

Lessons learned using Publishers' Web-based software to assess student work

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Lecture Proposal for the ACDC strand

ABSTRACT

The presenter will discuss the use of publishers' web-based text-specific software MyMathLab and WebAssign in remedial algebra, statistics, precalculus and calculus. Course software delivers and grades student homework and quizzes and may contain an electronic copy of the text, video lectures, applets and animations. Some students embrace the software, others insist on using a traditional textbook. Among the benefits to the student, the software provides instant feedback and just-in-time homework assistance. Student accountability and accuracy improves. Student engagement increases. The remedial math success rate using MyMathLab increased from 41% to 57%. Some students embrace the computer interface while others resist it, claiming it takes time away from doing mathematics, and grades answers inaccurately.

The professor can see from the software what problems students did and did not do correctly, and can then tailor the day's lesson to the students' needs. The software facilitates communication between the professor and the student about the math problems, thus increasing student learning and motivation. The software is fairly easy to use, so it takes only a few hours to compile the teacher-chosen homework for the semester. The software provides options to the professor as to how to use classroom time. Quizzes may be taken outside of class. Several versions of tests and homework are available using randomly generated numbers in the problems which enables a professor to institute a mastery learning approach, requiring students to repeat the lesson until he achieves a minimum grade. Diagnostic tests can be used to determine which content the student must learn, so that a student may progress more quickly through remedial courses by not having to repeat what he already knows.

Use of web-based, text-specific software for homework and other assessments provides both the instructor and the student with immediate information about what the student knows and does not know. The professor can adjust his instruction to student needs, and the student knows what he needs to study.

Keywords

Course management software, online homework systems, computer assisted instruction (CAI)