

High Tech, High Touch:
Overcoming Perceptions and Realities of Social Isolation
in the Online Course Environment

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Abstract

Among the criticisms and fears of online learning, one of the most frequently mentioned is the perceived lack of social interaction in online courses. Social interaction in online courses is examined within the context of various social learning models, and common critical arguments of the social interaction in online courses are addressed. Recommendations for encouraging successful online learning through social interaction and community building are made in relation to the various social learning models.

Outline

- I. Introduction
- II. Overview of Relevant Social Learning Models
 - A. Vygotsky's Zone of Proximal Development
 - B. Lave & Wenger's Legitimate Peripheral Participation
 - C. Frank Smith's Literacy Clubs
 - D. Common Points of Emphasis in the Models
- III. Perceptions and Realities of Social Interaction in Online Education
 - A. David Noble and Digital Diploma Mills
 - B. Gender Differences in the Perception of Online Education
 - C. Social Cues in the Online Environment
 - D. Social Interaction as a Learning Preference
- IV. Encouraging Social Interaction in an Online Class
 - A. Features of Successful Course Web Sites
 - B. Object-Oriented Social Learning Environments
 - C. Team Learning in the Online Environment
- V. Conclusion

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Education is not reducible to the downloading of information, much less to the passive and solitary activity of staring at a screen. Education is an intersubjective and social process, involving hands-on activity, spontaneity, and the communal experience of sharing in the learning enterprise.... We urge you to support learning as a human and social practice, an enrichment of soul and mind, the entitlement of all citizens in a democracy, and not a profit-making commodity to be offered on the cheapest terms to the highest bidder.

(AAUP letter to Governor Gary Locke, quoted in Noble, 2002)

The above quote from an American Association of University Professors letter to Washington Governor Gary Locke is more than just an isolated response to online education. In fact, there are two concepts in the above statement that are representative of prevalent views of online education. The first of these ideas is that education is a social process, involving interactions between people and the construction of knowledge in shared and guided experiences. The second, if slightly less explicit concept, is that online education is asocial and passive by nature. While the first of these ideas is a universally accepted truth about education, the second represents a view of online education that is obscured by frequent online course design that ignores the social aspects of learning, and by a lack of knowledge in and comfort with the use of technology to establish social connections among online users. By understanding social learning models in the context of Internet communication and technology, one can see a path to more effective online instruction.

There is a wide base of research and valid theory to support the assertion that learning is a social process. However, the sometimes widely-held view that online education is by nature an asocial

reiteration of the correspondence courses of an earlier time ignores the very roots of the Internet as a means of connecting people and constructing shared knowledge. Based on the wide variety of instructional methods available via the Internet, it is reasonable to say that online education is no more limited to a single instructional strategy than any other mode of education, including face to face instruction.

Overview of Relevant Social Learning Models

A common response to the idea that learning is a social activity is to point out the exceptions to this rule, such as Robinson Crusoe, who learned to survive in his environment without social interaction. Brown and Duguid assert that while it is true that people can and do learn on their own, even our own independent learning is framed by our existence within a society. They go on to cite the example of language as a social artifact, whereby people are inserted into “a variety of complex, interwoven social systems” (Brown and Duguid, 200, p. 140).

Vygotsky’s extensive research in the development and use of language in children resulted in the development of his Zone of Proximal Development (ZPD), which stresses the importance of social interaction in helping the learner master more complex concepts in their learning. This model of learning is based on the idea that from the perspective of each learner, there are three categories of tasks: Tasks which they can complete without help, tasks which they could not complete even with help, and tasks which they can complete only with help from someone else. It is this third category of task which forms the ZPD. According to Vygotsky, social interaction facilitates learning by allowing people to experience the completion of a task that is outside of their natural range of ability through the help of a more experienced colleague, instructor or mentor. Through this completion, the learner’s range of activity expands to encompass the target task (Vygotsky, 1980).

Jean Lave and Etienne Wenger (1991) present a corollary view of social learning, rooted in what they call “Legitimate Peripheral Participation”. The basic principle behind Legitimate Peripheral Participation is very similar to Vygotsky’s concept of the ZPD, in that it stresses the idea that people can

expand the realm of their capabilities through performing actions with the help of a more experienced teacher or mentor. Lave and Wenger use the term “apprenticeship” throughout their book to represent this working relationship.

