

The Influence of Medium and Task in Student Communication Patterns

Wendy Martin (wbm6@cornell.edu)
Geri Gay (gkg1@cornell.edu)
Dept. of Communication, Kennedy Hall
Cornell University, Ithaca, NY 14853
607-255-5530

Technologies that fall under the rubric of computer-mediated communication consist of a diverse array of electronic tools. Each of these tools has the power to amplify or reduce different elements of human interaction (Bowers, 1988), thereby influencing the collaborative process. Jonassen (1995) recommends using a variety of CMC media to support multiple facets of meaningful knowledge construction.

This poster presents an analysis of communication patterns of a class of 22 students, mainly seniors and graduate students, interacting within two CMC environments. The first is an electronic bulletin board to which students could post comments about readings or class discussions over the course of the semester. The second environment is a synchronous chat session. Students in a lab received one of four handouts that designated them as members of a particular electronic discussion group. Each group had to discuss a certain issue and give a presentation, as a group, to the entire class later that day. The members of each group used pseudonyms, so they were unaware of the identities of those with whom they were interacting.

Focus Question: How do interactions within a semi-structured, asynchronous CMC environment differ from those that take place in a task-oriented, synchronous one, and how does this shape the collaborative process?

The data analysis charts the communication patterns which characterize the two technologies, such as the rates of idea generation, interpersonal responsiveness and conflict. The dynamism of the chat sessions encouraged questions, disagreements and interdependence, emphasizing the social nature of knowledge construction. The lack of temporal stresses and the long-term commitment associated with the bulletin board allowed for reflective articulation of ideas and responses. This study is part of an ongoing research project investigating effective methods for teaching about technology with technology.

References

- Bowers, C.A. (1988). *The Cultural Dimensions of Educational Computing: Understanding the non-neutrality of technology*. New York: Teacher's College Press.
- Jonassen, D. (1995). Supporting Communities of Learners with Technology: A Vision for Integrating Technology with Learning in Schools. *Educational Technology*, 35(4 60-63).