



CASE STUDY HINDS COMMUNITY COLLEGE

Digital Course Solution Improves Student Success and Increases Instructor Efficiency

In 2010, Professor Sharon Feaster began offering *Connect Anatomy & Physiology* to her students as an extra study tool. In 2011, when she required students to complete homework assignments within *Connect*, she witnessed dramatic improvement in student grades, pass rates and retention. During the Fall 2011 semester when *Connect* was required, 22% more students passed the course and 29% more students completed the course than during the previous semester. Professor Feaster credits *Connect* with having made a real difference for her students.

Institution Profile

Hinds Community College is a public community college (the largest in the state of Mississippi) that provides academic opportunities to approximately 32,000 students through academic, career/technical, workforce, and secondary and adult education programs. Students attend from more than 70 Mississippi counties to earn associate's degrees in various disciplines including: nursing, law enforcement, theatre, zoology, physics, astronomy, communications, and art. Many students complete their two-year general requirements at Hinds Community College before transferring to a four-year university.

Implementation

Course Description:

This is a lecture course that pursues detailed studies of anatomy and physiology, including the human special senses and the endocrine, circulatory, respiratory, digestive, reproductive, and urinary systems.

Course Grade:

Lecture Class

- 80% of the final grade based on six unit exams and one final exam
- 20% of the final grade based on 12 chapter assignments within *Connect Anatomy & Physiology*

Digital Product in Use:

Connect® Anatomy & Physiology

Course Name:

BIO 2523 Anatomy and Physiology II

Course Type:

Traditional

Credit Hours:

Three

Textbook in Use:

Hole's Human Anatomy & Physiology by Shier, 12e

Instructor Name:

Sharon Feaster

Enrollment:

24/term (instructor total)
2,000+/year (university total)

Case Study Term:

Fall 2011

"Connect provides highly engaging and interactive activities that directly correspond to what is covered in class. Today's students are visual and they love using computers. Connect activities encourage them to study and to learn through an environment that is fun."

- Professor Sharon Feaster

Lab Class

- 75% of the final grade based on six unit exams and one final exam
- 25% of the final grade based on 12 chapter assignments within *Connect Anatomy & Physiology*

Implementation of McGraw-Hill *Connect*

Professor Feaster wanted to motivate her students to spend more time studying outside of the classroom. She says, "I was intrigued by McGraw-Hill *LearnSmart™* (the adaptive learning system within *Connect*) and its ability to show students their weaknesses and to then guide them to the textbook pages that cover the weak areas. Also, I liked the fact that I could quiz them using diagrams from the book, and be able to edit the diagrams."

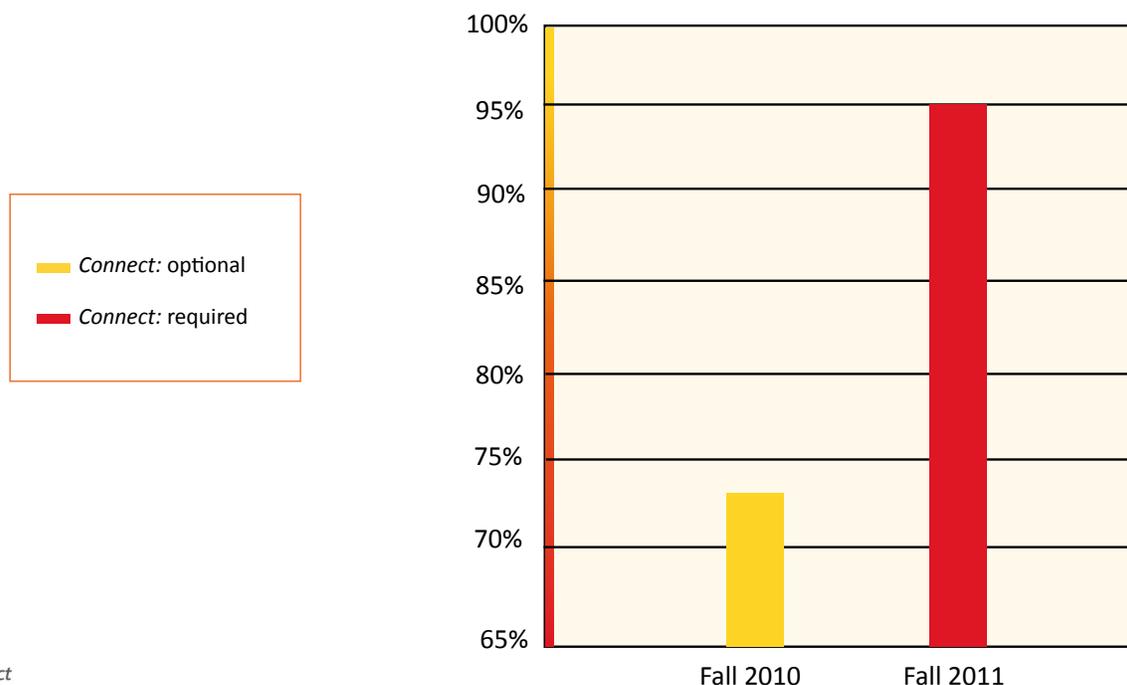
She initially offered *Connect* as an optional study tool for the students, but says she jumped at the chance to use *Connect* even more when it was fully integrated with Blackboard Learn. Due to the ease of use offered by the integration, *Connect Anatomy & Physiology* is now a required part of her course. For her lecture courses, she assigns *LearnSmart* modules and interactive quiz assignments. For her lab classes, she assigns quizzes that incorporate labeling, APR images, her own micrographs, and questions pertaining to weekly lab activities. She says, "*Connect* makes it easy to have visual assignments (like labeling) that are important in a course like A&P." All course handouts and *Connect* chapter assignments are available on the Blackboard course site. Each of the twelve chapter assignments is open for a certain number of days. The two lowest chapter scores are dropped.

