

Meeting: 1003, Atlanta, Georgia, SS 19A, AMS Special Session on Mathematicians' Work on Mathematics Education

1003-97-459 **Manmohan Kaur*** (mkaur@ben.edu), 5700 College Road, Lisle, IL 60532. *Motivating Undergraduates with Different Backgrounds to do Mathematics Research.*

Frequent quizzes form an essential component of mathematics courses. The best way to learn mathematics is to do it. Through quizzes, we not only assess student learning before it is too late, but also make sure that the student visits important concepts over and over again. We have seen that in a course with frequent quizzes, students score better overall.

In most teaching institutions, the faculty is hard-pressed for time, and therefore, electronic quizzes seem to be a good option. Course management systems like Blackboard and WebCT have online assessment tools, but most are unsuited to the mathematics environment. On the other hand, most available online mathematics assessment tools either require Unix platform, or require Maple software on the student machines. These resources are not available in most small liberal arts schools.

Further, to create a database of mathematics problems, it is essential that we create multiple problems of the same type. In order to do this, some mathematics programming software must be used.

We will explain how we created a database of mathematics problems in WebCT in an economical way, what difficulties came our way while administering online quizzes, and how we countered them, and will discuss the end of the semester student feedback. (Received September 15, 2004)