



Strategies for Creating Community in a Graduate Education Online Program

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Abstract

This article describes the practical application of social learning theory to build and sustain community in an asynchronous online learning environment. It presents ways that community-building can occur in a graduate online education program through the shared meaning-making processes occurring among students within and across interdisciplinary online courses as communities of practice emerge. Three professors share their experiences and strategies for developing, teaching, reflecting, and learning about creating communities of practice. Strategies include using interactive learning experiences, flexible grouping, extended online discussions, e-mail and journaling, video, digital storytelling, and power point presentations. Examples of online discussions show how student learning is situated in the group interactions revealing shared values, beliefs and practices generated within the online community.

Building community online is one of the greatest challenges in distance education. We believe that learning is a social process, and recognize that mental functioning originates in social activity (Vygotsky, 1978; 1986). In the social construction of knowledge, reality is constructed by communities of individuals who reconceptualize and reconstruct information to create new interpretations of the world (Cazden, 1988, Wertsch, 1985). Community is critical to learning, and talk is the primary mode of communication within the communities in our culture. Online learning can be a vehicle for “electronic” talk, and the dialogue that is an integral component of computer mediated learning supports the formation of concepts, ideas, new understandings, and self-understanding that emerge within a socio-constructivist perspective. Creating socially constructed meaning within and across courses is the ultimate challenge in learning to collaborate within a virtual learning community. The focus of this work is to find ways to honor the sense of community while taking advantage of the opportunities offered through online learning.

We are three professors who were asked to develop content courses that already exist into an online program leading to a secondary science and math master's degree within a university school of education. Because many students in the initial cohort group lived long distances from the university, the School of Education felt the need for a completely online presentation method within a framework of the existing Blackboard support network structure. As colleagues teaching at a suburban campus, we had the unique opportunity to work together on the development of these courses with the support of the technology department, funded by an internal grant from the university. Because of our close proximity and time already spent conferencing and reflecting together on our teaching, we shared similar philosophical perspectives that provided consistency of beliefs and instructional pedagogy across each of the courses. Our personal and professional challenge was to create an online learning environment that honored students' diverse perspectives and content area expertise, opening up spaces for honest, thoughtful, reflective dialogue in which all

voices could be heard and multiple points of view would be considered. We wanted to engage students in interactive, meaningful learning experiences reflecting our belief that transmitting information to students does not necessarily lead to genuine learning and that the lecture/teach/test/approach that is all too prevalent in higher education should not be replicated in an online course. Recognizing that learners need to engage with each other as well as course content, our goal was to develop and incorporate online strategies that would support learning and thinking together, as a community of practice evolved (Wenger, 2002).

This article describes some of the learning stories revealed in the exploration of the online community-building process along with the strategies we found helpful in supporting students' learning and creating a feeling of connectedness in the online courses. It will show the interaction of the planned and the emergent—the different experiences engaged in along with the intertextual and multimodal connections that guided the learning for ourselves (the three professors) and our online students.

Theoretical Framework

Wenger (2002) suggests that education is a process of identity transformation. It is a “mutual developmental process between communities and individuals, one that goes beyond mere socialization. It is an investment of a community in its own future, not as a reproduction of the past through cultural transmission, but as the formation of new identities that can take its history of learning forward” (p. 263-64). This, too, implies that from a socio-constructivist perspective, online learning cannot be reduced to transmitting information in a unidimensional direction (teacher to student; student to teacher). An effective learning community is created when all the participants (students, teachers and support personnel) work together collaboratively to exchange ideas, reflect on curriculum and learning, use data for improved practice, and focus on professional growth and development. In the process, the community itself is transformed by new, collective learning. According to Bielaczyc and Collins (1999):

The defining quality of a learning community is that there is a culture of learning in which everyone is involved in a collective effort of understanding. There are four characteristics that such a culture must have: (1) diversity of expertise among its members who are valued for their contributions and given support to develop; (2) a shared objective of continually advancing the collective knowledge and skills; (3) an emphasis on learning how to learn; and (4) mechanisms for sharing what is learned. (p. 272)

Dede (2004) also connects the application of learning communities to distributed learning based on four dimensions of learning communities identified by Bielaczyc and Collins (1999): “teacher roles and power relationships, shifts in discourse, shifts in centrality/peripherality and identity, and the changing role of knowledge” (p. 15).

