

Encouraging Ownership of Online Spaces: Support for Preservice English Teachers Through Computer-Mediated Communication

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Abstract

High attrition rates among new teachers are of concern to teacher educators. Support mechanisms may help teachers feel less isolated in their new profession. Computer-mediated communication (CMC) technologies can connect novice teachers in ways that are both time and place independent. Most research on asynchronous online discussions has focused on achieving formal learning goals through highly structured scaffolds for reflective thinking and cognitive presence. Less attention is being paid to how novice teachers who are already accustomed to participating in online communities turn to these online spaces for the support they need. This case study examined whether and how eight preservice teachers completing English education internships at professional development schools chose to use an asynchronous discussion forum in the absence of a tightly structured or controlled communication task. The interns chose to use the online space for just-in-time informal learning and for psychological support on complex issues that were not easy to discuss face to face. The interns regularly responded to each others' requests, thoughts, and concerns. The authors propose that highly structured online forums are not the only way CMC can be used for teacher support, particularly now that CMC is no longer a novelty, nor should formal learning be the only purpose for providing such online spaces to novice teachers.

A large number of novice K-12 teachers do not remain in their schools or classrooms long enough to make the transformation from beginner to experienced or proficient levels (Berliner, 1998; Gay, 2000; Howey, 2000). Studies show that 25% of beginning teachers do not teach more than 2 years (Gold, 1996) and nearly 50% leave within 5 years (Quality Counts, 2000). Researchers note that the initial year in the classroom is a critical part of a teacher's career with long term implications for job satisfaction and career length (Feiman-Nemser, 1983; Hebert & Worthy, 2001; Lortie, 1975; McDonald, 1980). Several factors—isolation, working conditions, low salaries, inadequate preparation, and a lack of support—contribute to high attrition rates (Andrews & Martin, 2003; Darling-Hammond, 2003; Kent, 2000; Rogers & Babinski, 1999; Veenman, 1984) and are often compounded by the lack of structures in place to support beginning teachers as they transition from “students of teaching to teachers of students” (Chubbuck, Clift, Allard, & Quinlan, 2001, cited in DeWert, Babinski, & Jones, 2003, p. 312). Learning to feel comfortable, rather than incompetent, in asking for help and having a secure place to do so are necessary for a successful entry into the profession. One way schools and universities can assist student teachers in making the transition to classroom teacher is by creating a network of collegial contacts (McCann, Johannessen, & Ricca, 2005).

Students in the University of Tennessee's English education initial licensure program—one that includes a year-long internship—not only attempt to become certified teachers but also earn a master's degree at the same time. These interns begin their course work and enter their school placement in August and continue through until the day the public schools end (usually the end of May). During this time they complete 12 hours of internship credit and 12 hours of required coursework in English methods, reading, analysis of teaching, and action research. Successful completion of the year-long internship is considered equivalent to their first year of teaching on the state's pay scale. Thus, their stress of being a first-year teacher is compounded with attending evening classes, preparing for the Praxis examination, and juggling lives outside of school. With these multiple demands, combating isolation through support mechanisms is central to the interns' success (DeWert et al., 2003; Ferdig & Roehler, 2003-2004; Rogers & Babinski, 2002).

Our interest in using CMC as a support network originated from our own background and research interests. At the time of this study, Lisa Scherff was the instructor of the course and the students' advisor and program coordinator. Thus, her interaction with the participants extended well beyond the course. Trena Paulus was a colleague in the same college, but was not involved in the teacher education program. She has both theoretical and practical experience with qualitative research, discourse analysis, and online discussions. Together we wanted to explore the first-year experiences of these interns as they enter the field, along with the potential role of CMC during this pivotal time.

Concepts of Support

Gold (1996) has identified two broad concepts of support that beginning teachers need: instructional and psychological. Instructional support helps novice teachers succeed in classroom and school settings, while psychological support facilitates self-confidence, self-esteem, self-reliance, and ways to handle stress (p. 561). New teachers often struggle with the same instructional issues: managing a classroom effectively, motivating students, organizing instruction, assessing student work, relating to parents, dealing with student differences, and acquiring classroom supplies (Darling-Hammond, 2003; Gold, 1996; Veenman, 1984; Zimpher & Rieger, 1988). In order to combat these problems, instructional support must deal with four areas: understanding the subject matter, being able to transfer that subject matter to students, using a variety of methods to teach, and being able to reflect critically on their practice (Gold, 1996; Shulman, 1986).

Psychological support is an umbrella term that covers many aspects of a teacher's life, including emotional support, positive regard, empathetic listening, confidence building, stress management, and increasing efficacy and self-reliance (Gold, 1996). Gold and Roth (1993) recommended that new teachers be provided with psychological support that includes awareness of individual needs, knowledge of how to meet those needs, and available individuals to provide support. Likewise, novice teachers need to feel valued, safe, and connected to others; have power over their own ideas and actions; find meaning in their professional lives; and be willing to take risks (Tang, 2003).

Technology as Support

One way of providing support to interns and new teachers is through computer mediated communication (CMC) tools. CMC is any form of discussion that requires the use of a computer (Dietz-Uhler & Bishop-Clark, 2001). As long as students have access to a computer, CMC can occur at any time or place, thus providing a level of accessibility to communication with others that is often not fostered in schools or in classrooms. Technology changes rapidly, and the adoption rates of technology are faster among the younger generation. Today's teacher education students are technologically more savvy and accustomed to participating in online communities and even expect CMC to be part of their educational experience (Oblinger, 2003).

Whether and how they participate in online communities is of interest to teacher educators for many reasons. The purpose of many online communities is to provide informal learning opportunities beyond what is possible in face-to-face classrooms. Whether and how teachers choose to communicate in these communities should be examined not only from the perspective of what teacher educators think novice teachers should be doing, but also from the perspective of the new teachers themselves. Past studies, which showed few teachers participating voluntarily in online discussions and communities (Nicholson & Bond, 2003; Stephens & Hartmann, 2004), may need to be revisited regularly as the new generation moves into teaching positions.

