior to and following the implementation of changes in the cutscores for placing students in ENGL 090, 101, or 102. The effects of the cutscore changes were to (1) move more students into ENGL 090 from ENGL 101, (2) move more students into ENGL 102 from ENGL 101, and (3) give credit for ENGL 102 to some high-scoring students who previously would have had to take the course. Information was provided on course grades of students who were affected by the changes compared to those who were not, course grade distributions before and after the cutscore changes, and grades in the subsequent course before and after the cutscore changes.

Before the change, students who were slated to be moved into ENGL 090 had about the same percentage of “D,” “F,” and “W” grades as those who remained in ENGL 101. After the change, similar percentages of “reassigned” students passed ENGL 090 compared to their lower-scoring counterparts who had always needed to take 090. A similar pattern of “no differences” was found for students who were moved into ENGL 102. This finding seems to indicate a lack of relationship between test scores and course grades. Perhaps this is not surprising since neither the ACT or SAT were developed for course placement purposes.

Grade distributions in ENGL 090, 101, and 102 also were similar both before and after the change in cutscores. However, grades improved in ENGL 101 after more students were required to take ENGL 090. Thus, although assigning more students to ENGL 090 slowed their academic progress, these students were probably better equipped to take the next level of English, ENGL 101.

IMPACT OF THE CHANGE IN ENGLISH CUTSCORES ON GRADES

Beginning with the Fall of 2000, the State Board of Education standardized the scores across public institutions of higher education for the placement of students in English and Mathematics courses. The change came about because of discrepancies between institutions within Idaho on the cutscores. Students with the same score, for example, might be assigned to ENGL 101 at one institution and to ENGL 102 at another institution. At the urging of the Board, representatives from Idaho's public institutions met to agree on the common cutscores, with the result that some of Boise State's cutscores were modified. Some students who previously would have enrolled in ENGL 101 were reassigned to ENGL 090, while others were moved in ENGL 102. Students with especially high scores were simply given credit for ENGL 102 under the new system. The prior cutscores which Boise State used for placement in English and the current statewide cutscores are displayed in Appendix A at the end of this report.

In the aftermath of these changes, the English department noted some differences in student performance and wished to have empirical data to see if this type of data corroborated their more informal observations. The Office of Institutional Assessment worked with the department and developed the following key questions to be answered from the data:

- Did students who had scores which fell in the area of cutscore changes perform differently than students who were not affected?
- Have grade distributions for first-time enrollees in ENGL 090, 101, and 102 changed since the cutscore changes?
- Did the cutscore changes appear to have an affect on performance in the next English course?

To answer these questions, test scores and grades were compiled from students who enrolled in ENGL 090, 101, or 102 for the first time between Fall 1998 and Fall 2001. The "pre-cutscore change" group included students who enrolled in English for the first time in Fall 1998, Spring 1999, Fall 1999, or Spring 2000. The "post-cutscore change" group included students who enrolled for the first time in Fall 2000, Spring 2001, or Fall 2001. Summer school enrollment was not included in the analysis.

RESULTS

Did students who had scores which fell in the area of cutscore changes perform differently than students who were not affected?

In an ideal world, cutscores are modified because they are not working for students in a particular score range. Perhaps students with scores close to the cutscore are performing so well that they could be moved to the next level of class (e.g., they could be moved from ENGL 101 to ENGL 102). Conversely, they may be at the bottom on the cutscore range and struggling, indicating that they need to start at a lower level (e.g., they could be moved from ENGL 101 to ENGL 090). With the implementation of the statewide set of cutscores, some students who

previously would have taken ENGL 101 were assigned to ENGL 090 or ENGL 102. In addition, some students who formerly were required to take ENGL 102 were now simply given credit for it based on their test scores.

