

A Student's Guide to Strengthening an Online Community

By Richard E. West

Abstract

Students usually have plenty of experience with online social technologies, but they lack understanding about how to use these tools and methods for course learning. This article is designed to help college students who are anxious about participating in an online learning community or do not know how to build one effectively. With ideas derived from research and practice, this guide has been written to inform online students about learning communities, the benefits they offer, and how students can assist in building a successful online community.

Keywords: online learning community, online learning, community of practice, CSCL, computer-supported collaborative learning, self-regulation, netiquette, social learning.

Many college students struggle to use online technologies in their formal distance learning courses. The problem for many is not a lack of familiarity with online technologies, as over 80% of students use Facebook (Anderson Analytics, 2008), 40% use MySpace (Anderson Analytics), and many use Yahoo/Google groups, discussion boards, and instant messaging. However, these students are unsure how to use online sharing/collaboration tools for learning in their college courses. As they enter a learning com-

munity, many report feeling like the title of an article about online students: "Engagement, Excitement, Anxiety, and Fear" (Conrad, 2002).

This article is intended to help college students understand how to strengthen the learning community in an online course that has been designed to allow rich student interaction. While many articles and books have been written to help instructional designers and teachers build effective online communities (e.g. Bonk, Wisner, & Nigrelli, 2004; Dawes & Sams, 2004; Hildreth & Kimble, 2004; Lewis & Allan, 2005; Lowry, Thornam, & White, 2000; McConnell, 2006), guidelines need to be directed to the new online students themselves, providing guidance in learning how to learn online (Palloff, 2001). This article may be distributed by instructors to college students entering an online course to teach them about what online learning communities (OLCs) are, why they benefit learners, and how students can contribute to strengthening a successful online community. While this article was written for college students, it may have some applicability to high school students as well.

What Is an Online Learning Community?

Researchers have been arguing for decades about what defines a community (Hillery, 1955). Some consider a community to be persons within a shared physical or virtual space (Lichtenstein, 2005; Rheingold, 1993; West,

“Instead of walking into a classroom where the teacher is visibly present, online students will often interact with each other and the content without knowing when or if the teacher is watching.”

2007), while others have argued that community is defined by feelings of trust, respect, or relationship (Glynn, 1981; Hill, 1996; Sarason, 1974). This article is based on this last definition because college students often do not control their access to other members of an online class, as that is typically an instructor’s decision. However, when a course instructor chooses to organize class activities so online students can interact, then the students need to build the emotional bridges of trust and relationships with each other (Liu, Magjuka,

Bonk, & Lee, 2007) to create a stronger, more effective learning community.

Online Learning Communities (OLCs) are similar to and different from face-to-face (F2F) learning communities in many ways. Some of the biggest differences are that OLC members often communicate through text rather than spoken dialogue, and OLC conversations are timed differently—varying from instantaneous (synchronous chatting) to lasting hours or days (email or discussion boards). Another dis-

concerting difference to new online learners is access to the online teacher. Instead of walking into a classroom where the teacher is visibly present, online students will often interact with each other and the content without knowing when or if the teacher is watching. While teachers may technically be more accessible online through email, discussion forums, or even chat, they may choose to take on more of a facilitative role. This may make them less visible than in a face-to-face course, while allowing the students greater autonomy in working together (Palloff & Pratt, 2001).

Why Are Online Learning Communities Important?

Online learning can include everything from independent study with limited interaction to vibrant, interactive communities in which students know and support each other and co-construct knowledge together. With different options available in online education, why should students invest the effort in strengthening a sense of community in their online courses?

The first reason is because strong OLCs can help students overcome a sense of isolation that online students traditionally feel (Canada,

2000; Liu, Magjuka, Bonk, & Lee, 2007; Weiss, 2000), and lead to more reflective discourse (Hawkes, 2006). In addition to helping students feel more connected, research has found that learning communities can lead to higher student engagement, greater respect for the diversity of all students, higher intrinsic motivation, and higher learning outcomes in the areas that are most important (Watkins, 2005). Palloff and Pratt (2001) found that OLCs “[increase] the likelihood that [students] will stay involved and motivated” (p. 138), while Liu et al. (2007) reported that when some students indicated feeling a strong sense of community, they also perceived themselves to be more engaged, satisfied, and successful in their learning (see also Moisey, Neu, & Cleveland-Innes, 2008).