Studies have found that online support networks can provide beginning teachers with "social, emotional, practical, and professional support" (DeWert et al., 2003, p. 319), moral support (Merseeth, 1990), a place to make connections (Romiszowski & Ravitz, 1997), deeper understandings of teaching and learning (Ferdig & Roehler, 2003-2004), and practice with collaborative reflection (Nicholson & Bond, 2003). DeWert et al. (2003) found that as teachers' feelings of isolation decreased, their confidence and enthusiasm increased, and they became more critical thinkers with improved problem-solving skills.

Many online spaces are created as part of formal learning environments, and the instructor's purpose for such spaces is that novice teachers achieve specific cognitive goals, such as critical reflection. Highly structured online environments have often been recommended as the best way to scaffold desired types of communicative outcomes (Bodzin & Park, 2000; Hough, Smithy, & Evertson, 2004). However, this approach takes the ownership of the space away from the novice teacher and gives it to the instructor, as pointed out by Fauske and Wade (2003-2004). By requiring only minimal participation to encourage entry into the online space and by not assigning specific topics for conversation or requiring a certain type of discourse, we hoped to provide a space for the teachers, if they wished, to own. We were curious about how and whether the current generation of novice teachers, those more familiar with online communities, when given control of the online space, choose to use it during their first year field experience.

Background

The purpose of this study was to examine how novice teachers in English education completing language arts internships at two professional development schools (PDS) would choose to utilize an asynchronous discussion forum while they were in the field. A PDS, similar to a teaching hospital, is an innovative institution formed through a partnership between a colleges or universities and elementary, middle, and high schools.

The PDS model is a collaboration between schools, colleges, or departments of education and preK-12 schools and/or school districts. Within a PDS, partnering institutions share responsibility for increasing student learning and achievement; engage in continuous inquiry to enhance excellent teaching and student achievement; take part in meaningful, ongoing professional development; and prepare effective beginning teachers (Abdal-Haqq, 1998; Ridley, Hurwitz, Hackett, & Miller, 2005). One feature of a PDS-based teacher preparation program is the strong built-in support system created for both preservice and novice teachers (Mantle-Bromley, 2001; Ridley et al., 2005; Wise, 2000-2001).

We chose to look at the PDS schools, with their smaller cohort of students, for this initial exploratory study. We specifically looked at PDS interns' use of CMC because of the enhanced support system inherently built into the PDS program. This program was unique in that the instructor (as well as the instructors of the other courses) traveled to the PDS sites to deliver instruction rather than interns commuting to night classes. Because interns took university classes at their school sites, they were able to spend more time with their mentoring teachers and English departments. Even though these interns were in a more supportive environment than their peers in a traditional internship, would the PDS be supportive enough? Based on the review of the literature on concepts of support and CMC as support, one overarching question directed our investigation: Would these PDS interns choose to use this CMC space, and if so, how would they utilize it?

Method

Context

As part of the 15-week language arts methods course taught during the fall by Lisa, the interns were provided with an online space: the asynchronous discussion forum feature of the university's Blackboard™ course management system. Although this type of technology was new to the instructor, Lisa was motivated to create this space because of her own isolating experience as a student teacher. Moreover, the discussion board was to be owned by the interns – providing them, should they need it, a space beyond their weekly class time to ask questions, vent frustrations, or make comments. To ensure that they at least entered the space and played around, they were asked to post at least one question and/or comment per week. However, there were no assigned topics for discussion or requirements to talk to each other in a certain way (e.g., critically reflect on readings). Rather, topics were to be generated by the interns as needed. We wanted to see how the interns would choose to use this online space while in the field, rather than formally dictate how they should be conversing. Lisa indicated that she would be lurking in the space, too, but would respond only when necessary or directly asked. Minimal instructor intervention was also a strategy to foster an intern-centered environment for this online space.

The interns were in the field and also enrolled in the PDS section of the secondary language arts methods course. To be enrolled in the PDS section of the class, interns

needed to be admitted to the graduate internship program and also be accepted as an intern into one of the two PDS high schools. As such, in the fall semester teacher candidates were enrolled in language arts methods, content area reading, and analysis of teaching (8 hours total), as well as being registered for 4 hours of internship. During the fall semester, the interns taught either the first or second block of the day, ate lunch with their mentors and department members, and then attended their classes in the early afternoon. Because they were in their placements all day, 5 days a week, the interns had both experiences to write about and the resources to do so.

Participants and PDS Sites

Participants in the study were eight PDS interns (six females and two males), ranging in age from 21-23; each had completed either a bachelor's degree in English the prior semester or the required number of hours in English coursework. Four of the interns were at the northern PDS, three were at the southern PDS, and one was at neither (he attended this class, with his advisor's permission, a year before his scheduled internship). At the time of the study, all participants had taken a technology course, in addition to the foundational courses (educational psychology, special education, etc.) required by the state. Although all students were proficient at using e-mail and the Blackboard system, none indicated having previously used the discussion board in this manner.

Both PDS sites are located in a suburban district that serves nearly 60,000 K-12 students. At the time of this study, the northern high school was in its second year as a PDS, while the southern high school was in its sixth year. Located in an older part of the county, the northern high school was attended by 1,036 students, 63% coming from low-income homes. The southern high school, located in a more affluent part of the district, had an enrollment of 1,554 students, 33% coming from low-income families.