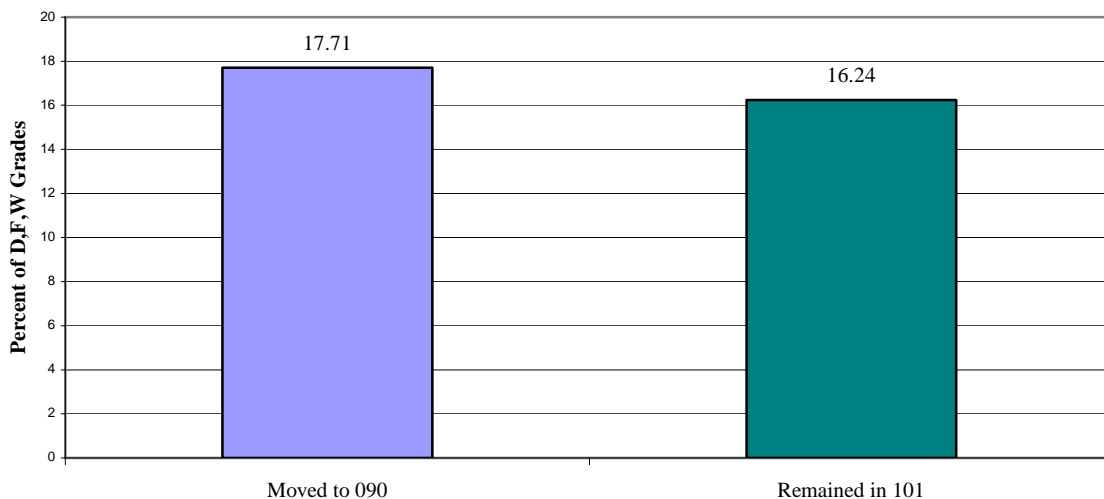
To see whether these changes were warranted from a *measurement* perspective, two approaches were taken. First, test scores and grades for students who took their first English course prior to the cutscore changes were obtained and grades were compared, looking for evidence that the affected group's grades indicated a need for change. Second, test scores and grades for students who took their first English course after the cutscore changes (Fall 2000-Fall 2001) were obtained. The grades of students who previously were newly assigned to the class with the cutscore change were compared to students whose class assignment did not change.

Moving Students into ENGL 090

The first change involved shifting the cutscores so that more Boise State students enrolled in ENGL 090 who formerly would have taken ENGL 101. Were students with scores in the affected range performing so poorly in ENGL 101 that they needed to be moved to ENGL 090? How did students in this range fare in ENGL 090 after the change in cutscores? Did their performance differ significantly from the performance of students whose scores were low enough that they were always assigned to ENGL 090?

As shown by Figure 1 below, the evidence is weak that the shift into ENGL 090 needed to be made for measurement reasons. Less than 20% of the students failed ENGL 101 who had scores in the range that would have placed them in ENGL 090 had they enrolled after the cutscore change was implemented. Furthermore, their performance was similar to that of students with scores which would have allowed them to remain in ENGL 101.

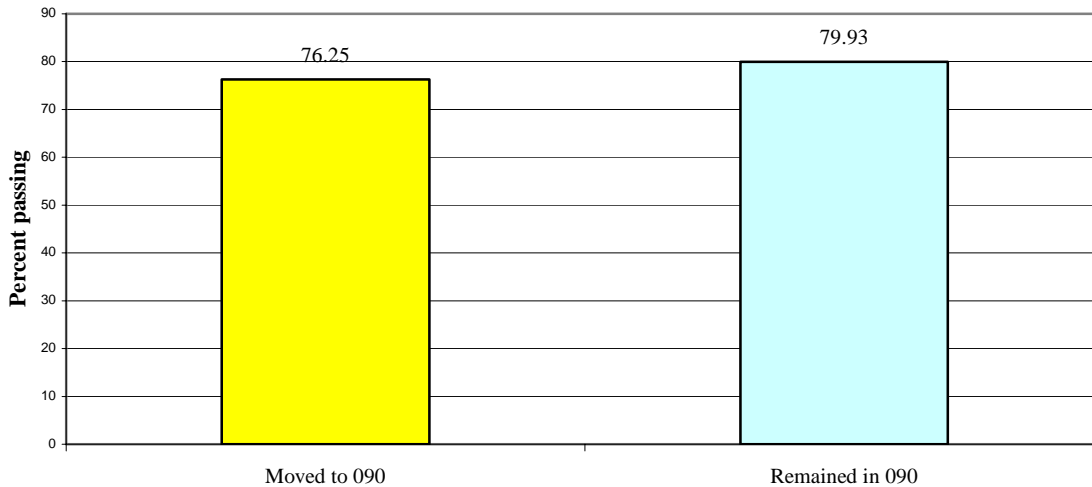
Figure 1. Comparison of D,F, & W Grades in ENGL 101 Prior to Cutscore Changes



