Educational Experiences and the Online Student

By Debbie Steinman

“Students’ perceptions of online courses can be negative if they experience large transactional distance with the instructor and with other students and can influence whether a student will stay in or drop out of a class.”

This article will explore the question: Are online courses providing an educational experience for students? The educational landscape has changed as the role of technology and online courses have increased in student instruction. Many colleges are actively engaged in the development of online courses and bringing their on-campus courses to the online environment, with a majority of public institutions in the United States offering either online or hybrid courses (Allen & Seaman, 2003; Meyer, 2002; Simonson, 2006). Many students choose to enroll in online courses and the demand for online courses is high. Taking an online course can provide educational experiences that would otherwise be unavailable, especially for students who live in rural areas and do not have convenient access to schools (Meyer, 2002; Rice, 2006). However, in addition to providing these distance learning opportunities, schools want to offer a quality education to their students. Just as there are advocates of online learning, there are also those who see it as a detriment to student learning and see it as an “imperfect substitute for traditional face-to-face interaction that occurs in the classroom” (Warf, Vincent & Purcell, 1999, p. 141).

Theory of Transactional Distance

In 1989, M. G. Moore presented information on the theory of transactional distance, a multi-layered concept. Transactional distance differs from spatial dimensions. It is the subjective measure of perceived distance between elements residing in cyberspace. A number of studies have shown that the greater the transactional distance the less interactive communication occurs and the more the learning experience suffers (Sargeant, Curran, Allen, Jarvis-Selinger, & Ho, 2006; Vonderwell, 2003; Chen, 2001b). The way a course is designed contributes to or detracts from the course dynamics.

While there are advantages to online instruction, there are also disadvantages. Students’ perceptions of online courses can be negative if they experience large transactional distance with the instructor and with other students and can influence whether a student will stay in or drop out of a class. Although there are no national statistics to compare dropout rates of online courses with their on-campus counterparts, studies by individual institutions reveal that online classes experience higher dropout rates than on-campus courses. At John Tyler community college, course completion rates for Internet courses were 35% while on-campus completion rates were 71%. Other reports have revealed that dropout rates for online courses range between 25%-40% compared to 10%-20% for on-campus courses (Carr & Ledwith, 1980; Carter, 1996; Parker, 2003; Pierrakeas, Xenos, Panagiotakopoulos, & Vergidis, 2004; Xenos,
By comparison, Carr (2000) noted that on-campus courses had completion rates 10 to 20% higher than distance offerings. Numbers vary depending on the method used to count dropouts. Since transactional distance affects student satisfaction and retention, transactional distance is seen as an important topic of discussion. This article addresses two aspects of transactional distance: a) learner-to-instructor, and b) learner-to-other-students.

**Learner-to-Instructor Transactional Distance**

Learner-to-instructor transactional distance increases when students feel a separation, a break or a tear in the lines of communication, between themselves and the instructor. Students can feel this separation when a hierarchical relationship exists in which the teacher is the one with power and is the provider of information. A more democratic relationship is evident in a holararchical structure. Shared interactive communication reduces the negative impact of transactional distance. Figure 1 is a graphic representation of hierarchical and holararchical relationships.

Evidence of learner-to-instructor transactional distance is measured by how close students feel they are in touch with the instructor. Students have reported a delay in feedback in online classes which do not provide personal contact with the instructor (Ryan, Carlton, & Ali, 1998). Personal contact is usually not available to students enrolled in online classes. Students prefer face-to-face contact because it makes them feel connected to the instructor and reduces feelings of a hierarchy. Lack of personal contact contributes to the students feeling the instructor is unapproachable (Summers, Waigandt, & Whittaker, 2005).

The assumption that direct contact with the instructor is necessary originates with our beliefs about how a classroom is supposed to look. This mental model of how an educational environment must look and operate includes the belief that effective instruction requires physical proximity, which leads us to conclude that if students are at a distance the educational experience must be impersonal and lacking in quality, socialization, and engagement. However, transactional distance can occur in both the online and on-campus classroom environment. Black (2005) commented on the negative impact on teacher-student interaction of on-campus lecture courses with 200 and more students.