Procedure

A qualitative case study (Merriam, 1988) was selected as the most appropriate way to explore the online discussions. Yin (2003) emphasized that case study is a research strategy rather than a method, defining it as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 13). Rather than attempt to isolate and investigate variables impacting the use of the discussion forum, it was more appropriate to first describe and interpret the interns' participation as part of the context itself. Naturalistic case study research of this type emphasizes a focus on meaning in context and is an "ideal design for understanding and interpreting observations of educational phenomenon" (Merriam, 1988, p. 2).

Because the purpose of our study is to understand what happened in the online forum, we chose to look in depth at the dialogue itself rather than collect interview data or administer pre/post-test instruments. Our goal was not to make causal claims about whether the online forum achieved some predetermined goal or "worked" per se; rather we sought to understand through an exploratory case study how one group of novice teachers chose to talk to each other when given the opportunity.

Methods used in qualitative case study research are inductive rather than deductive, so researchers generally avoid prior commitment to theoretical models (Yin, 2003, p. 14). According to Strauss and Corbin (1998), "It is impossible to know prior to the investigation what the salient problems will be or what theoretical concepts will emerge" (p. 49). Rather than test a hypothesis or a preconceived idea of what happened during

these 15 weeks, our goal was to discover what happened by studying the online dialogue itself. Literature is used as theoretical background for the study, but a specific conceptual framework was not selected prior to the collection and analysis of the data (as in Strauss & Corbin, 1998). Rather, the description of the case was linked to the relevant literature after the data were analyzed.

Merriam (1988) emphasized that qualitative design is emergent, with the process of data collection and analysis being recursive and dynamic. Qualitative data includes a detailed description of the context, direct quotations from participants, and excerpts from documents (Merriam, 1988). Participant observation is a common source of data for qualitative case studies. Because all of the interns' conversations took place online via the asynchronous discussion tool, reading the transcripts is a type of participant observation. Lisa observed the discussions as they occurred, in addition to analyzing them again at the end of the semester. At the end of the semester, all discussion forum postings were downloaded into word processing documents for analysis. All names were replaced with pseudonyms prior to analysis. The forum transcripts were analyzed to explore emergent themes related to the research question of how the interns made sense of their experience.

Our analysis proceeded in a modified form of the constant comparative method (Bogdan & Biklen, 1998; Glaser 1978; Goetz & LeCompte, 1984; Strauss & Corbin, 1998). Merriam (1988) outlined three phases in this type of qualitative data analysis: intensive analysis, developing categories, and developing theory. These roughly correspond to Strauss and Corbin's (1998) steps of open coding, axial coding, and selective coding. Intensive analysis began as we read and reread the data independently, each making notes and reflections to isolate the most striking aspects of the data. We individually compared and noted themes related to the research questions. We each kept a list of the major ideas that cut across the data, searching for regularities and patterns, similar to open coding as described by Strauss and Corbin (1998). Units of information (Lincoln & Guba, 1985), that is, excerpts from the online discussions, were isolated and labeled in the margins of the paper transcripts in preparation for the next phase of developing categories.

We held a series of meetings during which we developed our initial lists into categories. Similar to axial coding, we sorted the units into more abstract categories. Through an iterative process of convergence and divergence, emerging categories and subcategories were organized. Finally, through a process of selective coding, a tentative theory about how the interns talked with each other was developed. From the initial concrete codes, abstract themes emerged. We compared these themes to the data and then to the literature until both of us were satisfied with the final themes, presented in the discussion. The list of codes is explained in detail in the findings and discussion section.

Several methods were used to establish trustworthiness (also known as internal validity), dependability (consistency), and the overall rigor of this study, as outlined by Lincoln and Guba (1985), LeCompte and Goetz (1982), and Merriam (1988). We earlier described our roles as researchers in order to clarify our biases. We also had prolonged engagement with the study site. One or both of us were actively involved in the process of designing, implementing, and researching the discussion forum. We were immersed in the data over a long period of time, well beyond the 15 weeks of the online experience itself. We kept a record of our meetings and maintained an audit trail of our data collection and analysis process. During these meetings we engaged in peer debriefing and reflection on every stage of our analysis.

Findings and Discussion

The participants exchanged 141 messages during the 15 weeks, resulting in an average of 15.7 messages per person. Five interns posted 18 messages, two posted 15 messages, and one posted 12 messages; the instructor posted eight. Table 1 presents the number of weekly postings by participant.

Table 1
Number of Messages Posted by Participant by Week

Student	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Amber	1	1	1	1	2	1	2	1	1	1	1	2	1	1	1	18
John	1	1	1	1	3	1	2	1	1	1	1	1	1	1	1	18
Jordan	1	1	1	1	3	2	0	1	2	2	1	2	0	1	0	18
Kimberly	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	18
Charity	1	1	1	2	2	1	1	1	1	1	1	1	1	1	2	18
Janelle	1	1	0	3	2	1	0	0	0	2	1	1	2	0	1	15
Theresa	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Michael	0	1	1	1	1	2	0	1	1	1	1	1	1	0	0	12
Instructor	1	0	1	2	2	0	0	0	1	1	0	0	0	0	0	8
Anonymous ^a	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	8	8	8	13	20	11	7	7	9	11	8	10	8	6	7	141

^aOne student posted as Anonymous due to the sensitive nature of the content of her/his message.

The interns posted slightly more than one message per week. Table 1 illustrates that the messages were spread evenly throughout the semester rather than occurring all at once. Of note is that whenever an intern posted a question it was rarely left unanswered by the end of the week. The interns were not required to respond to each other, yet they did so. This result may be consistent with what Rourke, Anderson, Garrison, and Archer (2001) characterized as “interactive responses,” which help build relationships in an online environment. Although one message per week may seem negligible, asynchronous messages are time-consuming to read and respond to, as they are generally longer than either e-mail messages or synchronous chat messages. Thus, reading between 6 and 20 messages per week could well be a significant undertaking for these busy interns, and it is striking that they chose to respond to each other when not specifically asked to do so. The next phase of our research (Paulus & Scherff, in press) investigated this pattern of post and response in greater detail.

