

Key Elements of Building Online Community: Comparing Faculty and Student Perceptions

Pam Vesely

Assistant Professor
Department of Human Services
Western Carolina University
Cullowhee, NC USA
pvesely@email.wcu.edu

Lisa Bloom

Professor
Department of Human Services
Western Carolina University
Cullowhee, NC USA
lbloom@email.wcu.edu

John Sherlock

Assistant Professor
Department of Human Services
Western Carolina University
Cullowhee, NC USA
sherlock@email.wcu.edu

Abstract

This paper describes survey research of fourteen online courses where instructors and students were asked their perceptions about the challenges and essential elements of community in online classes. Results show that both instructors and students believe building community is very important. The majority of both students and instructors perceived it to be harder to build community online than in traditional classes. Additionally, while the majority of students and instructors both identified the same elements for building online community, there were significant ranking differences. Most striking among the differences was that students ranked instructor modeling as the most important element in building online community, while instructors ranked it fourth. Implications of these findings are discussed and recommendations provided for how instructors can model community behaviors in their online classes.

Keywords: Virtual Community; Online Community Building; Distance Education; Instructor Modeling; Instructor Presence; Online Student and Instructor Perceptions

Introduction

It is generally agreed that learning involves interaction and that it is a communal activity (McMillan & Chavis, 1986; Sarason, 1974). The traditional setting where communal learning activity occurs has been the in-person classroom; however, with the advent of technology that is no longer the case. While communities in general have been considered to be “place-based” (Paloff & Pratt, 1999, p. 21), the success of *MySpace.Com* and numerous other online communities demonstrate how communities can transcend physical spaces and still have actively engaged participants. The purpose of this survey

research was to compare instructor and student perceptions about building community in online university classes. The paper begins by reviewing the literature which has linked community to the learning process and identified it as essential. Previous research examining the challenges for instructors in building online community is also discussed. The methodology employed for this survey research is then described and the study's findings are presented and discussed. The paper concludes with a discussion of the implications of these findings and specific recommendations for instructors and administrators.

Literature Survey

The Importance of Community to Learning

The concept of learning communities has been discussed for more than two decades (Caverly & McDonald, 2002). Research has clearly shown that functioning in a community can enhance the learning that occurs among community members (Hargis, 2005; Kember, 1987; Powers & Mitchell, 1997). While *community* has been defined in the education literature in many different ways (Boyer, 1995; Hill, 1996; McMillan & Chavis, 1986; Preece, 2000; Rogoff, 1994; Sergiovanni, 1994), below are elements of community frequently identified:

- 1) A sense of shared purpose
- 2) Establishment of boundaries defining who is a member and who is not
- 3) Establishment and enforcement of rules/policies regarding community behavior
- 4) Interaction among members, and
- 5) A level of trust, respect and support among community members

Shea, Sau Li, & Pickett (2006) highlight the critical role that community plays in academic success and persistence in higher education. Yuen (2003) asserts that a learning community can help individual learners "achieve what they cannot on their own" (p. 155). The root word of community is *communicare*, which means "to share." (Paloff & Pratt, 1999, p. 25). This sharing occurs through interactions within social networks which are formed in the community.

When these interactions among community members are directed toward the purpose for which the community was formed, it is considered collaboration. Woods & Ebersole (2003) assert that optimal learning outcomes are "directly tied to the establishment of social networks among participants engaged in a collaborative learning enterprise"(para. 1). Such collaboration has been shown to be very important in the development of a learning community and in achieving the desired learning outcomes for a course (Palloff & Pratt, 1999; Yuen, 2003). However, with the ever changing technological landscape, how that collaboration occurs in the online environment continues to evolve.

Unique Challenges and Opportunities with Online Learning Communities

In recent years, there has been increased interest in online learning communities and their impact on education. With an estimated 96% of public and private colleges and universities now offering online courses, such interest is certainly warranted (Allen & Seaman, 2006). One reason for the interest in online learning communities has been to better understand and address the dropout rates among distance education students. Their dropout rates are often 10-20% higher than in traditional courses (Carr, 2000). Research has identified the feeling of isolation as one factor associated with higher drop out rates among online students (Galusha, 1997; Hara & Khling 1999; Kubala, 1998; Soles & Moller, 2001).

