Digital Course Solution Improves Student Success and Increases Engagement

Professor Tuckwiller needed to find a way to engage student interest in learning psychology outside of the classroom to reduce the time spent in lecture trying to cover every topic in the course. McGraw-Hill *LearnSmart,* the adaptive learning system within *Connect Psychology,* has helped her students to learn core course content outside of class. Now students experience the major concepts of the course through online labs and activities, and as a result, Professor Tuckwiller has time to bring more dynamic, engaging activities and videos from *Connect* into her classroom. And it is working—students are spending much more time with the material and pass rates have leaped from 75% to 83.6%.

Institution Profile

Florida State College at Jacksonville was originally established as Florida Junior College in 1965, and transitioned to a four-year institution in August 2009. It currently serves over 85,000 students, the large majority of whom are enrolled in associate degree programs. The college currently offers seven bachelor degrees, with more in the planning stages. Online and blended classroom/online formats are offered in many programs, with four degrees and nine certificates entirely online.

Implementation

Course Description:

This course utilizes the scientific approach that conveys an understanding of behavior, mental processes, and experiences of an individual organism and the principles that determine and guide individual and group behavior. It surveys the basic concepts of psychology, including the scientific study of behavior, behavioral research methods and analysis, and theoretical interpretations.

Course Grade:

- 25% of the final grade is based on *LearnSmart* modules
- 25% of the final grade is based on in-class activities (including labs and

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Digital Product in Use:
Connect® Psychology

Course Name:
General Psychology

Course Type:
Blended (lecture and online)

Credit Hours:
Three

Textbook in Use:
Experience Psychology by Laura King

Instructor Name:
Elizabeth Tuckwiller

Enrollment:
120/term (instructor total)
1200/year (university total)

Case Study Term:
Spring 2011

"I knew I needed to find a way to get students to invest in learning the content because it is truly impossible to cover everything in lecture in three hours a week.

I decided to give Connect *a try because it looked engaging and I thought students might actually do the* LearnSmart *modules and some homework based on the activities."*

- Professor Elizabeth Tuckwiller

interactivities from *Connect)*

- 16.67% of the final grade is based on exams within *Connect Psychology*
- 16.67% of the final grade is based on homework activities within *Connect Psychology*
- 8.33% of the final grade is based on Discussion Board assignments
- 8.33% of the final grade is based on one final project

Implementation of McGraw-Hill *Connect:*

Professor Tuckwiller has integrated *Connect Psychology* into every aspect of her course. She requires students to complete a minimum of 10 *LearnSmart* modules over the course of the semester. In order to ensure that students are prepared for class discussion, she requires that they complete each *LearnSmart* assignment prior to her lecture on the subject. "It is so exciting to see the students spending over an hour a week engaging in the module and achieving 100 percent!" she says. "Many of them have told me that they enjoy the modules and learn a lot from them — some of them really get into trying to get the high score!"
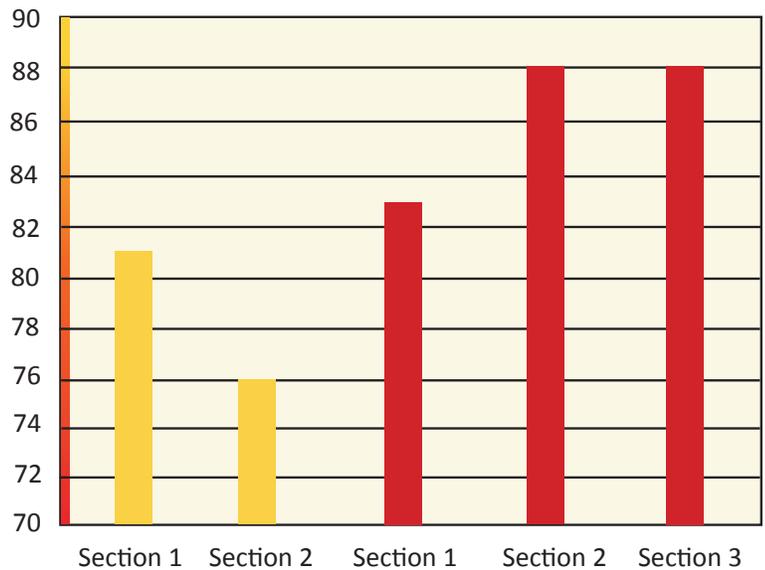
In addition to the *LearnSmart* modules, she assigns interactive homework assignments in *Connect Psychology,* which she creates from the suggested syllabus feature. On average, she makes one interactive assignment in *Connect* each week. This assignment typically includes 20 questions, which she builds around an interactive learning activity or a video demonstrating a key concept from the chapter. The questions are a mix of auto-graded multiple choice questions and essay questions which require students to immediately apply what they just learned. She says, "Grading essays in *Connect* is very easy. I like the message that *Connect* gives me when student responses are ready for grading, and the way I award points and save comments is user-friendly." To further save valuable class time, Tuckwiller administers all exams via *Connect* using the integrated test bank.

Knowing that students are working in *Connect Psychology* outside of class and being able to see the results of that work has freed Professor Tuckwiller to try new things during class. Class time has become much less about lecturing and much more about exploring the field through active learning.

