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34: Growing Virtual Communities

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Abstract

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As online collaborative technologies become easier to use, an increasing range of "virtual communities" are being established, often for educational purposes. This report stresses that an efficient technology is only part of the process underlying a successful online community. It considers the social process on which an online learning community must be founded if it is to flourish and be useful. Definitions of community, learning community, and virtual learning community are reviewed, and the experience of an online community member is discussed. The importance of nurturing the community's health, and the natural life cycle of a virtual community, are examined.

Growing Virtual Learning Communities

Too often the assumption is made that simply by putting online technology into place for people to use, we have "built" a virtual learning community. We cannot assume that a learning community will naturally grow from a virtual learning environment, however (Schwier, 2002). Social factors are the key to nurturing or growing a learning community, online as well as face-to-face. It is important to understand these factors, because they can create barriers to the community's growth.

The Merriam-Webster Dictionary (2004) defines community as "people with common interests living in a particular area," or as "a body of persons of common and especially professional interests scattered through a larger society (such as the academic community)." When we speak of community, we refer to people who have come together physically or by another means, because they have something in common, which has brought them together. Community is more than just a shared purpose. When people come together, they naturally engage each other in a social network of relationships (Preece, 2000), comprising shared activities and social interaction. Community is a "place where people conduct community activities, share common beliefs, and share a means of communicating" (Brooks, 1997; Corry and Tu, 2002). Community "takes place within social interaction about common interests" (Galbraith, 1995; Corry and Tu, 2002). Without social interaction, there would be no community. Bellah (in Rovai, 2002) adds that, "... these types of community are not "quickly formed." Community, therefore, comprises people who share something in common; who interact with each other in a physical space or through a shared identity; who are committed to the community through regular participation (to varying degrees); and who show reciprocity and trust.

The definition of an online or *virtual community* does not differ significantly from that of a physical community, though its implementation is different. The community builder needs to compensate for the lack of a physical space in which its members will interact. The space and the types of interaction most important to the community must be deliberately constructed. This process will depend on the type of community that is to be built, and its purpose. According to Preece (2000):

An online community consists of people who interact socially as they strive to satisfy their own needs or perform special roles; a shared purpose that provides a reason for the community; policies that guide people's interactions; and computer systems to support and mediate social interaction and facilitate a sense of togetherness.

Preece's definition contains many elements of 'community,' with the addition of a technology capable of supporting the community and enabling it to function; for it does not exist in a shared physical space, and its members may also be separated by time. Simple online community infrastructures facilitate basic communication and interaction functions, while more advanced technologies allow their users to create a virtual place where they can create new identities and environments to explore. Without the technology infrastructure, a virtual community cannot exist in any form.

Kowch and Schwier (1997) provide a definition of learning communities as:

... collections of individuals who are bound together by natural will and a set of shared ideas and ideals ... (depending) on autonomous, independent individuals engaged by influencing each other within the learning process.

To be a *learning community*, participants must be committed to the learning process, and responsive to the contributions of other participants through "reciprocity" based on trust between the community members. Trust is based on credibility (i.e., another's word can be relied on) and benevolence, the extent to which "learners are genuinely interested in the welfare of other members" (Royai, 2002).

Growing a *virtual learning community* therefore requires that we understand and embrace the social aspects critical to learners as they engage (and influence) each other across time and space. "A community . . . has clear boundaries that determine membership . . . (K)nowing the purpose of a community and sharing it clearly also helps to deter casual visitors who lack commitment (Preece, 2000). In addition to communicating its "culture, value, and context," a community needs to build a common history through shared experiences, and its members need to share their own personal histories and experiences. A shared history contributes to the community's sense of identity, and this forges a sense of who belongs to the community, and who does not (Schwier, 2002). The acquisition of knowledge through community activities is grounded in our experiences and constantly changes as we synthesize new information and generate new meanings. Anderson and Kanuka (1998) provide a social constructivist view of the process: "Knowledge is generated through social interaction." Schwier (2002) stresses that a strong connection (mutuality) leads to shared values which, in turn, lead to new knowledge and learning. A community can provide social interaction and relationships, both necessary for building new knowledge.

