

Pedagogical Strategies for Building Community in Graduate Level Distance Education Courses

Eileen McElrath

Assistant Professor
School of Library and Information Studies
Texas Woman's University
Denton, Texas
rmcelrath@mail.twu.edu

Kate McDowell

Assistant Professor
Graduate School of Library and Information Science
University of Illinois Urbana-Champaign
Champaign, Illinois
kmcdowel@uiuc.edu

Abstract

Community building in online distance education is important to a successful learning experience because it alleviates feelings of isolation for both students and faculty members. Ruth E. Brown describes the process by which students become part of an online distance education community, identifying three stages: "making friends," "community conferment," and the development of "camaraderie" (Brown, 2001). The purpose of this article is to present concrete, specific, and practical pedagogical strategies to implement Ruth E. Brown's 3-stage theory of community building in online distance learning courses. These strategies are based on the authors' combined 14 years of teaching distance courses in graduate level Library and Information Science (LIS) programs.

Keywords: Building community; virtual community; Ruth E. Brown's 3-stage model; online courses; student stories in theoretical frameworks; distance education

Introduction

According to the fourth annual report on the state of online learning in U.S. higher education published by the Sloan Consortium of the Alfred P. Sloan Foundation in 2006, "nearly 3.2 million students were taking at least one online course during the fall 2005 term, a substantial increase over the 2.3 million reported the previous year" (Allen, p. 1). The report represents responses from over 2,200 colleges and universities. Distance education is large and growing, and online instructors need practical ways to help their students participate in a learning community to enrich their educational experience and motivate them to complete their degrees.

The purpose of this article is to present concrete, specific, and practical pedagogical strategies to implement Ruth E. Brown's 3-stage theory of community building in distance learning classes (Brown, 2001). Brown's model was chosen in part because it was derived from an online doctoral program, which is similar to the online graduate programs in which the authors teach. The pedagogical strategies presented here have been developed in online courses by two faculty teaching graduate students in Schools of Library and Information Science/Studies (LIS), and represent over 14 years of combined teaching experience. The two authors have taught distance education courses in a range of subjects areas within the interdisciplinary field of LIS, including youth services librarianship, children's literature, young adult literature, storytelling, library and information center management, leadership in libraries and

information centers, reference, information professions, and information sources and services in the humanities.

Literature Review

Brown's research uses grounded theory based on interviews and archived class interactions to develop a general theory of how community is created in online classrooms. Briefly described, Brown's 3-stage process consists of stage one, "making friends online;" stage two, "community conferment" or acceptance which occurred when students participated in "long, thoughtful, threaded discussions on a subject of importance;" and stage three "camaraderie," which is achieved "after long-term or intense association with others involving personal communication" (Brown, 2001).

Although Brown does not focus extensively on pedagogical practices to create community, she does argue that "[m]odeling, encouragement, and participation by the instructor helped community form more readily for more students in computer-mediated classes" (p 31). The three stages in Brown's model are achieved in fifteen steps, some of which are dependent on students' own initiative. However, steps 1, 2, 4, 7, 8, and 9 are amenable to instructor control, as discussed below.

Table 1: Brown's 15-Step Process of Community-Building

Step	Description
1	Tools
2	Comfort level
3	Self-assessment and judgments
4	Similarities
5	Needs met
6	Time allotted
7	Supportive interaction
8	Substantive validation
9	Acquaintances/friends
10	Earning trust, respect
11	Engagement
12	Community conferment
13	Widen circle
14	Long term/personal communication
15	Camaraderie

Instructors can positively influence the community-building process by developing pedagogical strategies to facilitate each of these stages. In fact, one study found that students identified "instructor modeling" as the most important factor in building online community (Vesely, Bloom, and Sherlock, 2007).

Brown is one of many researchers concerned with the development of classroom community in online settings, where community (or lack thereof) takes on a heightened importance. (McMillan & Chavis, 1986; Hill, 1996; Wellman, 1999). Collins and Berge (1996) describe positive aspects of community building in distance education courses including “promoting human relationships, affirming and recognizing students’ input; providing opportunities for students to develop a sense of group cohesiveness, maintaining the group as a unit, and in other ways helping members to work together in a mutual cause” (The online instruction section, para. 3). Research on issues basic to the importance and success of graduate online programs indicates that providing supportive community for students is a necessity (Mellon, Kester 2004).