The interns chose to talk about six broad themes, which were categorized as either psychological support and instructional support in an effort to extend the previous literature on teacher support. A total of 175 codes were assigned to the 141 messages; messages sometimes included more than one code. Table 2 outlines our coding

categories, subcategories and descriptions of psychological support. These findings are presented next.

Table 2
Coding Categories and Description: Psychological Support

Code	Description
Category #1: Social Presence	
a. Socialize	“Checking-in” to convey their presence in the forum, responding empathetically to their peers’ postings, thanking each other for support
b. Personal lives	Offering information about their personal lives or incidents that are non-school related in any way
c. Humor	Sharing any sort of humorous story, joke or comment
Category #2: Stories From the Field	
a. Good story	Reporting positive instructional and/or personal events that take place at school
b. Bad story	Reporting negative instructional and/or personal events that take place at school
c. Mentoring teachers	Sharing positive and negative interactions and/or relationships between interns and mentors
d. Middle school	Discussing middle school experience
Category #3: Feelings of Stress	
a. Stress	Conveying feeling of being stressed and/or overwhelmed due to experience of internship teaching, coursework and life in general
b. Speed	Referring to how fast the semester or year is going

Psychological Support

Ninety-one percent of the messages, 129 of the 141, addressed issues related to psychological support. Three broad categories captured these issues: social presence, stories from the field, and feelings of stress. Examples of each are provided in the following section.

Social presence. Rourke et al. (2001) defined social presence as “the ability of learners to project themselves socially and affectively into a community of inquiry” (p. 2). This category includes interns checking in to convey their presence in the forum, sharing non-school-related personal stories, socializing, responding empathetically to their peers’ postings, and thanking each other for their support. This category also includes humorous exchanges. Seventy-eight of the 141 (55%) messages fell into this category.

At the most basic level, the interns posted messages to the forum to simply check in with their classmates and exchange personal information. For example, in week 8 John posted, "I would just like to remind everyone that I am going to Scotland in one week and while I am there, I will see Othello performed in Manchester. I will be sure to bring back many great stories. . ."

Interns also shared their experiences and requested responses from others. The following is Charity's posting in week 11 about a mandatory in-service day:

Is anyone else not feeling these Inservices? I have to go to _____ Middle School tomorrow morning to spend half the day doing something with our End of Course exams: . . . My mentoring teacher and I have to create them and have them approved. Supposedly they will be wanting a copy of the one we already did, a fat lot of help that will do after the fact. Anyway, just wanted to check in and see what everyone else had in store for this torture, I mean inservice day.

The following day, Janelle responded to Charity in an empathetic manner: "I'm not really feeling the inservice vibe either. I just got out of a department meeting and now I don't really know what I am supposed to be doing until 1:30 when our faculty meeting is . . ."

A humorous exchange about the internship experience appeared in the following response from Janelle in the week 10 discussion:

Some days I just think that I should not be held responsible for my actions in applying to the college of Education. I plead temporary insanity. It is completely not what I thought that teaching would be, which is sometimes okay and sometimes, well, harrowing and abysmal to a point that I never knew. But my week is going great :) Ha Ha . . .

Amber responded 2 days later in an empathetic manner:

Well, it seems like you have your hands full like the rest of us. However, I hope that you are still doing well, don't get discouraged. Remember they're kids and they aren't like us, well, for the most part. They struggle with issues that we can only imagine and then return to us on a daily basis seeking help, love, and advice. Even though that may come out in negative ways. Good luck!

This theme of social presence, as documented by the previous examples, is consistent with literature indicating that new teachers need empathetic listening and need to feel connected to others (DeWert et al., 2003; Merseth, 1991; Romiszowski & Ravitz, 1997). Establishing social presence is important to foster a sense of community in online environments, which are otherwise bereft of cues (Haythornthwaite, Kazmer, Robins & Shoemaker, 2000; Rourke, et al., 2001). That the interns, most of whom interacted with each other daily in the schools, made each other aware of their online presence and responded to each other empathetically may have helped foster a sense of trust, which in turn made the next two themes possible—sharing stories from the field and acknowledging feelings of stress.

Stories from the field. Thirty-two of the 141 (23%) messages included stories, both good and bad, about the interns' current teaching experiences. Stories included relationships with mentoring teachers and the difficulty of the middle school experience. In week 4 Kimberly shared this story:

Today I observed my Freshman Honors presentations in which they played the part of the gods and goddesses. It was so impressive. . . . Additionally, a student in one of my Fundamentals class discovered that she is getting a "B." She was amazed and her face glowed. . . . It was very uplifting, in contrast to our third block Fundamentals class, which is struggling. . . . Many seem unconcerned and our attendance is disgraceful. However, we have also had one severe disruption in which two of our students were expelled.

Janelle responded to Kimberly just a few hours later, in a supportive manner:

You are doing great! I know that it is discouraging that so many have Fs and don't care, but don't take it too hard—there's only so much you can do and in the end you cannot MAKE them care. Hang in there and I'm across the hall if you need to vent or talk.

Of note here is that the interns saw other interns every day at the PDS, and they seamlessly integrated their online and offline worlds, choosing to talk about some issues in person and other issues online. Blended environments are becoming more prevalent in higher education and should perhaps be considered in teacher education programs as well (Osguthorpe & Graham, 2003). We do not know specifically how the interns negotiated these worlds beyond their noting it in their online conversations; how they did so is an area for further investigation.

In week 10, Michael shared a story about his middle school experience: "I already know that middle school is not for me. I absolutely hate grammar, and so far that's all it's been in the classroom. What fun the next three weeks there will be." Janelle replied to Michael the following morning, again in a supportive manner, "I completely know what you mean. After I finish my middle school experience all I could think was, "That was fun, but I am never doing that again!!!"