Another way to assess the effect of the cutscore changes is to look at actual performance in the classroom *after* the cutscore change. Did students with scores in the range that moved them into

ENGL 090 perform significantly better than those who had scores that always placed them into ENGL 090? Figure 2 provides some answers. Note that in three semesters, over 250 students took ENGL 090 who previously would have taken ENGL 101, and that a similar percentage passed the course compared to students with lower scores. This finding indicates that the cutscore change may have slowed student progress because of unnecessary coursework.

Figure 2. Comparison of Passing Grades in ENGL 090 After Cutscore Change

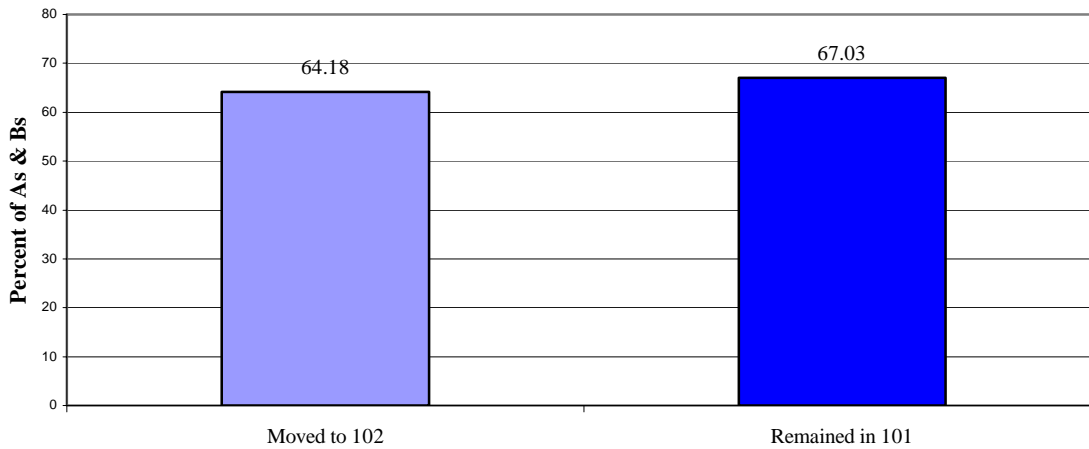


Moving Students into ENGL 102

A second change involved shifting testscores so that some students enrolled in ENGL 102 who previously would have taken ENGL 101. Were students within this score range doing so well that it was advantageous to them to skip ENGL 101? How did they perform once the cutscore change was implemented and they enrolled in ENGL 102 instead of 101? How did their performance compare to students who were not reassigned by the test scores?

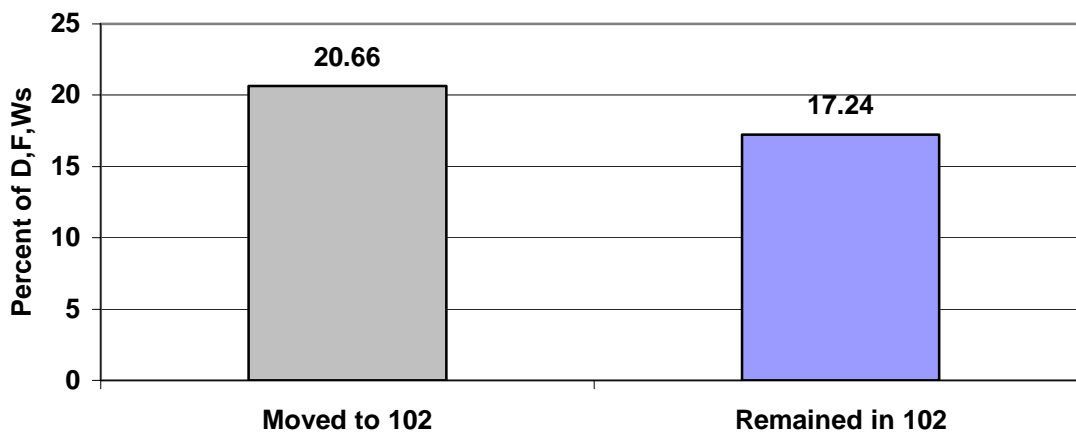
As shown by Figure 3 below, again there was scant evidence from a measurement perspective that a change needed to be made. About two-thirds of the students who would have been moved into ENGL 102 with the cutscore change received “As” or “Bs” in ENGL 101. Their performance was essentially the same as that of students who would remain in ENGL 101 because of their lower test scores.