Some argue that community is in fact central to the learning process. For example, Rena M. Palloff & Keith Pratt argue that, in online education, “attention needs to be paid to the developing sense of community within the group of participants in order for the learning process to be successful” (p. 29). Alfred P. Rovai developed the Classroom Community Scale, a self-report measure of perceived cognitive learning, to survey online students, and found a positive relationship between a sense of community and perceived cognitive learning (2001).

It is vital that instructors approach the issue of community early and with specific pedagogical strategies to prevent student isolation and disorientation. As researchers from the LEEP program at the University of Illinois, Urbana-Champaign found, “the distance experience can be trying, particularly at the beginning, as students cope with new technologies and new ways of interacting in a world no one understands including the students themselves in their early months of the program” (Haythornthwaite, Guziec, Robins, Shoemaker, 2000). A student’s experience during the first few weeks and months of an online course contributes to their decisions to continue in the course and to whether they will enroll in other online courses (Haythornthwaite, 2005). Gayle E. Mullen & Mary K. Tallent-Runnels (2005) found that students perceive online and traditional classroom environments differently and the most significant difference was in the instructors’ affective support such as listening, encouraging everyone to share ideas, using personal examples and providing humor. They emphasize the importance of the online instructors’ understanding that teaching and learning in the online environment is quite different from teaching and learning in the traditional classroom setting.

In fact, the online student experience is so difficult that some researchers have labeled it “distress.” Noriko Hara & Rob Kling (2000) define distress as “a general term to describe students’ difficulties during the course such as frustration, a feeling of isolation, anxiety, confusion and panic.” Their findings reveal that students’ distress include: the absence of physical cues lead to some confusion and anxiety for students, lack of feedback from faculty causes some anxiety and ambiguousness in human communication is more difficult to resolve in written communication.

Other research has explored reasons why students dropped or failed their online courses, and found that instructors need to orient the students to the demands of online courses and provide them with methods for learning online (Nash, 2005). While the instructor can facilitate the building of community, some researchers assert that, ultimately, students must build their own community (Conrad, 2005). Nevertheless, the pedagogical strategies that an instructor uses can either allow isolation to go unchecked or set the tone for cohesiveness and classroom community.

We also draw upon Alfred P. Rovai’s definition of traditional classroom community:

a feeling that members have of belonging, a feeling that members matter to one another and to the group, that they have duties and obligations to each other and to the school, and that they possess shared expectations that members’ educational needs will be met through their commitment to shared goals. Classroom community is a specific type of community based on the following characteristics: a. the setting is the world of education b. the primary purpose is learning c. the community is based on a fixed organizational tenure (2000, p. 33).

There are parallels between Rovai’s description of community as an affective sense of belonging and Brown’s references to “making friends,” “acceptance,” and “camaraderie.” It may be challenging for instructors accustomed to the traditional classroom to develop pedagogical strategies to promote such emotional and psychological aspects of online community, but it is vital that they do so.

Brown’s 3 stages of online community development provide a theoretical framework for understanding the process by which community develops. Brown indicates that instructors can contribute to this process by

foregrounding the concept of community in class activities and discussions (2001, p. 33). Below are examples of other specific pedagogical strategies that instructors may use to encourage students to develop community in their own online classrooms.

Pedagogical Strategy for Stage 1: Creating a Supportive Environment

Combating the distance and depersonalization of the online environment requires that the instructor model a personal and supportive approach. Brown lists supportive interaction as the eighth step in community-building (2001). Reminding the students that they are learning not only the course material and new concepts but also learning to maneuver in the online course management system as well as learning how to learn online is a way of foregrounding the commonalities of students in the class. Students need reminders to be kind to themselves during the course, as they deal with the challenge of learning in a new way. Stressing the difference from learning in a face-to-face classroom allows students to reflect on their own learning processes. This establishes a tone of friendliness, which in turn makes it more likely that students will engage in “making friends” (Brown, 2001).

Similarly, establishing a supportive tone and realistic expectations about technology helps students cope with “distress” (Hara and Kling, 2000) so that they can relax in times of technological trouble. Acknowledging the possibility that something may go wrong with the technology helps to reassure students, as does sharing information about what we will do when problems occur. As Brown’s steps 1 (tools) and 2 (comfort level) suggest, becoming comfortable with the technological environment is the foundation that all students need in order to effectively participate in the classroom community. Reassuring students that technology failures are surmountable obstacles with concrete suggestions for file backup and understanding regarding glitches in electronic communication provides an effective way to reduce their fears.