Social Presence research implies that learning is situated within the group interactions of the learning community and becomes an integral component of the shared values, beliefs and practices generated from the community. "Knowledge ... is inseparable from practice, and practice is inseparable from the communities in which it occurs" (Swan & Shea, 2005, p.241). In the online learning community, we recognize that instruction does not cause learning but rather creates a context for learning to occur (Wenger, p.266). Instructors plan, organize, and facilitate student-focused learning experiences, but the responsibility for learning, assessing progress, and working with all members of the community is assumed by the students. Ideally, the professor asks thoughtful questions responding to students in a way that pushes their thinking forward, challenges assumptions and novice understanding, and models an inquiry stance, setting the tone for honoring varied perspectives. Students are empowered in their own learning and benefit from the knowledge and expertise of multiple members of the community as well as the sensitive facilitation of the professor.

The challenge is to design the courses so that the primary focus is on the negotiation of meaning, support for the emergent learning process, facilitation and scaffolding of knowledge development, opportunities to be involved in actual practice, and thoughtful reflection and analysis of emerging competence inherent in assignments and learning engagements. A major goal is to create an environment for students "to play and reflect in a safe setting, with the opportunity to discuss and collaborate with peers and instructors; to help teachers move beyond mechanical use of curriculum and technology to become facilitators of inquiry" (Willis, Tucker & Gunn, 2003, p. 13).

The Community Building Process

In the process of course development, we three faculty members developed our own community of practice, making our strong constructivist, sociocultural perspective more visible through dialogue and reflecting together about the progress of our courses. This helped us to understand more clearly the constraints and opportunities for translating our beliefs into positive online learning strategies. While each of our courses was different, the pedagogical underpinnings were consistent and students could rely on a strong theory alignment between them.

Brown (2001) identified three stages in the process of building community with students in an online course. Initially, students are involved in getting acquainted online. Then as students engage in longer online discussions, they begin to discover similarities, differences, interests, and ask personal as well as content-related questions in their online discussions helping them feel more connected. At the third level of community, camaraderie becomes more evident as friendships and relationships deepen, students are overtly supportive of each other, and provide encouragement and a desire to be in other courses together.

We found that preliminary to any genuine community-building, the students needed to understand the instructor's format and assignments, recognize and accept the course structure and expectations for participation and behavior, and be comfortable with the technological aspects of moving about the course site. When these basic elements were in place, students were free to relate and connect more interpersonally with each other. Even though the asynchronous communication necessitated flexibility in responding to assignments and discussions, students seemed to be comfortable seeking help from the instructors or each other when needed, asking questions freely and offering suggestions and technological expertise. They did not seem to mind irregularly timed responses, postings, or discussions as long as deadlines and due dates were clearly understood and adhered to. Student responses to a final reflection question about online learning and how they felt the courses met their needs gave us positive and helpful feedback:

I love online classes. They allow for each student to work at their own rate and take time to digest others statements if necessary. It can occasionally cause problems when poor attitudes are inferred but I do not believe this was much of a problem on the discussion boards.

I have mixed feelings about online learning. On the plus side, I love the flexibility it offers. On the negative side, I miss the face-to-face interaction with professors and peers. The groups and projects did help us to feel that we were a community and I learned a great deal in the class. Instructors' comments were very thorough and I think the feeling of missing a live "community" goes away as we take more online courses. During my first one, I felt uncomfortable, but after three, I now view the discussion board as my community. In some ways, the discussion is better online because it is more thoughtful—a trade off between spontaneity and reflection. It takes a lot of getting used to, but once you do, it feels almost as natural as a classroom.