Relationships with mentoring teachers can be particularly difficult for interns to navigate. The forum was used by one intern as a safe space to raise an issue about working with his/her mentoring teacher. In fact, the intern posted this message anonymously in order to ensure his/her safety in raising the issue:

My mentoring teacher has a tendency to be somewhat hostile towards me. . . . One moment she'll act like she thinks that I am adequate and the next she acts like I will be the largest disgrace to the profession of teaching. . . . I just feel like I am working my butt off in this program and it is all for nothing because she treats me like I am nothing more than an annoyance. I am posting this as anonymous because I do not want anyone to know this for fear that it will somehow get back to her and she'll really take the gloves off. . . . If anyone is having a similar experience or has any advice please respond. I feel as though this is my only outlet and if I don't write this out then I will explode from acting like everything is wonderful with my internship.

Choosing to share this information anonymously suggests that not all issues can be discussed openly and directly face to face. This intern chose to use the forum as an outlet that may not have been available had for obtaining support when needed.

In general the instructor only replied to student posts when she felt that her experience and leadership position would provide insight that other interns were unable to offer. In this case the instructor replied the next day to the anonymous post:

You are in a tough situation, but know that it is not you! It could be any number of things. . . . The thing to keep in mind is that you know you are doing a good job, and all of us know that you are too! Just keep your professionalism at all times, especially in front of the kid.

Kimberly also responded, the following day:

I am so sorry that you are going through that. . . . Don't EVER let anyone make you feel badly about yourself! I know how capable you are... and please e-mail or call me if you ever need to speak to someone somewhat anonymously. I hope that everything improves for you! Keep up the good work!

That Kimberly responded even after the instructor had posted a response may further reflect that the instructor's voice did not dominate the discussions taking place among the interns. It was also striking to us that interns responded to nearly every school-related story that was posted. The interns did not necessarily ask questions in which they expected an answer from others in the cohort; rather, their self-disclosure of struggles prompted the empathy and support that followed. This corroborates findings by Ziegler, Paulus, and Woodside (2006), DeWert et al. (2003) and Merseth (1990, 1991) concerning the effectiveness of online discussion forums for providing support. Beginning teachers indicated that an "online community provided them with much needed emotional support and encouragement while diminishing their feelings of isolation and helplessness" (DeWert et al., 2003, p. 318).

Feelings of stress. Nineteen of the 141 messages (13%) conveyed feelings of stress and being overwhelmed by the heavy load of teaching, coursework (three graduate classes) and other life responsibilities being balanced by the interns. Michael, in week 8, conveyed his stress as follows: "I'm just waiting for this week to end. . . . For the past three weeks I've been telling myself, 'If I can just make it to Friday, I'll be alright.'" This category also included references to how quickly the semester or school year was passing. John, in week 7, wrote the subject line: Going Fast!

Not sure about the rest of you guys, but this semester has kicked into hyper drive for me. Weeks seem to be going faster and faster by, but I am not complaining.... I hope the time is moving as fast for everyone as it is for me.

Statements of stress occurred more often at the beginning and at the end of the semester. In fact, the entire discussion in the final week of the course was centered around stress, as illustrated by the following exchange. Kimberly asked,

Is anyone else completely overwhelmed? I am trying desperately to catch up, but it seems as if there is always more to do. . . . I hope that everyone else is doing well. Good luck with the rest of the semester!

Janelle, the following day, empathized, "Am I overwhelmed? Uh, YESSSSSSSS! I haven't slept a full night (like 5 - 6 hours) in I can't remember when. Hang in there! It's almost over." Feeling "stressed out" is a common concern of novice teachers (see, for example, Hansen & Sullivan, 2003; Nagel & Brown, 2003; Thomas, Clarke, & Lavery, 2003). The interns chose to share these feelings with each other in the forum, which may have provided an additional needed space for such conversations.

The PDS interns used the forum primarily for psychological support. They connected with each other online by establishing social presence, even though they were physically

located in the same schools. They shared stories from their internships, including issues with mentoring teachers. The online forum permitted sharing difficult experiences such as these anonymously, something not possible in person. They also expressed their feelings of stress. Next we look at how the forum was used for instructional support.

Instructional Support

The interns did not use the online space as much for instructional support as they did for psychological support. However, 38% of the postings (54 of 141) included themes related to instructional support. These instructional issues were organized into three broad categories: programmatic concerns, teaching ideas and advice, and sense of teaching efficacy. Table 3 outlines these categories. Examples are discussed next.

Table 3
Coding Categories and Description: Instructional Support

Code	Description
Category #1: Programmatic concerns	
a. University courses	Discussing issues regarding university courses, positive or negative
b. Applicability	Referring to the usefulness and/or success of ideas from the textbooks or class
c. Bureaucracy	Expressing frustration over bureaucracy concerning the program (“jumping through hoops”)
Category #2: Teaching ideas and advice	
a. Need advice/ideas	Asking for help regarding a situation at school or help regarding teaching at school
b. Provide advice/ideas	Providing advice, responding to questions or needs of peers, and/or sharing of ideas with or without solicitation from other interns
Category #3: Teaching efficacy	
a. Self-doubt	Questioning own teaching efficacy
b. Self-efficacy	Conveying a sense of enjoying teaching and displaying a sense of efficacy. Also includes developing self-awareness about teaching profession and own role as a teacher

Programmatic concerns. Twenty-nine of the 141 (21%) messages addressed issues related to the internship program itself. This category included comments on the internship program bureaucracy, comments about university courses the interns were currently taking, and applicability of ideas learned in formal coursework to their actual teaching contexts. Janelle summed up many of these programmatic concerns with her post during week 1:

Okay, what frustrates me? Well, for starters, when we were told about the PDS program, three different people told me (because I kept asking to make sure) that we would be in our placement schools all day and then we would have classes at night. Since I believed this, my mentoring teacher and I planned to have me teach her fourth block class [which is now not possible] . . . a little planning and communication would have been nice.