Brown suggests directly addressing the topic of community-building with students. A related pedagogical strategy is to directly address the theme of learning to be an online learner. To this end, it is important that students gain some understanding of Constructivism, the theory that provides the framework for this instructor’s online courses. The following definition of the theory is provided in each online course so students can begin thinking about learning online vs. face-to-face learning:

Constructivism is basically a theory -- based on observation and scientific study -- about how people learn. It says that people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences. When we encounter something new, we have to reconcile it with our previous ideas and experience, maybe changing what we believe, or maybe discarding the new information as irrelevant. In any case, we are active creators of our own knowledge. To do this, we must ask questions, explore, and assess what we know. (thirteen| ed. online, 2006).

Rovai’s definition of community states that building community relies upon having shared learning goals. Students share the goal of understanding the constructivist theory of learning while also gaining new ways of understanding themselves. The dialog that results from exchanges around these aspects of course content supports students through step 3 of Brown’s process, when they tend to become preoccupied with self-assessment and self-judgment (2001). The instructor can support students by encouraging them to develop an intellectual curiosity about their own constructivist process of learning to be an online learner.

Pedagogical Strategy for Stage 1: Course Chat

Instructors support students in building community when they model the expected participatory behavior. One effective means of modeling open discussion is to create a “Course Chat” discussion forum, where students can ask general questions about the course or the course instructions and receive public replies from the instructor. These are the types of questions that students in a traditional classroom would be asking each other during a break or asking the instructor individually at office hours. By using a Course Chat forum, students’ questions are answered promptly and the instructor is saved the trouble of answering the same question multiple times over private email. This also supports the building of community by showing students that they are not alone in having questions and empowering them to discuss the answers with the instructor in a public forum. Finally, students can be encouraged to answer their classmates’ questions if they know the answer, helping them to know and respect each other as

learners with shared goals.

Pedagogical Strategy for Stage 2: Interactive Introductions

Providing a forum for students to begin to get to know each other is important for building community and learning. Brown suggests that instructors should “[b]uild an opportunity for the students to learn more about each other to facilitate early discovery of commonalities” (2001, p. 33). In a face-to-face graduate classroom, the instructor would typically introduce herself/himself and ask the students to introduce themselves to one another. Introductions are even more critical in online courses. One basic online pedagogical strategy is to provide a mechanism for encouraging the students to introduce themselves, inviting them to share typical information such as name, city, and why they are taking the course. Using this strategy yielded approximately 75-80 posts in eighteen online courses taught by this instructor. However, in seven online courses in which this instructor used an interactive introductory exercise loosely based on a childhood game entitled, “Truth is Stranger than Fiction,” the students’ interactions increased. This interactive exercise calls for the above information but also requires students to actively engage with others’ introductions.

Table 2: Interactive Introductory Exercise

Exercise: Introductions
First, please tell us your name and the city and state in which you live.
Next, let's play, <i>Truth is Stranger than Fiction</i> . Tell us in four sentences three lies and one truth about yourself. The rest of the class will guess your one "true statement." Please do not tell us the real truth until someone correctly identifies it-that's part of the fun. Post your information by Monday so everyone will have time to guess your truth.
Then, list three or four of your favorite websites (PG-rated only, of course, so everyone can enjoy them). Please include: <ol style="list-style-type: none"> 1. One site that features your favorite author or singer. 2. One site that provides information about your "dream vacation." 3. One or two favorite websites – be sure they are rated PG and suitable for your classmates' viewing 😊
After reading each classmate's post, choose three classmates and comment on one of their favorite websites. Tell us about the website: <ol style="list-style-type: none"> 1. your interest in the subject 2. ease of navigation in the website 3. how informative you found the website

Students were required to post four times instead of one time, and so it is to be expected that the number of introductory posts and responses to classmates’ posts would increase. However, a simple quadrupling of the above numbers would suggest that 300-320 posts would be expected, while in fact the numbers increased to between 375 and 380 posts in each course. This increase shows that students became comfortable talking online with each other and sharing more information than they did in typical online introductions. Additionally, the students given the interactive introductory exercise chatted with each other about their daily lives and their plans for future careers. This exercise invites students to accept one another and be accepted into the online community, addressing stage two of Brown’s model (2001).