How Can Students Strengthen Their Online Learning Community?

Recognizing the importance of learning communities is necessary but not sufficient, because building online learning communities requires effort (Schwen & Hara, 2004). Following are suggestions for strengthening an online community from the inside out—through actions of the students within the community. When instructors design courses that encourage student interaction, the strength of the community that emerges often depends on how the students engage with each other and with the course (Liu et al., 2007). Students can best build an online learning community by focusing on four types of interactions involved with every successful OLC: learner-learner interaction, learner-content interaction, learner-teacher interaction, and learner-tool interaction (see Moore, 1993, for a discussion of three of these interaction types). A stronger emphasis is placed on learner-learner interaction skills, as this is often the area over which the students have the most control and where there are more opportunities for strengthening the psychological sense of community.

Learner-Learner Interaction

Learner-learner interactions are a critical factor in creating a strong learning community (Conrad, 2005; Gorsky, 2004) with effective group problem solving (Merrill & Gilbert, 2008). The first step to effective learner-learner interaction is understanding etiquette specific to online communication (netiquette). Just as face-to-face communication follows unwritten but acknowledged standards, such as taking turns when speaking, courteous cyberspace communication involves important unwritten rules. A critical courtesy is to always assume good intent of the person posting a comment or sending a message (Palloff & Pratt, 2001). Without

nonverbal and auditory cues, text messages can often be misunderstood because they lack the *emotional richness* of context (Zembylas, 2008). Thus, it is helpful to wait at least 24 hours before responding to an attack, which could threaten to destroy the community, because “the intensity of the message always seems to wane with time” (Palloff & Pratt, 2001, p. 150). Ignoring this practice often leads to flaming, or posting of critical and angry personal attacks, which can destroy the community (Shea, Swan, Li, & Pickett, 2005).

Other important netiquette guidelines refer to timing. Much online communication is asynchronous, but most of our daily living happens synchronously and asynchronous timing can be jarring. The person expecting a response should be patient about delays, which may be caused by the other person being sick, on vacation, busy at work, or unable to frequently check messages. Especially on weekends, community members should not expect prompt answers. However, when a re-



A Guide to Netiquette

1. All take a turn, and everyone gives a turn
2. Don't write everything in uppercase
3. Break text into short paragraphs, leaving a line in between
4. Write concisely. Online learning requires a lot of reading and people will be more likely to read your messages if you get to the point and make it concisely and clearly. Planning ahead what to write helps.
5. Revise before submitting. The benefit in online learning is that you can revise what you say before making it “live.”
6. Avoid acronyms, including internet-specific acronyms (BTW, LOL, and so on). They seem hip and trendy, but not everyone will know what you are saying.
7. Avoid time-saving contractions (e.g. “ur,” “cya,”) except *maybe* in fast-moving chat-rooms. Otherwise they won't save you that much time and will reflect poorly on your attention to detail, writing ability, and effort, which are critical skills for online learning. Others may wonder how good of a team member you'll be.
8. Use emoticons or brackets to show emotion (e.g. [I'm kidding here]). Be careful to use common emoticons that people will know, otherwise miscommunication still occurs.
9. Always say who you are quoting and give a URL when possible.
10. Avoid taking long quotes from other sources. Use only what you need.
11. Avoid the “me, too!” habit in posting. Post something substantial.
12. After posting a question or comment, check back in a few days to see if someone is responding to you.
2. Always assume good intent from others in their messages
3. Wait 24 hours before replying to an attack
4. Expect occasional conflict
5. However, don't mistake confusion for conflict
6. Be considerate in your language—the lack of visual/auditory feedback makes it so you do not see the effects of what you say on others.
7. Reply to others quickly, within 24 hours if possible, even if to say, “Thanks for the note, I'll get back to it in a couple of days.”
8. Post frequently. Remember that your electronic conversation is the only conversation you are having with your group. Going too long without talking will leave others wondering if you are even listening.
9. Test out the technology a few minutes ahead of schedule so precious group discussion time is not wasting with technical glitches.

Adapted by the author from Clarke, 2004; Dirkx & Smith, 2004; Lowry et al., 2000; Palloff & Pratt, 2001, 2003; Weiss, 2000.

Figure 1. A beginner's guide to netiquette in online conversations.