Often in virtual learning communities, students perceive that they are learning more when they are more interactive with each other in discussions and group experiences. When our students were placed in small work groups (e.g., similar content groups, or groups based on selected inquiry questions), they became more connected and felt less like strangers in the class. In some cases, genuine friendships developed through multiple discussions and among students who were in several online classes together. These students used a common language developed over time that reflected learning from other courses and showed application of theory from one course and discipline to another. For example, analysis of dialogue from a discussion board (Blackboard) showed that students were applying constructivist theories learned in one science methods course to other courses:

If I understand you correctly, I think you are picking up on some things from Dr. R's class. You are suggesting that students should be able to use the formulas in more than a "plug and chug" situation. I completely agree with you. They should be able to take a formula and be able to mold it to new situations. Let me know if I have understood you correctly.

Yeah, I'm a Dr. R groupie too. I like to have kids "uncover" the Pythagorean Theorem upon which it is based. I never like to do things without uncovering ... just like Dr. R. taught us about Constructivism.

In another discussion board dialogue, a student made a specific intertextual (text-to-text) connection from an article read in the online science methods course to a concept learned in the literacy-across-the-content course:

One science article I found to be very enlightening, especially having just had the literacy course. I learned how to analyze a science text in the literacy course and how to use strategies to help students comprehend more effectively. None of the science textbook series I've reviewed included anything about study skills or strategies to help students understand what they were reading about more easily.

In an effort to sustain the online program, some students were admitted even though they were not part of the original cohort group. While each

course developed its own learning community, cohort students appeared more comfortable with the technology, online academic expectations, willingness to reflect, and consistent reference to theoretical perspectives of the program. For example, cohort students accomplished an average of 8 to 10 postings per week as compared to non-cohort students who tended to post between 2 and 3 comments per week per student. In addition to general postings to the discussion board or group projects, cohort students also sent each other more direct messages and provided more explicit encouragement and personal references. Because of their common theoretical background and shared history with each other, cohort students were able to provide feedback and support using language everyone could understand—a kind of “shorthand” language they shared. As the science professor noted in her journal field notes:

Cohort students seemed to more fully understand the differences between their personal experiences as a learner and the practices expected of a socio-constructivist, reform-based teacher. Non-cohort students, lacking the cohesive background and common online academic experiences, found the new learning perspectives foreign and difficult to understand or apply in classroom practice or when completing assignments.

Strategies for Community Building

Implementing the “Framework for Distance Learning” model presented by Palloff and Pratt (1999, p. 74), the online courses were designed around the concept of community, incorporating collaboration, focused and shared goals, teamwork, interaction and feedback, and engaged, constructivist learning activities. Various strategies were applied in an effort to establish a supportive learning community. These strategies included the design of interactive learning experiences; various student grouping opportunities providing for small group and whole group interactions, dialogue and project work at micro and macro levels of engagement; opportunities for reflective thinking and sharing of insights, questions, technology, and learning needs; and multiple opportunities to communicate with other students and with professors publicly and privately.

This example from the online literacy course shows how some of the community-building strategies worked together to integrate interactive learning, flexible grouping, reflection, meaningful dialogue and communication, and helped create and sustain community for all the participants (professor and online students).

In this literacy course, assignments were designed to help students learn about various reading strategies appropriate for different subject areas. After a whole class threaded discussion about the need for teaching reading strategies to secondary students, the online students divided themselves into subject-area study groups (e.g. math, social sciences, English, science). Within their small groups, they were asked to scan and post an actual page from their subject-area text; choose and post an explanation of a specific reading strategy appropriate for a text in their subject area; and have a small group online discussion about how they would teach the strategy to their secondary students. Each small group made this information available to the whole online class which then posted feedback to the presenting group via a new threaded discussion, critiquing their posted presentation, discussing the choice of reading strategies, and reflecting on ways they might all incorporate reading strategy instruction in their own content areas. The use of small group content area study with online students teaching each other, reflecting on relevant feedback from class members, and discussing the use of strategies in content area subjects, contributed to building positive relationships with fellow students as they got better acquainted through their shared inquiries. This activity provided a way for the online students to learn

about reading strategies in all subject areas, and helped them engage in extended dialogue within and across their small groups. The following sections provide specific examples of online community-building and learning strategies that we found to be most effective.