Pedagogical Strategy for Stage 3: Illustrating Theoretical Frameworks with Student Stories

In addition to providing various kinds of support for students’ online interactions, it is in instructors’ best interest to assure that community-building activities are closely connected to the content of the course.

As Brown argues:

Community-building should be emphasized not just for the sense of togetherness it provides students, but also to help keep the students in the class and in the program, to promote full engagement in the class, to facilitate effective collaborative learning, and to encourage continued communication after the course of program is complete for development and career services purposes (2001, p. 34).

Full engagement and collaborative learning can be promoted by asking students to contribute stories from their lives that serve as examples of core course concepts. This third pedagogical strategy, using student stories to illustrate theoretical frameworks, is a means of insuring that students build community through exchanges that are both personal and firmly rooted in the course material. These exercises provide a platform for the sort of “long-term or intense association with others involving personal communication” that facilitates the third stage of community development (Brown, 2001).

To implement this strategy, instructors elicit stories from the lives of the learners that serve as examples of the material to be learned. Generally, these stories will serve as examples of real-world instances of basic course concepts. The instructor approaches these stories as information to be organized into a text or audio presentation that reiterates course concepts and explicates how students’ stories serve as instances of these concepts. Studies of excellent teaching confirm that the most effective way to introduce new concepts is to start “from the lives of the learners” (Curran, 1998). Using student stories to illustrate course concepts builds a “bridge” from their lives to the course material, and creates meaningful interactions, both socially and pedagogically, in the online environment

Eliciting student stories that are relevant to course concepts requires two steps: 1) identify concepts that students need to understand and 2) write questions to elicit stories of experiences that can serve as examples or instances of these concepts in action. Most instructors accomplish the first task when they design a syllabus. The second task is difficult to describe in the abstract, because it involves looking closely at the course concepts for instances where students’ lived experiences would provide relevant instances of a theoretical concept. However, it is easy to understand when based on examples from multiple areas of the interdisciplinary field of LIS. Three specific examples follow, from the areas of reference, collection development, and youth services, showing questions asked and examples of how students’ stories can be organized and presented back to the students as a group to illustrate course concepts. These are only a few examples; students’ stories could be used to illustrate theoretical frameworks in a variety of academic disciplines beyond LIS. In each case, this pedagogical strategy supports steps 4 (similarities), 7 (supportive interaction), 8 (substantive validation), and 9 (acquaintances/friends) as discussed below.

Example 1: Teaching Reference

In a burgeoning world of information resources, it is impractical to think that one course could teach all of the sources that a reference librarian will use in the course of their careers. However, a course can teach students to understand how reference is meaningful in their own lives. An instructor could ask: “What do you refer to?” In his paper surveying the practices of 61 superior LIS teachers, Charles Curran gives this question as one example of excellent teaching because it starts from the lives of the learners (1998). In a traditional classroom, a discussion centered on this question helps build community because students notice patterns and similarities among their own experiences.

Because distance education students answer in a text-based medium, an extended version of the question is useful, such as: “What do you refer to on a daily basis? Can you describe instances of having information needs, seeking answers, and having them met that occur hour by hour or moment by moment in your daily lives? What are your personal reference tools for organizing the information you need to navigate your world?”

The instructor organizes students’ responses, pointing out patterns and similarities among groups of students (likely patterns include referring to calendars, clocks, maps, lists of tasks) as well as unique or unusual stories. Responding to students’ individual stories supports Brown’s step 8, substantive validation, by demonstrating to students that their lived experiences are valuable to the class (Brown, 2001). A range of discussions may emerge by using these stories as a starting point, the instructor may ask students to define an “information need” and introduce traditional categories of reference materials for

meeting these needs. Through reading each others' replies to the query about basic information tasks accomplished every day, students are also introduced to one another through a snapshot of each of their home or work lives. Students learn about other students who have similar or different sorts of lives, which facilitates stages two and three of online community development by supporting step 4, as students discover background similarities such as common "interests, ideas, or shared circumstances" (Brown, 2001, p. 29).