Figure 3. Comparison of A & B Grades in ENGL 101 Prior to Cutscore Change



Again, performance in classes following the cutscore changes also provided information. About 120 students were able to skip ENGL 101 in the three semesters following the change. About 20% of this group received a “D,” “F,” or “W” in the course, which is similar to the performance of students with higher scores who remained assigned to ENGL 102 (see Figure 4 below).

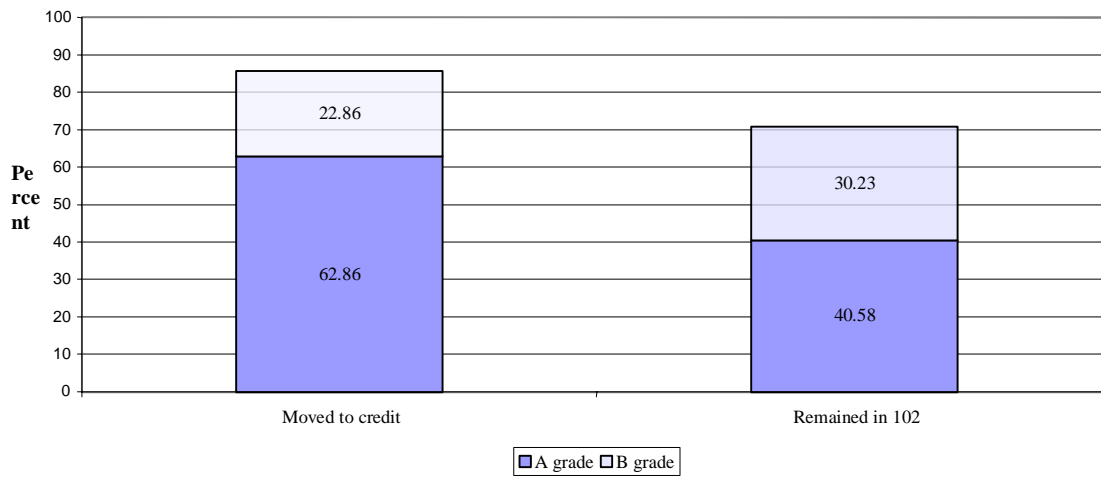
Figure 4. Comparison of D,F,&W Grades in ENGL 102 After Cutscore Change



Cutscores also were changed so that students who performed very well on the test were allowed to skip ENGL 102 altogether and receive credit instead. Did students who took ENGL 102 before the change perform so well in the course that they should skip it altogether?

Results indicate that about 85% of the students who received credit would have attained an “A” or a “B” in the course (Figure 5). This performance was decidedly better than that of students whose scores caused them to remain in ENGL 102. In a two year timeframe, however, only about 35 students would be affected by the change (assuming a stable enrollment).

