Assigning and Grading Homework for Large Classes Becomes Possible with Connect

With an average enrollment of 100 students per section in his Anatomy and Physiology course, Dr. Brian H. Kipp was unable to assign homework due to the inability to grade in a timely manner before he started using Connect. With Connect, Kipp was able to give homework assignments to a large number of students and have it graded automatically. Students benefitted from real-time feedback.

Using Connect has allowed Kipp to use learning objectives as the central focus of his teaching. Having the ability to assign questions on exams and homework based on the learning objectives discussed in class, he says, makes total sense. Before he started using Connect, it was impossible to track how students were doing on what he wanted them to learn, but now, he says, it’s a very easy and useful way to keep track of student progress. “The ability to assign homework and exam questions based on learning objectives gives me a rock-solid foundation to share with the students,” says Kipp. “Gone are the days when they have to guess what I want them to know. There is no question of the content.”

Implementation

Course grade is determined by the following:
15% – Connect homework assignments including SmartBook®
40% – Lab
45% – Exams

Digital Product in Use: Connect® Anatomy & Physiology
LMS: Blackboard
Course Name: BMS 250/251 - Anatomy and Physiology I and II
Course Type: Face-to-Face, Lab
Credit Hours: Four
Program in Use: Anatomy and Physiology: An Integrative Approach by McKinley, O’Loughlin, and Bidle
Instructor Name: Brian H. Kipp, PhD
Enrollment: 2 sections, 100 students per section, 500 students per year

“Students can see where I am going in lecture because of the SmartBook homework, and they can test their knowledge with the Connect practice problems.” — Brian H. Kipp, PhD

Kipp uses SmartBook to introduce students to the material from the chapter. They must read and answer questions within SmartBook before they come to class. Kipp requires students to attend class and expects them to be prepared to present as his classes are interactive. He doesn’t send out lecture notes, so students who miss class must obtain notes from other students.
He assigns approximately two homework assignments in Connect per week, a SmartBook assignment and a practice problem. The SmartBook assignment and practice problem each contain 15-20 questions, covering an entire chapter or portions of a chapter, based on learning objectives covered in class. These assignments help him to assess how well the students comprehend the material. Kipp uses a variety of learning techniques to reinforce the objectives. He also encourages students to revisit their completed SmartBook assignment and use the Recharge tool to reinforce the information they have covered. Students see their Connect homework grades immediately in Blackboard after submitting assignments for grading in Connect.

Kipp admits that student engagement has changed since assigning SmartBook. “Students can see where I am going in lecture with SmartBook, and can test their knowledge with the practice problems,” he says.

Utilizing the Connect reports allows Kipp to have a better understanding of where his students are in the course. He uses the Assignment Results, Student Performance report and Category Analysis to gauge the class performance, address individual student progress and ensure he’s covering the learning objectives. From SmartBook, Kipp uses the Missed Questions report to find out where students are confused and need more information, and the Most Challenging Learning Objectives to show students what they need to study. In addition to students coming to class having read the material and answered questions, these reports give Kipp the ability to tailor his lecture to cover exactly what the students are struggling with. Class time is now more valuable as he can focus on those common areas of confusion.

Kipp has been using Connect for more than five years now and could not be more enthused about how it has made him a more effective instructor. “It’s amazing” he says, “I do not grade homework ever, and now I can give homework to a group of 150 students as easily as I can to 20.” He says he would recommend it to other faculty, suggesting: “Do not be afraid to try anything. Connect is virtually unbreakable. I think we are still in the infancy of what Connect can do, and what we can do with it.”

Conclusion

According to Kipp, the use of Connect changed the way he teaches. By focusing on specific learning objectives and reinforcing those through Connect and SmartBook, he finds students can anticipate where his lectures are going and practice problems in advance. The ability to assign and grade homework to large sections has helped him better assess his students’ needs and address areas where students may be confused or need more information quickly.

“Connect is a solid, well-constructed, and easy to use system. Students like it, and it gives the instructor freedom to do several things in large and small classes.”

Instructor’s implementation goals:

- Find a way to assign and easily grade homework for large sections
- Address individual student progress
- Gauge the performance of the class
- Find out where students are confused and need more information
- Show students what they need to study

Issues for instructor before using Connect:

- Class size made assigning and grading individual homework too time consuming
- Unable to quickly address individual student progress
- Tracking performance of the class was unmanageable

Benefits to instructor after using Connect:

- Connect made assigning homework based on learning objectives possible
- With Connect he can give an assignment to large sections and have it automatically graded
- Connect makes it is easy and useful to keep track of student progress
Brian H. Kipp, has a B.S. degree in Biology from Saginaw Valley State University and a Ph.D. in Biophysics from Wayne State University. He is currently a Professor at Grand Valley State University, teaching Human Health and Disease, Anatomy and Physiology, Human Physiology, Basic Pathophysiology, Biology of Aging and associated labs.

Course Description:
Anatomy & Physiology I:
Focus is on the basic principles of homeostasis, cells, and tissues. The structure and function of the skeletal, muscular, and nervous systems will also be covered.

Anatomy & Physiology II:
This is the second of a two-semester anatomy and physiology sequence. The structure and function of the endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive systems as well as fluid and electrolyte balance, acid base balance, and basic metabolism will be covered.