The phrase, Legitimate Peripheral Participation, is in itself meaningful as it spells out the three important aspects of the theory. The word “Participation” stresses the importance of actual involvement or action on the part of the learner. “Peripheral” refers to the fact that the learner’s participation is not an isolated action, but rather an action that is taken with the help of a guide. “Legitimate” is used to balance the concept of periphery in this model. In other words, the action is guided, but still legitimate in that it is expanding or challenging the boundaries of knowledge and ability on the part of the learner (Lave and Wenger, 1991).

The interesting phenomenon about this concept is that as the learner’s knowledge increases, there occurs a natural shift in the balance of “Peripheral” and “Legitimate”. With most apprenticeships, the successful mentor will eventually work themselves out of a job. In Lave and Wenger’s model, mentors and apprentices of all skill levels form a Community of Practice, where mentors help apprentices learn the practice to the point where they become mentors themselves (1991).

Frank Smith, in his *Book of Learning and Forgetting*, discusses a similar community where more experienced members help the less experienced members through the progression of learning. His concept of “clubs” goes as far as including not only the progression of knowledge, but also the development of a contextual identity within community. His example of the spoken language club illustrates this aspect very well, as our identities as people who speak a given language are a central part of our social identity. According to Smith, as we learn a language we not only increase our knowledge; our identity becomes more and more that of the club (Smith, 1998).

By examining the common ideas in social learning models, one can begin to distill a set of principles for interaction in learning. Perhaps the most obvious among these commonalities is that learning is positively affected when subject-based social interaction occurs between people of varying

skill levels. Second, people learn when they can engage in the practice of what they are learning with the guiding support of someone who is more experienced. Finally, it seems that these theories all support the view that the things that we learn “are not new bits to be added to a store of knowledge, but extensions or elaborations of the experience and beliefs that make us what we are” (Smith, 1998, p. 13). In other words, in the learning process, it is important for us to acknowledge that learning changes our very selves.

Perceptions and Realities of Social Interaction in Online Education

Perhaps one of the most outspoken modern critics of online education, and distance education in general is David Mills. In his book, *Digital Diploma Mills*, he asserts that distance education, like the correspondence education movement, involves “prepackaged courses of instruction, educational commodities bought, sold and serviced through the mail” (p. 5). The biggest difference now, he points out, is that the mode of delivery is digital. He goes on to claim that the impetus for the development of online education programs, like that of the earlier correspondence education movement, is the acquisition of additional funding through an expanded student population; one where the same tuition and fees can be charged, but where the student may never set foot on campus.

David Mills is a benefit to online learning as a whole, because he reminds us of the importance of remaining true to our educational mission, maintaining rigorous academic standards regardless of mode of delivery, and the fact that aligning too closely with Corporate America and its ideals could endanger the academic freedom we have fought hard to preserve. However, one of David Mills’ foundational assumptions about distance learning, that it is unidirectional and non-interactive, is without basis in any good research or investigation. The reality of the amount of interactivity in online education is what while there are sure to be plenty of courses that are prepackaged, self-paced, solo explorations of a particular topic, the personal accounts of thousands of online students will tell the observer that this is not always the case. While the Internet could be used as a simple system of information sharing and delivery, its greatest potential and the function of its design suggests that it is far more useful and

valuable as a method for connecting people than it is as a conduit for information. It is a logical mistake to assume that the delivery of a course in an online format predetermines it to be a passive experience.

Craig Abrahamson of James Madison University (1998) maintains that a primary issue in interactive communication in distance education is a lack of accessibility to the instructor. During the class itself, Abrahamson claims, this could be due to any of three factors: “(1) the absence of interactive technology; (2) intimidation of the technology...or (3) uncertainty about the instructor whom he/she knows only as a media figure” (1998, p. 3). After class, according to Abrahamson, accessing the instructor would be “unworkable” (1998, p. 3). Although Abrahamson doesn’t state specifically why one would not be able to reach their instructor outside of class, it seems that perhaps he has forgotten about email, instant messaging, and telephone communication. He goes on in the same article to say that “opportunities for interaction with other students of distance education is[sic] limited” (p. 4), although he cites an article published in 1992 as his reference. In 1992, instant messaging as we know it didn’t exist, email wasn’t a household term, and discussion lists and newsgroups were reserved for only the most extreme geeks, or those in academia who used them to exchange ideas between their ivory towers. I am contacted more frequently using the methods of distance education than I am by phone for any of my classes, regardless of format.

