Clarifying the Instructor's Role in Online Distance Learning

Susan S. Easton

Experiencing an increased demand for college courses taught over the World Wide Web, universities often encourage faculty to teach courses online. However, the role of the online distance learning (ODL) instructor is ambiguous and often ill defined. This ethnographic case study explores communication processes that affect the roles of the ODL instructor. Interactions among six lead faculty, 18 online mentors, and their students were investigated through multiple methods. Many communication skills required of the ODL instructor are similar to those needed for effective classroom teaching. On the other hand, the online instructor's role does require a paradigm shift regarding instructional time and space, virtual management techniques, and the ability to engage students through virtual communication. **Keywords:** online education, instructional roles online, role clarification in instruction, computer-mediated communication.

In the world of higher education, several issues are converging: (a) advances in computer technology; (b) rapidly growing enrollments; (c) changing student demographics; and (d) continued cost containment requirements. This convergence presents complex challenges for delivering formal education via the Internet. Experiencing an increased demand for college courses taught over the World Wide Web, universities sometimes pressure faculty members to teach courses online. Many faculty members have never taught online and may wonder what competencies are required to distinguish this role from teaching in a traditional classroom (Smith, Ferguson, & Caris, 2002). The role of the online instructor is ambiguous and largely untested.

The Internet is central to both the problem and the solution to these challenges. The technology is so new, however, that only limited research is available to guide decision-makers regarding how to best implement it. Increasing access to education by making online distance learning (ODL) widely available is important. Yet understanding how best to support students in a virtual learning environment is also essential. Communication is the critical factor that emerges as various models are explored for increasing the effectiveness of ODL instruction and student support (Coppola, Starr, & Rotter, 2002).

One such model was tested at a large state university in the southeast United States as a component of its distance learning initiative. This model introduced the role of the "mentor" as the primary student interface in each class. The presence of mentors necessarily modified the role of the class' lead faculty member, who was supported by the mentor. The separation of the ODL instructor role into lead faculty and mentor allowed the author an opportunity to observe a complex structure in which class members were required to define and negotiate both mentor and faculty roles. The purpose of this study was to observe the activities and behaviors that mentors and lead faculty used to define their roles and the

Susan Easton (PhD, Florida State University, 2000) is an Assistant Visiting Professor of Communication at Rollins College in Winter Park, Florida. Susan Easton can be contacted at seaston@rollins.edu

communication processes they used to manage the dynamics of online teaching. As such, this case study provided the opportunity to ask the question, "What new roles, if any, are emerging in the instructional delivery of ODL?"

Distinguishing an ODL class from a traditional class is sometimes difficult. Instructors today frequently incorporate electronic technologies that extend instructional resources to their students: threaded discussion boards, websites, chat rooms, email, listservs, newsgroups and Internet research. Findings of a National Education Association (2000) survey indicated that almost half of faculty teaching courses that are not web-based nonetheless use email to communicate with their students once a week or more. According to Green (2001), approximately one-fifth of all college courses now use electronic course management tools. By the same token, some ODL courses incorporate one or more on-campus face-to-face (F2F) class meetings.

Researchers studying ODL are often further challenged by unclear definitions and overlapping acronyms used to describe distance education (Kuehn, 1994). Frequent terms such as "distance education" and "distance learning" may refer to correspondence courses, video, radio, telephone, or television courses. Therefore, scholars need to define terms whenever possible. Current technologies that were not available even a decade ago now provide new opportunities for conducting research in instructional communication (Bailey, 1994; Benson & Sparks, 1994; Gilbert, 1995; Green, 2001; Lucas, 1996).

In the past, research in the area of ODL was limited and was often peppered more with descriptions of the technology itself rather than the pedagogy that the technology presumably served (Bates, 1995; Easton, 2000; Harasim, Hiltz, Teles, & Turoff, 1996; Hiltz, 1993; Kuehn, 1994; Phillips & Santoro, 1989). Palloff and Pratt (1999) state, "Although computer-mediated learning is currently under study in many venues, very little scientific research has been conducted regarding the efficacy, benefits, or pitfalls of a computer-mediated approach to education" (p. xvi). Lane and Shelton (2001) also called for a "more balanced pedagogical perspective for use of computer mediated communication" (p. 241) and caution communication scholars to carefully examine the technology from an instructional perspective. In that same vein, nearly all of the technologically-infused programs recognized for innovation and merit by the prestigious Hesburgh Awards are driven by pedagogical concerns, rather than technology for its own sake (Cross, 2001).

