

Digital Course Solution Motivates Students to Read and Engage in Course Content

Dr. Hurns uses Connect application assignments to provide “rich activities for online students” and LearnSmart assignments to give students a fun and effective way to study the course material. As a result of the information provided in the LearnSmart reports, she can now measure engagement using meaningful student data. “Although we assumed students were not studying, the degree to which they were not studying was shocking,” she says. When comparing student engagement and success, students who were active LearnSmart users improved their quiz and exam scores by 10 to 29 points and their overall grade by 13 to 21 points. Hurns believes that “Connect and LearnSmart provide a great way to increase student engagement and student success.”

Institution Profile

Washtenaw Community College boasts an open-door admissions policy, affordable tuition rates, and high-quality classes to attract students from local communities and from around the world. WCC’s student body includes more than 1,000 students from over 100 foreign countries. More than 18,000 students register for credit classes each year, and thousands more enroll in non-credit LifeLong Learning classes. Courses are offered seven days a week, at night, and online.

Implementation

Course Description:

BMG 140 Introduction to Business covers functions, objectives, problems, organization, and management of modern business. Students develop insight into the vital role of the administrative function in our economy as a whole and in the operation of a single business unit.

Course Grade:

In the Introduction to Business online course, 40% of the course grade is LearnSmart and Connect activities. In the lecture course, these activities make up 20% of the course grade.

Digital Product in Use:

Connect® Introduction to Business

Course Name:

BMG 140 Introduction to Business

Course Type:

Traditional (face-to-face) and Online

Credit Hours:

3 hours per course

Textbook in Use:

M:Business, third edition, by O.C. Ferrell, Geoffrey A. Hirt, and Linda Farrell

Instructor Name:

Dr. Kimberly M. Hurns

Enrollment:

25/section; 5 or more sections a year

Case Study Term:

Spring 2013

“I think LearnSmart is a great measure of engagement. In the Business courses, students do not always assume the need for studying and high levels of engagement. I think there is opportunity in this area for me to develop more engagement strategies.”

- Dr. Kimberly M. Hurns

Implementation of McGraw-Hill Connect

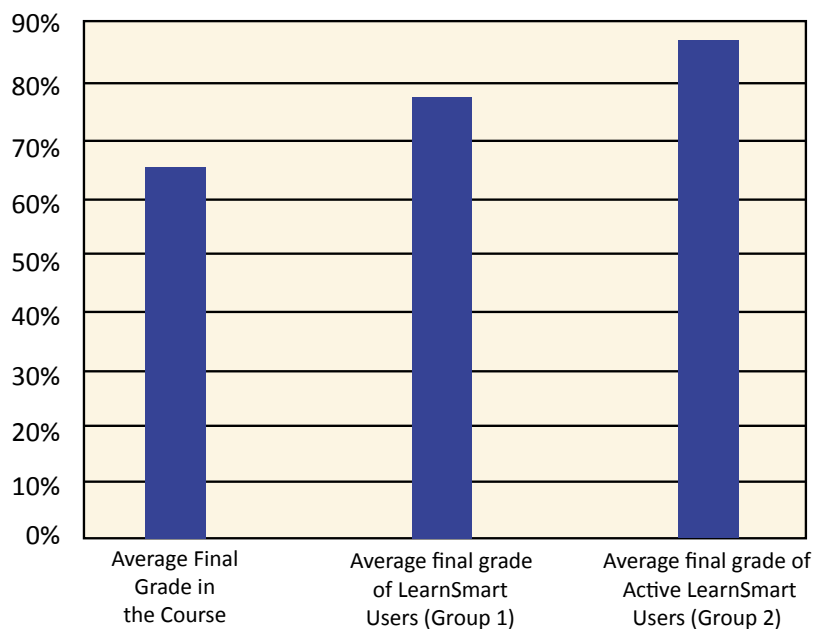
In both her online and lecture courses, Dr. Hurns assigns LearnSmart weekly. The due dates correspond to the beginning of a unit so that students complete LearnSmart before the lecture on that chapter takes place. This allows her to expect students to be more prepared for in-class discussion and team work activities. In her face-to-face course, she also adjusts topic coverage in lecture based on the data provided in the LearnSmart reports, and uses the same information to communicate more effectively in her online courses to update and add clarity on challenging topics.

