Patrick X Rault* (rault@math.wisc.edu), University of Wisconsin-Madison, Mathematics Department, 480 Lincoln Dr, Madison, WI 53706-1388. Large-Lecture Techniques. Preliminary report.

The growing number of large-lecture courses has decreased student-teacher interaction. Large numbers of students in a room combined with lack of time devoted to questions creates a dynamic in which (1) few people have enough ego to feel that their questions are worth asking and (2) the professor is psychologically distant diminishing the number of people to contact him or her inside or outside of class. This has spurred educators to create techniques geared towards maximizing interaction.

This study tested the effectiveness of certain educational techniques designed for Large Lecture Courses. The groups studied were four discussion sections of "Linear Algebra and Differential Equations" at the UW Madison in Fall 2007. Two sections were taken as controls and taught normally. The two remaining sections were taught using varying techniques to engage students despite the large lecture setting. Student responses to exams, surveys, etc. were analyzed to determine how well each method aided learning. (Received September 17, 2007)