Journaling, Discussion Responses, and E-mailing

Students and professors helped each other by providing content and technology information, emotional and esteem-building support, and social networking opportunities, developing a sense of mutuality and caring for each other. Similarly, students learned that “tone” of writing expresses attitude and that they needed to be careful to craft responses that conveyed what they meant, without offending other participants. They learned that when writing discussion responses and comments, they have to consider their “audience” and carefully choose their words or pay the unforeseen consequences through unexpected reactions.

The professors also gained more confidence in critiquing students for their appropriate—or inappropriate—tone and attitude conveyed intentionally or unintentionally through their writing. For example, a science preservice teacher did not like the literacy assignment in which a variety of books needed to be compiled in the form of a text set (set of thematically related books that integrated a science concept in literature). The student was very irritated by this assignment since it required some literary reading and searching for titles, and her feelings came through in her e-mail response to the professor. While honesty and genuine dialogue were encouraged, rudeness was not. This student learned from the professor’s e-mail response back to her that there are acceptable and unacceptable ways to respond and convey thoughts and feelings. Critiquing her choice of words in responding, helped her become more thoughtful, courteous, and appropriate in all her interactions with fellow students as well as the professor. Here is the student’s response to the professor’s comments:

Thanks for getting back to me. Online communication can sometimes be confusing! I have been a little frustrated lately and I didn’t mean to come across as rude. I just like getting feedback quickly on assignments that can help me on the next, similar assignment. Having never taken a class with you before, I was not entirely sure what you were looking for, even with the rubric. I’m still working on the reflection from teaching and will send it very soon. I hope that this clears up some things between us!” (student online e-mail response).

Video and Visual Strategies

Video technologies can provide more flexible and creative ways to represent teaching experiences, examples of expert teaching, opportunities for personal growth through viewing one’s own teaching, and provide immediate access to classroom engagements. Students and faculty can identify implementation of theory into practice, critique instructional practices in light of course content and pedagogy, expose preservice teachers to authentic classroom situations and provide opportunities for multiple viewing and discussion from a variety of perspectives.

Video technologies are seen as having the potential to document the richer, more complex events and situations of teaching and learning ... they can also provide a tool for teacher educators to accurately capture preservice teachers’ thoughts in a particular context of teaching and learning to teach ... It can create a context for preservice teachers to experience shared and multi-layered observations, discussions, and analyses and connect them to different kinds of teaching situations (Wang and Hartley, 2003, p. 112).

The inclusion of video helped to bring students and faculty together. One of the faculty members used video to introduce pertinent information at the beginning of each class in the form of a short preview lesson video. These videos were about three minutes long and provided only background information on theorists to be studied each week. The format was similar to fireside chats rather than lectures or perspectives on materials to be studied. Her rationale for this was that if the online students could see her and listen to a short instructional presentation, there would be more familiarity with the professor rather than the anonymity so prevalent in reading texts online.

Other uses of video hold great promise for making online learning come alive. For example, students could insert video segments of their teaching in the field for group critique and discussion. Students could then reflect on what they noticed about the teaching and how this might change or improve over time. Videos of experienced teachers could be included as motivation for extended discussions about a variety of topics such as classroom management, content exploration, questioning, gender awareness, lesson planning, curriculum integration, or differentiating instruction. Videos of various classroom master teachers could be shown as best practices and then discussed. Power-point presentations could be included to elaborate on assignments, after which all students could have an online discussion about what they noticed and learned, with questions and suggestions for the presenter.

In the science methods course, a major challenge was to find a way to access information from the preservice clinical experiences in the field and incorporate that learning into the online course content, similar to in-class teaching experiences of campus-based classes. Students were asked to videotape two field experience teaching sessions and then post them on the Blackboard course site. To achieve this, students used digital cameras or VHS cameras and Dazzle (a software and hardware program to convert their video) on a loan basis and were given some instruction in the use of the equipment. It was originally thought that streaming video could be used to expedite the video posting, and it did work in some cases. More importantly, though, students learned to critique themselves and engage in peer discussion along with the professor, as they viewed some of the posted video of their teaching in the field. Although the conversion of film to computer was not seamless and there were logistical and technical problems, it showed the potential and promise of using video as a learning tool.