Gunawardena (in Anderson and Kanuka, 1998) theorized that active construction of knowledge moves through five phases: sharing and comparing information, discovery and exploration, negotiation of meaning, testing and modification, and summarizing and application of new knowledge. Schwier (2002) adds plurality (bringing in ideas and relationships from outside the community); autonomy (respect for individual opinions, reaching group consensus, and a process for discourse); and future orientation ("visioning" how they will learn and apply that learning to the real world). This process of knowledge construction depends upon the nature of the community of learners, and needs to be supported by the virtual learning environment in which that community exists.

Experiencing a Virtual Community

Brown (2001) points out that the ability to define community is often a "predictor of whether or not the student felt a part of the community" and that helping students to define community early on in the process may create a "perceived need that students will want to fill." Community is a difficult concept for some students in virtual learning environments to define, especially if they do not believe that it relates to their online course needs. A community does not evolve in an online educational situation unless the participants want it to do so. It is present for some participants and not for others. Students who reported that they experienced "community," and could define what it meant in their online courses, also reported a perceived satisfaction with their learning experience (Brown, 2001; Rovai, 2002). In addition, a strong sense of community is associated with an increase in persistence, flow of information, availability of support, commitment to group goals, cooperation, and general satisfaction (Rovai, 2002).

It might be expected that repeated experiences in online courses, and long-term associations with fellow students will help learners to define community and to develop a sense of community. Conrad (2002), however, found that many learners lacked a basic concept of community, even though they had been through several online courses: learners "just beginning online classes were not concerned with the existence or building of community . . . " Why do all students not develop a sense of community in online courses? Brown (2001) identifies several explanations. Students may have no wish to be part of a community, or it may not be required of them; they may enroll in a course on the basis of knowledge goals, not community goals. The class may not be a high priority for them. Barriers may create an "out of synch" community experience. Or their definitions of community may not make it possible to experience it in an online environment. Some of these issues may be overcome through better preparation of students for online learning, or by finding ways to help reduce barriers between them.

We should be concerned, however, for students who do not make community connections despite their wish to do so. Although weak ties within a community are easy to maintain and can "be important for obtaining information, making new contact, raising awareness of new ideas" (Preece, 2000), they do not permit the creation of new knowledge through shared experiences and social interaction. Ways must be found to ensure that all learners have the opportunity to understand the importance of community in the virtual learning environment, and to experience it at the highest possible level. This may be achieved by heightening the students' sense of membership and group belonging (Rovai, 2002). The importance of a sense of belonging to the community, at least during the early stages of its development, is that it helps to sustain individuals in their learning and validates their own experience (Haythornthwaite, Kazmer, Robins, and Shoemaker, 2000). Brown (2001) found that "membership . . . was conferred by others through feelings of worthiness and acceptance . . . that occurred following participation in long threaded discussions . . . and based on the quality of the participant's input." Other factors noted by Brown as contributing to the perception of a person's membership in the community were: timeliness, supportiveness, virtual personality, perceived intelligence, commitment, and writing ability. None of these factors is immediately apparent when a person joins the community. Learners need time to become socially engaged with each other, so that they can

"move from a stressful position of isolation to confident membership" (Haythornthwaite et al., 2000).

Membership is also about who does *not* belong to the community – who is "outside" as well as "inside." As learners begin a distance education program, they distinguish between those inside and outside their immediate learning community (Haythornthwaite et al., 2000). The process of identifying membership can be a barrier to perceived membership in the community for those who arrive late in the process and those who come in and out of it. Haythornthwaite and colleagues found that "as the cohort dissipates . . . so does their attachment to the community." The introduction of new members and the loss of old friends reduces the attachment members feel to the community, especially as they engage in the outside world, and progress through the program ahead of/ behind others in their cohort.

Instructors/ facilitators play a variety of roles in shaping online groups and promoting a sense of community (Rovai, 2002). "Modeling, encouragement, and participation by the instructor" help a community to form more readily for more students (Brown, 2001). These roles and behaviors change as the community evolves through its various stages. If the community's goal is to develop active learners, "... the facilitator will need to take a leadership role early in the process, promoting a change of mindset (and helping) learners break out of their stereotypical roles of information receivers into roles of information seekers . . . " (Prestera and Moller, 2001). Communication, which includes interaction, engagement, and alignment, is the "brick and mortar of virtual communities" (Schwier, 2002), and is central to the notion of building learning communities (Kowch and Schwier, 1997). Richardson and Swan (2003) indicate that students' perception of "social presence" in a virtual community can be a predictor of their perceived learning within it. Social presence is the "degree to which a person is perceived as 'real' in mediated communication . . . and is a factor of both the medium and the communicators' perceptions of presence . . . " (Richardson and Swan, 2003). It affects how participants sense emotion, intimacy, and immediacy (Preece, 2000).

