

*Original Article*

## Online Learning Communities: A Review of Literature

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Online learning is rapidly becoming a common form for delivery of instruction in tertiary education. Along with instruction, a sense of community has transferred from the traditional classroom to the online environment. This review examines literature concerning the purpose and establishment of learning communities in cyberspace as well as their development and structure. In addition it explores research into learning objectives and pedagogy suited to this new learning environment and suggests areas for future research. The information provided is of use to those planning to initiate or improve their own online learning community in order to achieve transformative learning and a shared sense of purpose.

**Key Words:** online community, learning, transformative learning, constructivism, distance education

### Introduction

Modern learning communities (LCs) date back to the 1920s and the Meikeljohn Experimental College at the University of Wisconsin (Smith 2001). Although early attempts at such reforms met with failure, there has been a recent revival of LCs. These new LCs are being formed in response to the varied problems facing traditional educational systems (Hill 1985). Course linking, course clustering, collaboration, high levels of student and faculty involvement along with a strong sense of group identity and non-linear learning characterize these communities (MacGregor 1994; Levine 2003).

The use of the Internet as a platform for distance education has added a new dimension to the concept of LCs. This paper looks at recent research focusing on

what constitutes online learning communities (OLCs) and what steps should be taken to develop a community among online learners (Brown 2001; Chen 2003; Hill, Raven & Han 2002; Lock 2002; Rogers 2000; Rovai 2002). Several facets of OLCs including delivery systems, instructional design, pedagogy, student/faculty expectations and online class interactions are examined.

### Online Learning Community

Why initiate an OLC and not rely on standard Computer Based Instruction (CBI) delivered via the Internet? One reason is that attrition in online classes is higher than in physical settings. Building a community of learners is a means to help lower dropout rates (Misanchuk & Anderson 2001; Hill, Raven & Han 2002; Rovai 2002). What helps to define these communities? Shared goals and interests are essential for community building (Barab & Duffy 2000) but for OLC members it is only after being placed in a common environment that these are discovered. Once this new environment is defined, community building begins and progresses

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through several stages. Research indicates that when there is an opportunity for students to interact with each other and the instructor, before interacting with the content, a feeling of community and trust develops sooner (Brown 2001; Palloff & Pratt 1999; Rovai 2002). As members disclose more personal information they are “more likely to establish trust, seek support, and thus find satisfaction” (Cutler 1995). This is important as taking risks and overcoming fears are necessary psychological components of community building, both online or off (Palloff & Pratt 1999). Participation on a personal level, in addition to an academic one, is an indicator that a true OLC has formed (Mishanchuk & Anderson 2001; Rovai 2001). The fact that students’ perceptions and definitions of community differ, and therefore will have an effect on whether or not they feel they are part of the community, must be taken into consideration. Schwier (2002), in an expansion of Selznik’s (1996) writings on community, lists ten elements necessary for OLC development: history, identity, mutuality, plurality, autonomy, participation, integration, an orientation to the future, technology and learning. He then elaborates on the implications of each in shaping online communities. All ten elements are not necessarily present in every OLC. However, according to Rovai (2001), four essential components — spirit, trust, interaction and learning — are essential to all classroom communities. These four are sequential in nature as each element builds upon the previous one. OLCs are dependant on technology to develop and maintain interaction and the methods used to enable transformative learning.

### Theoretical Framework

It is through Computer Mediated Communication (CMC) that community is attained in an OLC (Lock 2002; Ubon & Kimble 2003). One of the first issues that needs to be addressed in starting an OLC is the technological requirements. The technology itself should be as transparent as possible allowing members to communicate with minimal distractions, but when problems with software arise, learners should be encouraged to assist each other in solving them (Chen 2003; Palloff & Pratt 1999). Care must be taken to ensure that learner frustration caused by technology is kept at a minimum. Prevalent forms of CMC in OLC include threaded message discussion boards, e-mail, chat rooms and audio and video presentations. The medium alone, however, is not what

leads to a successful community (Rovai 2002).

It is the pedagogy embedded in the course design more than the technology that leads to formation of a true community. Constructivism, which assumes that deep learning occurs when students construct their own knowledge and search for personal meaning, lends itself to online learning. Misanchuk and Anderson (2001) claim that interactions develop through three levels: communication, cooperation and collaboration. It is the “opportunity to interact with other learners in sharing, constructing, and negotiating meaning that leads to knowledge construction” according to Lock (2002). Threaded discussions, collaboration, team projects, sharing of experiences, shared facilitating and moderating of discussions and peer evaluations are some strategies that assist in this construction of knowledge (Brown 2001; Chen 2003; Lock 2002). Community size is another factor that can influence learning outcomes (Rovai 2002). With too small a group not enough quality discussion is generated while one too large can overwhelm students. While the instructors may assume the role of “guide on the side” in an OLC their continued active involvement in the community is essential to its success.