Photographs were used by faculty and students to establish interpersonal connections with each other in creative and engaging ways. For example, each professor included a photograph and introduction about herself at the opening of the course so the students would know a little about her as a real person, engaged in something special in her life beyond the university. Students were also asked to post a current photo of themselves as they would want other class members to know them. This allowed for some creativity and showed the students engaged in sports, with family or friends, or doing something they enjoyed.

Digital presentations were encouraged along with short video pieces about each student. For example, in the literacy course, the professor asked the students to submit a collage or PowerPoint presentation as a form of digital storytelling, showing the multiple literacies in their lives and the unique means of communication within those various literacies. A math student showed how writing, music, math, and language were an integral part of her life. A science student showed how she communicated in special and diverse ways with the volleyball team she coached, with her family, her fiancé, and as a teacher. Final course evaluations and reflections showed that the students felt this was a very engaging assignment and helped them get to know each other more intimately than relying only on the lengthy discussion board responses. They commented that they felt more connected to each other and more at ease during discussions and when posting assignments for critique from other

class members. Interestingly, the math and science content students had a virtual relationship from several previous online courses and felt even more connected after seeing the PowerPoint collage as a form of digital storytelling. The following responses to the posted collages show students learning from each other as well as a strong positive connection in their emerging virtual friendship:

I noticed in K's power-point collage that she has to be literate in so many different areas of her life—literacies demand many different kinds of skills, spoken and unspoken. I love the comment about the unspoken language she has with her fiancé and her family. As she said, we need to be sensitive to unspoken ways of communicating. When a student from a different background is quiet, we need to ascertain whether this is a cultural phenomenon to be respected or whether there is a problem to be addressed. In my classroom, I want everyone to be respectful of each other. But enough about me. K's power-point was awesome! I forgot how many "languages" we speak. It's great having you in our class.

K's response to A's PowerPoint:

Wow! I'm duly impressed. You have given literacy a lot of thought. I especially liked the inclusion of math symbols into the definition of literacy. This reminds me that literacy furthers community and we have to teach literacy in a way that includes all communities and remember that their literacy is simply different but not inferior.

The professor's response:

I am really impressed with all that you thought about and noticed in the collages. The discussion that is beginning about literacy and community is one that we will continue to read and think about throughout the course. Perhaps you all could discuss the connection between these as you see it now, and then we will revisit these ideas over time to reflect on how our understanding, ideas and beliefs are changing. Remember there's no right or wrong answer—just a need to think, reflect and respond to each other as we work through these issues and try to understand them more fully.

Grouping Options

Our approach emphasized connecting students through collaborative learning experiences. For example, weekly learning activities included small group projects, sharing sections from selected assignments for classmate feedback, relating course material to real situations or problems, and shared reflections on the learning process itself. One professor created a "common" on-going and informal discussion site for students to share questions, personal or professional successes and challenges, resources, and other insights and perspectives. For example, weekly learning activities included small group projects, sharing sections from selected assignments for classmate feedback, relating course material to real situations or problems, and shared reflections on the learning process itself. Through these collaborative tasks, students not only were encouraged to take ownership of the learning experience, but also to build meaningful relationships among themselves, their environment, and the course content.

Opportunities were provided for whole class discussions by responding to a posted prompt, or addressing a student's question or inquiry focus as

it emerged from the course content. Students also worked in small groups based on similar inquiry questions; common content interests or areas of expertise (e.g., to define and research a critical issue in their field); cross content groups to gain multiple perspectives; or just random groups as they formed and evolved. Student reflections on the process of online group collaboration revealed insights not only about the process itself, but also about the impact on the relationships of the students:

An advantage of online projects is that the communication with my group members is more direct, to the point, and more efficient. For example, the “file exchange” page makes it very convenient to post work for others to see and edit.