Figure 5. Comparison of A & B Grades in ENGL 102 Prior to Cutscore Change

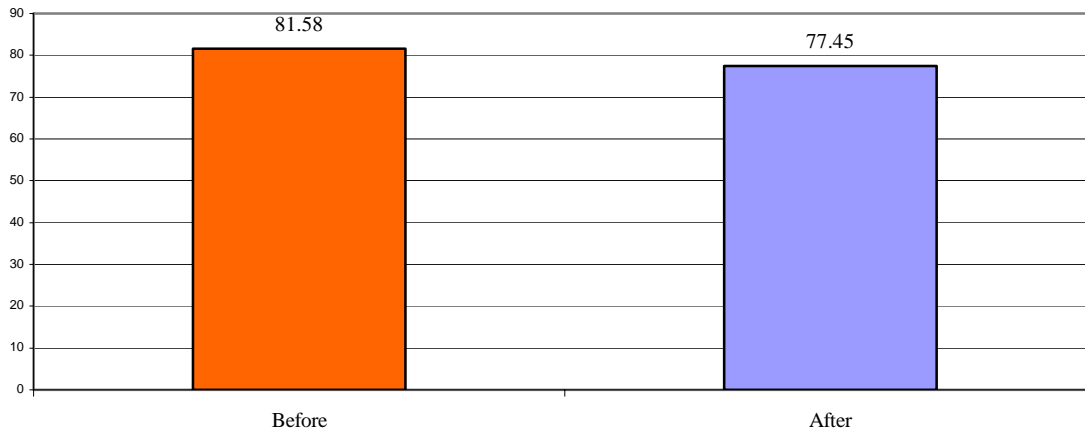


Thus, from a measurement perspective, the shifts in cutscores were unnecessary because grades were so similar between the groups. By placing more students into ENGL 090, the academic progress for about 250 students in three semesters was slowed unnecessarily. However, evidence does indicate that students who were given credit for ENGL 102 were top performers. This acceleration of academic progress, however, only affected about 35 students in three semesters.

Did the grade distributions change after the cutscore changes were implemented?

The thinking behind this question was that if the cutscore changes had an impact, in general we should see it in the grades given to students. Figure 6 below shows the percentage who passed ENGL 090 before and after the cutscore change. Note that slightly fewer passed following the change, though we would expect more to pass because students with higher academic abilities (as measured by test scores) had been added to the class. The differences were not statistically significant.

Figure 6. Percent passing ENGL 090 before and after the cutscore changes



ENGL 101 grade distributions also did not change in any statistically significant fashion. As shown by Table 1, only slightly more students received “As” following the change compared to before the change in cutscores. The same result was found for ENGL 102, with grade distributions remaining much the same before and after the cutscore changes.

Table 1. ENGL 101 and 102 Grade Distributions Before and After the Cutscore Changes

| Group | Percent of Grades that were: | | | | |
|-------------------------|------------------------------|------|-------|-------|-------|
| | F, W | D | C | B | A |
| ENGL 101 Grades | | | | | |
| Before change (N=4,862) | 12.40 | 3.78 | 17.52 | 33.30 | 32.99 |
| After change (N=3,352) | 12.62 | 3.13 | 15.81 | 33.29 | 35.14 |
| ENGL 102 Grades | | | | | |
| Before change (N=2,300) | 11.87 | 3.04 | 13.30 | 32.52 | 39.26 |
| After change (N=2,021) | 13.81 | 3.71 | 12.32 | 31.07 | 39.09 |

Thus, grade distributions did not change significantly for any of the three classes. There are a number of explanations for this. One is that the tests are not closely related to class performance. Another is that faculty shifted their expectations to deal with the changes in academic level, the result being similar grade distribution. A third possible explanation is that final grade is a measure that is too gross to measure subtle changes in classroom performance. These changes, however, might still be evident in the next English course.

Did cutscore changes have an affect on performance in the next English course?

Even though grade distributions might not show a difference for the first course that students took, differences might appear in the next level course. For example, the latest assessment

results for ENGL 101 showed a marked improvement in student skills, leading to speculation that having more students first take ENGL 090 provided a better background to handle ENGL 101. This analysis assesses grades for (a) students who began in ENGL 090 before moving to ENGL 101 and (b) students who began in ENGL 101 before moving to ENGL 102.

As shown by Table 2, sending more students to ENGL 090 with the change in cutscores was related to in better grades in ENGL 101. After the change, 73% of the students who began in ENGL 090 received “A” or “B” grades compared to only 56% prior to the change. It appears, therefore, that raising the cutscores was ultimately beneficial to students who began their academic career with weak writing skills.

Table 2. ENGL 101 Grades for Students Whose First Course was ENGL 090

| Group: | Percent Receiving the Following Grades in ENGL 101 | | | | |
|---------------------------------------|--|------|-------|-------|-------|
| | F, W | D | C | B | A |
| Before change in cutscores (N=233) | 12.45 | 5.58 | 26.18 | 34.33 | 21.46 |
| After change in cutscores (N=150) | 6.00 | 3.33 | 18.00 | 43.33 | 29.33 |

No significant change was found, however, for students who began in ENGL 101 before moving on to ENGL 102 (see Table3). Recall, however, that the main change to ENGL 101 was to remove both high and low scoring students through the cutscore changes. This is evident from the reduced number of students enrolled in ENGL 101 after the cutscore changes.