In week 5, Amber and Kimberly discussed one their university courses. Amber posted,

Good grief . . . did you see the homework for this week? HOW IN THE WORLD am I supposed to find the time to make up a survey and then use my STUDENTS' CLASS TIME to make them fill out a survey for MY CLASS.

Kimberly responded the following day:

YES! I completely understand and agree. Actually, it really does make me frustrated. Many of my students are extremely self-conscious of their reading ability and I am tired of "questioning" them for the purposes of a [university] class . . .

Even though their instructor, a professor and not a fellow intern, was lurking, they openly discussed programmatic issues online with each other.

Interns reported on their use of ideas and activities learned through the textbooks and class time, as illustrated by Theresa's post in week 12:

I used the activity to teach following directions in my class on Friday, and it went very well. The kids loved it and it was lots of fun. At the end, I asked them what they had learned was necessary for the game to work (to follow directions), and they said, reading, listening, and paying attention. Hmmmm . . .

The instructional support requested and conveyed by the interns reveal their interpretation of the online space as one that was safe. Many of the programmatic concerns they conveyed may have been unprofessional if spoken of during (university) class time or with their mentoring teachers, colleagues, and/or university faculty. Like other reported research (DeWert et al., 2003; Scherff, Ollis, & Rosencrans, in press; Valli, 1992; Veenman, 1984), interns in our study were more inclined to talk about broad and complex issues (such as relationships with mentors and/or university faculty members) than curriculum and instruction matters.

Teaching ideas and advice. Thirteen of the messages (9%) included requests for and replies to ideas and advice regarding situations (instructional, classroom management, discipline, etc.) at schools. One such exchange regarding research papers occurred between Jordan and the instructor during week 10. Jordan posted,

Two of my students have chosen very difficult careers to research: professional basketball player and body piercer. These two students hardly ever turn in assignments, so I told them they could research any career (that is appropriate for school). They were excited about my letting them do "their thing," but now they are frustrated b/c there is not much useful information on either career. Should I encourage them to choose something else?

Later that same day Lisa responded,

Can they use interviews for their research? I would tell them that if they want to continue to do those career choices, they need to interview ## number of people or people related to that field.

Novice teachers need instructional support in the area of managing a classroom, organizing instruction, and teaching methods (see, for example, Doyle, 1986; Gold, 1996; Smagorinsky, Gibson, Bickmore, Moore, & Cook, 2004). However, they need this support in a timely manner. Timely support can be difficult to provide in person during the once a week official class sessions. Because interns in the PDS program saw their instructor only once per week, the accessibility of the discussion board allowed them to have contact with her and fellow interns 7 days a week. When a lesson went wrong, or when an intern needed a teaching idea, help was available within 24 hours rather than within a week, something that would not have been possible without CMC.

Sense of teaching efficacy. Twelve of the messages (9%) included statements expressing doubt or confidence in their teaching efficacy. This category also includes statements reflecting a growing awareness about the teaching profession, in general, and their own role within it. In week 3 Jordan shared feelings about her growing responsibilities in the classroom, "I am feeling like 'the teacher' rather than 'the intern.' This has been my first week to do it all: plan, grade, ISS [internal suspension], etc." The next week, Theresa commented on the reality of teaching versus what interns learned in school and wanted to teach:

I was thinking today how, at [the university] with all its education ideals, DOL [daily oral language] and end-of-course tests prep seem monotonous and dull, but they are reality. . . . While I majored in English and read books that my students may never even care to hear about, my job as their teacher is to have them ready for every grammar trip they could come across.

Janelle, also in week 4, expressed some self-doubt regarding her decision to become a teacher:

Does anyone else have this wave of panic that comes over them sometimes and makes you go "what have I gotten myself into?" . . . I have always wanted to teach and so I think that I should be going home everyday going "I love my students!" and "I can't wait to go back" but the last couple of days I have felt like "If I don't get away soon someone's going down and it probably will be me but I'm going to take a few with me." . . . I just feel that I am barely keeping my head above it all and that any day now someone is going to realize what a fraud I have been in pretending to be any good at teaching. Be brutally honest - Am I bonkers?

Lisa chose to offer support that only an experienced teacher could provide:

You WILL NOT love every day. In fact, there will be days that you hate your life, your job, and the kids, BUT everyone, in every job, goes through that . . . our best days will be better than anyone else's!!! The one student who "gets it" will make you want to hug everyone (okay, not everyone, but a lot of people). Trust me . . . the internship is harder than when you have your own room!!!!

The PDS interns made the discussion forum their own by using it for instructional support for programmatic concerns, teaching ideas, and exploring their sense of teaching

efficacy. Although these concerns were not as prevalent as those of psychological support, they reveal an additional way that CMC was used by the interns – as a just-in-time support mechanism during their field experiences. As previous research has shown (Bodzin & Park, 2000; DeWert et al., 2003; Hough et al., 2004; Nicholson & Bond, 2003), online communities can foster feelings of efficacy and lead to professional growth. Investigating why they chose to talk more about psychological rather than instructional issues in this venue is an area for further investigation.

Conclusions, Implications, and Directions for Further Research

Despite the best intentions of and extensive planning by teacher education and mentoring programs, novice teachers frequently cite the first year as unsupportive and lonely. Technology has proved itself a valuable tool in many areas of education (Bodzin & Park, 2000; DeWert et al., 2003; Merseth, 1990, 1991); we propose that it should perhaps have a larger role in teacher preparation programs, particularly in the area of providing online spaces in which novice teachers are free to provide each other the support they most need. Even though a PDS is designed to be an inherently more supportive model of the internship experience, findings from this study show that CMC tools such as Blackboard's discussion forum may be able to provide interns with even more support during this crucial time.

