This talk will describe the results of an experiment I performed while teaching Introductory Calculus I. The students were primarily freshmen majoring in business or the social sciences, and I found a significant percentage of them to be lacking in basic pre-calculus skills.

My purpose was to foster success by increasing the number of students who regularly (1) do homework, (2) attend class, and (3) preview the material that will be covered in lecture.

To accomplish (1) I made heavy use of the online homework program WeBWorK, which not only gives students immediate feedback but also gives the instructor very detailed information about each student’s progress. To accomplish (2) and (3), very short daily quizzes were given at the start of each class. The quiz would consist of a very simple question about the content of the lecture to come, and also a simple problem testing a prerequisite pre-calculus skill (the same skill was tested for several consecutive quizzes).

Having a quiz given and a homework due each class day motivated the students to keep from falling behind. The online homework technology and format of the quizzes helped to keep the increased load on the instructor manageable. (Received September 22, 2011)