Changing Student Demographics

In addition to rapidly changing technology, the demographics and needs of the students in higher education have shifted, impelling a reassessment of the pedagogy itself. Since the mid-1970s, universities increasingly have recruited students over the age of 22, and for many institutions, one of the primary benefits to distance learning is the ability to reach an increased number of these non-traditional students (Ludlow, 1994). Fewer than one-quarter of the students in college today are between 18–22 and attending full-time (Twigg, 1994). These non-traditional students are typically older, voluntary learners who have already established a career or life vocation. They are returning to the classroom for personal enrichment, to learn new skills to enhance their existing job, or to pursue an alternative career path.

Interestingly, the characteristics of this non-traditional student are also those that describe the successful ODL student. The most successful ODL student is: (1) voluntarily seeking further education; (2) highly motivated and self-disciplined; (3)

older; (4) willing to initiate calls to instructors for assistance; (5) possessing a more serious attitude toward coursework; and (6) already a holder of a college degree (Brent & Bugbee, 1993; Palloff & Pratt, 1999).

Although well suited for ODL, non-traditional students often resist the opportunities for working in groups online. Graham and Scarborough (2001) specifically addressed the challenge of creating discussion groups online and found that independent learners tend to resist working in a collaborative environment. Although the majority of their respondents endorsed the idea of taking an active role in class, one-third expressed a dislike for group work.

This paradox–the opposition of many ODL learners to the group activities that are so central to ODL–creates particular challenges for instructors who adhere to the foundational principles of self-directed learning and the related practices that encourage social constructivism (Brookfield, 1985; Mezirow, 1997; Vygotsky, 1978). Kochtanek and Hein (2000), for example, state, "[constructivist practice] creates learners who are builders of their own knowledge" (p. 281). They describe the ODL instructor's role as "a facilitator, who, rather than merely putting information into the head of the student, creates an environment where students themselves can arrange existing knowledge and create their own learning constructs" (p. 281).

Obviously this constructivist philosophy, the roots of which go back to the early 1920s, is not unique to the online world. However, the text-based online medium requires participants to focus especially intently on the meaning of the messages conveyed, without additional visual or auditory cues, and therefore often results in increased collaboration among the students as they clarify and construct responses that build on previous comments (Arbaugh, 2000; Olaniran, Savage, & Sorenson, 1996; Palloff & Pratt, 1999). Several studies demonstrate that online collaborative learning groups can yield results similar to F2F discussion groups (Bailey, 1994; Berge, 1994; Coppola et al., 2002; McComb, 1994).

The Role of the ODL Instructor

Many communication scholars confirm that a facilitative role for classroom teachers is more effective than that of knowledge dispenser (Shelton, Lane, & Waldhart, 1999). Facilitative teaching is likewise an essential component of online teaching. Palloff and Pratt (1999) note these similarities between teaching in the classroom and online. Still, they caution those who oversimplify the differences that exist. Some of those differences concern how teachers may confirm engagement, comprehension, participation, and conflict resolution.

One common fallacy is that teaching online simply means putting up a website or turning one's lectures into text and then stepping back. This approach is usually unsuccessful (Berge & Collins, 1995). Based on several years of teaching online, Palloff and Pratt (1999) suggest that once instructors create the online courses, they change roles, such that the instructor needs to "take a back seat and gently guide the learners in their process by monitoring the discussion and entering it to prod participants to look at the material another way or to gently steer the conversation back on course" (p. 18).

Teaching online entails the absence of visual cues with which to send and receive messages, make quick assessments, or take corrective action. The ODL instructor cannot see who is taking notes, pondering a difficult concept, or preparing to make a comment. There are no visual cues that suggest when a student is frustrated, confused, tired, or bored. The online teacher does not know if the students are

asleep, talking among themselves, or even still enrolled in the course. Therefore the ODL environment requires of teachers increased written presentation skills, some technical competencies, virtual management techniques, and the ability to engage students through virtual communication (Berge & Collins, 1995).