Social interaction can have a positive or negative influence on community; and the sense of community is not always altruistic. Students may or may not perceive that it is in their best interests to create and maintain community in order to achieve harmony in the course and amongst their peers with whom they may work with again in later courses (Conrad, 2002). Long-term association can help to promote community (Brown, 2001), but it can also potentially discourage the evolution of community if students view the process as a business transaction (Conrad, 2002), rather than as an important part of their learning process. Haythornthwaite and colleagues (2000) indicate that some students may view computer-mediated communication postings as a chore requiring much work, while others may find that online socializing "eases work relations." Reduced social cues in a virtual community may allow some students to feel free to ask "stupid" questions, avoiding potential negative facial responses, while others "fade back" and fail to contribute to the community. Also, as students progress through a class and master the technologies and processes, their need for social contact may diminish.

The Life Cycle of a Virtual Learning Community

It is useful to consider the typical life cycles or stages of a virtual learning community. This helps to identify the points at which intervention may be needed (or should be removed) in the interests of the community's development. The levels of engagement between the community's members increase as each stage is reached, except for the last stage where engagement ends (Brown, 2001); and we can consider where communication and interaction may be key to the community's sustenance. The following analysis uses Schwier's (2002) terminology, adding two elements from Preece's system (2000).

- **Pre-birth** is when the development, software, and policies of the community are established (Preece, 2000). In academic contexts, these elements are generally established before the community is formed. If the process is not directly connected to an academic organization, however, this stage may be the community's sole responsibility. Either way, the basic structure and operation of the community will affect later stages of the community's development.
- *Formative:* during the formative stage, new members are brought into the community and the community's identity develops (Schwier, 2002). New acquaintances are made, similarities between members are identified, and communication is recurrent (Brown, 2001). This is the point at which the community needs nurturing (Preece, 2000). In a text-based online context, community conferment takes place via threaded discussions, and helps to establish community kinship (Brown, 2001).
- *Maturity* occurs when the community begins to function independently of direct guidance (Preece, 2000). The purpose, shape, and operations have been settled, and there is a less central role for the facilitator (Schwier, 2002). Camaraderie may be established through long-term and/or intense associations (Brown, 2001).
- *Metamorphosis:* for Schwier (2002), this stage occurs when the community becomes something that it originally was not. Some members may resist this change and attempt to prevent it. For some communities, a natural decline, leading to death, may be best option for the community at this stage (Schwier, 2001).
- **Death** is the final stage of a virtual learning community, when members leave, discussion slows to the point that there is not enough participation to motivate them to return, and/ or the community has served its purpose (Preece, 2000). The death of an online community may be natural, as for example at the end of an online course, or unnatural, as when a community tries to continue with no set purpose.

Conclusion

As we design and implement virtual learning processes in distance education, considering the meaning of community is important. Social factors are central to the planning, nurturing, and life cycle of learning communities. Participation, communication, and interaction are at their heart. A community's focus needs to be clear so that its members can build a common history and identity. Cooperation, trust, and reciprocity are required, so that the community can fulfill its goal of knowledge acquisition grounded in experience. A sense of belonging and social presence sustains participants through the learning process. Virtual learning communities face the additional challenge of connecting people over time and space through the use of technology. Students may not always be able to define a virtual learning community in a way that allows them to participate and benefit from it. The instructor/ facilitator must play an adaptive role in the community process, developing active and engaged learners. All of these social factors influence the life cycle of a virtual learning community, eventually leading it to a higher stage, or to decline and death, natural or not.

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The next report in the series discusses the development of an online community advocacy group.

N.B. Owing to the speed with which Web addresses become outdated, online references are not cited in these summary reports. They are available, together with updates to the current report, at the Athabasca University software evaluation site: <u>cde.athabascau.ca/softeval/</u>. Italicised product names in this report can be assumed to be registered trademarks.

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