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response is expected the recipient should attempt to respond as quickly as possible, even if to say, “Good question. I’ll think about it and post something tomorrow.” Short messages such as this can be equivalent to nodding one’s head to show attention during F2F communication. Other important netiquette guidelines are provided in Figure 1 on the previous page.

Because, “community is defined by the relationships and interactions between and among people,” (Liu, et al., 2007, p. 11) students building an OLC should take the time to develop relationships with other members of the community (Lowry et al., 2000). Researchers agree, “online groups are often more effective if they are initially formed by some type of face-to-face meetings,” (Clarke, 2004, p. 14; see also Conrad, 2005). However, if this is not possible many OLCs have places where students can post their pictures or short biographies. Simply having a picture attached to messages can strengthen the recognition that there is a human being, with emotions, thoughts, and histories, behind the text.

Many online communities have a designated space for members to socialize about topics not related to the course content. Often these spaces are most beneficial if they are for students only, not instructors. This allows students to have the kinds of informal discussions that they might normally have in the hallways before an F2F class begins. Examples of such informal social spaces are available in Tappedin (<http://tappedin.org/tappedin/>), the online professional community for teachers. In Tappedin, there are formal learning spaces (such as the Arcade Conference Room), and informal spaces (such as the Hot Tub). This differentiation of spaces lets community members know what type of dialogue is encouraged in each space. In online communities without visual interfaces like those of Tappedin, an informal discussion can be as simple as a chat room or discussion thread designated as the *water cooler* to encourage the kind of informal discussion in that forum that typically happens in work environments as co-workers meet around the water cooler or coffee machine. Participants can greatly improve their connection to each other by spending some

time in this informal space, especially at the beginning of the semester.

Text messages can seem more *human* with the addition of humor and honesty, emoticons, and personal and expressive language. To make messages more personal, an individual can frame a message by bracketing comments to explain the intended tone of a message: [“I’m just joking here”], for example (Palloff & Pratt, 1999; Weiss, 2000). In addition to making online speech more natural and human, critical *listening* is important. Kramer (2002) suggests that students can be better critical listeners online if they are (1) mentally awake and prepared to participate, (2) willing to ask questions, and (3) aware of filters, such as biases, judgments, and attitudes that affect how they interpret messages.

Perhaps most important is to remember that there are three functions of online communities, and efficient accomplishment of a task is only one of them. Online communities also exist to support the members and to take care of individual needs (Palloff & Pratt, 2001).

Simply interacting with one another is not enough. . . . Participation in an online course is not the same as collaboration. Collaboration goes beyond direct engagement in specific activities and is consistent throughout the course. It is a process that helps students achieve deeper levels of knowledge generations through the creation of shared goals, shared exploration, and a shared process of meaning-making. (Palloff & Pratt, 2003, p. 23)

It is through collaboration, not simply interaction, that students have the best learning experiences. Part of effective collaborative, or cooperative, learning is developing a sense of trust and interdependence among community members (Weidman & Bishop, 2009). This strengthens the community (Dirkx & Smith, 2004) and helps members construct their identities as community members (Wenger, 1998). Students can develop this interdependence by relying on each other, rather than the instructor, for simple tasks and questions. Relying on peers during instructional discussions can make in-

teractions more meaningful (Seo, 2007). When content misunderstandings do require the instructor's input, the group can approach the instructor together. When learning communities develop this interdependence, instructors can avoid having to stamp out little fires and instead can provide quality instructional feedback in the most critical areas.

Learner-Instructor Interaction

Learner-instructor interactions are also critical for effective student learning in OLCs (O'Leary & Quinlan, 2007). Swan (2002) found that interaction with the instructor was one of three factors significantly related to student perceptions of the course. Online instructors establish their social presence through multiple ways, including the instructional design of the course, organization of the materials, and directed facilitation of the activities (Shea et al., 2005). Thus, the instructor may not always communicate directly with each online student but may establish connections with each of them in other ways. When students recognize their instructor's efforts to create teaching presence, their sense of community can improve (Shea et al., 2005).

Additionally, many of the same recommendations for learner-learner interactions also apply to learner-instructor interactions, particularly regarding netiquette, communication timing, and making efforts to establish greater social presence online through pictures, biographical sketches, and informal conversation at the beginning of the semester. This helps the instructor understand the students' needs, personalities, and learning goals.

