

Monologues, Dialogues, and Interactive Conversations: Exploring an On-line Discourse Community for Educators

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Abstract: The purpose of this qualitative study was to examine the on-line discourse accompanying a year-long professional development experience. Participants in this study were 19 graduate students, 5 teacher-leaders, and 1 university faculty member involved in a Reading Institute taught at an urban university in the Southeast. Primary data sources for the study consisted of over 1300 bulletin board postings from the beginning of a summer term through the end of the following spring. Secondary data sources were chat-room transcripts, course materials, informal interviews with the participants, and e-mail correspondence. Data were analyzed using a constant-comparative method. The findings indicate that students involved in an on-line course develop diverse ways of using the distance learning technology to communicate with others. Instructors and/or teacher leaders played an important role in modeling and scaffolding online dialogue in order to move communication from single postings, or monologues, to multi-person interactions. In a supportive learning environment, students can use an on-line community to further their understanding of assignments, seek out information, and provide support for one another.

Web-based distance learning offers exciting possibilities for teacher training and education. Learning opportunities via the web pose alternatives for teachers who want to increase their professional knowledge and credentials but who might be restricted by time or place from attending regular classes. However, despite growing support of on-line learning for improving access to education and facilitating interaction across learners (Harasim, 1990; Hiltz, 1994), there still seems to be reluctance among some college instructors and students in fully accepting this type of experience as a legitimate learning situation (Cornell, 1999).

Part of the reluctance may stem from the lack of human contact inherent in the approach. Several researchers have found that fostering human relations on-line may be one of the most important factors in creating successful on-line courses (Hopey, 1996; Spitzer, 1998). Laszlo and Castro (1995) believe that, “interactive learning environments [should not] replace interpersonal and direct contact processes, but rather ... augment them. Technology is not a substitute for collaborative, interpersonal exchanges of information and experience” (p. 11).

Morrison and Adcock (1999) contended that students need peer-to-peer networks and mentor relationships in order to experience success in a distance learning setting. Such interaction creates a learning community, which "...supports and encourages knowledge acquisition. It creates a sense of excitement about learning together and renewing the passion involved with exploring new realms in education" (Pallof & Pratt, 1999, p. 163).

Previous distance education research has examined the nature of social interaction in online environments. In a qualitative study, Stacey (1999) researched the process of collaborative learning that occurred when Master of Business Administration students used computer-mediated communication as a means of small-group and large-group communication. Her findings indicated the processes and tasks in the course facilitated the social construction of knowledge. The students actively constructed their own personal perspectives on information through the process of communicating their ideas electronically to their small group. Similarly, Barab, Thomas, and Merrill's (2001) naturalistic study found graduate students enrolled in an online course collaboratively investigated and shared personal experiences in ways that led to co-construction of meaning.

The importance of dialogue and discussion in order to provide opportunities for exchanges of ideas and for the social construction of knowledge is of particular interest to teacher educators (Grisham, 1997). Effective professional development in teacher education requires coaching, monitoring and clinical support as teachers work to integrate theory and research into real-life classroom situations (Anders, Hoffman, & Duffy, 2000). However, because of the labor-intensive nature of teacher education, in recent years there have been calls for additional research examining the ways various forms of technology might be used effectively to improve teacher education (National Institute of Child Health and Human Development, 2000).

Given the importance of social interaction in professional development experiences and the growing interest in the integration of technology in teacher education, researchers have begun to explore the ways that technology may facilitate the communication of teachers in both pre-service and in-service educational programs. Studies examining various forms of on-line discourse (chats, discussion postings, electronic mail dialogue journals), indicate that teachers' and students' roles may shift in the on-line community with students' taking on responsibility for mentoring peers and teachers learning with students (Harris, 1993; Rice-Lively, 1994). Furthermore, preservice teachers have effectively used on-line formats to gain both knowledge and practical expertise through dialogue with peers (Grisham, 1997). Dodson (1999) noted, however, that while the web provides opportunities for student discussion, such interaction is often characterized as just "simultaneous monologues" (p. 4). Dodson's research with pre-service teachers stressed the importance of comments that invite participation, and added that sponsorship of topics is needed to create more of a dialogic stance. As teacher-educators continue to consider the interactions made possible by web-based or web-assisted course experiences, additional information is needed to understand how discourse communities evolve in such courses. Better understanding of the nature of discourse in online communities and the ways instructors might facilitate and support such discourse is important to teacher educators interested in integrating web-based support networks into their professional development programs.