In a 2001 study of 325 online students who were enrolled in various online courses through the Connecticut Distance Learning Consortium where interactivity was available and utilized in their courses, 5% of females and 2% of the male students indicated in a survey that they enjoyed interacting online in the class context, while a higher percentage of female and male students (11% and 5%, respectively) indicated that they missed the face to face interaction of the regular classroom. Some reasons that they cited were the lack of physical and facial expressions in the conversations, the absence of instant dialogue and feedback from the instructor and other students, and various technical and usability problems with the course environment (Sullivan, 2001). This study indicates that even in courses where there is planned and intentional interaction between students and the instructor as well as

each other, the quality or usefulness of the interaction from the student perspective may not be as impressive as one would hope. In addition, it appears that men and women have a somewhat different perception of the social aspects of the online course environment, with women viewing the environment as being less friendly and social (Sullivan, 2001). A recent article in the Chronicle of Higher Education discusses the dangers of misunderstood email messages, where the tone of the instructor is misinterpreted by the student to be cold or even rude (Young, 2002)

One slightly more specific criticism of communicating online is that text-based communication lacks important social cues, such as voice intonation, posture, and other body language, which are an important part of effective conversational communication. While it is true in a text-based discussion that one can't see the person with whom they are communicating online, and therefore cannot tell anything about their physical appearance or manner of speaking, online communities have developed compensations for these missing social cues in the environment. Elizabeth Reid describes the role of these compensations in a text-based virtual environment called a MUD, or multi-user dimension:

MUDs create their own context out of words. The cues normally associated with sight and sound and touch are provided through description. The information with which newcomers are met allows them imaginatively to place themselves within the virtual world, and encourages them to treat these textual cues as if they were real. This information provides a common basis for interaction between players (Reid 1994).

Perhaps the most famous of these text-based social cues is the smiley. While the smiley has thousands of iterations, the one that most people have probably seen is formed by joining a colon, a hyphen, and a right parenthesis together as in :-). Online, when a smiley appears at the end of a sentence, it's the equivalent of saying that same sentence with a smile. Less famous in the wider culture of our society, but just as prevalent in online circles is another method of representing the physical self called "emoting". Emoting involves a third-person description of imaginary actions that are used to compliment or illustrate one's words, providing a physical context to the social relationship. Emoting

can be as simple as describing a gesture, as in “Bill smiles”, or as complex as describing a more involved action or feeling, as in “Bill opens a window to let in some fresh air”.

Reid compares online communication that includes these social cues to a play, in which actors’ words and actions, including gestures and slight postures, are deliberate and intended to work together to communicate to the audience (1994). In the case of the MUD and other synchronous environments, however, every member of the audience is also an actor in the play. While this type of communication can be effectively used to communicate online, it requires that something that often happens on a subconscious level in our face to face communication be made deliberate. Because of this, the ability of the learner to communicate effectively online becomes a factor in the success of this type of communication as a learning tool.

Encouraging Social Interaction in an Online Class

Amy Jo Kim, Creative Director for the Internet consulting firm NAIMA, and author of *Community Building on the Web*, discusses some of the important aspects of an online community in her article, *Timeless Principles for Building Community* (1998). Several of the principles found in her article provide an effective context for discussing online communities in the context of online education.

The first of Kim’s principles is to define the purpose of the community. On the surface, the purpose of an online class seems obvious: to educate the students. However, the idea of purpose can be examined on several different levels which would be helpful in an online course. One such level is that of the purpose of the user of the technology. In other words, what are the various tasks that the user will be trying to accomplish in the course environment, and how can its design support them? This is an important aspect of community because if users can’t accomplish their goal of communication, then they will not learn from their social interactions with the instructor and other students. Of course, purpose is also a valuable framework for examining the course goals and objectives, to ensure that they align with the stated purpose of the course.

Kim's second principle is to create distinct, member-extensible gathering places. The idea of members contributing to a virtual community gathering place is a very strong parallel to Lave and Wenger's assertion that a community of practice produces knowledge artifacts which are persistent in nature and related to the group (Lave and Wenger, 1991).

