## A Final Exam Performance Measure

By Don Sutherland

Following my BBA 407 (Strategic Management) class's first quiz back in October, I <u>noted</u> that the class had realized learning potential that was just under 50% of that for the preceding class, even as both classes had started the semester with fairly similar knowledge. Based on the diagnostic exam administered at the beginning of the semester, the spring 2015 class had leaning potential of 0.600 (meaning that 60% of the course content was new or unfamiliar) and the fall 2015 class had learning potential of 0.592. Nevertheless, the quiz outcomes revealed realized learning potential to date of 0.386 for the spring class and 0.190 for the fall class.

At the end of each semester, realized learning potential is calculated from the final exam. That standardized measure provides insight into how much the class learned relative to prior classes. Following the final exam, the fall 2015 class's realized learning potential was 0.390 vs. 0.578 for the spring class. That metric reveals that the most recent class learned less material than the preceding class.

That outcome raised the following question: Did the most recent class continue to lag in its learning despite its having been informed of the outcomes from the quiz and renewed emphasis on homework assignments? To address that question, one needed to see how much additional learning potential was realized since the quiz.

The post-quiz learning potential for the current class was nearly identical to that of the spring 2015 class (0.200 vs. 0.192). As a reduced homework completion rate played a large role in the quiz outcomes, I examined homework completion rates for the three assignments preceding the final exam. The completion rates for both classes were virtually identical (57.4% for the spring 2015 group and 57.0% for the fall 2015 group).

The possibility of imposing a penalty for a failure to submit homework assignments was discussed following the quiz. No penalty was implemented. However, the class's homework submission rate only improved slightly.

Considering that the near identical rates of homework completion resulted in nearly identical realized learning potential following the quiz, the penalty will be adopted for spring 2016 and added to the syllabus and other course-related material. As a result, if a student completes all homework assignments, that student could earn a total of 5 points toward his or her grade. In contrast, if a student submits no homework assignments, that student would see 5 points deducted from his or her grade.

I am disappointed that mandatory penalties need to be adopted. However, just as had been the case prior to the implementation of a mandatory library session to familiarize students with credible research resources, a voluntary approach proved insufficient. Even as students received detailed information related to the impact of homework on the quiz outcomes, the homework completion rate only rose slightly. That outcome was reflected in the post-quiz realized learning potential.