Therefore, the purpose of this study was to examine the on-line discourse accompanying a year-long professional development experience. This experience consisted of three graduate courses called "The Reading Institute" and was comprised of both on-campus experiences and

online learning and support. Specifically, the following guiding question was addressed: How can the discourse community that developed in an on-line course environment be described?

Methodology

Participants in this study were 19 teachers, 5 teacher-leaders, and 1 university faculty member involved in a Reading Institute taught at an urban university in the Southeast. The students were teachers enrolled in graduate programs in literacy and all had taught at least 3 years. Fourteen of the teachers taught elementary grades, three were middle-school teachers and two taught high school. The Reading Institute included an intense 3-week summer study with subsequent classroom application throughout the follow-up school year. During the summer institute, teachers focused on understanding readers and the reading process, on linking assessment and instruction, and on instructional strategies that enhance students' literacy abilities in the content areas. Particular emphasis was placed on planning ways to meet the needs of learners in the teachers' classrooms. In the following school year, teachers integrated literacy-related instructional strategies and assessment techniques in their curriculum and received ongoing support through the use of distance-learning technology. Using Web-CT, teachers were required to post reflections on small-group selected readings every two weeks and to submit results of classroom implementation assignments. They were also encouraged to read and respond to one-another's postings. Teacher-leaders for the course experience were doctoral students in language and literacy education involved in teaching internships. The teacher leaders led small group discussions during the summer institute and supported the teachers by participating with them in the bulletin board discussions throughout the year.

Primary data sources for the study consisted of 1,330 Bulletin board postings from June 1999 through April 2000. These included both required postings (eg. Reflections on readings, assignments) and voluntary postings. Secondary data sources were chat-room transcripts from the spring of 2000, course materials, informal interviews with the participants, and e-mail correspondence. Data were analyzed using a constant-comparative method (Glaser & Strauss, 1967) and data reduction techniques as recommended by Hubermann and Miles (1993).

The research team that worked on this study consisted of the instructor of the course and four doctoral students. One of the doctoral students involved in the research team had also been involved as a teacher-leader during the course experience. The instructor framed the design of the study and conducted bi-weekly team meetings. To establish initial codes, the doctoral student members of the research team individually read approximately seven weeks of bulletin board postings and charted content therein. This content was shared and categories were created in light of the (a) content of the messages and (b) the purpose or goal of the message. Analysis of the data resulted in further refinement and description of categories. This resulted in a total of nine final categories to describe the discourse elements found in the postings throughout the year. The discourse elements identified were giving/clarifying assignments, posting assignments, reflections on readings, presenting professional opportunities, asking questions and soliciting ideas or help, offering ideas/presenting information/advice, personal or self disclosure, affirmations and thanking, and salutations.

Next, the doctoral student members of the research team coded the same data set to examine the viability of the category descriptions for each element and to establish consistency across the team. A recursive-generative process (Hubermann & Miles, 1993) was used as team members

analyzed subsections of the data, shared the results of their efforts in team meetings, and adjusted category descriptions accordingly. Whenever a question or discrepancy occurred, team members met and worked with the data until they attained consensus.

As data analysis progressed, the descriptive categories of discourse elements appeared to be insufficient in capturing the nature of the interactions. Subsequently, diagrams were constructed to serve as models of the dialogues (two-person) or conversations (multi-person) that took place. Next, charts were created which took into account not only the discourse elements but also whether postings were monologues or were part of ongoing dialogues and conversations, and whether postings were teacher-initiated (posted by the instructor or teacher-leaders) or student initiated. Finally, time-lines were constructed to examine differences between summer, fall, and spring semester postings.

Findings

The discourse elements evident in the 1330 postings can be seen in Table 1. As illustrated, the frequency of postings was greatest in the fall of the year when the students began implementing their projects in their classrooms. To give a better sense of the nature of the postings, however, it is important to examine these discourse elements in the context of the interaction patterns that emerged in the on-line community. In the sections that follow we will discuss the relationships between these interaction patterns, the discourse elements, and the participants involved.

