Online Discussion-Based Learning:
Using Asynchronous Tools to Create Community

Abstract: Etienne Wenger's notion of a community of practice has received much attention in academic research. It has been applied recently to the emerging analysis of distance learning programs. Whether specifically labeling student collaboration a community of practice or more broadly defining it as a collaborative learning community, educators are looking at ways to synthesize and integrate this model with theories concerning the utilization of technology to create effective distance learning experiences. This study directly correlates this framework to the success of current distance education practices.

Wenger's notion of a community of practice has received much attention in academic research. It has been applied recently to the emerging analysis of distance learning programs. Whether specifically labeling student collaboration as a community of practice or more broadly defining it as a collaborative learning community, educators are looking at ways to synthesize and integrate this model with theories concerning the utilization of technology to create effective distance learning experiences. Without considering the pedagogical design behind collaborative technologies, these tools serve as fancy equipment with the power to inhibit learning rather than enhance it. While distance learning is emancipating in that it allows for people in distant and remote locations to overcome geographical, economic and social constraints, it also carries with it the stigma of isolation and an inferior educational experience than that of the traditional classroom. A review of current studies of distance learning programs reveals that the development and growth of a community of learners is vital to the success of distance learning.

In a 2001 interview, Wenger defined three important components of a community of practice.

…A community of practice really must have three elements in it: domain, community, and practice. The first one is that it must have a domain-a specific area of expertise that members share… The second thing that you want to have is a community-a set of people who interact with one another, who engage with one another, who talk with one another, who think together and develop relationships with one another in that process… And the third important element to have is a practice-ways of dealing with the problems typical of their domain-that is developed over time. (De Cagna, 2001)

Using these indicators of a community of practice as a framework, particularly the second element of the notion of a community, we will examine the nature of distance learning programs and directly correlate this framework to the success of current distance education courses. The results of case studies by Brandon (1999), Poole (2000), K. King (2001), T. King (2001), and Rodrigues (1999) will be considered. For the purpose of this study, distance learning is defined as "an approach that allows educators and students to work with resources in a real or virtual environment outside of the host establishment" (Rodrigues 1999).

In Wenger's first element, domain, one can look at online learning communities as groups of people together for the common purpose of creating, accumulating and disseminating knowledge. There are many such virtual communities of interest existing and forming on the web every day. As observed by Brown, one can link, lurk on the periphery, learn, act or lead in a variety of subjects, developing a new form of "cognitive apprenticeship" (Conner, 2000).

This type of knowing and practice is interwoven in a contextualized environment. When we apply this environment to distance learning courses by means of online threaded discussion, students become more involved, develop a high ownership of meaning, engage in deeper thinking and show evidence of an overall commitment to learning (King, T., 2001; Poole, 2000; Rodrigues, 1999; Smith, 2001). Thus, students participate in a sustained collaborative investigation of their own knowledge domain. With this shift in discourse structure from that of the traditional classroom, managing online discussions can be difficult and time-consuming for the instructor (Rodrigues, 1999). In addition, the professor is divested of some of his or her authority, with students debating intellectual ideas and challenging assumptions. With this equal communication, students function without the influence of a dominant position from which to base their own beliefs. Consistent with constructivist approaches, students seem to take more control of their learning and negotiate meaning with teachers and fellow students (Poole, 2000). There exists a level of independence that is necessary for the community to flourish.

The second element essential to a community of practice is the notion of a community. The problem of creating an online community is a critical design aspect that has not especially been well implemented in practice. Because students do not share a physical environment, the initial building of a community occurs differently online. "In the opening weeks of distance courses, there is an anonymity and lack of identity which comes with the loss of various channels of communication" (Smith et al., 2001). Consequently, design of the distance learning program must focus on identities and modes of belonging.

A key issue for a learning community is that the degree to which an individual feels like a member of the community and the extent to which they buy into the aims of the community, transforms the identity of the individual, and from that, the extent to which they commit themselves to their own growth through the growth of the collective, that is, individual accountability in relation to the group (King, T, 2001).

The degree of membership or legitimate peripheral participation, as maintained by Wenger, reconciles the individual with the collective. It is this sense of belonging and ownership that nourishes the community. Kahl and Cropley found that distance learners differed from face-to-face learners in that they felt more isolated and experienced lower levels of self-confidence (1986). As a result, distance learning community building efforts include: naming the community (Herrmann, 1998), assigning team-based substantial projects (Shneiderman, 1994), and using class members' names in bulletin board messages (Poole, 2000). Hence, the principles that lend themselves to quality face-to-face learning environments are parallel to those deemed successful in online courses. However, as revealed by Kathleen King's 2001 case study, the integration of online conferencing with face-to-face classroom learning allowed for "fuller expression, development, and learning." This sense of collaboration is substantiated by Rodrigues in her study of an online masters course. Her findings reveal that students developed a connection in the face to face contact time that positively influenced the online community.

It should be stated that the fostering of group dynamics at the start of the course, during face to face contact sessions, enabled students to build peer rapport. This rapport encouraged them to communicate candidly through the online forum. Hence the discussions that followed online were possibly a consequence of the camaraderie and association that developed during the face to face sessions (1999).

The body of knowledge about how face to face interaction impacts on the building of an online community is rather modest at this time. We believe there is great promise in designing hybrid distance learning programs that include face-to-face components. Further study is warranted.

The final aspect of Wenger's definition of a community of practice involves practice, resolutions to shared problematic experiences. True communities share a common purpose and develop shared meaning through overcoming relevant challenges. This aspect of the community involves how the instructor allows the students to resolve their differences and create their own community. While students in distance learning programs seem to demand more structure and direction, it is actually the organic development of the community that determines its success. In other words, it is important for the group to customize its own norms and rules that match its goals and

environment. This notion of a joint enterprise in which a team negotiates for a common purpose towards performance goals is vital to the experience of inquiry and cooperation (Wenger, 1998). In her case study, Poole also noted that disagreements actually contributed to the development of the class community (2000). Roschelle's research in this area focuses on collaborative technology tools for the community to utilize to resolve problematic experiences and for the production of new practices. He states that communities of practice can grow and learn through the use of collaborative technology that builds communal understandings (1992). He asserts that true collaborative technologies are instruments of mutual knowledge construction in a shared perceptual space.

Although technology on its own is incapable of producing significant educational change, when implemented in conjunction with reputable educational practices, results can be impressive. Using the principles of a community of practice in a systematic design of distance learning programs can provide the basis for improving the quality of learning by focusing attention on the framework that actively engages the students into the positive experience of developing and sustaining a community of learners. This provides an authentic context to enable students to engage with the program and to reflect on it in a meaningful way. Using technology to enhance the educational experience in this way is both broader than and different from what people usually associate with distance learning courses. With the development of a community of practice and the utilization of the Internet, learning may extend across disciplines and often to recognized experts in the field. The benefits are far-reaching and abundant. It has been also noted that the blending of a face to face component along with the use of technology based tools aids in building a support network to enhance learning outcomes. As eloquently affirmed by Jonassen, Peck and Wilson, "The education future portended by the Internet, therefore, is not isolated, individually tailored to each child; rather, it is a community-centered future that accommodates the individual through the workings of the larger community" (1998).

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