

Effect of Instant Feedback on Student Learning in Introduction to Animal Science.

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My Introduction to Animal Science classes consisted of 75 and 50 students in the Fall and Spring semesters, respectively. These students had varying backgrounds or no background in animal agriculture. This course was a foundation course which covered every topic in the animal science curriculum on an introductory basis. Thus, too much information is taught in this course over the period of each semester. The resultant effect was less time available for student feedback from me (*the instructor*) over the course of the semester. The Desire-to-Learn (*D-2-L*) computer software provided great opportunities for student assessment in the classroom and with that some tools for instant feedback to students. The study question I investigated was: Does instant feedback (*during class assessments*) in this course enhance student learning?

All exams for the course over the period of two semesters were completed in a computer lab on *D-2-L*. Five exams (*100 points each*) were completed on *D-2-L* over the course of each semester. The electronic exam format on *D-2-L* was designed to allow the student after completing and submitting the exam the opportunity to review their responses to questions. I selected this assessment format because I wanted students in this course to have instant feedback in a classroom setting after they completed and submitted their exam each time. Students drew my attention on an individual student basis to learn about questions they answered incorrectly and how they could work differently to complete these questions. This allowed the students to immediately engage in a learning experience right there and then. At the end of each semester I examined student performance based on performance score and progress as well as surveyed students for exam format preferences (*paper or traditional style, or electronic style exams*).

Introduction to Animal Science students unanimously preferred taking exams on *D-2-L* than on paper and pencil like it was done prior to this study. Students spoke very positive of their likeness and opportunity to review their exam or quiz immediately after completing each one. They also had access to the exams or quizzes they had completed throughout the semester on *D-2-L*. Another positive aspect of using this style of assessment was the fact that it allowed automatic transfer of the score of each exam to my gradebook, thus allowing the students to have access to their grades 24/7. Statistical reports of student performance was instantly available to the student. It allowed students to compare themselves to classmates, thus students did better on subsequent exams.

Although it took a lot of time to build up a question pool and work all the glitches in the assessment system to allow for smooth assessment of students, the payback in the amount of student learning was very impressive and worth the challenges faced putting the assessments together. Instant feedback provided a more individualistic way to review exams with students, thus addressing each student's needs as they related to each question on the exam. Another positive aspect of instant feedback was the fact that class time often used for discussion of each exam was better used doing other things to enhance student learning.