Finally, successful learner-instructor interaction clarifies expectations, establishes procedures, and defines community rules. This is part of what is typically called the *norming* period of group relationships (Tuckman, 1965) where community members define the norms of their learning community. Students can contribute to successful norming with their peers and instructors by sharing their opinions early in the semester—and asking instructors for theirs—about how often communication should take place and in what format. Additionally, students can ask questions to clarify the expectations for participation and collaboration. Because of the faceless nature of online learning, developing these norms can prevent future misunderstandings.

Learner-Tool (Technology) Interaction

Tools, including modern technologies, are always important mediators within problem-solving communities, especially in online learning communities where technology plays

a visible role. Because technology is critical to the online community, students' interactions with the technology are important. Many students choose to take academic courses online because doing so is less expensive and more convenient than moving on site. However, despite being economical, students should be prepared to invest in the appropriate technology to allow them to be full community participants. It is not fair to other members of the learning community if a participant is using a slow Internet connection, an outdated computer, and incompatible software, it could make it very difficult to collaborate with others and may force the individual to withdraw from the community because of technological barriers. Student OLC members should expect to invest in the right tools to engage in the community (Dirkx & Smith, 2004).

In addition, students should take responsibility for knowing how to use the technology. Conrad (2005) reported that new online learners often are preoccupied with functional and technical concerns. Students who are unfamiliar with the technologies or the instructional medium should invest some time up front mastering these tools so they can focus on their learning. This is important because "frequent technical failures or connectivity issues may leave members out of the community gathering place and thus hinder the development of a sense of community," (Liu et al, 2007, p. 12). Sometimes technology can become a scapegoat when things go wrong (Dirkx & Smith, 2004), even though the reality may be that the students did not sufficiently prepare themselves to use the tools.

No matter how skilled students are with technology, they should expect that technology *will*—not *may*—fail some of the time. To avoid anxiety, community participants should conscientiously save documents and even discussion board posts in separate locations. Before scheduled synchronous chats or conferences, all should test their technology setup or login, so that precious group discussion time is not wasted with technical glitches.

Learner-Content Interaction

The final type of interaction in an OLC is between learners and content. In OLCs, students must exhibit greater self-regulation in studying the course content. Canada (2000) states, "The online student, however, cannot live by RAM alone. Even more importantly [than tech skills] is the ability to manage time and work effectively" (p. 36). Self-regulation is highly correlated with success in online learning communities (Anderson, 2007). Because of

“The success of an online community depends on the efforts of its members to build it.”

the nature of OLCs, teachers may be less present, deadlines may be softer, flexibility may be greater, and homework may be oriented towards more self-directed problem solving. In this environment, students who do not carefully monitor their own learning can lose track of time, fall behind, and become overwhelmed or intimidated (Gabriel, 2004). They also have less external motivation to develop relationships with other members of the community,

since they cannot see faces waiting for responses. As Canada (2000) described it, the traditional learner is much like an athlete who is constantly under the coach’s observation and so is highly motivated to keep performing. The online learner, in contrast, is much like a pianist practicing in private for a recital that will come at a future, possibly undetermined, date.

Lowry and colleagues (2000) recommended that members of online communities set their own deadlines to help them stay motivated. Just as in physical communities, members of a virtual community can offer to give peer critiques of assignments, which would require self-imposed deadlines so that students stay on schedule. If the teacher does not have assigned topics or roles for discussion, the community members can select these topics and determine who will fill the rotating moderator role. Many researchers feel that focusing comments — and perhaps even labeling them as particular kinds of messages or responses — can lead to more effective online dialogue (Jeong, 2004).

Finally, by understanding the technologies and medium used for the course, students can often find more efficient ways to interact with the content. This is important because a main challenge in online learning is managing all of the reading (Gabriel, 2004). By understanding the course technologies, students can often discover ways to use RSS syndication to search, sort, and aggregate content into “customized and personal views of emerging content” (Anderson & Kuskis, 2007) that can help students regulate and organize their learning. Also, by using descriptive and meaningful titles in discussion board posts, students can alert their peers to what their comment is about, whom it is for, or what it is responding to.

Summary

Online learning is firmly entrenched in the United States educational system (U.S.