The interns in this study used the discussion forum to request and provide psychological support to each other on issues that could otherwise be difficult to address. They also used the forum as a mechanism for timely and immediately relevant instructional support. Several of the factors that contribute to high attrition rates for novice teachers— isolation, working conditions, inadequate preparation, and a lack of support (Andrews & Martin, 2003; Darling-Hammond, 2003; Kent, 2000; Rogers & Babinski, 1999; Veenman, 1984)—were voiced by interns in the discussion board postings. Even though these interns were in a PDS school, they chose to use the online space for additional support that they may not have been able to get in person. Because Lisa could access the discussion board any time and at any place, she was able to read and respond to interns' concerns normally limited by the 3 hours per week face-to-face time the methods course provided. Although she could not solve all of their problems, reading about the interns' issues and needs (such as lesson and classroom management ideas) provided her with the opportunity to devote class time to them.

Building trust in online environments has often been challenging in a lean CMC environment. However, these interns knew each other in person and also quickly established social presence online by checking in, exchanging stories, and expressing their frustration to each other. In this way they were able to share concerns with each other that they may have been unable to share with their university professors, internship supervisors, or mentoring teachers. The level of trust displayed in a short time could be explained by the fact that these interns spent more time with each other than did interns not included in the PDS program. This points to our next area of research: comparing these findings with how interns in a traditional internship program (where participants do not know each other as well as the PDS interns) use the discussion forum.

Adding the voices of the interns to our findings is another area of future research. Although we chose not to interview interns at this phase of the study, additional data such as interviews or pre-post online experience surveys could shed light on how their feelings of support changed over time, how the online and face-to-face support mechanisms intersected, and how they felt about the online experience. Our next phase of research has moved beyond capturing what the interns chose to talk about in this space to examining how they engaged each other in these discussions (Paulus & Scherff, in press).

We agree that highly structured online discussions may promote more critical thinking and reflection, as is desired by instructors of graduate courses. However, we also feel that the interns themselves may be the best judges of what psychological support and just-in-time instructional support they need day to day. In addition to researching highly structured online discussions, we propose that it is time to return to examining the informal online spaces in which novice teachers take ownership of what matters to them and respond to each other in kind.

References

- Abdal-Haqq, I. (1998). *Professional development schools: Weighing the evidence*. Thousand Oaks, CA: Corwin Press.
- Andrews, S. P., & Martin, E. (2003). *No teacher left behind: Mentoring and supporting novice teachers*. Paper presented at the annual meeting of the Georgia Association of Colleges for Teacher Education/Georgia Association of Teacher Educators, St. Simons Island, GA.
- Berliner, D. (1998). *Implications of expertise in pedagogy in teacher education and evaluation*. Paper presented at the Educational Testing Service Invitational Conference.
- Bogdan, R. C., & Biklen, S. K. (1998). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn and Bacon.
- Bodzin, A. M., & Park, J. C. (2000). Dialogue patterns of preservice science teachers using asynchronous computer-mediated communications on the World Wide Web. *Journal of Computers in Mathematics and Science Teaching, 19*(2), 161-194.
- Chubbuck, S. M., Clift, R. T., Allard, J., & Quinlan, J. (2001). Playing it safe as a novice teacher: Implications for programs for new teachers. *Journal of Teacher Education, 52*(5), 365-376.
- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership, 60*(8), 6-13.
- DeWert, M. H., Babinski, L. M., & Jones, B. D. (2003). Safe passages: Providing online support to beginning teachers. *Journal of Teacher Education, 54*(4), 311-320.
- Dietz-Uhler, B., & Bishop-Clark, C. (2001). The use of computer-mediated communication to enhance subsequent face-to-face discussions. *Computers in Human Behavior, 17*, 269-283.
- Doyle, W. (1986). Classroom organization and management. In M. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed.; pp. 392-431). New York: Macmillan.
- Fauske, J., & Wade, S.E. (2003-2004). Research to practice online: Conditions that foster democracy, community, and critical thinking in computer-mediated discussions. *Journal of Research on Technology in Education, 36*(2), 137-153.
- Feiman-Nemser, S. (1983). Learning to teach. In L. Shedman & G. Sykes (Eds.), *Handbook of teaching and policy* (pp. 150-170). New York: Longman.

- Ferdig, R.E., & Roehler, L.R. (2003-2004). Student uptake in electronic discussions: Examining online discourse in literacy preservice classrooms. *Journal of Research on Technology in Education*, 36(2), 119-136.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers College Press.
- Glaser, B. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Mill Valley, CA: Sociology Press.
- Goetz, J.P., & LeCompte, M.D. (1984). *Ethnography and qualitative design in educational research*. New York: Academic Press.
- Gold, Y. (1996). Beginning teacher support: Attrition, mentoring, and induction. In J. Sikula, T. J. Butterly, & E. Guyton (Eds.), *Handbook of research on teacher education* (2nd ed; pp. 548-594). New York: Macmillan.
- Gold, Y., & Roth, R. A. (1993). *Teachers managing stress and preventing burnout: The professional health solution*. Washington, DC: Falmer Press.
- Hansen, J., & Sullivan, B. A. (2003). *Assessment of workplace stress: Occupational stress, its consequences, and common causes of teacher stress*. ERIC Document Reproduction Service No. ED 480 078.
- Haythornthwaite, C., Kazmer, M.M., Robins, J., & Shoemaker, S. (2000). Community development among distance learners: Temporal and technological dimensions. *Journal of Computer-Mediated Communication*, 6(1). Retrieved November 1, 2006, from <http://jcmc.indiana.edu/vol6/issue1/haythornthwaite.html>
- Hebert, E., & Worthy, T. (2001). Does the first year of teaching have to be a bad one? A case study in success. *Teaching and Teacher Education*, 17, 897-911.
- Hough, G., Smithey, M., & Evertson, C. (2004). Using computer-mediated communication to create virtual communities of practice for intern teachers. *Journal of Technology and Teacher Education*, 12(3), 361-386.
- Howey, K. (2000, March). *A review of challenges and innovations in the preparation of teachers for urban contexts: Implications for state policy*. A paper presented to the Title II Teacher Quality Institute, Biloxi, MS.
- Kent, S. I. (2000). Problems of beginning teachers: Comparing graduates of bachelor's and master's level teacher preparation programs. *The Teacher Educator*, 35(4), 83-96.
- LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52(1), 31-60.
- Lincoln, Y., & Guba, E.G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Lortie, D. (1975). *School teacher: A sociological study*. Chicago: University of Chicago Press.