Example 2: Teaching Information Organization

To demonstrate how information organization is relevant to students' lives, the instructor might ask questions about students' personal collections, such as: "What have you collected? Do you organize your collection(s), and if so how? Do you have a collection big enough that you can't remember every item in the collection? If so, how do you keep track of what you have? Examples might include books, music, hobby supplies and equipment, etc" (P. Lawton, personal communication, June 14, 2007). This question requires students to engage with both information organization and the experience of trying to access that information.

The instructor then presents these students' collections, organizational schemes, and access strategies as examples of how individuals accomplish basic tasks of organization and access. It is worth commenting to the students in this case that the instructor is organizing this collection of student stories about collection organization. This reinforces the point that even the information we see about information organization is organized in some way. Understanding systems of organization builds fluency in information access as well as the ability to think critically about the process of organizing and the need to adapt or design systems. Most students will have some sort of collections, and those who enjoy collecting books, music, memorabilia, or other things are typically eager to talk about their hobbies. Again, the instructor facilitates community as students discover similarities, respond supportively to one another's collections (step 7) while building acquaintance and friendship (step 9) (Brown, 2001). At the same time, students are expanding their understanding of information organization.

Example 3: Teaching Child Development and Library Services

There are also instances where the instructor is introducing a more complex theoretical model with multiple categories that require definition and differentiation. For instance, in youth library services courses, students must learn about child development, often introduced through Jean Piaget's four-stage model of developmental child psychology. Each stage is reached sequentially by growing children and marks a level of psychological growth that allows the child to understand the world at increasing levels of abstraction.

Table 3: Piaget's Developmental Stages

AGE	STAGE	CAPABILITIES
0-2 yrs	Sensorimotor	Explore relation between sensation and physical
2-7 yrs	Pre-operational	Use symbols, including language, to represent objects
7-11 yrs	Concrete operations	Use logic, rational thought
11+ yrs	Formal operations	Develop abstract, hypothetical reasoning

To elicit stories that will provide examples for this framework, the instructor asks students: "Can you remember a learning experience or moment from your own childhood? Please describe this experience and what you learned."

In this case, the instructor inserts synopses of students' stories in the appropriate place in the 4-part theoretical framework. This can be done in a synchronous audio lecture, in which the framework is described and students are named individually and acknowledged for what their memory posting

contributes to the framework. However, it can also be done in a text lecture, so long as students are named and acknowledged for their contribution. Organizing and acknowledging student stories provides substantive validation, step 8, for students (Brown, 2001). Below is an abbreviated example of such a lecture; it includes far fewer students than would typically be enrolled in such a class.

Table 4: Framework Illustrated by Student Stories

THEORETICAL CATEGORIES (from Piaget)	STUDENT STORIES
Sensorimotor	--learning to tie shoes (student A) --haircuts, self-given and otherwise (student D)
Pre-operational	--reading, writing, drawing symbolically (student H) --playing with "codes" (student B)
Concrete operations	--making guesses, "what happens if I drop this down the stairs" (student M)
Formal Operations	--making arguments, justifying actions (student E) --self-observation, values and morality (student C)

Another presentation choice could be to insert longer text excerpts of posted stories in students' own words, using quotation marks. The important features are that the framework is presented, that students' stories are connected to this framework, and that students are acknowledged by name for their individual contributions. By seeing how their memories of childhood (or perhaps of their own children) connect with Piaget's model of child development, students also have a rich field of stories through which they may personally connect with one another. Typically, this interactive lecture is followed by a second burst of postings in the class forums as students compare their experiences and discuss their commonalities. These exchanges provide a rich basis for the development of stage three community, in which students develop camaraderie after long and in-depth conversations (Brown, 2001).

Illustrating Theoretical Frameworks with Student Stories: Challenges and Variations

In using this pedagogical strategy, there are occasions when a student presents a story that, while being a relevant answer to the question posed, genuinely does not fit within the intended parameters of the course concepts. In such a case, after the general presentation of the concepts or frameworks illustrated with student stories, the best approach is to, again, acknowledge the students who contributed these unusual stories and to talk explicitly about *why* these stories don't fit. In so doing, the instructor offers students an important model of critical thinking about course concepts as well as an opportunity for students' own critical reflection about the limits of course concepts or theoretical frameworks. In that way, a supportive interaction is maintained, and students are still offered substantive validation for what their stories contribute to the class.

Occasionally there may be one or more concepts or categories for which no student stories serve as illustration. This offers an opportunity to invite students to speculate as to why this particular concept or category did not emerge as a theme in their stories. Instead of presenting a concept without illustration, this offers the opportunity to present another example or to invite students to apply their growing analytic skills by coming up with a story that would serve to illustrate this concept or category.