Many ODL instructors have succeeded in eliciting positive responses from students by consciously writing their content in a way that ensures immediacy and conversational tone (Coppola et al., 2002; Kochtanek & Hein, 2000; Moore, Masterson, Christophel, & Shea, 1996; Palloff & Pratt, 1999). Future exploration of the role of immediacy online and of oral-based text (Rubin, Hafer & Arata, 2000) should help address concerns about low student motivation leading to high ODL dropout rates (LaRose & Whitten, 2000).

The technical component of the instructor role often requires assistance with software and hardware interfaces, systems access, passwords, and the like (Berge & Collins, 1995). One goal of ODL is to manage the technology so that it does not become an obstacle to learning. The instructor's role requires skills in cross-functional teaming to provide a seamless integration for the student. As Green (2001) reports, "the real technology challenges in education (and elsewhere) involve people, not products" (p. 1).

Because ODL is so well suited for collaborative learning, the instructor plays an essential social role. Social responsibilities may include building a learning community, helping students work in groups, and establishing a culture for productive interaction. The effective ODL instructor keeps online discussions on track, weaves discussion threads, and maintains group harmony (Kearsley, Lynch, & Wizer, 1995; Rohfeld & Heimstra, 1995).

Just like the classroom instructor, the online instructor needs to perform managerial responsibilities, from maintaining students' records to facilitating self-directed learning. In a virtual environment, monitoring student progress can be even more difficult than in the classroom. For example, "absences" in an online environment are not as easy to track nor to determine the cause.

In summary, the lines distinguishing the role of the traditional classroom instructor from the instructor online are blurry. Although limited by lack of visual cues, the role of the ODL instructor is nonetheless quite rich.

Methods

Research Setting

This study is based on the implementation of ODL at a large, southeastern state university. A qualitative approach was selected as most appropriate because of the fluid and dynamic nature of the interactions (Patton, 1990). During the design phase of the online initiative (October 1998 through July 1999) I was a non-active participant observer and took notes during design meetings and discussions. I also was a student participant-observer in three ODL courses to immerse myself in the field and to experience the role of a graduate student online. Upon completion of the design phase, I assumed the position of Mentor Co-ordinator, providing primary administrative support for all mentors. Mentors and lead faculty were informed of my research and consented to participate. Data were thus collected for this study within a naturalistic framework (Eisner, 1998; Lincoln & Guba, 1985; Yin, 1994).

Students in these classes moved through the program within cohorts, and a new

class began in the fall of each year. This implementation intentionally started with few classes but grew exponentially when additional courses were added for the second year and beyond. During the fall 1999 semester, three undergraduate courses were delivered to a total population of approximately 211 students and were taught by three lead faculty and 12 mentors. In the spring 2000 semester, four undergraduate courses were delivered to approximately 140 students and were taught by four lead faculty and 14 mentors. Although in the first semester several students enrolled in two or three classes each, many reduced their class loads in the second semester.

Participants

The participants in this case study included 18 mentors and six lead faculty. The lead faculty were all Caucasians between the ages of 38–52 and were full-time professors at the university. All were simultaneously teaching F2F courses in addition to the ODL classes in their respective disciplines. Five out of the six professors were non-tenured faculty. The lead faculty were responsible for collaborating on the course design with the assistance of a team of instructional designers, graphic artists, programmers, and various technical support personnel. Each lesson was delivered in a weekly online format with supplemental assignments and activities monitored and assessed by the mentors. Lead faculty provided oversight to ensure that feedback and comments facilitated student learning. In addition to being content experts, they were ultimately responsible for the success of the course. Although attempts were made by the implementation team to document the responsibilities of the lead faculty role, several stakeholders resisted written job descriptions. As a result, there were wide discrepancies in the amount of interaction each lead faculty had with the students and mentors.

Eighteen different mentors participated in this study–12 in the first semester and 6 additional in the spring. The mentor group consisted of 7 males and 11 females ranging in age from 25 to 54 years of age. Seven were between 25 to 35 years of age, 6 between 36 to 45 years of age, and 5 between 46 to 55 years of age. Two mentors were Hispanic, and the rest were Caucasian. Twelve mentors worked full-time in addition to their mentor position, and of those, 9 were college professors at community colleges throughout the state in which the university was located. The program's intention was to provide local support to the students if requested. Six mentors were full-time graduate students at the university. All of the mentors held graduate degrees or had equivalent experience in the subject area to which they were assigned and received compensation as university employees. A brief mentor description was provided and available online.