Monologues





As shown in Table 1, monologue postings submitted by all participants decreased markedly across the year, from the majority of interactions in the summer (89%), to less than half of fall and spring interactions. The lack of response to postings during the summer encompassed all discourse elements, while in the fall and spring, most of the monologue postings were initiated by students completing and posting course assignments. One interesting trend noted in the category of discourse elements, “ask questions – solicit ideas/help” was identified when analyzing the amount of these postings that were monologues, remaining therefore unanswered questions. These made up 10% percent of the summer questions posted, decreased to 3% during the fall, then rose slightly to 6% in the spring. The higher number of unanswered questions in the summer may have been impacted by  fact that the questions might have been answered in person during the three-week summer Institute period. The decreasing number of these and other monologue postings from summer to fall, however, seemed to indicate the students’ increasing comfort with the technological community. As the on-line environment became their primary mode of communication, two-person and multi-person interactions increased with bulletin board postings exhibiting a wider range of discourse elements.

Table 1

Discourse Elements and Interaction Patterns Occurring Across the Year

	Postings By Semester			
	Summer	Fall	Spring	Total
Discourse Elements				
Giving/clarifying assignments	8	5	18	31
Posting assignments	61	19	15	95
Reflections on readings	85	91	73	249
Presenting prof. opportunities	9	3	3	15
Ask questions/ soliciting ideas/help	33	88	55	176
Offering ideas/ presenting info/advice	71	142	85	298
Personal/self-disclosure, goals needs	48	103	58	209
Affirmation/thanking	46	113	60	219
Salutations/greetings	1	32	5	38
Total discourse elements	362	596	372	1330
Interactions				
Monologue	224 (89%)	60 (39%)	63 (48%)	347
Two-Person Dialogue	14 (6%)	54 (35%)	36 (27%)	104
Multi-Person Conversation	14 (6%)	40 (26%)	32 (24%)	86
Total Interactions	252	154	131	537

Dialogues

Most of  two-person dialogues consisted of a student posting a reflection to a reading or assignment  receiving encouragement, advisement and/or new ideas. Initially students reflections or  assignments received such feedback from the instructor. As the year progressed, however, there seemed to be a gradual shifting of this supportive role from instructor, to teacher-leaders, and then to the students themselves. In the summer, for example, the instructor answered 79% of the student-initiated postings in two-person dialogues. By fall, however, instructor-answered postings dropped to only 21% of the total, with the teacher leaders providing feedback 42% of the time and students responding to their peers almost as often, at 37% of the time. In the spring, the students had taken over the majority of the mentoring, making up 68% of these postings, with the teacher leaders involved 24% of the time, and the instructor involved only 8% of the time in this role.

In addition to mentoring, technology assistance was another area of support that shifted from the teacher to the students. The students became highly supportive of one another's emerging technology skills. For example, at first students were concerned about sending attachments correctly. When they would ask for confirmation that an attachment was received, one or several students would immediately respond. Technology mentoring also included the scaffolding of processes for navigating a web-based course. For example, when one student requested help, another immediately replied, "I am attaching a file telling you the steps in attaching a document."

The shifting of roles that occurred, from instructor to students as primary respondents, may have reflected the instructor's willingness to share responsibility for student learning. Often she entered the conversation as just another participant, sharing thoughts without taking on the role of the main advisor and counselor. Further, the modeling of responses by the teacher-leaders, who were classroom-teaching peers of the students, may also have made it easier for the students to let go of their traditional roles. Instead of passively waiting for the teacher to respond, students began to actively support each other's learning, sharing experiences and resources, and creating for themselves a stimulating on-line learning environment.

Multi-Person Conversations

As illustrated in Table 1, the increase of the multi-person conversations throughout the year were further indication that an interactive mentoring network and sense of community were beginning to emerge.

During the summer's initial work on Web-CT, conversations of more than two people were rare, making up only 6% of total interactions. The exceptions that did occur, however, were mostly generated as a result of high interest topics that allowed participants to share personal perspectives and to get to know each other. One of these conversations, (one of the longest of the course including 81 postings), was entitled "My Favorite Books". The instructor began this conversation by saying, "Let's use this thread to share and find out about the great books we can use next year in the classroom (what we can relax with on the beach in July!)". Nearly everyone participated enthusiastically in this conversation, sharing and responding to others' recommendations of books appropriate to the classroom, as well ones for personal enjoyment.