LaRose & Whitten (2000) make the point that computer mediated instruction introduces the computer as a new "social actor" into the classroom. They assert that by "removing or attenuating sensory cues, Web courses strip away the personality of the instructor, perhaps to the point that the learner loses the sense of taking a course from the instructor in favor of taking a course from a computer" (p. 325). Eastmond (1995) makes the point that online students' feelings of being alone can be overcome when students join together in a community where the learners support one another. Brown (2001) found that students felt it generally took a longer period of time to establish a sense of community in an online class than in a traditional face-to-face classroom but that it could be achieved. The power of establishing a sense of community in online classes has been demonstrated by LaRose & Whitten (2000) who found a

statistically significant relationship between students' sense of community and the positive achievement of learning outcomes in the online setting. So how is this sense of community achieved in the online setting? Both students and instructor have roles to play.

Student and Instructor Roles in Online Learning Communities

Consistent with the traditional face-to-face classroom, online students will get out of a learning community what they put into it. If they are passive and choose not to engage in community, then the benefits they derive will be limited. Ideally, students will be intentional about their learning and actively seek to build and sustain the learning community. However, the education literature suggests that instructors play a key role in motivating students to engage as learning community members.

Olcott & Wright (1995) assert that the responsibility for instructional quality and aggregate effectiveness of distance education rests with the instructor. Paloff & Pratt (1999) add that the instructor in an online class is responsible for facilitating the personal and social aspects of an online community in order for the class to have a successful learning experience. However, facilitating these aspects is not without challenge because the online classroom involves computer-mediated communications which are generally regarded as less personal and possessing diminished social presence (Rovai, 2002a). To address the diminished social presence, Mandemach, Gonzales & Garrett (2006) suggest that online instructors need to be "seen" in order to be perceived by their students as present in their course. While traditional instructors are able to utilize their physical presence as a signal of their active involvement in a class, online instructors must actively participate in the course or risk the perception of being invisible or absent (Mandemach et al., 2006; Picciano, 2002).

Instructor Presence and Behavior Modeling

Mandemach et al. (2006) assert that instructor presence is most impacted by: teaching presence, instructor immediacy, and social presence. Teaching presence involves frequent and effective interaction with the course instructor. Instructor immediacy refers to the behaviors that enhance closeness and nonverbal interaction with another. Social presence refers to the salience of the interpersonal interaction and relationships.

Aviv (2000) suggests that the online instructor must encourage supportive interactive processes where class members can get to know each other, develop social skills with one another, and accept and support each other. LaRose & Whitten (2000) found that when students observe supportive teacher interactions with other students, it motivates their own learning in that it creates the expectation that they will receive the same type of interaction. Additionally, Rovai (2002b) examined the presence of community in fourteen courses (7 online and 7 face-to-face) and found that those courses where students perceived a stronger sense of community emphasized interactive dialogue over structure in the course.

The multi-media capabilities of today's online learning software offer many tools and options for instructors to establish social presence, to model various types of interactions, and to foster community development. As a general framework for such instructional leadership, online instructors are well served to keep in mind Chickering & Gamson's (1987) seminal work identifying seven principles of good practice for instructors in undergraduate education.

Seven Principles of Good Practice in Undergraduate Education

1. Encourages contact between students and instructor,
2. Develops reciprocity and cooperation among students,
3. Encourages active learning,
4. Gives prompt feedback,
5. Emphasizes time on task,
6. Communicates high expectations
7. Respects diverse talents and ways of learning.

Such principles have been shown to be effective in the online environment as well (Chickering & Ehrman, 1996). One can readily see how each of these recommended instructor behaviors both individually and

collectively can serve to foster development of a learning community in the online environment.

Summary and Significance of Present Study

This introduction has reviewed the research literature linking the development of community to successful learning in both the traditional and online classrooms. The advances in technology in just the past decade have enabled learning communities to transcend physical space and have created unique opportunities for individuals from all over the world to participate in online learning communities anytime and anywhere. While technology has created unique opportunities to develop these online learning communities, the literature also clearly documents significant challenges in building online community which have implications for both students and instructor.