Hurns also assigns Connect assignments in her online course to provide learning opportunities which are completed in class in her face-to-face course. These assignments are due during the unit coverage and consist of two to four interactive application questions, all of which are self-graded and provide feedback to students.

As a result, Hurns is able to spend more time coaching students on the development of their business skills instead of grading online assignments. She also uses this time to research current content, such as articles and examples, to incorporate into her class, giving students the opportunity to analyze information and apply their knowledge.

To further enhance her course delivery, Hurns has also integrated Connect with Blackboard, her school learning management system. This allows students to access their Connect assignments directly from her Blackboard course with their same login information, while providing her with automatic grade synchronization. She says, "I believe the single sign-on is extremely important to provide a clean and focused experience for students. This allows the technology to serve its purpose without getting in the way of the content."

Figure 1 - Student Course Grade Comparison



Results Achieved

With the robust data available in the LearnSmart reports on the class and individual student level, Hurns is able to use LearnSmart as a measure of engagement and student success. She can evaluate how engaged students are in the material instead of making assumptions about studying habits outside of class. For data analysis purposes, Hurns identified students who fell into two groups of more highly engages users: Group 1 – LearnSmart Users who used the tool

to study a minimum of one hour or more on some chapters, and Group 2 – Active LearnSmart Users who used the tool to study one hour or more on 50% or more of the chapters. While the assignment was set for an expected average of 25 minutes, these students demonstrated time spent over and above the average student.

The grades of engaged and highly engaged students showed a big difference (see Figure 1). Students who used LearnSmart actively and consistently earned an average of 86.06% – 21 points higher than the average final grade in the course of 65.88%. Students who used LearnSmart for an hour or more on some of the chapters scored an average of 78.80% in the course, which is 13 points higher than the average course grade of 65.88%.

Course grades improved because quiz and exam scores of students who used LearnSmart were 10.12 to 29.16 points greater than the students who did not use the tool to study beyond the required time for a grade. One student offered this feedback: “I averaged ~95% on the last five tests compared to the ~85% on the first three tests. The extra time spent studying after the 100% completion really helps me remember the material.”

Hurns says, “While LearnSmart assists in increasing students’ grades, I think strategies to engage more students will be imperative and will be key in pushing additional results. Engagement strategies measured with LearnSmart will help in addressing overall success rates.”

“Based on conversations with colleagues, I think that students do not easily equate the need to study in a business course like they might in a math or science course. There are lots of opportunities to improve student engagement through LearnSmart.”

Conclusion

Students who are highly engaged LearnSmart users are achieving much higher grades. In addition, Dr. Hurns has realized many efficiency benefits from having data to adjust her lectures and online communication with students, more time to research articles and examples for her students due to automated grading and Blackboard integration, and being able to quickly access and assess reports to identify and address student engagement levels. Hurns believes that, ultimately, LearnSmart can also help improve passing rates, retention rates, and continue to improve grades when more student engagement strategies are implemented. Future plans include increasing the consistent use of LearnSmart in all introduction sections. She says, “Student success is a big measurement at our institution, and I would like to use LearnSmart as a way to address this issue in our introduction course. We can model good study behaviors for students to maintain during their college career.”

CASE STUDY

OZARKS TECHNICAL COMMUNITY COLLEGE

Digital Course Solution Motivates Students to Read and Engage in Course Content

Tim Rogers wanted to improve overall scores and pass rates in his traditional and online courses. *Connect / LearnSmart* has made that possible. After implementing *Connect / LearnSmart*, Rogers noted that his final exam scores increased by an average of 10% and his student pass rates have increased by almost 5%. Further, 13% more students earned As and 8% more students earned Bs while 5% fewer students earned Ds and 4% fewer students failed the course. Rogers was also able to spend more time prepping for lecture and identifying topics students struggled with and less time grading and reviewing homework by using *Connect / LearnSmart*.