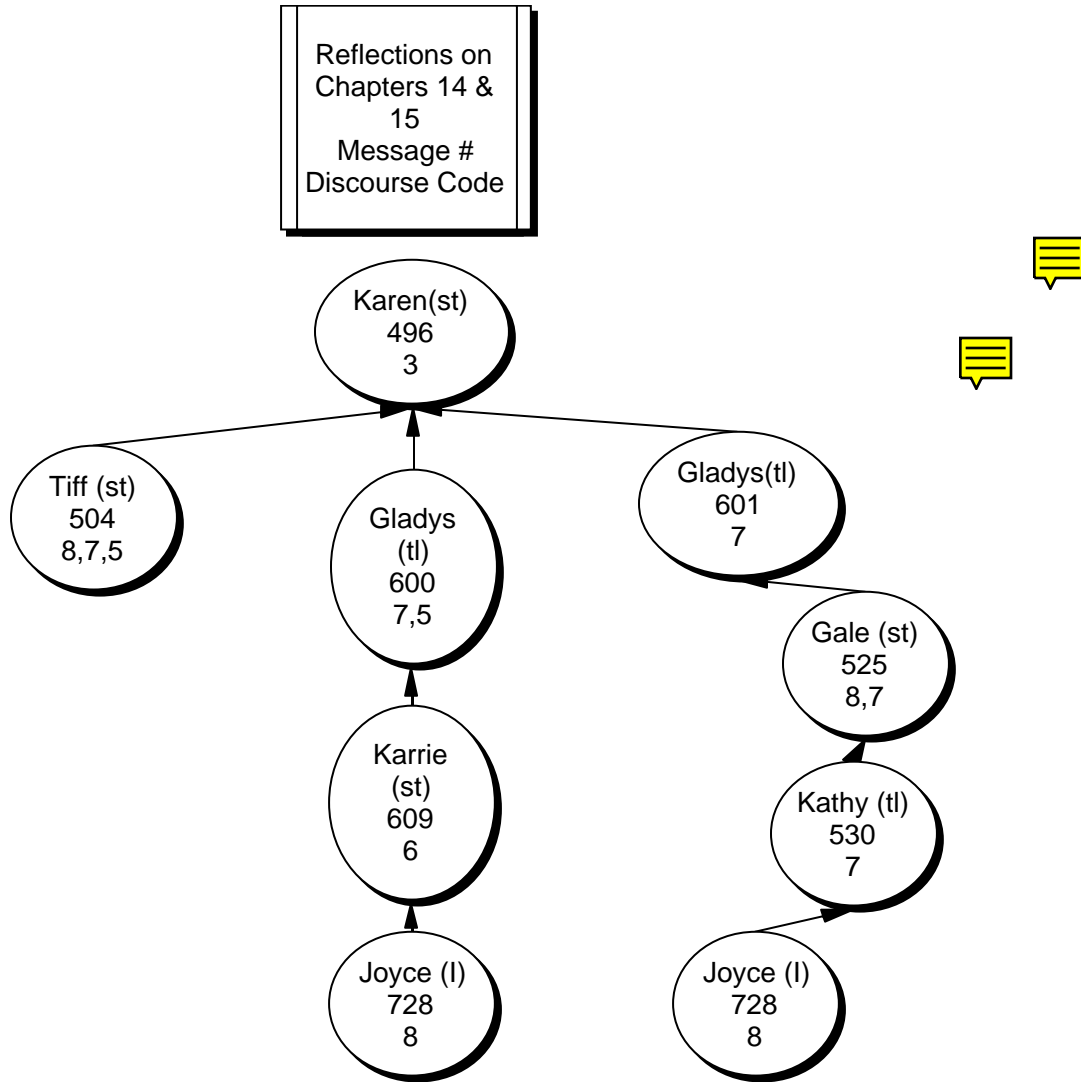
The number of multi-person conversations nearly tripled in the fall and made up 26% of total conversations. This increase remained stable in spring at 24% of total conversations. During the fall, the content of postings initiating these conversations shifted from high-interest topics to postings containing students' reading reflections (60% of multi-person conversations). The content of such reflections often included questions and/or concerns as the writer attempted to apply his or her assigned readings to the classroom. On such occasions, a class member would draw on personal knowledge and expertise to offer advice and make suggestions. Other participants might then provide information and affirm each other's reactions or personal advice. Through this process, the on-line community allowed the students to become an instructional support team. The dynamic nature of this interaction is also illustrated in the chart shown in Figure 1.