I think the best part of this class has been exchanging ideas and lessons. Interestingly, this online class has given me more ideas and lessons that I can actually use right away than many classes I attended in person. I also feel the feedback has been more genuine, both from the professor and my classmates. Maybe this is because we can be truly objective as we think about our interactions and reflect before sending responses to each other. We don’t have the limitation of a face-to-face interaction that could be less honest.

Although some of us were skeptical of doing a long distance project, in some ways it was better than in a regular class. For instance, on several meeting occasions, one of us was forced to bow out at the last minute. In a face-to-face class, we would have had to rely on a brief second-hand summary. In the online format, we could review the archives, get caught up, and make a relevant contribution.

Being my first online course, I have been impressed with the amount of conversation that takes place in such an impersonal setting. I have begun to enjoy hearing other’s opinions in writing. It’s such a different way of communicating, but after talking to kids in a classroom all day, it is really refreshing.

I was a little apprehensive about completing a group project online. I thought it would be quite challenging without having any real, human contact. In the end, I was quite pleased with the outcome of my group project. There was probably more communication between group members than there would be if we were in an actual classroom setting. In previous experiences with group projects, group members only discussed their project when they were in class and we didn’t have the continuing meaningful dialogues.

Often, the small groups had their own assignments or inquiry work, and were then responsible for “teaching” what they learned or discovered to the whole class. There were many opportunities for sharing work, insights, projects, reflections, and artifacts. Student presentation and sharing resources, ideas, and interpretations prompted sustained discussions as they pondered and expressed new ideas and questions. For example, following a group article analysis presentation, the whole class participated in a week-long dialogue. Responses to the student-posed question after reading an article, “Can a teacher consciously create academic microcultures in which the students thrive? How or why not?” resulted in further analysis and deeper student inquiry:

This is the kind of article I’ve been searching for. It addresses student accountability but I believe teachers need to be accountable for students’ education, too—up to a point, anyway. As mentioned both in the article and this discussion thread, if a student is not motivated, it doesn’t matter who or how the material is presented because the student will not learn.

The idea of microcultures within a school is potentially a good idea. As mentioned in a comment in this thread, it would be possible to create these groups in a classroom. I would like to know how a teacher could implement this in a classroom, though.

One of the aspects of peer-group learning is to randomly select group members or purposely select students of different learning strengths or cliques to participate together. I feel that the teacher’s job is to facilitate the removal of barriers in the classroom that keep students apart and to work toward creating a community of learners in the classroom. I don’t think kids should work to please a teacher—no matter how charismatic. They should work to please themselves and for their own learning and futures.

As Goldman and Hiltz (2005) wrote: “Learning, especially lifelong learning, occurs because people want to find ways to live and love, to connect with and take care of each other and to search for the relevance of experiences and thoughts. People want not only to adjust and rectify their misconceptions, but also their missed conceptions” (p. 262). All the myriad collective engagements contributed to the overall student learning as they participated in meaningful work and helped to inform each other within their community of practice. As students noted in their final reflections:

We came to know each other better and were able to support each other in ways that aren’t always possible within a structured, traditional once a week class. This course gave us the advantage of immediate feedback and the ability to “capture the moment” together rather than holding our ideas and thoughts in isolation until the next class. As we analyzed our group experiences first hand, we learned how powerful a connected learning community can be.

Our online students’ discussions, e-mail responses, and reflections provided insights related to our expanded sense of professional community and collaborative interactions. Many of these responses focused on course content, problems, discoveries, sharing of growing technological expertise and problem-solving about online grading through the use of different kinds of assessments, including tests, surveys, reflections, and performance assessments. However, throughout all the multiple and varied conversations, there was evidence of growing trust toward each other as colleagues; increasing confidence in learning online; willingness to share personal insights, issues, and concerns; appreciation for the opportunities for learning together; and a sense of playfulness and enjoyment in our shared accomplishments.