To encourage the development of camaraderie, or stage three community, it can be useful to invite students to discuss their opinions about how their story was presented by the instructor. Students can be invited to explain whether and why they might place their experiences in a different category. In this way, the instructor knows how the students have understood the concepts presented and can provide further clarification as needed.

A more time-consuming variation on this pedagogical strategy is to have students categorize their own stories in light of a set of concepts presented by the instructor. This could be particularly effective later in a course, once students are familiar with the basic course concepts. Observing this process of students categorizing their own stories provides useful feedback to the instructor regarding how adept students are becoming with analyzing their own stories in terms of course concepts.

Using student stories in theoretical frameworks creates community while achieving the learning objectives of the course. The instructor demonstrates that students' experiences have theoretical relevance to the material. Students are respected as actors in the virtual classroom and invited to bring relevant instances from their own lives to the class discussion as they learn to analyze their experiences. This pedagogical strategy is an ideal way to provide students with substantive validation, demonstrating that "students' ideas and opinions were valued and respected" (Brown, 2001, p. 29), and ultimately providing a time-efficient way to teach core course concepts and encourage the development of camaraderie, stage 3 of community-building among students.

Conclusion

These pedagogical strategies provide some concrete ways of taking Brown's theory of online community development into the online classroom strategically and pragmatically, engaging students in community-building exchanges. From the increasing numbers of students who are taking distance education courses, it is clear that distance learning will be vital to our teaching and learning future. Distance education instructors, administrators, and students need strategies that build community in online courses, taking students through the stages of making friends, acceptance, and true camaraderie in order to create vibrant online learning experiences.

References

- Allen, I. E., & Seaman, J. (2006). *Making the grade: Online education in the United States*. Needham, MA: The Sloan Consortium.
- Anderson, M. A. (2004). Adventures in online teaching and learning. *MultiMedia&Internet@Schools*, 11(3), 32-34.
- Artino, A. R. Jr. (2004). A model for designing online collaborative learning. *Distance Learning*, 1(4), 23-28.
- Brown, R. E. (2001). The process of community-building in distance learning courses. *Journal of Asynchronous Learning Networks* 5 (1) Retrieved February 2007, from [http://www.sloan-cwiki.org/wiki/index.php?title=The Process of Communitybuilding in Distance Learning Classes%2c_JALN_5\(2\)](http://www.sloan-cwiki.org/wiki/index.php?title=The_Process_of_Communitybuilding_in_Distance_Learning_Classes%2c_JALN_5(2))
- Collins, M., and Berge, Z. (1996). Facilitating interaction in computer mediated online courses. Retrieved February 2007, from <http://www.emoderators.com/moderators/flcc.html>
- Conrad, D. (2005). Building and maintaining community in cohort-based online learning. *Journal of Distance Education*, 20(1), 1-20.
- Curran, C. (1998). What sixty-one superior lis teachers say about superior lis teaching, plus comments from six knowledgeable observers." *Journal of Education for Library and Information Science*, 39(3), 183-194.
- Doherty, W. (2006). An analysis of multiple factors affecting retention in web-based community college courses. *The Internet and Higher Education*, 9(4), 245-255.
- Hara, N. & Kling, R. (2000). Students' distress with a web-based distance education course: An

