Abstract: This project examined learners’ perceptions of the learning community construct, whether learners’ online and face-to-face interactions led to the development of learning communities and whether the process of building community was different in face-to-face and web-based courses. Courses requiring learners to interact on a personal level early in the course were more likely to develop into learning communities. The degree of distance within the course did not make a difference in whether these learning communities developed. Rather, a sense of trust and of shared hardship as they worked through the course assignments were seen as more important by these learners. In situations where communications were considered inappropriate, developing communities were derailed or development never began. A definition of community emerged from the data that identified characteristics of shared learning goals, exchanging ideas, assisting each other, and an element of trust among the learners within the community.

Introduction

This project’s purpose was to investigate the ways learners create, maintain, and use an online learning community to effect learning. Distance education, especially web-based learning opportunities, has become a more central feature of higher and adult education program delivery (Vrasidas & McIsaac, 1999). However, the ways in which learners interact with the content, the instructor, instructional activities, and each other to influence learner knowledge acquisition has not been fully explored. On-line learning has the potential to change the dynamics of traditional classroom interactions. Rather than the instructor solely establishing the conditions for learning, the learner has the opportunity, through listservs, chat rooms, and threaded discussions, to influence the social, emotional, and instructional environment (Jones & Martinez, 2001). This influence can be used to create learning communities. Garrison (1995) approaches online learning from a transactional constructivist perspective that constructs and validates “meaningful and worthwhile knowledge . . . through both individual reflection and social discourse” (p. 138). Nevertheless, a study assessing the extent to which constructivist principles are reflected in both campus-based and distance learning settings found that they “are not carried into discernible practice” (Tenenbaum, Naidu, Jegede, & Austin, 2001, p. 107) in either setting. A number of authors suggest that active learning through collaborative activities that facilitate the social construction of knowledge is a distinctive feature of on-line learning communities (Grubb & Hines, 2000; Palloff & Pratt, 1999; Stacey, 1999).
Methods and Procedures

The study included 29 students from nine undergraduate and graduate courses at three Ohio universities. The courses varied in content, length, percentage of online versus face to face, level of structure and the amount of interaction designed into the course. With the exception of one course, students had no choice as to the format. These students volunteered to participate in interviews (18 in focus groups and 11 in individual interviews).

We examined the interplay of learning and the strength of the educational community when courses were offered at different degrees of distance (defined as the amount of face-to-face interaction—0%, 50% or 100%) and with varying structure (defined as high, medium or low) in the course content. These constructs were based on Moore’s theory of transactional distance (Moore & Kearsley, 1996). According to Moore and Kearsley (1996), interaction is a product of course design that alleviates the effect of geographic distance on problems of understanding and perception by the learner.

Data were collected through individual and focus group interviews following a semi-structured format. The interview responses were analyzed using a theory driven open coding guide developed for this project (Boyatzis, 1998). All data for the study were collected between September, 2001, and June, 2002.

Findings

Defining Community

Respondents indicated that a learning community had for them, the following elements - shared learning goals, a free flow of ideas, and help solving problems from all members of the community. An element of interpersonal connection or trust was also identified as important in attaining a feeling of community.

Creating a Learning Community

When asked how they went from being individuals to feeling part of the group or team, the most common response can be summed up by one of the interviewees who said, “We had to!” Most of the learners felt that although they were placed into groups, the assignments given within the courses, and the process of working together to complete them was the key to becoming a cohesive group, and subsequently, feeling that they were part of a learning community. In examining responses from interviewees who felt that community did develop in their course, we found this was true across all levels of distance.

Not all agreed, however, that their course or the group to which they were assigned created a learning community. For those learners who did not feel that their group became a learning community, it often appeared that the individual was unwilling to socialize or did not have an interest in participation in the course.

I just felt like an independent student. I didn’t try to get to know anybody except for reading their student intros and also with the teacher. [When the student was asked if she felt like she was alone, she responded:] Yes.
Structure and Community Creation

The learners participating in this study concur with Moore’s theory that interaction and appropriate structure aid in learning and with the notion that social construction of knowledge aids in the formation of learning communities. When the structure of the course requires learners to work together, communities were created and learning was enhanced.

But, that format where you produced a result of your group discussion and compared it with other groups in one way or another I thought improved your learning [she nods]

On the other hand, when learners were not satisfied with the level of structure, learners indicated that there were problems with learning.

They [were] just . . . not at all structured. There’s no set way, no definite. . . . I’m never sure what they want, so when I sit down to do my work, I’m not sure what I should be doing or what they want me to do or if I’m doing it right…Like I said, I like more structure and only one of them (one of the 14 web based courses this learner took) really had…enough (structure) to make it work.

Whether the learners were working together face-to-face or via the web did not seem to make a difference in whether a learning community was created, however learners who had taken both face-to-face and web based believed face-to-face communities developed more quickly.

Maintaining a Learning Community

Some learners felt that the process of community building began with social interaction and shared goals. Trust that others in the group would do their part and provide assistance if needed was identified as a key element in the continuation of a learning community. Working on the assignments allowed some learners to develop a feeling of trust in their community members. For others, working together on a project or assignment was not sufficient to develop and maintain a learning community.