"In the past, I was certain that students were not reading at home and therefore, I felt an immense pressure to cover all the basics of each chapter in class. With *LearnSmart*, I can see that they are learning the basics at home!" As a result, she uses the activities and video clips from *Connect* to make class much more interactive for students. "I feel like I have so many more engaging resources using *Connect Psychology* with the class. I have also found that the video clips can be useful resources to illustrate big ideas for the chapters in a meaningful way."

Professor Tuckwiller also uses the variety of reports available within *Connect* to gauge and measure her students' activity and performance. She regularly examines the *LearnSmart* module results to see how much time students are spending on them, and is amazed by the correlation between time spent and performance. She also appreciates the exam scoring feature that allows her to see students' scores in

Figure 1 - Grade Average

Chart y-axis values: 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90
x-axis labels: Section 1, Section 2, Section 1, Section 2, Section 3

Legend:
- without Connect (Fall 2010)
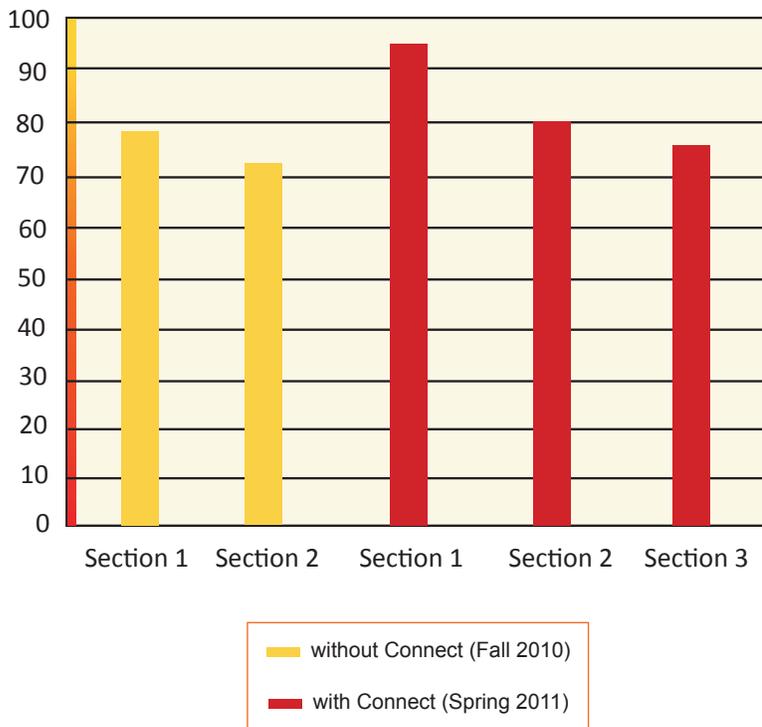- with Connect (Spring 2011)

terms of Bloom's taxonomy, which shows that her students are comprehending concepts at a high level and can also apply the information they are learning. "I like that I can SEE how much time they are spending outside of class, which puts a bit of pressure on the students to do the module. One of the biggest problems I have encountered with students is ENGAGE-MENT, and *Connect* engages them outside of the classroom. I am very, very pleased with it."

Results Achieved

Professor Tuckwiller has seen an increase of 7.83% in overall class grade averages when comparing her two sections of General Psychology before *Connect* (Fall 2010) and the three sections of the same course that used *Connect* in the spring (see Figure 1). The improvement in pass rates from the same sections show a similar trend, going from an average of 75% in the Fall semester to an average of 83.6% in the Spring semester (see Figure 2).

She has also found a 100% correlation between completion of the *LearnSmart* modules and student pass rates. Every student who completed all assigned modules passed the class, and every student who failed the course did not complete the majority of assigned modules.

Figure 2 - Pass Rates

Legend:
- without Connect (Fall 2010)
- with Connect (Spring 2011)

Student Comments

"I was skeptical when Dr. T first introduced the class to this new way of learning, but I realized that Connect *is more fun and more helpful in retaining the information than any other program I have used in the past."*

'I've been in the library every day working in Connect, *and I love it! I learn more from using* Connect *than I do reading. When I misinterpret information I've read,* Connect *prompts me to re-read the specific subject matter and later asks me the same question, thus reaffirming that I grasped the material. I find it very helpful!"*

"'Connect is pretty cool. It actually makes you learn the materials that are covered on the test. A++ to* Connect!"

"In another class I'm taking, everything is separated into a mess of tabs and I don't really like it. With Connect, *it is just one clear page with all the assignments listed on it."*

Conclusion

Professor Tuckwiller is very happy with *Connect Psychology* and recommends it to colleagues. "I tell people that it drastically improves student engagement and that it is the next wave in digital learning and blended course development," she says. "It frees up class time for labs, activities and other forms of active learning." *Connect* has made her blended classes more effective, enabling her to offer more sections next year. It has also increased engagement, changed the way her students learn, and given her a way to measure that learning more effectively. Professor Tuckwiller now plans to use the McGraw-Hill and Blackboard™ total course solution to seamlessly deliver her course in one place.