Institution Profile

Ozarks Technical Community College (OTC), located in Springfield, Missouri, was founded in 1990 to promote student learning through accessible, high-quality, and affordable workforce training and technical education opportunities. Over 15,000 students enroll in OTC every year and can earn associate's degrees in art, science, and education. Other programs of study include biological clinical sciences, allied health, business, marketing, and accounting.

Implementation

Course Description:

The course objective is for students to have a basic understanding of business terms and principles including entrepreneurship, management, human resources, marketing, and finance. Various aspects of business are covered including: economics, production, personnel, accounting, data processing, laws/regulations, and international trade. experience toward the things the student doesn't know rather than what the student has already grasped is incredible, especially when there are huge numbers of students involved. This experience allows the course to be individualized for each student rather than offering a one-size-fits-all, 'canned' course experience."

Course Grade:

The grade is determined by: Exams (60%), *Connect* (20%), Business Plan (15%), and Other (5%).

Digital Product in Use:

Connect® Introduction to Business

Course Name:

BUS 110 Principles of Business

Course Type:

Traditional and Online

Credit Hours:

3 hours

Textbook in Use:

Understanding Business, 10th edition by William G. Nickles

Instructor Name:

Tim Rogers

Enrollment:

30 students per section; 750/ year (university total)

Case Study Term:

Spring / Summer 2009 (without *Connect / LearnSmart*) and Spring / Summer 2014 (with *Connect / LearnSmart*)

"Less time spent grading homework assignments by far. My time has gone from about 8 hours per week on average to 2 hours per week now."

"I love LearnSmart!"

- Tim Rogers



Implementation of McGraw-Hill *Connect* / *LearnSmart*

Before switching to *Connect* / *LearnSmart*, Rogers used a textbook that had no digital component. He was manually making up assignments, worksheets, and quizzes to try to engage students and keep them progressing throughout the semester. He wanted to find a digital tool that provided meaningful homework assignments to help provide a foundation of major concepts and terms in the course. *Connect* / *LearnSmart* is that tool. “Learning the vocabulary of business is one of our major objectives in this course, and *Connect* has helped make that possible,” Rogers said.

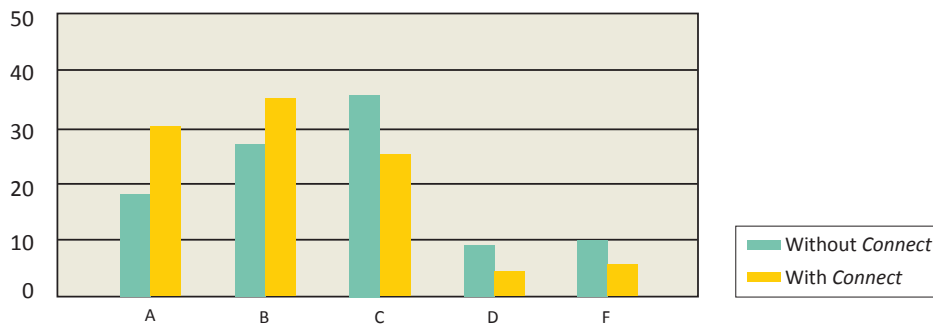
Now, when Rogers teaches a traditional seated class, he requires a 30-40 minute *LearnSmart* module completed for each chapter prior to coming to class. For his online classes, he requires one *LearnSmart* and one to two other *Connect* assignments completed for each chapter. These assignments are due prior to taking the unit exam.

Rogers uses the “Most Frequently Missed Questions” report the most. He tailors his lecture directly to his real classroom data making his lectures more efficient and immediately useful for the students.

Results Achieved

Before using *Connect* / *LearnSmart*, 18% of Rogers’ students earned As, 27% earned Bs, and 36% earned Cs (see Figure 1). After implementing *Connect* / *LearnSmart*, the students earning As increased to 31% -- a growth of 13%. The number of students earning Bs jumped from 27% to 35% -- an increase of 8%. Five percent (5%) fewer students earned Ds and 4% fewer students failed.