Conclusions and Implications for Further Inquiry

Our work has revealed insights about the potential for online learning in higher education. Analysis of our field notes, online student discussions, shared professional dialogue, and student reflections suggest a need to

continue to study: designing meaningful activities for engaged learning in an online format; developing and implementing a broader repertoire of strategies for creating communities of practice; and creating appropriate, relevant assessment instruments for formative as well as summative evaluation. Our ongoing faculty dialogue and consistency in theoretical foundations across courses helped us align course content and provide continuity in developing strategies to support our students' learning. Our shared experiences in developing and teaching an online program suggest that positive results are possible when courses are designed and planned collaboratively; when data about student engagement and learning are gathered and analyzed across courses and used to inform instructional decisions; when teaching practices are focused on student learning; and a range of interactive, community-building learning strategies are implemented to encourage student online interaction and collaboration.

In the growing body of literature exploring technology-mediated collaborative learning, studies show positive results when collaboration is an integral part of online learning (Alavi & Dufner, 2005). We found that online learning enhanced communication in unexpected ways. Students gained greater insight into appropriate ways to communicate through writing, and learned to recognize that tone of written voice and word choices greatly impacted responses, dialogue, and interpretation of content. They discovered that their writing could convey many different messages and serve various purposes including course content, coaching each other (and the professors) about technology when needed, and conversing about assignments and making connections within and across the courses. In fact, some students who described themselves as quiet and reluctant to talk in a regular class discussion had a great deal to say in the online format through discussion boards, assignment critiques and course reflections.

Another significant insight was revealed when students taking more than one course in the program or those remaining together through several courses, began to apply what they learned and made theoretical references to what they learned across courses. For these students, the consistent socioconstructivist theoretical base underlying all the courses in the program provided a filter for all field observations and classroom practice and a foundation for dialogue within and across courses. In some cases, students made theoretical references to actual classroom practice during their field experiences. For other students, there were cross-content connections representing growing understanding and comfort in an online instructional approach that emphasized facilitating and scaffolding learning rather than the typical transmission of content information and testing for mastery.

We also found that the consistent theoretical foundation supported our expectation for collaborative work. Our students learned to post more thoughtful comments and give positive, constructive feedback in their small group and whole class threaded discussions. There was a sense of familiarity and ease of responding to each other and a willingness to discuss misconceptions or take a risk posting an online project. Students learned to engage in small and whole group activities available online. In their reflections, the online students noted feeling less stressed and more willing to work with their study group or partner because the online format reduced issues about scheduling time to get together, unequal effort from some of the students, or feeling uncomfortable presenting in front of their peers as they might have in a regular classroom format. Knowing each others' talents and vulnerabilities gleaned from community-building strategies, such as online storytelling about themselves and various online discussions, helped provide a sense of shared learning, encouragement, and support for each other. It was not unusual to see postings such as: "You did a great job with your powerpoint"; "I tried your lesson plan and it went well"; or "Help! My 9th grade students couldn't do the assignment I gave them."

In their online learning research, Palloff and Pratt (1999) found that there was a need to rethink static instructional delivery strategies and that "students need new and different information resources, skills, roles, and relationships" (p. 167). Our role involved more of a true facilitation of

learning rather than transmission of information. Resisting the urge to respond to all the discussion board dialogue, we learned to "listen" and participate only when a concept needed to be highlighted or a discussion needed to be repositioned. Our participation was more substantive and responsive to students' needs and the online format provided time for more thoughtful responses and meaningful reflection. Additionally, we three professors became a stronger community of practice, studying student work, analyzing responses, and collaborating on ways to improve course outcomes. We believe that "technologies do not have one or two good and bad promises locked within them, awaiting their right use or wrong misuses. They have multiple potentials that are structured by the existing social relations guiding their control and application" (Luke, 2001, p. 156).

We engaged in this reflective analysis because we felt that the learning potential of the whole "community of practice" would help us all learn more from the collective efforts and insights of the entire group. This is very different from a learning community in which individual participants do the learning without necessarily impacting the community. It is also different from the typical practice of implementing a "lecture-test" format that many professors tend to use. Swan & Shea (2005) wrote that "Digital technologies have the potential to replace an educational paradigm based on scarcity and isolation with one based on abundance ... digital multimedia enlarge the repertoire of resources available to serve inquiry, thought, and the creation of knowledge, and hence potentially, education" (p. 254).

