

# Self Directed Testing in a College Setting

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*Some educators consider testing as only a method of evaluating the achievement of outcomes among students rather than as a method of teaching. The Computer Assisted Testing System developed by Kennesaw State University students provides a method of fostering independent learning, as well as, familiarity with testing on a computer to alleviate the problems with test anxiety that may accompany group testing in a classroom.*

Testing is a difficult situation for many students to confront. However, this anxiety producing activity is considered an excellent teaching strategy, as well as, an evaluation method by many educators. Some students in the Kennesaw State University School of Nursing found that tests can be a way to develop and display independent, self directed learning; acquire beginning computer skills; learn time management; and learn to master essential information. The computer assisted testing system, developed by students in the computer science department at Kennesaw State, was a method implemented to move toward these ends.

Several problems provided the impetus for development of the new testing system: (1) Test anxiety displayed by students in the classroom testing situation. (2) Classroom testing neither allowed for differences in rates of learning among students, nor did it foster self directed, independent learning that is particularly desirable in the nursing program. (3) The registered nurses licensing examination (NCLEX) is exclusively administered on a computer. Students need to experience taking tests via computer to overcome their fear of technology. Some students, with no experience in the use of computers, were particularly concerned about their ability to cope with taking their licensing examination successfully. (4) A more efficient, time saving method of assessing learning was needed. Group classroom testing takes great amounts of time to prepare, type, administer, grade, review with students, report, and record scores.

The initial step toward computer testing began as a project of computer science students. Computer science students were asked to develop a testing system that would administer, grade and report scores to each student on the computer. Easy access to the test bank for updating or adding test items was also a requirement in the initial phases of development.

The program created generated a ten-item drug calculation test for each student. Questions were randomly generated to avoid students receiving the same exam. Students completed exams as they felt prepared to do so, during the quarter. The campus computer lab, which offers long hours each day and on the weekend, served as a central location for students to complete their exam. Student identifications were checked before they were allowed to take the test in the computer lab. Students were required to leave all books and papers outside the lab and to avoid any conversation during testing. The test results were reported to the student on the computer monitor upon completion. The professor was given the testing disk to download all results to the program grade book.

Students were quite pleased with the independence that was provided through such testing. They were appreciative of being able to determine their own learning and testing times. Students reported feeling more secure with computers and less anxious about testing. The time saved by students and professor was also an advantage.

Future developments include creating such a testing system for all tests in a nursing course. This requires many questions in the test bank in order to assure that each student receives different exam. Installation of the program on the network will also save time and effort.

The successes of self directed testing in the School of Nursing have been evident through the evaluations from students and a high passing rate among students on this test. It has led to the achievement of several outcomes and a method of assessment of learning in students. Moreover, this system of testing has provided the opportunity for students to assess their own learning and understanding of information and to make their own decisions pertaining to their education. •