The Utilization of Discussion Boards for Homework in an Interactive Delivery Course: Linear Algebra and Differential Equations.

The Utah Mathematics Endorsement Project (UMEP) offers a variety of undergraduate mathematics courses for professional teachers to raise their teaching qualifications. Classes are delivered through an interactive broadcast satellite system. As part of the project, we taught Applications of Linear Algebra and Differential Equations this summer. We decided on several different methods of assessing students’ understanding. We assigned homework problems, and created corresponding discussion topics online through Blackboard Vista. Participation in the discussion boards replaced turning in traditional assignments. In this article, we will discuss our structure and rationale behind the homework. We will also share our analysis of students’ use of the discussions, how they felt about using them, and their effectiveness as a learning tool. Overall, we have evidence that the discussions benefited students’ understanding of concepts taught in class, and that students gained appreciation for discussing mathematics. We will explain our strategies for getting through a large number of posts, and give suggestions for anyone who wishes to use discussion boards. Lastly, we will make recommendations based on our experiences for changes to try in future classes. (Received September 22, 2009)