Our work has shown that online learning has great potential for expanding the instructional arena. Through online learning, students and faculty are able to participate together regardless of location, and the technology itself provides opportunities for creative, constructive meaning-making within a supportive learning community. Since "Communities and neighborhoods are now virtual as well as actual, global as well as local, technology has helped to create a new form of social interdependence enabling new communities to form wherever communication links can be made" (Palloff & Pratt, 1999, p. 25). In fact, "The learning community is the primary vehicle for online learning to occur" (Palloff & Pratt, 1999, p. 29). Connecting within a virtual community is a powerful way to get to know others through shared experiences of learning the course material, succeeding in the use of technology, and learning to learn together in new, exciting ways.

References

- Alavi, M., & Dufner, D. (2005). Technology-mediated collaborative learning: A research perspective. In S. Hiltz & R. Goldman (Eds.), *Learning together online: Research on asynchronous learning networks* (pp. 191–214). Mahwah, N.J.: Lawrence Erlbaum Associates, Publishers.
- Bielaczyc, K., & A. Collins (1999). Learning communities in classrooms: A reconceptualization of educational practice. *Instructional-design theories and models: A new paradigm of instructional theory*, Vol. 11. C.M. Reigeluth. Mahwah, NJ: Lawrence Erlbaum Associates.
- Brown, R. (2001). The process of community-building in distance learning classes. *Journal of Asynchronous Learning Networks*, 5(2), 18–35.
- Cazden, C. B. (1988). *Classroom discourse: The language of teaching and learning*. Portsmouth, NH: Heinemann.
- Dede, C. (September, 2004). Enabling distributed learning communities via emerging technologies—Part one. *T.H.E. Journal*. www.thejournal.com.
- Goldman, R., & Hiltz, S. (2005). Asynchronous learning networks: Looking back and looking forward. In S. Hiltz & R. Goldman (Eds.), *Learning together online: Research on asynchronous*

learning networks (pp. 261–280). Mahwah, NJ: Lawrence Erlbaum Associates.

Hiltz, S., & Goldman, R. (Eds.). (2005). *Learning together online: Research on asynchronous learning networks*. Mahwah, NJ: Lawrence Erlbaum Associates.

Luke, T.W. (2001). Building a virtual university: Working realities from the Virginia Tech Cyberschool. In C. Werry & M. Mowbray (Eds.), *Online communities: Commerce, community action, and the virtual university* (pp. 153–173). Upper Saddle River, NJ: Prentice-Hall.

Palloff, R. M., & Pratt, K. (1999). *Building learning communities in cyberspace: Effective strategies in the classroom*. San Francisco, CA: Jossey-Bass.

Swan, K., & Shea, P. (2005). The development of virtual learning communities. In S. Hiltz & R. Goldman (Eds.), *Learning together online: Research on asynchronous learning networks* (pp. 239–260). Mahwah, NJ: Lawrence Erlbaum Associates.

Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1986). *Thought and language*. Cambridge, MA: MIT Press.

Wang, J., & Hartley, K. (2003). Video technology as a support for teacher education reform. *Journal of Technology and Teacher Education*, (11)1, 105–138.

Wenger, E. (2002). *Communities of practice: Learning, meaning and identity*. NY: Cambridge University Press.

Wertsch, J. V. (1985). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.

Willis, E., Tucker, G., & Gunn, C. (2003). Developing an online master of education in educational technology in a learning paradigm: The process and the product. *Journal of Technology and Teacher Education* (11)1, 5–21.

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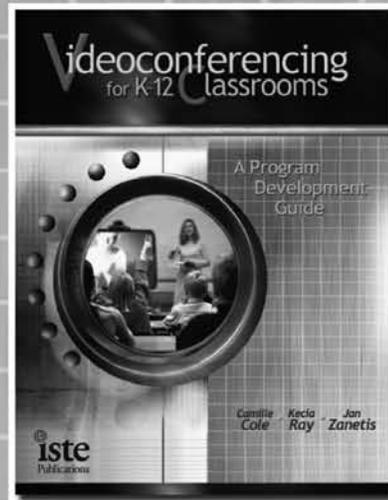
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