A third principle that is easily aligned with the concept of a community of practice is the call for one to accommodate a range of roles within the community. By allowing students to take on various roles, which may involve combinations of both learning and teaching-oriented tasks, we facilitate multiple modes of learning as well as student to student interaction in the group.

Environmental aspects of the course environment are important in establishing a virtual place where socially-connected learning can occur. However, it is also important for the instructor to deliberately plan the course activities to direct students into situations where social learning can take place. One such model that is useful to the online environment is that of Team Learning. Much of the team learning approach can be applied directly to the online environment, including group assessment and peer review of work. One of the biggest advantages to employing a structured small group approach in the online classroom is the fact that by using this approach each student is "assigned" additional connections to the class. Students in online classes at times have a low level of connection with the instructor (Sullivan, 2001), but requiring them to meet with their work group early on and throughout the class gives them more opportunities to develop supportive relationships with their peers, which can enhance the learning process (Michaelson, 1994; Brown and Duguid, 2000). Team learning approaches also take some of the emphasis off of the objective assessment of student knowledge, which can be especially difficult to measure online. The learning group can also function as first line of technical support for the students in the group, relieving the instructor of some of the burden. Each of these aspects can serve to create more opportunities for social interaction, connections and community between students in the class.

The technological tools or course environment used can also help to foster a sense of community among the students in an online class. The MOO, or Multi-User Dimension, Object Oriented, is one such environment. MOOs are very much like their predecessors, MUDs, in the sense that they are a largely text-based environment that is customizable and interactive with the users. In addition, however, most modern MOOs have the ability to integrate multimedia and other types of communication.

To make these virtual worlds even more true to life, they also give the users the ability to create persistent objects (meaning that they persist even after the user has logged off). These objects can take the form of anything from a desk or discussion table, to a class syllabus, to a hot tub. They can be moved, manipulated, and interacted with, and have definite instructional value. Since they are user-defined, an instructor with the time, ability and patience could develop any kind of instructional object that they needed in their online course.

The benefits of the MOO over more generic chat or real-time discussion spaces is that it provides a sense of space and environment in which the discussion takes place. Linda Polin uses the real-world comparison of walking into a classroom to find the desks arranged in the shape of a “U”, facing the chalkboard. The physical arrangement of the room is an important factor in shaping the expectations of what is to happen in the class. The ability of the MOO to mimic the physical environment through virtual space allows it to be a part of shaping student interactions in that space. In Polin’s words, “They succeed because they are able to bring landscapes and objects into play in conversation by harnessing the abounding willingness of participants to imagine together ...” (2000). Polin punctuates her point by narrating a transcript from a class session in which students held a class discussion while sitting in a virtual hot tub. Looi and Ang emphasize the usefulness of these shared experiences in providing opportunities for situated learning, collaboration, and cooperative construction exercises for students in online classes (2000).

Conclusion

In looking at most educational literature, one can see that there is a high degree of emphasis placed on the role of social interaction in education. Online education is often viewed as being asocial in nature because of the lack of face to face contact, the perception and reality of weak online communication, or some other limitation of the online environment. It is this discrepancy between the obvious and important role that social interaction plays in successful education and the real or perceived absence of that same interaction in the online environment that represents perhaps one of the biggest and most widely recognized hurdles to the success of online education.

In order for online education to become more effective, and by extension more credible, opportunities for social interaction must be created in online courses. The first step in this process is for instructors to realize that good communication and community development is possible in the online environment. With this realization should come a purposeful course design around the objective of creating social learning opportunities, which could use a modified team learning approach or one of several other approaches. Another aspect of online courses which can be improved to bolster social interaction in online courses is the mastery of the forms and nuances of online communication by students and especially instructors.

Fundamentally speaking, it is highly probable that the Internet can be used successfully in education. It appears as though many of the problems and issues that people have with online education are a byproduct of the fact that this is a relatively new mode of education. As professors and students grow naturally more proficient in using technology to communicate, and this mode of communication is viewed as a primary mode of communication rather than as learning a second language, opportunities for community-building will become more apparent. Perhaps at some point down the road, when we are all more comfortable with the technology, our vision of the unique learning opportunities and methods afforded by this environment will be less clouded by the perception of the Internet as an asocial technology where communication is limited, and awkward at best.

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