Department of Education, 2003). Thousands of students who are enrolled in online classes and academic programs are in danger of feeling disenfranchised, isolated, and unsupported in their learning. An effective method for addressing these difficulties is through an active online learning community, but instructors cannot build these communities alone. The success of an online community depends on the efforts of its members to build it. As Palloff and Pratt (2003) wrote,

The virtual student needs to accept the different role of the instructor online and recognize that the deepest learning in an online course comes from interacting with everyone involved. Reaching that level of understanding, and being willing to take on responsibility for creating the learning community as a result, is critical to its formation. (p. 20).

The guidelines in this article can help students understand what it means to learn in an online community, as well as what the community should expect of them. This may help learners get past simply having an “experience that is shared” and progress towards something much more meaningful: “creat[ing] a shared experience,” (Schrage, 1990).

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References

- Anderson Analytics. (2008, December 1). *Blogging increasing in popularity among Generation Y*. Retrieved from <http://www.andersonanalytics.com>.
- Anderson, B. (2007). Independent learning. In M. G. Moore (Ed.), *Handbook of distance education* (2nd ed., pp. 109-122). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Anderson, T., & Kuskis, A. (2007). Modes of interaction. In M. G. Graham (Ed.), *Handbook of distance education* (2nd ed., pp. 295-309). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Bonk, C. J., Wisher, R. A., & Nigrelli, M. L. (2004). Learning communities, communities of practice: Principles, technologies, and examples. In K. Littleton, D. Miell, & D. Faulkner (Eds.), *Learning to collaborate, collaborating to learn*. New York: Nova Science Publishers, Inc.
- Canada, M. (2000). Students as seekers in online courses. In R. E. Weiss, D. S. Knowlton, & B. W. Speck (Eds.), *Principles of effective teaching in the online classroom*