Students point out that interaction in the classroom requires that they be able to hear and see the professor (Ryan, et al., 1998), that it is easier to ask questions in the on-campus classroom (Schmidt, 2002), and that they enjoy having face-to-face communication with the teacher. To reduce student-instructor transactional distance and create an environment more closely approximating the face-to-face model, online classes should offer a specific time when students can meet with the instructor in the lab or classroom instead of just online (Schmidt, 2002). If students cannot meet on campus, teachers can meet with the students during "interactive office hours." The interactive office is equipped with a video camera and a microphone so that the student can both hear and see the instructor. Students log in, discuss areas of concern, ask questions. The use of videoconferencing in the field of education has been limited and has been met with resistance due to the technology being too expensive; lack of bandwidth, which results in frozen images; and difficulty of use. Technological advances have solved many of these hardware, software, and network issues (Regenold, 2005).

Videoconferencing adds a media richness that is lacking in chat rooms and discussion board interactions. Users can see and hear each other in real time, speech inflections help to convey meaning, and feedback is immediate (Kydd & Ferry, 1994). Students and professors agree that virtual office hours facilitate the "transmission of knowledge over a distance that would not have been possible through other means such as a telephone call" (Johnson, Lakshman, Hewett, Souder, Fitzgerald, Donegan, & Margovsky, 1998, p. 132). Including videoconferencing during instructors' office hours alleviates the students' perception of lack of personal contact with the instructor and reduces the negative aspects of hierarchical structure. Students experience increased satisfaction with online courses when the feeling of remoteness is removed.
Learner-to-Other-Students Transactional Distance

Learner-to-other-students transactional distance can be compared to a classroom learning experience. In a classroom, a social element is present that leads to student-student interaction. Students often study together, meet to do homework, and help one another master difficult concepts or interpret instructions. This immediate form of communication is greatly reduced in an online situation. Other students are no longer perceived as individuals but are seen as a group of unknowns and names on a list. Without the personal connection, it is difficult for students to get to know each other.

Students in online classes report that they have a difficult time communicating and sharing learning experiences with other students. In a study by Ryan et al. (1999), students who participated in online modules felt disconnected from the class, which led to feelings of isolation: “I felt out there by myself and grew increasingly anxious until we met in a real class” (Ryan, et al., 1999, p. 276).

Bonk, Hara, Dennen, Malikowski and Supplee (2000) found that, overall, discussion board postings provided a space for students to share and negotiate knowledge and promoted social interaction and dialogue. Community building was accomplished through small group activities. The metaphor of communities as spheres describes the social contact that is required by some students. When the sphere is intact, students feel a connection to one another. As transactional distance increases, breaks start to appear in the sphere and in the lines of communication. Figure 2 illustrates this process.

Educators can increase interaction in online classes with the use of computer-mediated communication (CMC) that help instructors accomplish their objectives of increasing a student’s ability to learn. CMC technologies include discussion boards, email, electronic whiteboards, and conferencing environments such as chat rooms. Discussion board forums help students learn more effectively by reducing learner-learner transactional distance (Chen, 2001a; Romiszowski & Mason, 2003). Students use discussion board forums to share ideas, learn from each other, and engage in thought-provoking interactions. Some see bulletin board discussions as an area in need of improvement. Researchers (Ryan, 1998; Schmidt, 2002; Summers, et al., 2005) have reported that students were dissatisfied with the level of interaction provided in online discussions. Some students felt that asynchronous communication affected the flow of ideas and left them feeling disconnected. “Because everyone was online at different times, there was no flow of communication, and I felt frustrated” (Ryan, et al., 1998, p. 276). One student commented, “I missed seeing faces that go with the names” (Ryan, et al., 1998, p. 276). Educators who are aware of these issues can take steps to alleviate the distance some students feel.

The Philosophical Roots of Learner-to-Instructor Transactional Distance

Online educators struggle with the challenge of reducing learner-to-instructor transactional distance. Revisiting the ideas of educational thinker Paulo Freire can help online educators reframe traditional hierarchical patterns of learning, which too often translate into a banking method of teaching in which the teacher “makes deposits” and the students receive, file, and store those deposits (Freire, 1993). Teaching with Freirean techniques means addressing power structures while respecting and valuing the contributions of both teacher and learner. Lageman (2002) joins the conversation and confirms the value of social equality between students and teachers. Reducing the hierarchical structure between teacher and student will enable cooperation between and among the participants and is essential to effective education. Edmondson (2006) reminds us that teachers can affect changes because “decisions are made by those who happen to hold power in education” (p. 103). However, Brookfield (2005) explains that teachers have several tasks to accomplish and must learn how to perceive dominance and power structures before they can affect changes.