The present survey research makes an important contribution to our understanding of online community by examining similarities and differences between instructor and student perceptions about the challenges and essential elements of online community. This research builds on the work of Brown (2001) who examined how the phenomenon of community occurs in the online environment from the students' perspective. The present study included both students and instructors and asked whether establishing community in the online classroom was harder or easier and why. Additionally, while many of the variables that impact the development of community in the online classroom have been previously reported, this study sought to identify and compare student and instructor perceptions of what is truly most important.

Method

Study Design

A survey research design was selected for this study to investigate the perceptions of instructors and students regarding development of community in an online course environment. A survey instrument including both closed and open-ended questions was used to collect data. The method of analysis used for the open-ended responses was an adaptation of Auerbach & Silverstein's (2003) exploratory content analysis. In exploratory content analysis: 1) Researchers identify segments of text used repeatedly by participants to express the same idea, 2) segments are then grouped into repeating ideas, 3) the repeating ideas are then assembled into themes, and 4) once common themes are identified, the researchers complete the analysis by returning to the literature to review theoretical constructs related to the research question(s). In accordance with exploratory content analysis, open-ended answers are coded independently by reviewers. In this study, two researchers followed the process of exploratory content analysis, independently coding open-ended responses, and then met to compare identified themes. Both reviewers were in agreement regarding the major themes emerging from this study.

Ratings for rank order questions were on a scale of 1-7. Percentages for each rank were calculated using the UltimateSurvey program. In this study, the findings converged to explain the perception of instructors and students regarding important factors in the development of community in online courses.

Participants

The 62 respondents in this study included 14 faculty members and 48 graduate level students at a regional comprehensive university. Participants were those who responded to e-mails sent to a convenience sample of instructors who were teaching online courses in spring 2006 and fall 2006 (N=64). Student participants were invited by their instructor to complete the online survey. All faculty participants were experienced online instructors and indicated a minimum of 2 online courses, with an average of 7 courses developed and taught. Three instructors developed and taught more than 8 online courses. The average number of online courses taken by student respondents was 4 courses with 14 students having taken 6 or more online courses.

Surveys were purposely administered near the end of each semester so that students/instructors had sufficient experience in the course to reflect upon and to comment on the sense of community. Academic programs represented by instructor respondents included: Educational Leadership and Foundations, Nursing, Human Services, Special Education, and Health Sciences. Instructor and student participants

from 14 different online courses completed the survey.

Survey Instrument

The survey instruments were developed using components of Brown's (2001) framework focusing on the process of community building in distance learning classes. Rather than providing a pre-set definition of community, an initial question asked respondents to provide their definition for community. Additional survey questions were created to obtain student and instructor perceptions on the importance of specific factors in building community in online courses. Factors from Brown's (2001) study which formed the basis for survey questions included:

1. Expected behavior modeled by instructor
2. Sufficient time available for discussion and interaction
3. Similarities found about which participants could communicate
4. Personal/academic need/desire to be part of community
5. High priority placed on class and interaction
6. Engaged in class dialogue
7. Having materials such as textbooks available for the first class session
8. Having time available to devote to the class

Parallel survey instruments were created for instructors and students. The following are example questions which were created relevant to the purpose of this study:

Instructor questions

In an online course, how important is it to have the instructor model being part of a community?

In this online course, to what degree did you model being part of a community to assist students in feeling part of community?

What were some ways in which you, as the instructor, modeled building community in this online course?

Student questions

In an online course, how important is it to you to have the instructor model being part of community?

In this online course, to what degree did having your instructor model being part of a community assist you in feeling part of the community?

What were some ways in which your instructor modeled building community in this online course?

Rank order question which was answered by instructor and students

Please place the following factors in rank order from the most important (1) to the least important (8) factors in building community in online courses. Use each number only once. Rank order responses were derived by calculating the mean ranking number for each item.