### Impact on Learning

With regard to OLCs, Palloff and Pratt (1999) state, “The total outcome of knowledge acquired and shared is far greater than what would be generated through independent, individual engagement with the material.” OLCs enable students to learn, practice, and acquire necessary skills in addition to feeling a sense of empowerment as they learn about the technology through hands on activities, about collaboration with a diverse team. In addition they learn about themselves and their own learning styles (Palloff & Pratt 1999). Students in an OLC can be exposed to a broad range of experiences through interactions with community members. The variety of ages, backgrounds, work and educational experience brought into the community would be difficult to duplicate in a physical classroom. Through the empowerment and sharing of experiences, students are able to structure the learning to suit their own needs and situations. Some educational researchers do not maintain that OLCs encourage a deeper form of learning. The “No Significant Difference Phenomenon” website

(<http://teleeducation.nb.ca/>

[nosignificantdifference/](http://nosignificantdifference/))

maintained by TeleEducation of New Brunswick, Canada lists quotes from 335 research papers that suggest there is no significant difference between learning outcomes for online students and those in traditional classrooms. Phipps & Merisotis (1999) address this subject and contend that in much of the experimental research there was "inadequate control of extraneous variables" leading to a lack of validity. They also cite the large amount of cross-referencing as a problem. It is not appropriate, however, to compare OLC learning to that of traditional classrooms, as each entails different processes for interaction and learning, even if the outcomes are similar. It is time to move past this comparison and develop a method to evaluate OLCs on their own merits and flaws.

### Critical Issues

For some the concept of OLC holds negative implications. It is possible that members may subjugate their individuality in order to conform to community norms (Hodgson & Reynolds 2002). When establishing OLCs steps should be taken to avoid the "groupthink" mentality which is defined in Palloff and Platt (1999) as "the subtle and not-so-subtle pressure to conform in thought and action". Instructors and discussion moderators can create opportunities that encourage individuality in a climate of trust that allow for both candor and support (Rovali 2002) among learners, which aids in alleviating problems caused by conformity.

New methods of instruction delivery and student participation require new approaches to stimulate interaction and collaboration. Instructors therefore need to become proficient in ways to moderate and stimulate discussion in a new and different environment. Research by Beaudin (1999) indicates that carefully designing online discussion questions to encourage a deeper level of discussion is an important factor in promoting active participation and good learning. Research to date often does not take into account the different learning styles of students. While some report on increased interaction through CMC by those who may feel reticent and intimidated in face-to-face (f2f) situations (Warschauer 1999), this does not go far enough in addressing the learning differences and psychological implications of disembodied communication. In OLC passive non-participants run the risk of being forgotten as participation is the only means to establish and maintain one's identity (Misanchuk & Anderson 2001). Care must be taken to

nurture and guide the establishment and continuance of a social identity and presence for all members.

### Future Research

Much current research is focused on individual online classes and therefore it is difficult to determine the generalizability and long term impacts of any particular OLC. It is of interest to find which elements of community are transferred to future classes. Future research should include more longitudinal studies focused on entire degree programs. This would provide a more accurate picture of OLCs in a broader educational context. Rheingold (1991 pp. 37) asserts that all communities are setting-specific and it would be helpful in understanding the dynamics of an OLC to see how the community differs as membership and specific settings change over time. The advantages of asynchronous distance learning will likely be boosted by the introduction of new generation of technologies. However, in certain situations, methods of interaction in OLCs may change causing new areas of research to evolve. The increasing ability of students to participate in synchronous communication through videoconferencing and chat rooms and how this affects OLCs will no doubt be one new area of study. The effect of new technologies on learning styles should also be a focus of future investigations. It will be interesting to see how the dynamics of OLCs alter when face to face communication without restrictions of place come into more widespread use. Even with these new technologies taken into account, international time differences, busy work schedules and student preferences for text based CMC will all assure that current platforms will remain in use alongside or in partnership with synchronous systems (Collison et al. 2000).

### Conclusions

The importance of developing OLCs in online educational programs cannot be ignored. The absence of f2f communication in cyberspace make such community development all the more necessary. All members of the community will need to find their own distinct voice and self as they project their identity within the community. Trust and mutual concern must be established to ensure active participation in the community. Once these are present, the community can grow and learn in a cooperative environment where all members share knowledge and

experience. Constructivism, with its emphasis on active experiential learning and collaboration, provides the pedagogical underpinnings for OLCs. It is imperative that the role of the online instructor is that of facilitator rather than lecturer. New methods of instructor participation and moderating should be employed so that through the transformative learning process, all participants share the roles of learners and teachers.

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