Competition and Collaboration in a Computer-Mediated Teacher Education Course

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Abstract: The current study examined student perspectives on peer collaboration and competition in an online teacher education course. Using a questionnaire and interviews as data sources, the study sought to explore the extent to which students felt their computer conference interactions were collaborative and competitive. An analysis of the data revealed that while students do value the opportunity to work together with their classmates online, they do not necessarily consider their interactions as true collaboration. Moreover, students reported that they often felt there were instances of peer competition within the conferencing environment.

Introduction and Theoretical Framework

Computer conferencing courses (CMC) have long been recognized as being conducive to constructivist pedagogical approaches. In education, the use of technology can potentially redirect learning from instructor-led transmission to an activity of social exploration (Salomon, 1991), engaging learners in authentic and meaningful tasks (Brown, Collins, & Duguid, 1989). Computer supported environments offer situations and tools that encourage learners to realize their cognitive potential (Scardamalia, Bereiter, McLean, Swallow, & Woodruff, 1989) and foster meaningful personal learning (Jonassen et al., 1995). Recent technologies have created environments that favour a student-centered approach over teacher-dominated instruction (Romiszowski & de Haas, 1989; Gunawardena, 1992; Harasim, Hiltz, Teles, & Turoff, 1995). Increasingly, educators have become aware of the role of computers as cognitive tools that can be used to construct knowledge and understanding (Jonassen et al., 1995).

The social context of CMC is thought to provide an impetus for pushing students to develop increasingly sophisticated levels of understanding (Hiltz, 1986). Through continued interaction with their peers, students move beyond their current level of knowledge as they consider new perspectives and ideas (Harasim, 1989). Each succeeding round of discourse potentially drives shared inquiry to a deeper level. Thus, collaborating in online discussions is thought to promote greater engagement with the course content (Peterson, Morrison, Cram, & Misanchuk, 1996), and ultimately better learning. It is important that collaboration be distinguished from other learning processes such as cooperative learning (Bernard, de Rubalcava, & St. Pierre, 2000). Unlike cooperative
learning, collaboration emphasizes mutual engagement over the division of labour (Abrami & Bures 1996). It should be noted, however, that while research suggests that a relationship exists between online interaction and student satisfaction (e.g. Walther 1992; Walther, Anderson & Park, 1994; Gunawardena, 1995), there is no firm evidence of a causal link between the level of CMC discourse and student learning.

Despite the advantages that are associated with collaborative learning, there is evidence to suggest that students experience a sense of competition in their online courses. Unlike face-to-face discussions which are transient, the interactions that take place online are preserved for later analysis. Students’ contributions to online class discussions are public and remain available to the instructor for evaluation purposes. Indeed, most distance students are aware that the quality of their online submissions can easily be compared against those of their classmates. As a result, it is plausible that this places increased pressure on students to perform at a level that meets or surpasses the performance of their peers. Online competition may also be produced by course marking schemes. English and Yazadani (1999) point out that it is fundamentally inconsistent for an instructor to encourage students to collaborate, but to grade students individually – especially if people feel that final marks are based upon relative measures. Such a situation can promote competitive pressures that increase learner anxieties and undermine the instructor’s collaborative goals.

The purpose of the current study is to explore how teacher education students perceive collaboration and competition in their online courses. To what extent do students experience genuine collaborative learning in their own online interactions? Do they experience a sense of competition when interacting with their peers? How are both collaboration and competition manifested in computer-mediated conferencing environments? By exploring these questions it is hoped that we can develop a deeper understanding of the social processes that promote and interfere with online learning.

Methods and Data Sources

The participants were comprised of fifty-seven masters and doctoral students studying at the Ontario Institute for Studies in Education (OISE/UT). Two types of data were collected. First, all 57 students completed an online questionnaire consisting of 43 Likert-scale questions and five short-answer questions. The purpose of the questionnaire was to identify some of the more widely-held online practices shared by the participants. Second, follow-up interviews were conducted with nine of the participants. The interviews were designed to provide the researchers with in-depth perspectives of learners’ perceptions of collaboration and competition in their online courses.

Results and Discussion

The findings revealed that students often interacted in a manner that does not reflect genuine collaboration. Rather, they tended to interact in a way that stressed course efficiency over efforts to engage in shared understandings. Competition was also evident in students’ participation habits, and was reflected in how students contributed their discussion notes.