Figure 1 - Average Grade Distribution Percentage



Rogers believes *LearnSmart* / *Connect* has made a positive impact in how he is able to prepare a lecture and in how the students are able to study for exams. Since implementing *Connect* / *LearnSmart*, he’s noticed that more students actually “shout out” answers to his questions during lecture. “Anytime this happens it’s earth shattering to me!”

Students are engaged and learning more in his lectures because Rogers tailors his lectures to the topics the students are struggling to understand. “I do not focus on the vocabulary nearly as much since using *Connect* and *LearnSmart*. The students are getting that aspect of the class through the modules in *LearnSmart*, so I tend to just try to actually apply the information during my class time. This has been a significant improvement in my opinion.”

Student scores show the results: Final exam scores improved by an average of 10% (see Figure 2) and the number of students who passed the course expanded by nearly 5% (see Figure 3).

Figure 2 – Average Final Exam Scores

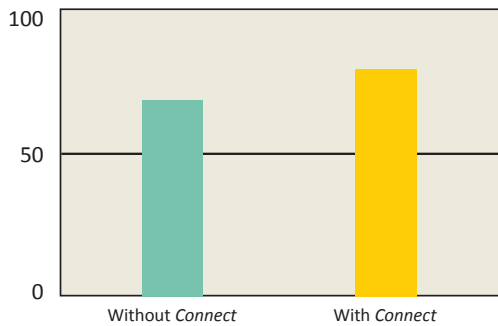
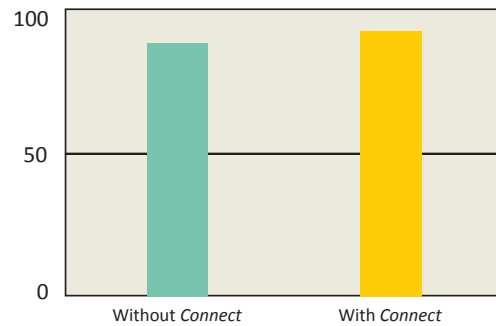
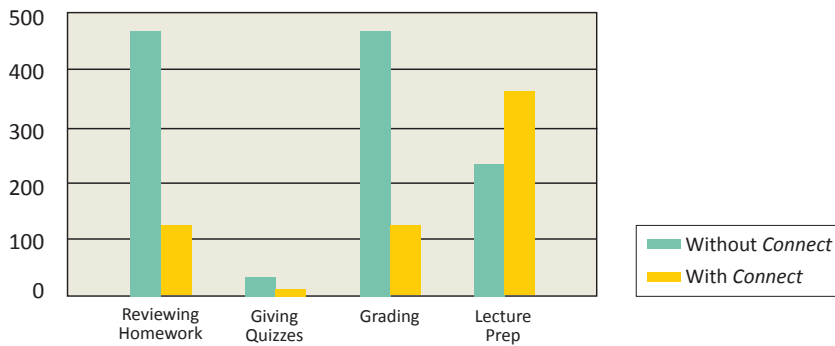


Figure 3 – Average Student Pass Rate



Additionally, because Rogers spends less time outside of the classroom grading homework, he can spend more time prepping for lecture (see Figure 4). He now has the time to research articles and discover more innovative learning techniques to bring to the classroom. “This has been a large plus!” Rogers said.

Figure 4 - Instructor Minutes Spent



“Connect / LearnSmart helps move the ball forward, and this is working where what I was doing before was not.”

Conclusion

The pass rate for Rogers’ course increased by nearly 5% and the number of students earning As and Bs improved by 13% and 8% respectively because more students are engaged in the homework and in the lectures. Students say they “actually really like LearnSmart” because the learning modules help them feel better prepared for exam questions. As a result, final exam scores have increased by an average of 10%. Further, Rogers doesn’t have to spend hours reviewing homework or grading any longer; instead, he can choose to spend more time researching innovative techniques that will continue to engage students and, as a result, improve test scores and passing rates.