- a. Instructor modeling behaviors conducive to building community
- b. Students with more online experience participating in the course
- c. Sufficient time for discussion and interaction
- d. Finding similarities with other class members
- e. Personal desire/need to be part of an online community
- f. A student's interest/priority for the class
- g. Interaction and dialogue with colleagues in an online environment
- h. Having textbook and other materials for the first class

The final questions for each survey asked respondents to list other factors which either contribute to, or detract from, building community that were not mentioned in the survey.

Results

Data analysis results are provided for the questions pertaining to perceived importance of a learning community in learning course material and defining key elements of community. Further results are categorized according to the main perceptions of students and instructors regarding important factors in building community in online courses. Analysis of data regarding perceptions of whether creating community in online courses is more or less challenging is also provided.

Importance of an online learning community

Eighty-five percent of students and 100% of instructors perceive being part of a learning community assists students in performing well and learning course material. For students, 85% stated that becoming part of community was important to them in this specific course, and 94% reported experiencing a sense of community in their course. Ninety-three percent of instructors stated that it was important to them to have students become part of a learning community in this specific course.

Students and instructors were in agreement regarding key elements of a learning community. Key elements included: a sense of shared purpose, purposeful communication involving encouragement and support, collaborating to learn course material, working for an extended period of time on a common goal, and a comfortable exchange of ideas in an organized fashion. Two themes emerged from content analysis of the open-ended responses: a) Development of a learning community is encouraged by including structured, collaborative activities in course design and b) inclusion of opportunities for intentional, supportive, and ongoing interaction among class members is critical.

Important factors in building community

Rankings of factors and representative quotes from survey participants are summarized in Table 1.

Instructor Modeling

Students and instructors both agreed that instructor modeling was important in building online community. However, when analyzing the responses for the rank order question, students ranked instructor modeling as the most important factor in building community in online courses, and instructors ranked it as fourth in importance. Conversely, instructors rank ordered interaction and dialogue with colleagues as first, while students perceived this factor as fourth in importance. Faculty ranked instructor modeling as fourth in importance, even though there was agreement with students on the themes of modeling: participation, feedback, and communication. Instructors indicated that modeling community was primarily a factor of course design as indicated through open-ended question results. As students engage in online discussions, structured chats, and other interactive activities, instructors believe community develops. Instructors commented that, "the instructor can not model what has not been designed and embedded into the course".

Student's interest and priority for the class

Both students and faculty ranked student interest and priority for the course as the second most important factor in developing online community. Themes which emerged included the need to be self-disciplined and the degree to which students cared about interacting with online colleagues rather than preferring to "simply learn course material" (See Figure 1). Instructors agree that students need to be self-disciplined and to have self initiative for participating in the course ("a large portion of the course is devoted to participation- this is dependent on involving oneself actively in the community"). Instructors and students also indicate that student preference for working alone or in groups is a factor.

Table 1: Factors ranked by faculty and students as most relevant to building community

Students Ranking Order	Faculty Ranking Order
1. Instructor Modeling	1. Interaction and Dialogue
<i>The professor participating in the discussions; she responded in the middle of a posting-that let you know she was really reading the responses.</i>	<i>Creating a rich setting for students to introduce themselves and their involvement in discussions is important</i>
<i>The professor constantly answering questions; grading and commenting on papers immediately.</i>	<i>Deliberate instructional design and strategies and tactics (role-plays, debates, and interactive peer introduction exercises) are necessary.</i>
<i>The Professor communicates frequently by e-mail. She has gone out of her way to offer online chat sessions to help with difficult material.</i>	<i>The instructor's role is critical. The instructor must design and facilitate activities that promote community building.</i> <i>Prompting shared personal view points and or experiences is critical.</i>
2. Student's interest and priority for the class	2. Student's interest and priority for the class
<i>Students must have self discipline to check in and contribute to discussion boards</i>	<i>A large portion of the course is devoted to participation- this is dependent upon involving oneself actively in the community.</i>
<i>I care more about getting to know people in f2f classes. In online courses, I'm more interested in simply learning material. I prefer individual work online.</i>	<i>Students who do not participate in group work detract from community building.</i>
3. Sufficient time for discussion and interaction	3. Sufficient time for discussion and interaction
<i>It takes more effort [to create community] in an online class because you have to take time to communicate.</i>	<i>Making sure students continually interact with one another and support one another through shared learning and group projects is crucial.</i>
4. Interaction and Dialogue	4. Instructor modeling
<i>I have learned so much from classmates.</i>	<i>Instructor can not model what has not been designed and embedded into the course</i>

Sufficient time for discussion and interaction

Having sufficient time for discussion and interaction was another important factor for building community in online courses. Students perceived that while community is important and may help them learn course material, it takes more time and effort to communicate in an online course. Instructors stated the importance of making sure that all students are consistently interacting with one another and supporting one another through shared learning activities and group projects.

