

A Study of Student-Student Interaction and Collaboration in the Virtual High School

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Andy Zucker

The Concord Consortium

<http://concord.org>

Huge Growth in Online Courses

- Hundreds of thousands to 1 million K-12 enrollments in online courses
- By 2002-03 Internet-based learning was the most common distance learning technology used by medium to large school districts (NCES)
- 43% of all districts in the Southeast enrolled students in a **state** virtual school
- Quality is therefore of growing importance

Research Questions

- Does encouraging online student participation through grading practices increase student interaction and thus increase the value of the course for students?
- What do teachers and students think of the role of interaction in online courses?

Study Methodology

- Randomized experimental trial
- Eight pairs of teachers, each pair teaching the same online course
- Both experimental and control teachers encouraged interaction, and
- Experimental teachers were asked to double point value for interaction

Teaching Techniques

- Ice-breaker activities
- Minimum # of responses each week
- One or two small-group activities
- Student lounge area for socializing

Courses in the Study

- Art History
- Career Awareness for the New Millennium
- Computational Science Using Java
- History of Photography
- Introduction to Programming in Visual Basic
- Introduction to Sociology
- Perspectives in Health
- The Holocaust

Outcome Measures

- Numbers of postings made by students
 - Numbers of postings to the student lounge area
- Earned grades of the students
- Retention rates of students in the courses
- Teacher rating of quality of online discourse
- Students' self-report of value of communication
- Students' reported satisfaction with the course

Survey Findings

- High satisfaction with VHS courses
- “*Communications with other students have been an important part of my learning in this VHS course*” – more than two-thirds of students agreed or strongly agreed

Why is Interaction Important?

- Students
 - Get to know other students (77%)
 - Helps in learning material (46%)
 - Helps motivate (32%)
- Teachers
 - Students get to know others and their points of view (94%)
 - Helps in learning material (75%)
 - Helps motivate (69%)

Survey Findings (continued)

The fundamental finding that emerges from the survey data is that student-student interaction is highly valued by large majorities of both teachers and students

Differences by Treatment

- There were no significant differences between treatment and control, for either teachers or students, on any of the measures
 - Survey items
 - Attrition / persistence
 - Grades

Conclusion

In light of the teachers' and students' responses to the surveys, one could argue that increasing point values as a means of increasing the level of student interaction wasn't effective because students are already motivated by the authentic need within online courses for such discussions and teachers already require interaction