As demonstrated in this diagram, this fall conversation began with a student posting her reflection to an assigned reading (Karen, posting 496, discourse element code 3). During the subsequent interaction, four students, two teacher mentors, and the instructor posted responses

that asked questions (discourse code element code 5), offered ideas or advice (code 6), shared their personal experiences (code 7), and affirmed approaches and suggestions (code 8). By mid-fall, such interactions frequently took place in response to assigned readings. An important point to note is that responding to another's postings was not required in the course, although it was encouraged and modeled by the instructor and the teacher-leaders.

Figure 1.

Interaction Patterns In A Fall Multi-Person Conversation About An Assigned Reading



Note.

- Parenthetical abbreviations refer to the role of the individual making the posting: (st) = student, (tl) = teacher leader, and (I) = instructor.
- Arrows indicate to whom a person was responding when making a posting.
- Codes: 1 – giving/clarifying assignment, 2 – posting assignments, 3 – reflections on readings, 4 – presenting opportunities, 5 – asking questions/soliciting ideas or advice, 6 – offering ideas or presenting information/advice, 7 – personal/self-disclosure, goals, needs, 8 – affirmation/thanking, 9 – salutations/greetings

In the spring, the types of discourse elements that resulted in multi-person conversations expanded (See Table 2). Reading reflections still initiated many conversations, but there was even equal number generated by general questions posed to the group. In addition, relatively high numbers of conversations revolved around disclosure of personal goals and needs or offering teaching advice and suggestions. One spring posting asked for help, for example, with a student stating, “I would like to get my group [of pupils] into more flexible groupings. Please send suggestions on time management if anyone can.” Responses back were prompt and included such comments as: “You might want to focus on doing guided reading groups several times per week, if not every day...a guided reading lesson can be done in 15-25 minutes, so that might help your time management problem.”

Table 2

Discourse Elements Initiating Multi-person Conversations Throughout the Year

Conversation Type	Summer		Fall		Spring		Total
Giving/clarifying assignments	3	21%	0	0%	0	0%	3
Posting assignments	1	7%	3	8%	5	16%	9
Reflections on readings	1	7%	24	60%	7	22%	32
Presenting professional opportunities	3	21%	1	3%	0	0%	4
Ask questions/soliciting ideas/help	0	0%	3	8%	7	22%	10
Offering ideas/presenting info/advice	2	14%	4	10%	4	13%	10
Personal/self-disclosure, goals needs	3	21%	2	5%	6	19%	11
Affirmation/thanking	1	7%	3	8%	2	6%	6
Salutations/greetings	0	0%	0	0%	1	3%	1
	14		40		32		86

The following excerpts from a series of responses to a student who expressed her own need for conversation on a self-chosen topic, give a more complete illustration of the content and extent of these supportive interactions. The interaction pattern evident in this conversation is diagrammed in the chart found in Figure 2.

Mary, one of the class members, posted on the main bulletin board that, “I ‘d be interested in sharing some ideas on BLT running records because I have second and third REP kids this year.”

Susan shared her interest in the topic by responding, “My school has also elected to participate in the Reading First Program. We have yet to receive the materials needed to conduct the BLT.”

Kathy, a teacher-leader, added, “That’s great that your school will be using

Reading First; once you get the materials you will really enjoy it.”

A third class member, Grace, joined the conversation. “I really like the BLT because it gets good results. The good thing is you have a step-by-step guide to refer to if needed.”

Tara raised a concern. “I had a problem with the nonsense words used. I often found the children getting frustrated during those sections. Do you happen to know why they didn’t use real words?”