- Mantle-Bromley, C. (2001, April). *The status of early theories of professional development school potential: Progress of four settings across the United States*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- McCann, T. M., Johannessen, L. R., & Ricca, B. (2005). *Supporting beginning English teachers: Research and implications for teacher induction*. Urbana, IL: National Council of Teachers of English.
- McDonald, F. (1980). *Study of induction programs for beginning teachers (Vol. 1). The problems of beginning teachers. A crisis in training*. Princeton, NJ: Educational Testing Service.
- Merriam, S.B. (1988). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Merseth, K. K. (1990). *Beginning teachers and computer networks: A new form of induction support* (Report No. 90-9). East Lansing, MI: The National Center for Research on Teacher Education. ERIC Document Reproduction Service No. ED 324 309.
- Merseth, K. K. (1991). Supporting beginning teachers with computer networks. *Journal of Teacher Education*, 42(2), 140-147.
- Nagel, L., & Brown, S. (2003). The ABCs of managing teacher stress. *The Clearing House*, 76(5), 255-258.
- Nicholson, S.A., & Bond, N. (2003). Collaborative reflection and professional community building: An analysis of preservice teachers' use of an electronic discussion board. *Journal of Technology and Teacher Education*, 11(2), 259-279.
- Oblinger, D. (2003 July/August). Boomers, Gen-Xers & Millennials: Understanding the "new students." *Educause Review*, 36-47.
- Osguthorpe, R. T., & Graham, C. R. (2003). Blended learning environments: Definitions and directions. *The Quarterly Review of Distance Education*, 4(3), 227-233.
- Paulus, T., & Scherff, L. (in press). "Can anyone offer any words of encouragement?": Online dialogue as a support mechanism for pre-service teachers. *Journal of Technology and Teacher Education*.
- Quality Counts 2000. (2000). Who should teach? The states decide. *Editorial Projects in Education*, 19(18), 8-9. Retrieved October 15, 2006, from <http://counts.edweek.org/sreports/qc00/templates/article.cfm?slug=execsum.htm>
- Ridley, D. S., Hurwitz, S., Hackett, M. R. D., & Miller, K. K. (2005). Comparing PDS and campus-based preservice teacher preparation: Is PDS preparation really better? *Journal of Teacher Education*, 56(1), 46-56.
- Rogers, D. L., & Babinski, L. (1999). Breaking through isolation with new teacher groups. *Educational Leadership*, 56(8), 38-40.

- Rogers, D. L., & Babinski, L. M. (2002). *From isolation to conversation: Supporting new teachers' development*. Albany: SUNY Press.
- Romiszowski, A. J., & Ravitz, J. (1997). Computer-mediated communication. In Cr. R. Dilles & A. Romiszowski (Eds.), *Instructional developmental paradigms* (pp. 745-768). Englewood Cliffs, NJ: Educational Technology Publications.
- Rourke, L., Anderson, T., Garrison, D.R., & Archer, W. (2001). Assessing social presence in asynchronous text-based computer conferencing. *Journal of Distance Education, 14(3)*, 51-70.
- Scherff, L., Ollis, J., & Rosencrans, L. (in press). Starting the journey together: A teacher educator and her "students" navigate their first semester in the secondary English classroom. *Issues in Teacher Education*.
- Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher, 15(2)*, 4-14.
- Smagorinsky, P. Gibson, N., Bickmore, S. T., Moore, C. P., & Cook, L. S. (2004). Praxis shock: Making the transition from a student-centered university program to the corporate climate of schools. *English Education, 36(3)*, 214-245.
- Stake, R.E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Stephens, A.C., & Hartmann, C.E. (2004). A successful professional development project's failure to promote online discussion about teaching mathematics with technology. *Journal of Technology and Teacher Education, 12(1)*, 57-73.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Tang, S. Y. F. (2003). Challenge and support: The dynamics of student teachers' professional learning in the field experience. *Teaching and Teacher Education, 19*, 483-498.
- Thomas, N., Clarke, V., & Lavery, J. (2003). Self-reported work and family stress of female primary teachers. *Australian Journal of Education, 47(1)*, 73-87.
- Valli, L. (1992). Beginning teacher problems: Areas for teacher education improvement. *Action in Teacher Education, 14*, 18-25.
- Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research, 54(2)*, 143-178.
- Wise, A. E. (2000-2001). Creating a high-quality teaching force. *Educational Leadership, 58(4)*, 18-21.
- Yin, R. (2003). *Case study research* (3rd ed). Thousand Oaks, CA: Sage Publications.

Ziegler, M., Paulus, T.M., & Woodside, M. (2006). Creating a climate of engagement in a blended learning environment. *Journal of Interactive Learning Research*, 17(3), 295-318.

Zimpher, N. L., & Rieger, S. R. (1988). Mentoring teachers: What are the issues? *Theory Into Practice*, 27(3), 175-181.

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