Making Connections: The Discourse of Collaboration

Trena M. Paulus
A515 Claxton Complex, University of Tennessee, Knoxville, TN 37996
Ph: (865)974-8144, Fax: (865)974-0155
Email: tpaulus@utk.edu

A goal of distance educators is to lower high attrition rates by connecting learners through Internet communication tools. However, structuring and evaluating online discussions for effective learning continues to be a challenge for educators. Gunawardena et al. (1997) created an interaction analysis framework to examine the "social construction of knowledge in collaborative learning environments facilitated by computer conferencing" (p. 397): 1) sharing and comparing of information; 2) discovery and exploration of cognitive dissonance; 3) negotiation of meaning/co-construction of knowledge; 4) testing and modification of proposed co-construction; and 5) agreement/applications of newly constructed meaning (p. 414). Gunawardena et al. (1997) found mainly sharing and comparing of information, speculating that either greater facilitation or a different communication mode was needed to support movement into the second phase of the model (discovery of cognitive dissonance). In this study discussion transcripts of ten groups working to complete course assignments at a distance were examined to see whether and how the participants created new knowledge together. A computer-mediated discourse analysis approach (Herring, In press) was used to code the 2,552 functional moves exchanged by the groups according to the Gunawardena et al. model (1997.) Interrater reliability of over 80% was achieved. Sixty-five percent of the moves were coded as Phase 1, 15% as Phase 2, 7% as Phase 3, 1% as Phase 4 and 2% as Phase 5; findings similar to those of the previous researchers. However, the lack of fit between the theoretical model and the actual discourse warranted a closer look at the functional moves actually used by the participants. According to the model, for a functional move to be in Phase 2, areas of inconsistency or disagreement must be stated and arguments advanced to support one's position. Negotiation of meaning in Phase 3 then involves a resolution of conflicting concepts identified in Phase 2, implying certainty of one' own position with justification of that position with evidence. If group members did not display such explicit disagreement or certainty, a move could not be coded as Phase 2. However, in this study it became clear that initial *uncertainty* was as important as certainty. Members expressed their uncertainty about an issue or simply identified the possibility of different viewpoints, utilizing functional moves such as eliciting feedback, asking questions and responding to questions. Members valued such expressions of different opinions and diverse perspectives. Thus, the manner in which members socially constructed knowledge did not fit the Gunawardena et al. (1997) model. The emphasis is not on creating arguments and justifying one's own position; rather, together through interaction groups sought connection with each other, consistent with models proposed by Herring (1996) and Belenky et al. (1986). The Gunawardena et al. (1997) model is consistent with other challenge and argumentation frameworks (e.g. Duffy, Dueber & Hawley, 1998) which seek to create scaffold structures for effective online discussions in educational environments; these challenge models stand in contrast to an equally viable process of reaching new understanding, the model of connection. Rather than dismissing online discussions as less effective because the discourse does not match the challenge model, a closer look should be taken in light of the connection model.

References

Belenky, M.F., Clinchy, B.M., Goldberger, N.R. & Tarule, J.M. (1986). Women's Ways of Knowing: The development of self, voice and mind. Basic Books, Inc.

Duffy, T.M., Dueber, B., & Hawley, C.L. (1998). Critical thinking in a distributed environment: A pedagogical base for the design of conferencing systems. Center for Research on Learning and Technology, Technical Report No. 5-98. Bloomington, IN: Indiana University.

Gunawardena, C. N., Lowe, C. A., & Anderson, T. (1997). Analysis of a global online debate and the development of an interaction analysis model for examining social construction of knowledge in computer conferencing. Journal of Educational Computing Research, 17(4), 397-431.

Herring, S. C. (In press). Computer-Mediated Discourse Analysis: An Approach to Researching Online Behavior. In Barab, S.A. & R. Kling & J. H. Gray (Eds.), Designing for virtual communities in the service of learning. New York: Cambridge University Press.

Herring, S. C. (1996b). Two variants of an electronic message schema. In S. C. Herring (Ed.), Computer-mediated communication: Linguistic, social and cross-cultural perspectives (pp. 81-106). Amsterdam: John Benjamins.