Naming conventions are used in this report to provide anonymity to the participants while not obscuring relevant information to the reader. Individual lead faculty are designated by a number following the abbreviation "LF", and because most were male, I use the masculine pronoun. Mentors are given an alphabetic designation following the letter "M." In the fall 1999 semester, two information studies courses were taught by LF1 and LF2, and one computer sciences course was taught by LF3. Four mentors were selected to support each lead faculty and each mentor had an average of 18 students assigned to his or her group. In the spring 2000 semester, one information studies course was taught by LF4, one communication studies course was taught by LF5, and two computer sciences courses were taught by LF3 and LF6. Fourteen mentors supported the spring 2000 classes such

that there were four mentors in three classes and three mentors in one class. Mentors were assigned an average of 10 students per class.

Data Collection and Analysis
The data collection occurred in two phases that included early implementation throughout 1999 and then during the spring 2000 semester. The methods used for data collection were triangulated (Lincoln & Guba, 1985) and encompassed: (1) participant observation; (2) historical documentation; (3) focus group meetings with mentors; (4) in-depth interviews with mentors, lead faculty, administrators, and students; and (5) secondary data developed for evaluation purposes by the university. Some of these data were collected F2F, while others were collected via the Internet or telephone. Interviews conducted in person and by telephone included audio taped data collection while the Internet provided written data.

First, data were collected separately from both mentors and lead faculty through interviews, focus group meetings, and surveys. This information was summarized and then presented to study participants for validation and accuracy (Eisner, 1998). By combining the input of mentors and faculty, a comprehensive description emerged of the role of the ODL instructor in this setting.

The data analysis process was a non-linear procedure of multiple, iterative passes that cycled between collecting data, recording notes, member checking, and creating memos. Several methods were used for organization, utilizing a continuum of interpretive tools. In addition to transcriptions, memos and lists were recorded in field notebooks and then resorted and reorganized as computer documents. Thematic outlines were color-coded based on combining similar themes and specific patterns. Guided by Glaser's work (1978) on grounded theory, data analysis relied on the use of open coding and theoretical memos.

Findings

The focus of this study was to discover what new roles, if any, emerged in the instructional delivery of ODL in a setting supported by mentors. The findings have been organized to reflect responses from both the mentors and the lead faculty as they describe the roles they experienced and the processes they used for negotiating and defining these roles. These findings present data chronologically. The lead faculty data is presented first, followed by mentor insights.

Lead Faculty Interviews: Early Implementation
Prior to the start of the fall 1999 semester, lead faculty members described their expectations of the mentor role and the anticipated dynamics for clarifying this role throughout the semester. The responses from the faculty were consistent in two ways: (1) they were all unsure of what potential problems to expect from the students and mentors; and (2) this lack of insight did not seem to cause concern as each faculty member expressed confidence in his prior experiences working with teaching assistants.

During the sixth and eleventh week of the fall 1999 semester, lead faculty discussed their experiences regarding the program and reacted to responses collected earlier from the mentors. Several themes emerged regarding their early experiences and communication strategies. When responding to questions about the role of lead faculty, comments seemed to divide into two ends of a continuum. Lead

faculty who had prior experience teaching online expressed greater confidence in their understanding of their new role, and as a result, they articulated communication strategies that were more proactive.

LF1 stated, "We've been doing distance learning for a long time, so this isn't very different." He then explained his approach.

> The mentors let me know if they are having any problems, and I respond by email. If one mentor asks me a question, I copy the others in on the response so they all know what's going on. Then I also look at the website, so I can read the threaded discussions and see what the students are saying. Look, you can see how much activity is going on by reading these postings. [He pointed to the computer screen and then demonstrated several ways that he monitored the discussions].

LF1 elaborated on the importance of making sure his mentors used the threaded discussion instead of email so that he could read the conversations. He indicated that he checked the site, "About three or four times a week. I also look to see what's going on with the grades and what kind of comments the mentors are making to the students."

In a similar way, LF3 discussed his communication strategies for monitoring his class.

> I talked to my mentors by phone almost every day during the first week. It was a little crazy. Now I usually email them every day and we talk once a week. I send the students a group email every week and copy the mentors in on it. Then I follow up with a little more information to the mentors about what they might expect to see based on how things went for me in this class when I taught it last semester. There are some weeks when they will have to really pull the students along, so I want them to be prepared.

