

MyLab IT educator study examines assignment scores in flexibly-paced online course at Salt Lake Community College

Key Findings

- Students who scored above average on homework earned Grader Project scores an average of 15 percentage points higher than students who scored below average on homework.
- 96% of student survey respondents agreed that the Grader Project Report helped them understand what steps they did wrong in order to improve their score on a subsequent attempt.
- Despite a flexible schedule in which all course assignments were due at the end of the semester, the majority of students (79%) stayed on track with the instructor's recommended pacing guide and completed 91% of course assignments on average.

Study Specifics

School name: Salt Lake Community College, Salt Lake City, UT

Course name: Business Computer Proficiency – Spreadsheet & Database

Course format: Online

Course materials: MyLab IT with Microsoft Office 2016 (custom edition)

Timeframe: Fall 2018

Educator: Susumu Kasai, Instructor

Results reported by: Sara Kasper, Pearson Results Manager

Setting

[Salt Lake Community College](#) (SLCC) is Utah's largest two-year college with the most diverse student body. It serves more than 61,000 students on 10 campuses as well as through online classes. Nearly 10,000 students a semester meet all or some of their learning goals through SLCC Online which offers more than 200 courses in 50 academic disciplines. Other facts about the school include the following:

- 94% of students are Utah residents
- 73% of students transfer to a four-year institution
- 56% of students are the first in their family to attend college
- 33% of students are age 20 and under
- More than 120 programs of study are offered

About the Course

Business Computer Proficiency: Spreadsheet & Database covers various features and functions of spreadsheet and database software for business applications. Students will learn how specific software tools can be used and correct formula and function syntax. Students will develop knowledge and skills using spreadsheet and database software as business problem-solving tools.

Professor Susumu Kasai teaches the course in Fall and Spring to approximately 50 online students each semester and in Summer to 150 online students. He has used MyLab IT for more than three years.

Challenges and Goals

Kasai shares that the goal of this course is to provide students with enough introduction, conceptual understanding, and hands-on skill building of Excel and Access to prepare them for advanced-level use of Excel

and Access as business problem-solving tools. Many of Kasai's students will transfer to the University of Utah for a four-year degree, and so the course was designed to emulate the University of Utah's comparable spreadsheet and database course. MyLab™ IT was adopted via committee decision a few years ago.

Implementation

Course materials

A custom course text has allowed educators to combine material from two textbooks into one, saving students money in the process. Kasai notes, "Over the years, we've improved the quality of the custom edition." Although Kasai was initially a proponent of students purchasing a print textbook for learning (in addition to MyLab access + eText), he has come to realize that one of the biggest advantages of the eText are the instructional video links that demonstrate in detail every step of the topic in hand. "I tell students to click the icon and watch the eText video if they are having a difficult time with instructions. It's been very helpful to many students."

MyLab IT assignments

Each week, students are expected to study one to two chapters of the text. In total, eight chapters of Excel and eight chapters of Access are covered. Kasai stresses the importance of reading the chapter content from the text carefully before attempting a hands-on assignment. Kasai wants students to spend at least 40% of their learning time going through instructions and reading the textbook to increase their self-awareness and develop their analytical problem-solving skills. He continues, "If we do too many hands-on activities, students won't read the textbook." As such, he does not assign [Simulation Trainings](#) in MyLab.

Students complete MyLab homework activities that review the textbook contents. They have unlimited attempts to get the best score possible, as Kasai wants homework to be a low-stakes learning opportunity. After completing chapter homework assignments, students complete a [MyLab Grader Project](#) for each chapter. Kasai puts a limit of three attempts on Grader Projects and encourages students to make sure they feel confident with the material before they even attempt a Grader Project. Kasai goes through the MyLab IT gradebook frequently to check on student scores and progress.

On the Fall 2018 end-of-semester student survey (56% response rate),

- 75% of respondents said they always or often made a second or third attempt on Grader Projects in order to improve their score.
- 84% of respondents said they always or often viewed their [Grader Project Report](#).
- 96% of respondents agreed that the Grader Project Report helped them understand what steps they did wrong in order to improve their score on a subsequent attempt.

When students have a question or complaint regarding the scoring of a Grader Project, Kasai requests they attach a copy of their Grader Project Report in the email. "If students read through the report comments, they should understand why a deduction occurred, although there sometimes are exceptions." If there is a grading issue, Kasai will send an announcement to the class to avoid getting the same question/email repeatedly.

Course pacing

Each homework is available from the start of the course to the second-to-last day of the course for submission and resubmission. In order for students to avoid having to complete too many assignments at the last minute, Kasai encourages students to work toward completing the recommended homework assignments listed on the syllabus by the end of each week with frequent communication and reminders. Every week Kasai checks how many assignments have been attempted and whether students are staying on track.

On the student survey, 83% of respondents liked the fact that all assignments are due at the end of the semester. Summarized one student, this open schedule was "more flexible for work-life balance." Another

commented, *“It helps with focusing on other classes with strict due dates and I had more leeway in terms of how I wanted to plan my time.”* On the other hand, many students commented on the benefits of staying with the pacing guide. Said one, *“I feel like it is easier to have due dates through-out the semester to keep up with assignments.”* Another student acknowledged, *“I prefer to have set dates, so that I don't find myself procrastinating.”*

In fact, 75% of survey respondents reported completing weekly assignments on time and only occasionally falling behind; 4% reported keeping ahead of schedule. About a fifth of student survey respondents (21%) reported often falling behind with the course schedule and having a difficult time catching up. One student mentioned the perils of falling behind on the end-of-semester survey: *“I didn't hold myself accountable and let the class slip by due to worrying about other classes that had deadlines. This is also due to me having to spend a lot of extra time in MyLab IT because I had to finish a lot of work about halfway through the semester.”*

Best practices

In the first week of class, Kasai has his students review a guidebook to orient themselves on how to use and navigate both MyLab IT and Canvas, the school's Learning Management System (LMS), through which MyLab is [integrated](#). Salt Lake Community College requires all courses to be developed in the Canvas platform for consistency, data collection, and documentation purposes. Kasai designed the guidebook to help students with the challenge of using both a new LMS and an online learning platform in their first semester of college. *“Students can easily get lost, so I am providing as many details as possible to help them,”* he says.