- ethnographic study of participants' experiences. *Information, Communication & Society*, 3(4), 557-579.
- Haythornthwaite, C., Guziec, M. K., Robins, J. & Shoemaker, S. (2000). Development among distance learners: Temporal and technological dimensions. *Journal of Computer-Mediated Communication* (1). Retrieved November 2006 from <http://jcme.indiana.edu/vol6/issue1/haythornthwaite.html>).
- Haythornthwaite, C., Guziec, M. K., Robins, J. & Shoemaker, S. (2005) *Making connections: community among computer-supported distance learners*. Retrieved November 2006, from http://www.alise.org/conferences/conf00_Haythornthwaite_Making.htm)
- Hill, J.L. (1996). Psychological sense of community: Suggestions for future research. *Journal of Community Psychology*, 24 (4), 431-438
- Lawless, C. & Richardson, J. T. (2004). Monitoring the experiences of graduates in distance education. *Studies in Higher Education*, 29(3), 353-373.
- McMillan, D.W., & Chavis, D.M. (1986). Sense of community: A definition and theory. *American Journal of Community Psychology*, 14(1), 6-23.
- Millon, C. A. & Kester, D. D. (2004). *Online library education programs: Implications for rural students*. *Journal of Education for Library and Information Science*, 45(3), 210-220.
- Mullen, G. E. & Tallent-Runnel, M. K. (2005). [Student outcomes and perceptions of instructors' demands and support in online and traditional classrooms](#). *Internet & Higher Education*, 9(4), 257-266.
- Nash, R. D. (2005). Course completion rates among distance learners possible methods to improve retention. *Online Journal of Distance Learning Administration*, VIII(IV).
- Ozden, M. Y. , Erturk, I. & Sanli, R. (2004). Students' perceptions of online assessment: A case study. *Journal of Distance Education*, 19(2), 77-92.
- Palloff, R. M. & Pratt, K. (1999). *Building learning communities in cyberspace: Effective strategies for the online classroom*. San Francisco: Josey-Bass.
- Palloff, R. M. & Pratt, K. (2001). *Lessons from the cyberspace classroom: The realities of online teaching*. San Francisco: Josey-Bass.
- Palloff, R. M. & Pratt, K. (2003). *Virtual student! A profile and guide to working with online learners*. San Francisco: Josey-Bass.
- Pierrakeas, C. & Xenos, M. (2004). A comparative study of dropout rates and causes for two different distance education courses. *The International Review of Research in Open and Distance Learning*, 5 (2), 1-15.
- Rovai, A. P. (2001). Building classroom community at a distance: A case study. *Educational Technology Research and Development*, 49(4), 33-48.
- Rovai, A. P. (2005). Sense of community, perceived cognitive learning, and persistence in asynchronous learning networks. *The Internet and Higher Education*, 5, 319-332.
- Rovai, A. P. & Wighting, M. J.. (2005). Feelings of alienation and community among higher education students in a virtual classroom. *Internet and Higher Education*, 8, 97-110.
- Serwatka, J. A. (1999). Internet distance learning: How do i put my course on the web? *THE (Technological Horizons in Education)*, 26(10), 7-10
- Simpson, O. (2004). The impact on retention of interventions to support distance learning students. *Open Learning*, 19 (1), 79-95.

- Stodel, E. J. Thompson, T. L. & McDonald, C. (2006). Learners' perspectives on what is missing from online learning: Interpretations through the community of inquiry framework. *International Review of Research in Open and Distance Learning*, 7(3), 1-24.
- Smith, T. C. (2005). Fifty-one competencies for online education. *Journal of Educators Online*, 2(2), 1-18.
- Stager, G. (2005). On high-quality online education: How to make your online courses better than your traditional classes. *District Administration*, 41(5), 77-79.
- thirteen|ed online: Concept to Classroom. (2007). Workshop: Constructivism as a paradigm for teaching and learning. Educational Broadcasting Group. Accessed December 28, 2006, from <http://www.thirteen.org/edonline/concept2class/constructivism/index.html>
- Vesely, P., Bloom, L., & Sherlock, J. (2007) Key elements of building online community: comparing faculty and student perceptions. *MERLOT Journal of Online Learning and Teaching*, 3(3). Accessed February 29, 2008, from <http://jolt.merlot.org/vol3no3/vesely.htm>
- Waters, C. (2004). Building a learning community online. *Tech-Learning: The Resource for Education Technology Leaders*. Accessed July 22, 2005, from <http://www.techlearning.com/story/showArticle.jhtml?articleID=1730167>
- Wellman, B. (1999). The network community: An introduction to networks in the global village. In Barry Wellman (Ed.), *Networks in the Global Village* Boulder, CO: Westview Press.
- Wojciechowski, A. & Palme, L. B. (2005). Individual student characteristics: Can any be predictors of success in online classes? *Online Journal of Distance Learning Administration*, 8(2). Retrieved November 14, 2006, from <http://www.westga.edu/~distance/ojdl/summer82/wojciechowski82.htm>
-

Manuscript received 30 Nov 2007; revision received 7 Mar 2008.



This work is licensed under a

[Creative Commons Attribution-NonCommercial-ShareAlike 2.5 License](http://creativecommons.org/licenses/by-nc-sa/2.5/)