LF3 offered an example of how a proactive approach seemed to be effective in handling problems early in the class and reflected on how simple problems can escalate without interventions. We discussed my observations of what appeared to be confusion on his website when more than 100 comments were posted in the first three weeks. Students had posted questions such as, "Hey, where is Group Three?" Subsequent responses from the mentors were posted attempting to round them up with statements such as, "Group Three–Look Here!"
LF3 explained:

> I think it's an indication that the students didn't know how to get to the individual group areas and didn't realize that they had to scroll to the bottom to move to the other sections. Hopefully, that's being worked out now. I think the mentors had to spend some time helping them figure out the interface. It's really a simple one, but sometimes it's the little things that seem to cause the most trouble in the beginning.

In contrast to the confidence expressed by LF1 and LF3, ODL was a new experience for LF2, and his comments offered a different perspective. He appeared less confident and seemed to be waiting for direction and articulated reactive rather than proactive communication strategies.

When I asked LF2 how he monitored his class, he stated, "I sometimes get an email or a phone call from the mentors if they need something." He continued:

> It's pretty quiet. I'm not sure what I should be doing. I don't really hear too much now that the first few weeks are over. The first week was busy with enrollments and a lot of last minute information. Lately, I haven't heard much from the mentors or students.

Later in our conversation I mentioned that some students had indicated that they found it helpful to have information posted in the announcement section online, and he inquired, "Does LF1 post announcements weekly?" He paused and asked,

"Do you think I should?" LF2 continued and expressed a sense of confusion regarding his role as lead faculty, "To be honest, I feel like I am not so much in control of the class as it is a handoff to the mentors once it starts. I did my part in the course, and I'm not sure how involved I should be now."

Lead Faculty Interviews: End of the Second Semester

About nine months into the program, lead faculty had taken a number of contrasting positions regarding the proper role for mentors. Often these models represented roles with which they were already familiar. LF1, for example, likened mentors to course teaching assistants. "They support student learning, provide socio-emotional support, and provide general support to the instructor through grading, doing the 'leg work,' and course supervision," LF1 opined. LF2 and LF3 accorded mentors more central teaching roles. LF2 said, "The mentor is the instructor and facilitator in the course. The most important things they do are: (1) evaluation and grading; (2) conducting and monitoring class discussion; and (3) responding to students' questions one-on-one." Similarly, LF3 stated that mentors

> … need to be the first point of contact to students regarding clarification and encouragement. Also, they provide evaluation of student work with my guidance. The three most important things they do are to stay in touch with the students, provide quick response to the lead faculty, and do consistent and meaningful grading.

LF6 emphasized the mentors' role in assessing the students' learning and providing feedback on their progress. LF6 likewise regarded mentors as mediators between himself and the students. "They deal with students or refer them to the right resources, and they keep me informed." LF5, in contrast, highlighted the mentors' role in facilitating discussion and interaction online. He also mentioned the mentors' role as advocate for the students.

If the lead faculty displayed some diversity in their views of online mentoring, they were much more homogenous when describing their own roles. LF1 summarized the perspective for all of the faculty respondents, "The lead faculty develops the course and supervises the mentors." In addition, according to LF3, the lead faculty constituted "the final authority on subject matter."

By the end of the second semester, I also observed a change in the degree of interaction with students such that most lead faculty rarely engaged in direct contact with individual students. Except for a few instances, lead faculty only addressed students (if at all) by group messages such as announcements. Anecdotal feedback from telephone interviews with students suggested that most students perceived the lead faculty to be, "a web presence who has a VIP role. He provides quality control for the course like a supervisor." Comments regarding LF3 seemed to be the exception, as most students from this class described his role as more interactive. One student stated:

> He guided the entire course through his mentors. His work was not so visible as the mentors but he did a great job. He was very informative and accessible, more so than most professors that I've had in a classroom environment.

Lead Faculty Communication Strategies

Communication patterns varied greatly among lead faculty. Based on both direct observation and feedback from mentors and lead faculty in the spring semester, I summarized communication patterns and behaviors for each lead faculty, then presented the summaries for confirmation in follow-up interviews.

The range of communication patterns showed a spectrum of communication strategies and frequency of communication contact. On the low end, LF2 and LF4

responded to questions or concerns from mentors, often giving priority to mentor emails over others by reading and responding within 24 hours, and sent group emails to mentors from time to time within a semester. Both LF2 and LF4 participated in one online chat with students during the semester, their only formal, direct contact with students.

