Effectiveness of Collaborative Learning Techniques and Mechanisms to Enhance Students' Preparedness

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Collaborative learning techniques (CoLTS) effectively enhance students' learning and empower critical thinking. The challenge to promote effective group discussions during classes is constrained by how much students are prepared before group activities. On-line quizzes and informal writing assignments (short essays) might be implemented in order to enhance students' preparedness before classes. The Conservation of Natural Resources course (Spring 2012, sections 1 and 2) was designed for students to complete on-line quizzes and informal response papers before lectures. As a course midterm evaluation, students were asked to complete a survey to assess the perceived benefits of group activities, quizzes and essays. In general, students were better prepared when required to complete short essays than quizzes. For instance, 80% of the students completed the assigned readings when needed to complete short essays. On the other hand, only 65% of the students completed the readings when required to take on-line quizzes. Supplemental readings were also available to students as a way to enrich group discussions. However, only 7% of the students utilized such material because of time constrains. In general, students recognized the importance of group discussions, although differences were observed between students' populations.