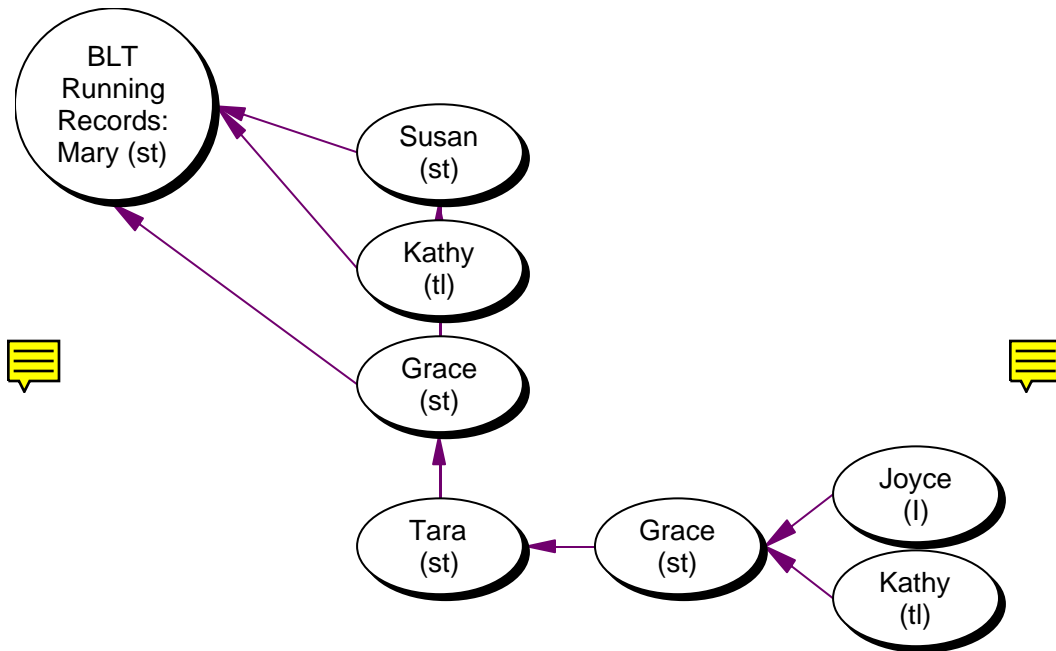
Her concern was addressed by Grace. “From what I was told, nonsense words were used because if the students really know phonics then they should be able to decode any word.”

A teacher-leader, Kathy, also responded, “If I were using BLT with readers with good strategies and expect words to make sense, I would have no qualms with prepping them by telling them this is a game.”

Joyce, the instructor, joined the conversation at this point by adding, “There are better ways to check students’ knowledge of phonics...maybe using words that are uncommon but phonetic.”

Figure 2.

Diagram Of A Multi-Person Conversation In Response To Student’s Personal Need Or Goal



Note.

- Parenthetical abbreviations refer to the role of the individual making the posting: (st) = student, (tl) = teacher leader, and (l) = instructor.
- Arrows indicate to whom a person was responding when making a posting.

In the spring, postings also became more personal in nature, as the participants encouraged each other in a cheer-leading role. When one wrote about a fellow student, “I just heard you were named teacher of the year,” many responses followed in rapid succession. “Why am I not surprised by this?” one participant wrote. “You are an outstanding teacher and I know your children have learned a lot from you.” Another stated: “It’s an honor whether you win or not. I’ll keep my fingers crossed and say a prayer. Let us know how it goes.”

These multi-person conversations reflected a growing on-line community of educators. In the summer, the instructor facilitated the multi-person interactions that occurred through her invitations on the bulletin board area for students to post personal reflections and ideas on various topics (eg Favorite books). In the fall, students’ reflections to the course readings often resulted in such conversations. These reading assignments were often determined by the students in their small group discussions with their teacher-leaders and the reflections provided a springboard for sharing frustrations, successes, information, and advice. By the spring, conversations went beyond the assignments to encompass day-to-day classroom and personal experiences, resulting in teachers who were less isolated in their work and who had resources to aid them in being more effective in their teaching.



Discussion

The findings of this research indicate that students involved in an on-line course develop diverse ways of using the distance learning technology to communicate with others. In a supportive learning environment, students can use an on-line community to further their understanding of assignments, seek out information, and provide support for one another. In discussing the implications evident from patterns in the data, however, a number of factors should be considered.