Interaction and dialogue with colleagues

Students and instructors ranked interaction and dialogue with colleagues as the fourth important factor in building community. Open ended comments revealed that for students, having online conversations with classmates and reading each other's contributions to assignments enhanced the online learning environment. Instructor responses focused on the instructor's role in designing and facilitating activities that promote building community rather than personal modeling. These themes and representative comments are presented in Table 1 above.

Is building community more challenging or less challenging in online courses?

Eighty-nine percent of students and 79% of instructors stated that building community in online courses is more challenging than building community in face-to-face courses. Themes from analysis of open-ended responses regarding perceptions that building community in online courses is more challenging than in face-to-face courses included: a) Communication, b) time, c) participation. These themes and representative comments are presented in Table 2:

Table 2: Perceived difficulties in developing community

Student Perceptions	Faculty Perception
<p>Communication</p> <p><i>You don't have all the elements of communication (body language, tone, opportunities to explain).</i></p>	<p>Communication</p> <p><i>Face 2 face immediacy of feedback (verbal and nonverbal) which is part of the collaborative process, energy developed within groups as they collaborated to solve problems does not occur online.</i></p> <p><i>It's a challenge for students to adjust to slower pace and "facelessness" of online collaboration.</i></p>
<p>Time</p> <p><i>Hard to find time to discuss personal issues and experiences online. All time is consumed with assignments and discussions concerning them. [developing community] takes more effort because you have to have time to participate</i></p>	<p>Time</p> <p><i>Time spent in reading and responding</i></p>
<p>Participation</p> <p><i>Some people participate more and some shy away from typing views/thoughts.</i></p> <p><i>Some times you feel like you are out of the loop if you don't check discussion threads daily.</i></p>	<p>Participation</p> <p><i>Students who do not participate in group work detract from community.</i></p>

Eleven percent of students and 21% of instructors in our study perceived that building community in online courses is less challenging than building community in face-to-face courses. Themes from analysis of open-ended responses regarding perceived reasons building community in online courses is less challenging than in face-to-face courses included: a) Communication with entire class is easier, b) flexible time schedule, c) time for more thought and deliberation which results in richer postings in online courses, and d) online courses provide an environment in which students can be themselves, can learn by reading other student's postings, and an environment in which 1-2 students do not dominate discussions as can occur in some face-to-face courses.

Discussion

Respondents in this study were in agreement that being part of an online learning community assists students in performing well and learning course material. Their perceptions are in alignment with Yuen's (2003) and Woods & Ebersole's (2003) assertions that learning communities assist students in achieving more through the collaborative efforts of the group. Instructors, in particular, perceive the benefits of students relating well to each other and assisting each other within the context of learning course material. An important factor in the formation of community is a student's desire and need to become part of the learning community as opposed to being present simply to learn course material. For instructors and students who recognize the value added benefits of participating within the learning community, there was agreement with current literature regarding the definition and critical factors of a learning community. Learning communities involve a structured, supportive environment in which there is purposeful, intentional interaction among members of the group. Additionally, there must be a level of trust, respect, and support present among community members.

Results of this study support research literature in that even in collaborative online environments where students engage in discussions, debates, case studies, and problem-based learning activities, students still want to experience instructor presence in the course (Garrett, 2006; Mandemach, et al, 2006). It was important for the instructor to provide students with leadership and guidance through modeling substantive responses on the discussion board. Students indicated that instructors modeled community by giving frequent, timely, and constructive feedback. Regarding communication, students identified that instructors being available to discuss course concerns and personal concerns via e-mail, chat rooms, and discussion boards modeled community for them.

