

Online Discussion Forums: Do They Enhance Student Learning in Science?

Abstract

This project looked at the addition of online discussion forums in the traditional classroom in several courses at a two year Tribal College. Surveys, student interviews, assessment rubrics, and classroom observations were used to assess student preconceptions and post conceptions of participating in online discussion forums. Prior to the implementation of the online discussion forums, a majority of the student responses indicated that they preferred verbal classroom discussions over online discussion forums. Student participation in the online discussions improved as the semester progressed.

Research Questions

Does incorporating an online discussion forum enhance student learning?

- What are the students' preconceptions and post-conceptions of online components in their courses?
- Are students more likely to participate in online discussion verses face to face discussion in class?
- How does the addition of an online discussion forum impact the instructor?

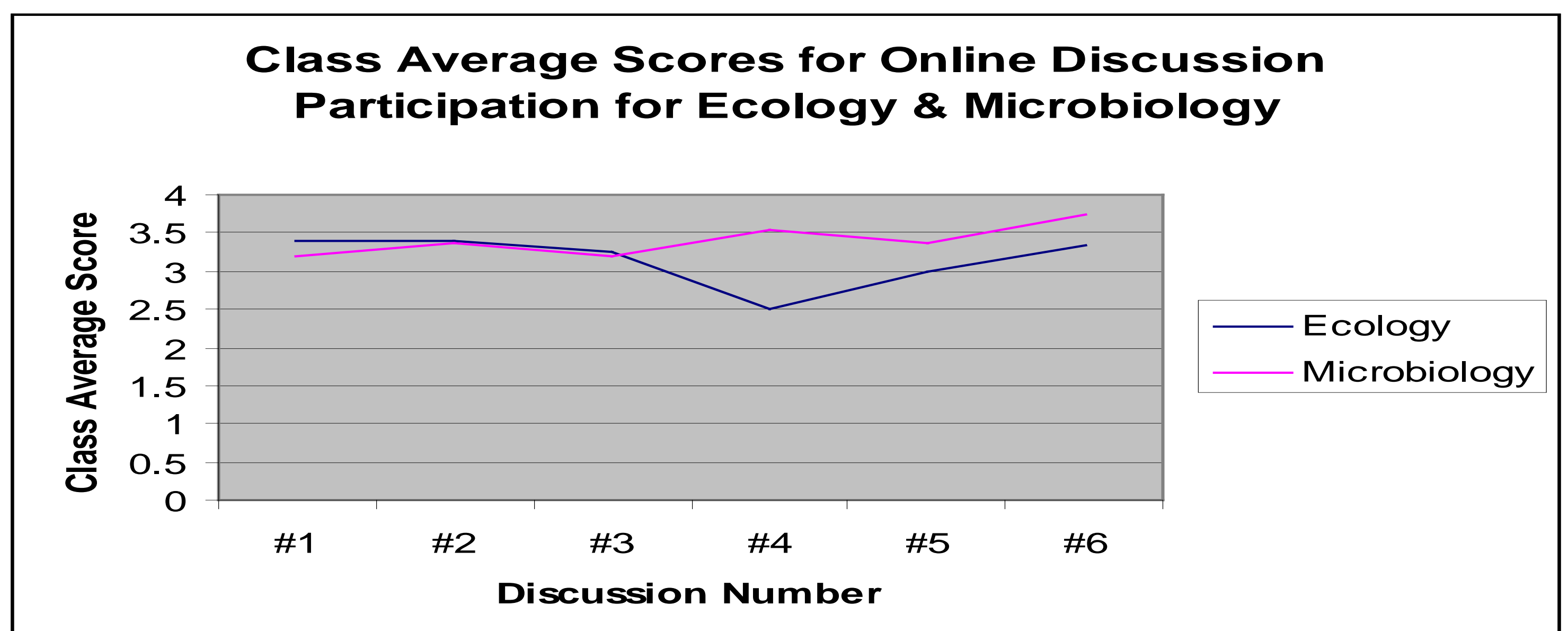
Treatment/ Design

Data was collected from Ecology and Microbiology courses during the 2009 Spring Semester. Data sources are pre & post treatment surveys, assessment rubric, student interviews and classroom observation notes.

Data Collection Methods

Research Questions	Data Source 1	Data Source 2	Data Source 3	Data Source 4
Primary Question:	Pre-treatment survey	Post treatment survey and student interviews	Rubric	
Sub-Question 1	Pre-treatment survey	Post treatment survey	Student interviews	
Sub-Question 2	Pre and post treatment surveys	Rubric	Student interviews	Classroom observation notes

Data From Assessment Rubric



Results

In the pretreatment survey, students responded that they preferred verbal discussions over online discussions. However data from the post treatment survey, assessment rubric, student interviews and classroom observations showed that the students actually participated in online discussions more than the verbal discussions. Also, data showed that the online discussion forums enhanced their learning.

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