"One student described LearnSmart as her own personal tutor. Several students have told me that they like that LearnSmart stops and directs them to the textbook when they continually miss questions pertaining to a particular topic."

Results Achieved

A higher percentage of students passed with a higher grade, and fewer students failed exams when *Connect* was a requirement for the course versus when it was provided as an optional resource. **In fact, 95% of students passed the course with a C or higher when *Connect* was required, versus only 73% passing with a C or higher the previous semester (see Figure 1) - an increase of 22%! Professor Feaster also saw improvement in exam scores. 54% of the students passed the first exam with a C or higher when *Connect* was required, versus only 34% when *Connect* was optional.**

Figure 1 - Students Who Passed with a Grade of C or Higher



On the second exam, 59% of students passed with an A, B or C, while 27% of students failed. During the prior fall semester, only 38% of the students passed and 49% of students failed. Professor Feaster reports that this trend continued for all six exams throughout the course (see Figure 2).

Figure 2 - Exam Pass Rates (C or higher)

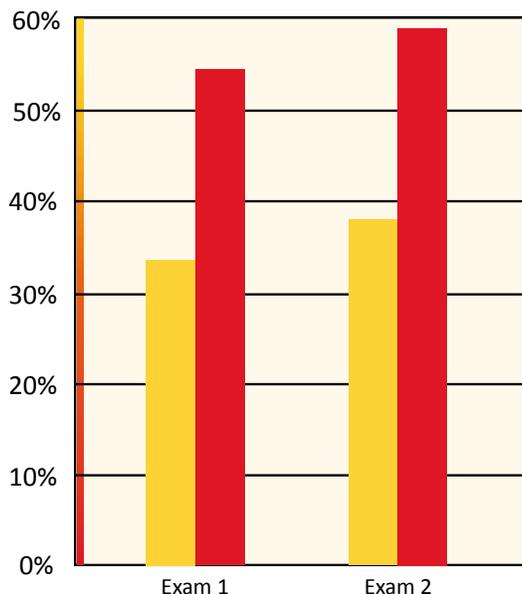
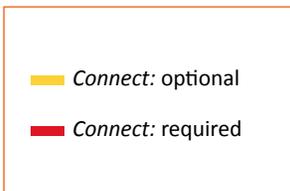
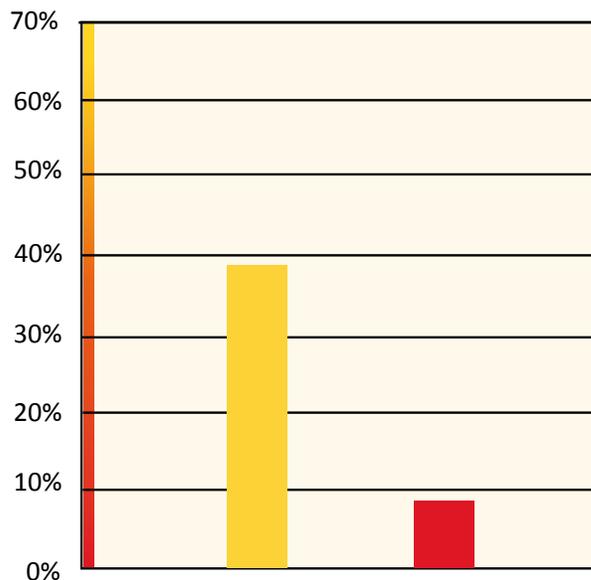


Figure 3 - Students Who Withdrew Prior to the End of Semester



Class retention was significantly impacted as well, with over four times as many students dropping out when *Connect* was not required. In 2010, 38% of the students withdrew from the course. In 2011, only 9% of the students withdrew. She assumes that fewer students felt compelled to withdraw because they were succeeding in the course.

Professor Feaster comments, “*Connect Anatomy and Physiology* impacted borderline students. The fact that I required them to do the graded assignments helped them study and LEARN material (it was not just busy work to give them extra grades).” She was also pleased to find that she now spends a lot less time grading since the assignment results in *Connect* automatically sync with the Blackboard GradeCenter.

Conclusion

Professor Feaster says, “I observed that A students are going to make A’s regardless of what is asked (or not asked) of them. The *Connect* and *LearnSmart* assignments force all of the students to study in a variety of ways . . . which evidently improves their understanding.” The data backs this up, showing that *Connect* made a significant difference for students who might have otherwise withdrawn from or failed the course or who may not learned the material well enough to pass the course. As a result, Professor Feaster “absolutely” recommends *Connect* to other faculty.