Respondents were in agreement that a student's interest and priority for the course were important to the development of online community. As shown in Figure 1, both students and faculty indicate the need for students to be self-disciplined and to have self initiative for participating in the course.

Respondents stated that building community in online courses can be more challenging due to the lack of immediate feedback and nonverbal cues, the need for self-discipline, and the lack of informal sharing that often occurs in face-to-face courses. Respondents also noted that forming an online learning community could be less challenging due to the ease with which an individual can communicate with all classmates and the instructor simultaneously.

Implications

This study has important implications for instructor participation, course design for online learning as well as for administrators with regard to building community in online courses.

Implications for Instructors

First, students contend that instructor presence is a key factor in online learning and online community. In online classes, instructors can generate a sense of "presence" through their actions in the online environment. Students in this study indicate a need to be heard by their instructors through consistent feedback, responses to postings and responsiveness to concerns. One of the key means by which instructors establish presence in the online classroom is via their ongoing interactions. Instructors can demonstrate leadership in their course by modeling appropriate interactions (Mandemach et al. 2006). Collins & Berge (1996) suggest that such interactions should focus on "promoting human relationships" (p. 7). They maintain that this process involves: a) affirming and recognizing students' input, b) providing opportunities for students to develop a sense of group cohesiveness, c) maintaining the group as a unit, and d) various other ways of helping members to work together in a mutual cause. Similarly, Heuer & King (2004) offer a number of suggestions for how online instructors can enhance their presence in their courses through effective course management. They include:

- 1) modeling expected behaviors and interactions
- 2) encouraging students
- 3) facilitating sharing and participation
- 4) responding to students concerns and establishing an environment of open communications.

Examples of how an instructor might implement these recommendations include things as simple as sending an email complimenting a student on his/her participation in a given week (i.e., “encouraging students”), establishing a virtual “lounge” where students and faculty can talk informally about any topic of interest (i.e., “facilitating sharing and participation”), asking the class whether the expectations for participation are clear and providing suggestions for improvement (i.e., “responding to student concerns and establishing an environment of open communication”), and providing students with polite but honest feedback about their work (i.e., modeling expected behaviors and interactions). Another effective technique to promote the development of relationships is the use of rotating smaller working groups of 4-6 members. The smaller group size allows for more interaction and the rotation allows students to still interact with all of their classmates.

The apparent discrepancy between student and instructor perceptions of the importance of instructor modeling may be explained in thinking about both perceptions within the context of course structure. According to Garrison, Anderson, & Archer (2000), instructor presence involves the instructional design of the course, facilitating discourse, and direct instruction of key course concepts. Instructor respondents in this study agreed that instructional design is important for the development of a learning community. Within the courses surveyed for this study, community was modeled by the instructor through providing clear structure and guidance for course assignments, providing structure within the course where interaction is required such as initial “getting to know you” activities, group discussions and survey research assignments, providing frequent thorough feedback on assignments including constructive commentary, and being available to discuss course concerns and personal concerns online. According to instructor comments, facilitating discourse was modeled through substantive responses in discussion postings and providing leading questions for students during cooperative group activities such as debates, role plays, and survey research assignments. Rather than providing direct instruction through a lecture format, (face-to-face courses), instructors in the online courses structured assignments to lead students in learning essential course concepts. Instructors accomplished this through carefully constructing assignments to highlight key concepts, through clarifying confusing concepts within synchronous or asynchronous discussions, and by providing rubrics for quality of discussion responses. Through observation of student interaction, the instructor is able to clarify misconceptions that become apparent in course content. In this regard, instructors stated that dialogue between course participants is more important than instructor modeling because it is through reading student responses that the instructor is able to identify the level of individual student understanding of course material.

Implications for Course Design

As instructors noted in this study, the development of community must be an intentional goal. The achievement of that goal must be built into the design of an online course. As Palloff & Pratt (1999) noted, the development of an online learning community involves developing new approaches to education and new skills in its delivery.