Educators need to move away from the banking style of teaching to an environment where students participate in the learning. A hierarchical/banking style of teaching inculcates student
passivity, which translates to boredom and dull expressions on student faces. The teacher is cast in the role of the one with the knowledge and the students are the passive recipients (Seals, 2006). This again recalls images of the classroom where desks are lined up in neat rows and students sit quietly in their seats, afraid to make a sound or question the teacher. Freire (1970) comments that hierarchical relationships are further sustained when teachers grade exams looking for very specific right answers that have been memorized and regurgitated. Educators should be encouraged to scrutinize their teaching practices and explore the implications.

There is a prevalent view that students' experiential knowledge is inferior to teachers' academic knowledge. Greene (1995) comments that power affects the ways teachers organize and practice. Online educators can model non-hierarchical relationships to decrease learner-to-teacher transactional distance. Online educators who acknowledge the worth and power of their students can dismantle hierarchical relationships.

Bartlett (2005) drew on fieldwork to show how educators interpreted and examined Freirean concepts to reduce student-instructor transactional distance. Teachers believed that the best way to reduce hierarchical relationships evident in so many classrooms was to create an atmosphere of friendship and trust through dialogue and the relating of personal experiences. Although the teachers felt that this type of relationship decreased teacher-student distance, Freire (1970) would say that the teachers only went part way and needed to take the next step and evoke social change. The idea of developing teacher/student friendships might find resistance among some teachers who feel that it risks the loss of their students' respect and could even result in students emailing jokes, chain emails, and political statements (aka spam). Dewey would say that at least the teachers are putting theory into practice and are integrating "knowing" with "doing" (Heldke, 2002). Some might feel that an interest in either being respected or liked is pointless, because both determine one's actions based on reactions to other people's opinions.

There must be a better way to reduce hierarchical relationships, reduce transactional distance, and increase teacher-student interactions. Greene (1995) proposes that reducing a hierarchical relationship doesn't mean that the teacher must become the students' friend, but instead avoids subordinating students. Instead of thinking about the students' opinions, which results in reactions, educators who maintain an awareness of "thoughtfulness" conduct themselves in a way that values students and avoids the pointless cycle of action and reaction.

Greene (1973) and Dewey (1998) agree that a hierarchical relationship comes down to "control" which depersonalizes and sets up feelings of indifference and power structures. Burbules and Rice (1991) encourage educators to listen to all perspectives not "combine them into a single, consistent, unified account" (p. 394). Only if there is mutual respect between teachers and students can we hope to change the relationship from one of hierarchy to holarchy (Seals, 2006). Hester (2004) emphasized the importance of respect and that through understanding, educators can work to narrow teacher-student transactional distances. Marcuse emphasizes that it isn't hierarchical relationships that are bad, but whether or not they are dominating (Agger, 1978).

By having a participatory relationship with their students, teachers can decrease teacher-learner transactional distance, shifting the focus from power and hierarchy to teaching and learning. Teachers can implement change by choosing and implementing instructional techniques, then observing the cause-and-effect relationships. For example, teachers who take an active role in discussion board posts can assess, through evaluations, whether or not there is a decrease in teacher-learner transactional distance. "Direct personal experience is so intense and powerful that it shapes what the teacher will do and try to do throughout her career" (House & Lapan, 1988).

**The Philosophical Roots of Learner-to-Other-Students Transactional Distance**

One factor used to predict whether students will persist in online classes is the amount of interactivity built into a class (Everheart, 1999). Hara, Bonk and Angeli (2000) examined student interactions on discussion boards. Building upon Henri's (1992) framework for content analysis, several aspects of discussions were measured, one of them being the quality of the cognitive skills. The analysis revealed "nearly 70 percent of student electronic dialogue in this online conference was at a cognitively elaborate level" (Hara, et al., p. 138). Freire (1970) believed that students need to interact with each other in order for learning to occur. "I cannot think authentically unless others think. I can-
not think for others, or without others” (Freire, p. 58).

Interaction requires “presence,” which means that students can become fully engaged in the activity by bringing their personal opinions, values, and beliefs to the conversation (Black, 2005). Dialogue becomes an important aspect in student-student transactional distance. Dewey said that the teacher takes on the role of leader in encouraging student-to-student interactions. “As the most mature member of the group he has a peculiar responsibility for the conduct of the interactions and intercommunications which are the very life of the group as a community” (Dewey, 1998, p. 65-66). Sharing new ideas and information becomes a powerful force in the development of new knowledge.