Concern for Meeting Course Requirements

In their survey responses, 82.5% of students admitted that they submitted notes due to pressures to contribute a certain number of notes to the conference (see Fig. 1). This pressure resulted in students trying to fulfill their ‘quota’ for the week. For example, in a short-answer questionnaire item one student commented that contributions ceased when “people feel they have reached the minimum requirements of that week and have other priorities.” More often than not, these concerns were related to their participation grade for the course. As one student stated, “When you’re in an online course, one of my major concerns is how I’m going to be evaluated…I don’t want to say that’s really what counts but that’s kind of what it comes down to.” Such feelings were echoed by students who participated in the post-course interviews. In some cases, students expressed that there were instances when it was difficult to come up with material to contribute to the conference. As one student explains, “…there have been times that I’ve been hard-pressed to actually find something to post in a week, and I know what I’ve contributed is a bunch of fluff”. In other cases, students described their classmates’ online messages as “…ridiculous posts that add information just for
the sake of adding”. These notes were considered as excessive attempts to post notes in the conference without adding any substance to a discussion.

**Figure 1:** “I feel pressured to contribute a certain number of notes to the conference” ($N = 57$)

### Absence of Mutual Understanding

An advantage of computer-mediated conferencing is that students can access the written contributions of an entire class (Harasim, 1989). The time and place independence that CMC affords means that students can interact with other classmates without the time restrictions imposed on traditional face-to-face courses. Despite this, many students felt that their peer discussions were often shallow or superficial. Although students welcomed the opportunity to interact with their classmates, they felt their online discussions were comprised of segregated individual efforts. As one student commented “… everybody just gives their opinions…so it really doesn’t seem like collaboration; it’s like people pick up on the discussion and go off on a tangent.”

### Competing by Participating Early

When interviewed, students frequently remarked on the importance of participating early in the discussion forum. Early participation, it was felt, enabled student to “gain the floor” and influence the direction of discussion. One student remarked how staying up late allowed him early access into the online discussions. His strategy was as follows:

> At 12:01 after the instructor had posted something, I responded, so I was the first respondent and yes, that did influence discussion. Now if that’s competition, then yeah I was competitive. I was doing it as an experiment, and it demonstrated to me that this was in fact, the correct way to go.

Another student explained that early contributions increased the change of posting “accurate” responses. She explains: “As soon as an assignment or a question is posted by the instructor, if you’re early to answer it, then you’re early to get it right because there are really only 1 or 2 possible right answers.”

### Student Perceptions of Online Competition

When asked if they observed instances of competition in their online courses, many students felt that their classmates competed by “whipping out their egos” when participating online. This form of competition was considered by students to be unhealthy. In the words of one participant, competition “…pits individual learners against one another; it raises the risk level.” Another student commented that competition was detrimental to student
learning. She did not consider her online course as an environment where individuals contributed new knowledge or synthesized ideas. She explains “It's like someone will post something and people attempt to do their best to better them, trying to 'one-up' them by either inserting some kind of article link or something.”

Competition was also responsible for the writing style a note was written in. To some students, notes were like “mini essays”, messages that reflect a student’s work and effort in the course. To achieve this, many students felt it was necessary to include references to course readings in their notes in order to distinguish themselves from others. One student explained that most students tended to “yardstick or measure” themselves against other people’s postings, and that “this may be the way the professor perceives them in relation to other people…the difference online, you know, is that it’s like you’re submitting essays all the time.”

Conclusions and Educational Significance

The mixed method adopted in this study revealed that teacher education students frequently characterize their online interactions as individualized efforts rather than as collaborative endeavours. Although some students felt they learned a lot from their peers, others felt they learned relatively little and would not describe their online interaction as collaborative. The study also uncovered several ways in which students perceive competition to be occurring within their online course. Competition was often expressed subtly, such as participating early in the discussions. Such a practice is not easily detectable in the text of online discourse, so many distance education instructors may not even be aware that a form of competition is taking place.

Collectively, the results from this study suggest a number of implications for online teacher education courses. When participating in their CMC courses, students appeared to have differing views as to what constitutes collaboration. In some cases, students felt their efforts of reading and writing notes reflected peer collaboration. In other cases, students expressed feelings of highly individualized contributions. Regardless of their perspective, many students appeared to participate in a manner that failed to reflect true collaborative inquiry. Instead, their efforts seemed focused on ways to most easily meet course participation requirements. To foster true collaboration, it may be necessary to restructure the design of computer-mediated conferencing courses, and rethink the nature of online participation.

The way students perceive competition may also play a role in how students learn in a computer conferencing course. Some students felt that competition could potentially be beneficial if students competed to produce high-quality, insightful messages. However, most students felt that competition was not beneficial, and resulted in decreased levels of solidarity within the online environment. Marking schemes that focus on individual accomplishments may heighten feelings of competition and undermine efforts to foster collaborative practices. To reduce the negative effects of competition, course instructors may need to develop assessment strategies that reward group, rather than individual, accomplishments.

References