- (Vol. 84, pp. 35-40). San Francisco: Jossey-Bass.
- Clarke, A. (2004). *E-learning skills*. New York: Palgrave Macmillan.
- Conrad, D. L. (2002). Engagement, excitement, anxiety, and fear: Learners' experiences of starting an online course. *The American Journal of Distance Education*, 16(4), 205-226.
- Conrad, D. L. (2005). Engagement, excitement, anxiety, and fear: Learners' experiences of starting an online course. *The American Journal of Distance Education*, 16(4), 205-226.
- Dawes, L., & Sams, C. (2004). Developing the capacity to collaborate. In K. Littleton, D. Miell, & D. Faulkner (Eds.), *Learning to collaborate, collaborating to learn*. New York: Nova Science Publishers, Inc.
- Dirkx, J. M., & Smith, R. O. (2004). Thinking out of a bowl of spaghetti: Learning to learn in online collaborative groups. In T. S. Roberts (Ed.), *Online collaborative learning: Theory and practice* (pp. 132-159). Hershey, PA: Information Science Publishing.
- Gabriel, M. A. (2004). Learning together: Exploring group interactions online. *Journal of Distance Education*, 19(1), 54-72
- Glynn, T. (1981). Psychological sense of community: Measurement and application. *Human Relations*, 34(7), 789-818.
- Gorsky, P., Caspi, A., & Tuvi-Arad, I. (2004). Use of instructional dialogue by university students in a distance education chemistry course. *Journal of Distance Education*, 19(1), 1-19.
- Hawkes, M. (2006). Linguistic discourse variables as indicators of reflective online interaction. *American Journal of Distance Education*, 20(4), 231-244.
- Hildreth, P., & Kimble, C. (Eds.). (2004). *Knowledge networks: Innovation through communities of practice*. London: Idea Group Publishing.
- Hill, J. L. (1996). Psychological sense of community: Suggestions for future research. *Journal of Community Psychology*, 24(4), 431-438.
- Hillery, G. A. (1955). Definitions of community: Areas of agreement. *Rural Sociology*, 20(2), 111-123.
- Jeong, A. (2004). The combined effects of response time and message content on growth patterns of discussion threads in computer-supported collaborative argumentation. *Journal of Distance Education*, 19(1), 36-53.
- Kramer, C. (2002). *Success in on-line learning*. Albany, NY: Delmar.
- Lewis, D., & Allan, B. (2005). *Virtual learning communities: A guide for practitioners*. New York: McGraw-Hill Education.
- Lichtenstein, M. (2005). The Importance of Classroom Environments in the Assessment of Learning Community Outcomes. *Journal of College Student Development*, 46(4), 341-356.
- Liu, X., Magjuka, R. J., Bonk, C. J., & Lee, S. (2007). Does sense of community matter? An examination of participants' perceptions of building learning communities in online courses. *Quarterly Review of Distance Education*, 8(1), 9-24.
- Lowry, M., Thornam, C., & White, C. T. (2000). Preparing higher education learners for success on the web. In R. A. Cole (Ed.), *Issues in web-based pedagogy: A critical primer*. Westport, CT: Greenwood Press.
- McConnell, D. (2006). *E-learning groups and communities*. New York: Open University Press.
- Merrill, M. D. & Gilbert, C. G. (2008). Effective peer interaction in a problem-centered instructional strategy. *Distance Education*, 29(2), 199-207.
- Moisey, S. D., Neu, C. & Cleveland-Innes, M. (2008). Community building and computer-mediated conferencing. *Journal of Distance Education*, 22(2), 15-42.
- Moore, M. G. (1993). Three types of interaction. In K. Harry, M. John, & D. Keegan (Eds.), *Distance education: New perspectives* (pp. 19-24). London: Routledge.
- O'Leary, P. F. & Quinlan, T. J. (2007). Learner-instructor telephone interaction: Effects on satisfaction and achievement of online students. *American Journal of Distance Education*, 21(1), 133-143.
- Palloff, R. M., & Pratt, K. (1999). Building learning communities in cyberspace: Effective strategies for the online classroom. San Francisco, CA: Jossey-Bass.
- Palloff, R. M., & Pratt, K. (2001). *Lessons from the cyberspace classroom: The realities of online teaching*. San Francisco: Jossey-Bass.
- Palloff, R. M., & Pratt, K. (2003). *The virtual student: A profile and guide to working with online learners*. San Francisco: Jossey-Bass.
- Rheingold, H. (1993). A slice of life in my virtual community. In L. M. Harasim (Ed.), *Global networks: Computers and international communication* (pp. 57-82). Cambridge: MIT Press.
- Sarason, S. B. (1974). *The psychological sense of community: Prospects for a community psychology*. San Francisco: Jossey-Bass.
- Schrage, M. (1990). *Shared minds: The new technologies of collaboration*. New York: Random House.
- Schwen, T. M., & Hara, N. (2004). Community of practice: A metaphor for online design? In S. A. Barab, R. Kling, & J. H. Gray (Eds.), *Designing for virtual communities in the service of learning* (pp. 154-178). Cambridge: Cambridge University Press.
- Shea, P., Swan, K., Li, C. S., & Pickett, A. (2005). Developing learning community in online asynchronous college courses: The role of teaching presence. *Journal of Asynchronous Learning Networks*, 9(4), 59-82.
- Seo, K. K. (2007). Utilizing peer moderating in online discussions: Addressing the controversy between teacher moderation and nonmoderation. *American Journal of Distance Education*, 21(1), 21-36.
- Swan, K. (2002). Building learning communities in online courses: The importance of interaction. *Education, Communication & Information*, 2(1), 23-49.
- Tuckman, B. W. (1965). Developmental sequence in small groups. *Psychological Bulletin*, 63, 384-399.
- U.S. Department of Education, N. C. E. S. (2003). Distance education at degree-granting postsecondary institutions: 2000-2001. Retrieved from <http://nces.ed.gov/fastfacts/display.asp?id=80>
- Watkins, C. (2005). Classrooms as learning communities: A review of research. *London Review of Education*, 3(1), 47-64.
- Weiss, R. E. (2000). Humanizing the online classroom. In R. E. Weiss, D. S. Knowlton, & B. W. Speck (Eds.), *Principles of effective teaching in the online classroom* (Vol. 84, pp. 47-51). San Francisco: Jossey-Bass.
- Weidman, R. & Bishop, M. J. (2009). Using the jigsaw model to facilitate cooperative learning in an online course. *Quarterly Review of Distance Education*, 10(1), 51-64.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.
- West, R. E. (2007). *Defining and measuring learning communities by their boundaries*. Presentation at the annual conference of the Association for Educational Communication and Technology, Orlando, FL.
- Zembylas, M. (2008). Adult learners' emotions in online learning. *Distance Education*, 29(1), 71-87.

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