LaRose & Whitten, (2000) recommend that instructors incorporate “immediacy features” (p. 32) into the design of online classes to build community. They identify three possible sources of immediacy in the virtual classrooms that may generate a sense of belonging and closeness among class participants: the interactions between teacher and students (teacher immediacy); interactions between students (student immediacy) and interactions with the computer system that delivers the course (computer immediacy). Collectively, these sources constitute instructional immediacy. Incorporating these features into the online classroom serve as incentives for class members to both feel and act as members of a community.

Fostering student immediacy is important in building online community because peer groups are valued associations. Student immediacy describes behaviors that create a feeling of closeness between learners (LaRose & Whitten, 2000). Caverly & MacDonald (2002) found that students need to make connections

by finding similarities in background, motivation and commitment to have a sense of community. Course design should support community building through faculty presence and student immediacy. Examples include well-designed icebreaker activities, group assignments, and ongoing topical discussions that involve both faculty and the students.

Conclusion

This study examined instructor and student perceptions of community across fourteen different online courses in higher education. While additional studies of this type are needed, the findings still provide important insights to faculty who are currently teaching online or who plan to teach an online course in the future. One clear take-away from this study is that it is incumbent upon faculty to play a leadership role in building community in their virtual classrooms. As this study has shown, students believe instructor modeling is the most important element in building online community. While a number of recommendations have been made in this paper for how an instructor might model the community behaviors he/she wants to see in class, the study's findings clearly show that both faculty and students believe building online community is a real challenge. However, with a compounded annual growth rate forecast in distance education of 33% (Oblinger & Kidwell, 2000), it is a challenge we cannot afford to ignore.

References

- Allen, E.I., & Seaman, J. (2006). *Making the grade: Online education in the United States 2006*. Needham: Sloan Center for Online Education.
- Auerbach, C. F. & Silverstein, L.B. (2003). *Qualitative data: An introduction to coding and analysis*. New York: New York University Press.
- Aviv, R. (2000). Education performance of ALN via content analysis. *Journal of Asynchronous Learning Networks*, 4 (2) [online version]. Available at: http://www.aln.org/alnweb/journal/Vol4_issue2/le/reuven/LE-reuven.htm
- Boyer, E. (1995). *The basic school: A community for learning*. Ewing, NJ: California Princeton Fulfillment Services.
- Brown, R.E. (2001). The process of community building in distance learning classes. *Journal of Asynchronous Learning Networks*, 5 (2), 18-35.
- Caverly, D.C., & MacDonald, L. (2002). Online learning communities. *Journal of Developmental Education*, 25 (3), 36-37.
- Carr, S. (2000). As distance education comes of age, the challenge is keeping the students. *The Chronicle of Higher Education*, 46 (23), A39-A41.
- Chickering, A.W. & Ehrman, S.C. (1996). Implementing the seven principles: Technology as a lever. *American Association for Higher Education Bulletin* 10, 3-6.
- Chickering, A.W. & Gamson, A.F. (1987). *Seven principles for good practice in undergraduate education*. Racine, WI: The Johnson Foundation, Inc.
- Collins, M., & Berge, Z. (1996). Facilitating interaction in computer mediated online courses. Retrieved on May 24, 2007 from: <http://www.emoderators.com/moderators/flcc.html>
- Eastman, D.V. (1995). *Alone but together: Adult distance study through computer conferencing*. Cresskill, NJ: Hampton Press.
- Galusha, J. M. (1997). Barriers to learning in distance education. *Interpersonal Computing and Technology: An Electronic Journal for the 21st Century*. 5 (3-4), 6 - 14. Retrieved from