On the high end of frequency of contact and variety of communication behaviors, LF3 and LF6 used the following strategies:

1. initiated three or four phone calls each semester to individual mentors to solicit concerns;
2. sent weekly group emails to mentors to inform them in advance of any specific issues to address in the assignments;
3. used frequent statements of appreciation, such as, "You're doing a good job," "You know the students better than I do, what's your opinion?"
4. responded within 24 hours or less to any email from a mentor; met with mentors face-to-face prior to class to review grading requirements;
5. posted weekly announcements to students on the website or sent students group emails.

LF6 spent additional time monitoring mentors' assessments of students. Each week, he reviewed the mentors' grades and comments and gave the mentors feedback on the effectiveness or accuracy of their grading. He also required weekly submission of grades by all of his mentors so that he could assess the grading before releasing an "all clear," allowing grades to be given to students.

Of all lead faculty, LF6 sent and received the most communication messages. Accordingly, his comments reflected concerns about workload associated with ODL.

> It's a lot more work than I anticipated. I think the program may see some real problems down the road when they begin working with faculty who are less enamored with distance learning. I think everyone tries to sell faculty on the idea that this is less work, but it's not! Certainly not for new courses. It's even more of a problem when you realize that this extra work doesn't even "count"–we are still supposed to do research–that's all that counts here.

Interviews with Mentors: September 1999

After the initial chaos of the first two weeks of the fall 1999 semester, I conducted phone interviews with the mentors. Through individual interviews, email exchanges, direct observation of website activity, and telephone calls, I recognized that the start-up activities had caused some frustration, which was exacerbated due to several factors. In addition to the typical confusion of students adding and dropping courses during the first week, students, mentors, and even lead faculty were experiencing the program for the first time. The technology was new to all of the students and most of the mentors. It required significant effort to learn new course materials, navigate the website, and adjust to working in a virtual environment. Problems with passwords, course materials, and academic advisement were being addressed, and although there was a technical support contact, students contacted their mentors instead. Despite other resources to whom mentors could refer students (academic advisors, student support representatives, and technical support), the mentors often forgot that these resources were available, or chose not to redirect students to them. Mentors typically became disconcerted by what they perceived to be swelling role expectations.

Mentor Themes During Start-Up

Even at this early stage in the interview process, several themes emerged. Within each mentor group, those mentors who had previously worked with the lead faculty member to whom they were assigned (as either a student or a teaching assistant) seemed more confident about their roles than those who had not. On the other hand, those who were unfamiliar with their faculty were more hesitant to contact them directly with questions about expectations.

Prior experience as a teaching assistant in an online class was an obvious advantage for MX, because in addition to knowing her lead faculty, she had developed strategies to help her organize the work more effectively. When I asked how she was doing in the first two weeks, she stated:

> Things are going very well. I have 17 students that I've divided into four groups. I can manage my groups and work my way around the system, so I don't feel so crazy like MA does. I also set up an online office for my students. It would really be a good idea to spend more time on teaching mentors about the course interface in the future training sessions.

In a contrasting example, an exchange between LF2 and ME illustrated a combination of dynamics that were frequently experienced between those who were less familiar and comfortable. LF2 related his frustration:

> I sometimes get an email or a phone call from the mentors if they need something. ME called to complain about errors in the course, so I think we got off to a bad start because I don't know what she expected me to do about it. I told her to call the web developer. I think she was being very picky because some of the sheets were scanned in wrong. I mean, I want to hear about real problems, but she was emailing me for every little thing. So I think our relationship is a little testy right now.

I responded that I had spoken with ME about that situation, and I agreed that ME had the impression that their relationship was a little strained right now. I added that I thought she seemed uncomfortable contacting him, so she had been calling me. LF2 responded, "I didn't want to give her that impression, but it seems that when MG gives me feedback it's helpful, but when ME gave me feedback I felt like crap … Like I'm imposing on her."

I suggested that LF2 call ME because a call would add the tone of voice that he wanted her to hear. I added, "I know MG feels more comfortable working with you because you've worked together in the past and have a good rapport. You and ME don't know each other and sometimes that can cause problems in the interpretation of emails." LF2 agreed, "Yeah, I know. I'll call her and we can talk."