Dewey believed that education is a social process and cannot be divorced from the social context in which it occurs. The quality of education is determined by the “degree in which individuals form a community group” (Dewey, 1998, p. 65). Students stated that interaction helped them become more involved in the learning process (Black, 2005). When the social process of dialogue occurs, it leads to improved student understanding (Gorsky & Caspi, 2005). Habermas (1982) commented that social interaction involves an exchange of information “oriented towards reaching understanding” (p. 234). There is clearly a need to provide opportunities for students to interact. Dewey believed “individuals develop and flourish as persons only in interaction with others in society” (Seigfried, 2002, p. 49). Thus, we see that student-student interactions are necessary in online classes to reduce transactional distance and counteract the sense of isolation.

Some educators feel that we cannot overcome the deficiencies inherent in online learning environments. They believe that online social interactions are a poor substitute for face-to-face interaction. Bowers (2001) cautions educators to consider the cultural loss and gains that computers bring, alleging that “students taking online classes find them mechanical and devoid of intellectual stimulation” (p. 136). The online class “further reduces the need to interact with other people and eliminates the possibility that a wide range of issues and events might become part of the conversation” (Bowers, p. 144). This view of online learning is undoubtedly held by many, and it serves to remind educators that student-student interactions reduce transactional distance. Burkhart suggests that all participants need to take an active role and participate in making meaning of the world. “There is no world, no truth, without meaning and value, and meaning and value arise in the intersection between us and all that is around us” (2004, p. 16-17). Motteram and Forrester (2005) suggest that an induction program would help new online students build necessary skills, such as how to participate in discussion boards or group work. Such a program would relieve students’ concerns and anxieties and help them feel included as they adapt to a new learning environment.

Socrates would join with Bowers in questioning the worth of online learning in which students obtain knowledge from reading words on a computer screen. His highly interactive teaching methods involved meeting others in person and engaging in dialogue. Socrates held that learning from written text was inferior to learning that results from real-life conversations. Relying on the written text serves to dull the mind, he claimed, because the memory is no longer exercised.

Online instructors mimic speech through narrative techniques and the use of examples that tell a story. This is different from true conversation. Speech is more complex and more nuanced. Writing removes the writer from the word. Words on a page are located outside the mind; they are readily available but do not reside in the mind. Socrates would scoff at students gaining knowledge from the written word instead of dynamic dialogue where ideas are explored and evaluated (Stevenson, 2002). If students can easily look something up, the implication is that the knowledge lies outside their mind and is not truly their own.

Reflections

If Socrates is correct, true knowledge only emerges in face-to-face interaction of individuals in a community, and we may conclude that online learning is not beneficial to student’s learning. However, educators have the ability to design online classes that are interactive, are respectful of teachers and students, and enable students to become active participants in the classroom, which in turn will reduce transactional distance. By weighing the strengths and
weaknesses of various pedagogical techniques, educators can select an instructional strategy that will enhance interaction, at the same time allowing them to exercise the appropriate level of control without becoming authoritarians.

Consider the image of Socrates wandering through the streets of Athens conversing with others and having lively discussions of intellectual ideas. This model of dialoguing implies that the teacher does not merely dispense knowledge, but draws out understanding from the student. Active participation by both parties is key to this model and is imperative in order to reduce transactional distance. The theory of situated cognition proposes that knowledge cannot occur in isolation but must be presented in context so that it can be related to situations where it will be used. Instead of being passive recipients, learners become active participants, which builds understanding (Brown, Collins & DeGid, 1989). Certainly there are conversations where participants are just "present" and not really interacting. In these situations, the conversation could be described as being pale and not rich in content. This is often apparent in discussion boards where the conversation starts out lively and then postings slowly dwindle until even apathetic responses stop.

This article began by asking the question: Are online courses providing an educational experience for students? After considering the arguments and philosophical roots, I feel that online courses do provide an educational experience for students. This will not automatically occur. It takes effort. Standards and guidelines must be set for interaction among students and between students and teachers. Bonk and Cummings (1998) suggest that instructors require students to introduce themselves in a discussion board post in a way that lets them get to know each other and find common interests. Students can be given time to explore and discuss ideas before the instructor interjects an opinion that might suppress knowledge building. Group chats in which an expert participates in the conversation can enhance and personalize the online experience in a way that helps to alleviate the isolation and create an awareness that others are listening to what they are saying. Teachers can take a leading role and continually seek out ways that prove effective to decrease transactional distance and learn methods. It is up to the teacher to ensure an interactive learning environment by using approaches that engage students in the learning process.

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Bibliography