First, the nature of individuals who choose the teaching profession shaped the results of this study. Teachers have the responsibility of creating a community in their classrooms through the establishment of particular discourse expectations (Cambourne, 2000) and this may have affected the high level of participation. Also, the fact that all were literacy teachers might have been indicative of a relatively high comfort level with writing. Such factors could have led to increased participation in this course relative to participation one might see with other teachers or with students from other majors. Consequently, further research might examine the development of a community in classes that comprise teachers from other subject areas or other professional groups.

Second, this study demonstrated that a variety of influences may shape the discourse in an on-line community. One of the teacher leaders, who was also a member of this research team, noted that in the case of this particular course, a rapport formed within some of the small groups during the three-week summer institute, which may have affected the web-based environment. Previous research (Harris, 1998) has indicated that establishing patterns of communication early is critical to the success of online courses. Future research could focus on the extent to which a sense of community is developed prior to the web-based portion of an on-line course and how this opportunity for in-person contact is related to the subsequent on-line interaction.

Finally, the 1330 postings analyzed may not have been adequate in fully describing the community that formed. Many participants reported that they used other communication avenues such as personal Email and the telephone to converse about topics of mutual interest. Similar research may incorporate data relevant to other forms of communication used by students to more fully understand the extent of networking that emerges in distance learning experiences.

With these influences in mind, the findings from this study indicate a classroom community can evolve within a web-assisted course and can provide support as teachers work to make connections between theory and practice in their literacy classrooms.

The patterns evident in this year-long professional development experience indicate that an on-line community may develop in part through the introduction of high-interest topics. In the summer, these topics were instrumental in sparking multi-person conversations. Students who may have been more hesitant in asking questions or seeking advice, for example, were enthusiastic when sharing opinions and making recommendations on topics unrelated to the classroom. Even though such topics may not directly apply to the course requirements, they may be a way of stimulating interaction and developing the relationships necessary in creating a community.

In addition, during the initial weeks the instructor and the teacher leaders were keys to establishing relationships among the class members. They offered suggestions, answered questions, encouraged communication among group members, and modeled response patterns to others' postings. Such modeling has been found to be key in establishing effective on-line learning environments (Martin, LaMaster, & Vinge, 1999). The fact that the teacher leaders were peers of the teachers in the course also seemed to be helpful in developing a comfort level among participants in following the teacher-leader examples. As has been noted in previous research, the roles of the instructor, the teacher-leaders, and the students seemed to undergo a shift across time in the on-line community (Harris, 1993; Rice-Lively, 1994). The students gradually assumed more and more of a role in supporting the professional development of their peers through cyber-mentoring (Boxie & Maring, 2001). Students, teacher leaders, and the instructor became co-learners as they actively participated in collaborative discussions (Osterman & Kottkamp, 1993). Using the on-line technology, these participants shared their professional knowledge with others, offered advice relative to both pedagogy and technology, and reflected on their practice. Thus, consistent with previous research, these professionals effectively used the on-line formats to gain knowledge about how to navigate within the class and how to implement activities in their classroom, and to further their content understanding through dialogue with peers (Grisham, 1997).

Another critical factor shaping the course interactions was the extent to which class members were required to post assigned reading reflections and course assignments. The reflections, in particular, seemed to stimulate response from other class members. Calls for assistance and statements of opinion contained in such reflections were readily answered, despite the fact that such responses were not a requirement of the course. When students felt that somebody cared enough to help, or felt that they could help another person, a community was formed. This support structure grew through out the year and by the spring semester conversations extended beyond the course to other areas aspects of teaching and even to the students' personal lives.

The importance of developing relationships in the on-line learning environment has been emphasized previously in the field of distance learning. For instance, Spitzer's ten principles fundamental to the success of distance learning stress personal contact. He contends, "... there is no substitute for a positive, caring, non-threatening environment" (1998, p. 55). Similarly, Hopey (1996) stated that the future success of distance learning will rely in part on this type of collaboration between learners, and Morrison and Adcock (1999) found that students need peer to peer networks and mentor relationships in order to experience success in a distance learning setting. Such a learning community "supports and encourages knowledge acquisition. It creates a sense of excitement about learning together and renewing the passion involved with exploring new realms in education" (Pallof & Pratt, 1999, p. 163). It is this type of community that we see evident in the data from this course and that we contend is invaluable to the success of distance education.

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