Assessments

All assignments are weighted evenly to comprise the final course score.

- 59% Chapter homework (23)
- 41% Chapter Grader Projects (16)

Results and Data

In Kasai's two online course sections in Fall 2018 totaling 43 students, 86% passed the course with an A, B, or C letter grade. More than three-quarters (77%) of students received an A or B letter grade. The overall course score was an 82.2%. On average, students skipped 4 out of 39 course assignments, a completion rate of 91%.

As mentioned previously, Kasai stresses the importance of reading course material and carefully completing homework before attempting the hands-on Grader Projects. Using tools introduced in the chapter reading, he wants students to apply what they learned in the chapter to solve more complex application problems. Throughout the course, students are assigned a total of 16 Grader Projects — eight for Access and eight for Excel.

Students were divided into two groups based on the average homework score of 89.3%. Data show that students who scored above average on homework assignments earned Grader Project scores an average of 15 percentage points higher than students who scored below average on homework (figure 1). *Note: two students who completed 15% of coursework and one student who completed 26% of coursework were removed for the purpose of this analysis.*

Average Grader Project score based on homework score

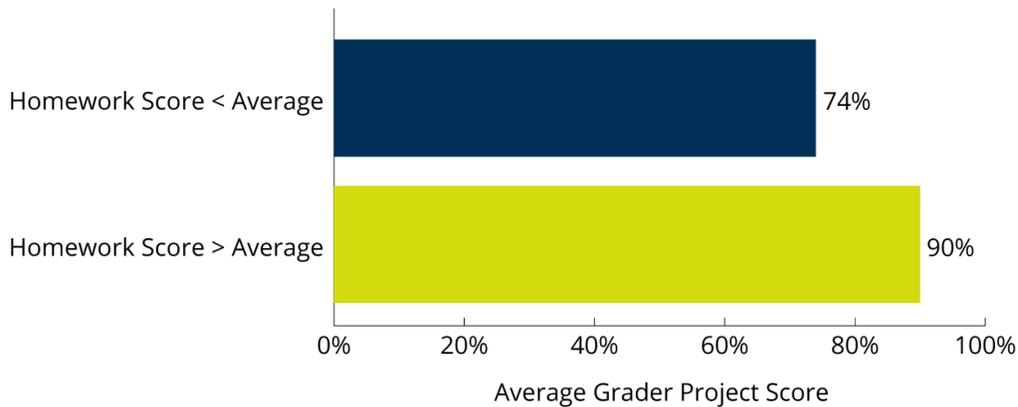


Figure 1. Average Grader Project Score Based on Homework Score Above Average ($n=25$) and Below Average ($n=15$), Fall 2018

For students, scores on the formative homework assignments are intended to help them identify potential gaps that exist in their understanding, and these homework scores may also indicate to students how successful they will be when completing the summative Grader Projects. In fact, the correlation between homework assignments and Grader Projects is strong and positive, where $r=0.70$ and $p\text{-value} < .001$. This connection does not indicate causation but instead measures the strength of the relationship between these two variables; the closer r -value is to 1.0, the stronger the correlation. The results reinforce Kasai's belief that, "Students using the textbook to carefully study the materials before attempting to test their understanding through MyLab IT assignments is essential and critical to their successful course experience."

The Student Experience

Responses from a Fall 2018 end-of-semester survey of Kasai's students (56% response rate) indicate that the majority of responding students recognize the value of MyLab IT.

- 92% of respondents thought that MyLab IT was a good value for the course.
- 87% of respondents would recommend MyLab IT to other students.
- 86% of respondents agreed with the statement, "My understanding of the course material increased as a result of using MyLab IT."

Open-ended comments to the question, "What are the benefits of MyLab IT?" included:

- "Immediate feedback on grades, working at my own pace, and having videos when needed."
- "I think the videos and step-by-step instruction of MyLab IT helped me the most. If I was stuck on something, going back through the material and being able to see how to work it out helped me a lot in understanding the material."
- "I like that you're able to view where you went wrong in an assignment and it gives you the steps to adjust or make changes so you can figure out the correct way to complete an assignment."
- "Allows somebody to work on areas that they struggle with and it's easy to manage your coursework."

Conclusion

Despite the challenges of taking an online, technically self-paced course, most of Kasai's students stayed on a recommended pacing guide and completed the majority of course assignments — a testament of their ability to be motivated, self-reliant learners. As many of Kasai's students will transfer to a four-year school to pursue a bachelor's degree, the course was designed to emulate the rigor of the comparable course at the University of

Utah. Kasai strives to help his students develop problem-solving skills that will carry them successfully to an advanced-level course. On the end-of-semester survey, one student summed up the achievement of this goal: *“MyLab IT gave me the practice I needed in order to learn the material necessary and I feel very confident that material used in this course will come in handy with my degree in business.”*

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—Student, Salt Lake Community College