<http://jan.ucc.nau.edu/~ipct-j/1997/n4/galusha.html>

- Garrison, D.R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education*, 11 (2) 1-14.
- Hara, N., & Khling, R. (1999). Students' Frustrations with a Web- Based Distance Education Course. *First Monday*. 4 (12). Retrieved from http://www.firstmonday.dk/issues/issue4_12/hara/
- Hargis, J. (2005). Collaboration, community and project-based learning--does it still work online? *International Journal of Instructional Media*, 32, (2), 157- 162.
- Heuer, B.P., & King, K.P. (2004). Leading the band: The role of the instructor in online learning for educators. *The Journal of Interactive Online Learning*, 3 (1), 1-11.
- Hill, J.L. (1996). Psychological sense of community: Suggestions for future research. *Journal of Community Psychology*, 24 (4), 431-438.
- Kember, D. (1987). A longitudinal process model of drop out from distance education. *The Journal of Higher Education*, 60 (3), 278-301.
- Kubala, T. (1998). Addressing student needs: Teaching on the Internet., *T. H. E. Journal*. Retrieved from <http://www.thejournal.com/magazine/vault/A2026A.cfm>
- LaRose, R., & Whitten, P. (2000). Re-thinking instructional immediacy for web courses: A social cognitive exploration. *Communication Education*, 49, 320-338.
- Mandermach, B.J., Gonzales, R.M., & Garrett, A.L. (2006). An examination of online instructor presence via threaded discussion participation. *Journal of Online Learning and Teaching*, 2 (4), 248-260.
- McMillan, D.W., & Chavis, D.M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14 (1), 6-23.
- Oblinger, D., & Kidwell, J. (2000, May/June). Distance learning: Are we being realistic? *Educause*. 31-39.
- Olcott, D., & Wright, S.J. (1995). An institutional support framework for increasing instructor participation in postsecondary distance education. *The American Journal of Distance Education*, 9 (3), 5-17.
- Paloff, R.M., & Pratt, K. (1999). *Building learning communities in cyberspace*. San Francisco: Jossey-Bass.
- Picciano, A.G. (2002). Beyond student perceptions: Issues of interaction, presence, and performance in an online course. *Journal of Asynchronous Learning Networks*, 6 (1) 21-40.
- Powers, S.M., & Mitchell, J. (1997). Student perceptions and performance in a virtual classroom environment. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Preece, J. (2000). *Online communities: Designing usability, supporting sociability*. New York: Wiley & Sons.
- Rockwell, S.K., Schauer, J., Fritz, S.M., & Marx, D.B. (1999). Incentives and obstacles influencing higher education instructor and administrators to teach via distance. *Online Journal of Distance Learning Administration*, 2 (4). Available at: <http://www.westga.edu/distance/rockwell24.html>.
- Rogoff, B. (1994). Developing understanding of the idea of communities of learners. *Mind, Culture, and Activity*, 1 (4), 209-229.
- Rovai. A.P. (2002a). Building sense of community at a distance. *International Review of Research in Open and Distance Learning*, 3 (1), 1-16.

- Rovai, A. P. (2002b). A preliminary look at structural differences in sense of classroom community between higher education traditional and ALN courses. *The Journal of Asynchronous Learning Networks* 6 (1): 41–56.
- Sarason, S.B. (1974). *The psychological sense of community: Prospects for a community psychology*. San Francisco: Jossey-Bass.
- Schifter, C. (2002). Perception differences about participating in distance education. *Online Journal of Distance Learning Administration*, 5 (1). Available at: <http://www.westga.edu/%7Edistance/ojdl/>
- Sergiovanni, T.J.(1994). *Building community in schools*. San Francisco: Jossey-Bass.
- Shea, P., Sau Li, C., & Pickett, A. (2006). A study of teaching presence and student sense of learning community in fully online and web-enhanced college courses. *Internet & Higher Education*, 9 (3), 175-190.
- Soles, C. & Moller, L. (2001). Myers Briggs type preferences in distance learning education. *International Journal of Educational Technology*. 2 (2). Retrieved on May 23, 2007 from <http://smi.curtin.edu.au/ijet/v2n2/soles/index.html>
- Thompson, M.M. (2003). Instructor satisfaction in the online teaching-learning environment. In J. Mourné & J. Moore (Eds.) *Elements of quality online education: Practice and direction*. Needham, MA: Sloan Center for Online Education (pp. 189-212).
- Woods, R. & Ebersole, S. (2003) Social networking in the online classroom: Foundations of effective online learning. *EJournal*, 12-13 (1). Available at: <http://www.ucalgary.ca/ejournal/archive/v12-13/v12-13n1Woods-browse.html>
- Yuen, A.H. (2003). Fostering learning communities in classrooms: A survey research of Hong Kong schools. *Education Media International*, 40, 153-162.

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