Table 3. ENGL 102 Grades for Students Whose First Course was ENGL 101

| Group: | Percent Receiving the Following Grades in ENGL 102 | | | | |
|---|--|------|-------|-------|-------|
| | F, W | D | C | B | A |
| Before change in cutscores (N=1,929) | 11.98 | 4.46 | 18.51 | 32.71 | 32.35 |
| After change in cutscores (N=862) | 11.25 | 4.18 | 16.82 | 37.01 | 30.74 |

SUMMARY AND CONCLUSIONS

This study followed on the heels of a statewide change in cutscores for placing students in English and Mathematics courses. The purpose of the study was to assess the impact of the changes in English scores on course grades in students' first and subsequent English courses and to determine whether the change seemed warranted for the students whose test scores fell in the range where they were impacted by the change.

Of the three tests used for placement, only one—the COMPASS—was truly developed to serve as a placement instrument. None of the three tests were developed with the aim of awarding academic credit. Thus, the relationship between performance in a particular course—as measured by course grades—and test scores could be weak.

Indeed, based on grades in the first course, no good empirical evidence could be found to justify moving students out of ENGL 101 and into ENGL 090. Students who were targeted to move or were moved into ENGL 090 had similar grades to students who were not moved. Grade distributions also did not change. From this perspective, then, it appeared that students' academic progress was unnecessarily slowed. However, grades in ENGL 101 *were improved* for students who began in ENGL 090 after the cutscore changes were implemented. Therefore, the movement of additional students into ENGL 090 appeared to be a mixed blessing: student progress was slowed, but ultimately many were better prepared for ENGL 101.

In addition, no empirical evidence could be found for moving additional students into ENGL 102. Grades were similar for those affected by the change and those who were not. Grade distributions did not change. Since the academic progress of about 120 students in three semesters was accelerated by the change, however, from a student perspective, the change was a good one.

Students who were awarded credit for ENGL 102 under the new system typically had outperformed their classmates with lower placement scores. About 85% earned an "A" or a "B" in the course prior to the implementation of cutscores, indicating that students with this level of placement scores would handle ENGL 102 well. From this perspective, then, it would be good to award credit and accelerate their progress. However, this does not mean students who received credit had the skills which are addressed in ENGL 102. Since performance in the next course that required writing a research paper (a basic goal of ENGL 102) could not be assessed, the beneficial nature of this change remains uncertain.

Appendix A
Past and Current Cutscores for Placement in ENGL 090, 101, or 102

| Score Range: | Before Fall 2000 | Fall 2000 and later |
|----------------------|--------------------|-------------------------|
| ACT Writing | | |
| 14 or less | Enroll in ENGL 090 | Enroll in ENGL 090 |
| 15-17 | Enroll in ENGL 101 | Enroll in ENGL 090 |
| 18-24 | Enroll in ENGL 101 | Enroll in ENGL 101 |
| 25-30 | Enroll in ENGL 102 | Enroll in ENGL 102 |
| 31-36 | Enroll in ENGL 102 | Get credit for ENGL 102 |
| SAT Verbal | | |
| 410 or less | Take ENGL 090 | Take ENGL 090 |
| 420-440 | Take ENGL 101 | Take ENGL 090 |
| 450-560 | Take ENGL 101 | Take ENGL 101 |
| 570-590 | Take ENGL 101 | Take ENGL 102 |
| 600-690 | Take ENGL 102 | Take ENGL 102 |
| 700-800 | Take ENGL 102 | Get credit for ENGL 102 |
| COMPASS Writing Test | | |
| 59 or less | Enroll in ENGL 090 | Enroll in ENGL 090 |
| 60-67 | Enroll in ENGL 101 | Enroll in ENGL 090 |
| 68-94 | Enroll in ENGL 101 | Enroll in ENGL 101 |
| 95-98 | Enroll in ENGL 101 | Enroll in ENGL 102 |
| 99-100 | Enroll in ENGL 102 | Enroll in ENGL 102 |

Note: Changes are shaded