Communication problems were reported as one reason that learning communities did not develop or were derailed after development began. As evidenced by the following comment, it appears that one sure way to erode trust among the group is to communicate in ways that would be unlikely in a face-to-face course. Basic courtesy seemed to be lacking from some group members.

I found people to be somewhat impolite, more so than I would expect face-to-face. More challenging in an impolite way than I would expect face-to-face. And that’s turned me off. As a matter of fact, the last time I was with my group face-to-face, I said, “I’d like for us to be careful about this as we continue, particularly around the final exam that we’re all starting to do as a discussion chat group,” because it made me uncomfortable.

Good communication and ongoing interactions were identified as factors that preserved (maintained) the learning communities that were created.
Using Learning Communities

The interviews provided evidence that the learning communities that developed and were maintained throughout the courses played an important role both in students’ learning and in lessening their feelings of distance from each other. Becoming a member of a learning community provided a sense of social presence. Again, learners seemed to feel this way across all levels of distance. One of the learners in a web-enhanced course summed up the use of a learning community rather well:

It’s gotten me more involved. I think just the back and forth between the people – it’s kind of funny because when we go to class we don’t know anybody’s names. On the Internet, during the week when we are having these discussions over the e-mail, we all know everybody’s names and there are like little jokes going back and forth but when you get to class you have no idea who you had these jokes with. I think having them [group interactions] online and having everybody post their opinion or their experience has really furthered it [learning], because everybody in that class has some kind of different experience so, therefore, when they do respond to different discussion postings they give further information. They’re like, oh well this society deals with this or this society deals with this and if you go to this web page - or this is a great book that concerns that - it gives you a lot more things that are not particularly required for the course, things that I may not actually go and do right now but maybe over the summer when I have time I’ll say, oh hey, I remember this guy was talking about this and I need to go look that up and find out more about it. I think that has really fostered more outside learning like without having required it.

These students used their learning communities to enhance their learning. They saw the community as an opportunity to share ideas. Finally, learning communities seem to lower the feeling of isolation for some students.

Interaction and the Use of Community

For the learners reporting that learning communities formed and that they relied on the community for the construction of knowledge, interactions were deep and meaningful. These meaningful interactions also seemed to help maintain the community throughout the course.

I think they (chat, discussions, and group assignments) added value to the learning experience and helped us be connected.

It gives you different notions too, because otherwise you’re your own compass unless you get other peoples’ feedback, so my experience would have been totally through tunnel vision unless I had inputs coming along the way.

I found it [group interactions] to be very good. We got so much in-depth….

However in some situations, the interaction never reached the depth required to aid learning.

Some people are using it [the discussion board] more as a chat line... than I think for depth of thought issues….
Some of those postings, I ask “what does that have to do with anything we’re reading?”

Overall, the learners interviewed felt that the interaction had at least the potential to aid in their learning and to support the development, maintenance and use of learning communities. In addition, they felt that when a learning community did develop through interactions, their learning was enhanced.

**Conclusion and Implications for Further Research**

This study investigated how learning communities developed in web-enhanced or web-based courses and whether the formation and use of these communities was instrumental in a learner’s knowledge development in the course. We had hypothesized that interaction would be the most important element in both the development of communities and in the learning that occurred as a result. Surprisingly, structure appeared to be more important to these learners. Without clear guidance, and without adequate explanation of what the interactions were to accomplish and how they were to be used, learners did not find the interactions themselves to be useful as an aid to learning or in the development of a learning community. Even in courses that we had categorized as highly structured, there were instances where lack of structure interfered with both the development of community and with learning.

The learners developed definitions of community through their own experience with the formation and use of communities that reflect much of the research and the definitions found in the literature. They recognized when the course required them to become a community and when the course got in the way of the development of a community. For those learners in courses where communities developed - and were not derailed by lack of trust, poor communication or lack of guidance by the instructor - this group of learners indicated that the interactions and sharing in the community led to better understanding and fostered further learning outside the course.

The importance of structure in this group of students’ satisfaction with their learning reaffirms the need for instructors to develop clear guidelines and to communicate the purpose of interactions in courses, whether face-to-face or on-line. Specifically, as instructors we need to be clear about what is expected of the student, provide continued support and clarifications throughout the course, and to continue to facilitate the interactions structured into the course. Through these steps we can encourage the creation, maintenance and use of communities as learners engage in the hard work of learning.

This study offers some preliminary findings regarding the development and maintenance of online learning communities. Further research is needed to determine the levels and type of structure required for learners of various abilities. In addition, we need to investigate how online interaction might best be facilitated if on-line communities are to be created maintained and used to aid learning. The types of interaction that best assist learners as well as the factors that interfere with the creation and maintenance of on-line communities also require further study.

**Reference**


David S. Stein, Ph.D., Associate Professor, The Ohio State University, 283 Arps Hall, 1945 N. High Street, Columbus, OH 43210; stein.1@osu.edu

Joe E. Wheaton, Ph. D., Associate Professor, The Ohio State University, 356 Arps Hall, 1945 N. High Street, Columbus, OH 43210; wheaton.3@osu.edu

Jennifer Calvin, The Ohio State University; calvin.15@osu.edu

Christine Overtoom, The Ohio State University; overtoom.1@osu.edu

The authors would like to thank the Research Center for Educational Technology at Kent State University for funding this study.

Presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus, OH, October 8-10, 2003.