In the first three weeks of class, most mentors indicated that their primary problems were process issues related to the newness of the technology and errors on the website and in the materials. None mentioned substantive problems with curricular content. For example, MD stated:

> Things are OK now after the first rough start. There were lots of questions that I didn't know the answers to, like financial aid, passwords, etc. I was not able to get into the site, and it took a few days to get it fixed, which was frustrating. We need more training on how to use the technology so we can answer their questions.

Most mentors felt that they were working more hours than they had expected. Some of the comments about the amount of work were centered on the process of grading assignments and the amount of writing required. MD stated:

> There are too many students [24], so it is difficult to grade papers thoughtfully. It is very time consuming. For example, in Week 2, each student had several assignments, so I had to correct 52 assignments in one week. It's very time consuming because you have to justify every grade you give.

Several mentors also commented on the additional workload required to follow up with students who did not respond or post on the website. MB said, "Hours vary by how much follow-up is necessary. It is more work to have someone who doesn't respond than those who do." MA agreed that she spent most of her time following up on students who did not reply, and said, "I don't know if they just dropped the class or don't care. It's a little confusing!" MD described her own technical problems in the first two weeks and added, "The students may be dealing with the same thing, but I don't know for sure. I just keep at it with the emailing if I don't hear anything. It's time consuming and sometimes I feel like I'm bothering them."

In the first few weeks a great amount of information was presented to the class members, and mentors complained frequently that students were repeatedly asking questions about information that had already been made available. MA was particularly frustrated with one student whom she said, "never reads the information that's posted online, and constantly asks me questions I've already answered." MG noted that her students tended to jump around and seemed to miss obvious information. She observed that she also had the same problem when reading the common website and suggested that we use color coding and common protocol for our threaded discussions.

At this time, most mentors were unsure about how the students perceived the mentor role. MC said, "I don't know how they see me, maybe as a teaching assistant. It hasn't been clarified. Some students were emailing LF2 and he had to redirect them back to me. I think they are confused." MA agreed and noted, "A few students contacted LF1 directly and he sent me an email saying, "You need to tell these people to contact you and not me." I had already sent them an email telling them to contact me, but obviously they didn't bother to read it."

Second Semester Mentor Interviews

Mentors experienced less difficulty in the spring 2000 semester than during the preceding, start-up semester. Several factors influenced this change: (a) advance notice of course assignments; (b) students' familiarity with the system; (c) fewer technical problems; (d) increased experience and confidence; (e) meeting F2F with lead faculty; and, in some cases (f) increased structure and communication with lead faculty. By the end of the second semester, mentors displayed a much firmer grasp of their roles in the overall class scheme. For example, MF felt that her status was no different than the lead faculty: "It seems more like I'm being a lead faculty, only I do my teaching by the feedback I provide on their papers. The only thing I'm not doing as a mentor is developing the course."

MD, on the other hand, thought of her role as "a cheerleader, a hand holder, and a grader. I create and build relationships with the students, so they feel comfortable coming to me with questions. I'm more accessible than the lead faculty, and I can answer their questions faster." MX likewise considered rapport-building and encouraging discussion to be her most important functions.

When describing the role of the lead faculty, most mentors were in agreement with MM's comments, "The lead faculty has the ultimate responsibility for the quality and standards of the course content. He worked with the instructional designers to develop this course and put it online in the first place." MN agreed, "He's my boss. He tells me what I should be doing and how I should be leading the class." Responses varied depending on how involved a lead faculty was during the semester. MJ noted, "He's not very involved in the clas*s*, but he's the subject

matter expert, and if I can't answer a question, I go to him. It's like the buck stops there."

Summary of Mentor Themes

Time and workload. Consistently throughout the interviews and focus groups I heard comments about the time requirements and challenges of working virtually. Mentors reported spending an average of 12–15 hours a week per course in the fall 1999 semester, and eight to 10 hours a week per course in the spring 2000 semester. Most of the work involved reading, grading papers, writing feedback, handling communication, and logistics, in that order. Mentors also reported that most students online have an anticipation of an accelerated response time for instructor feedback which seemed to be reinforcing the need to have an organized approach and communicate that to the students.

In the spring, mentors spoke more strategically about their workload and stated that they distributed the work over the entire week in order to check email daily. Although this required logging in frequently, most mentors indicated that they developed a specific schedule for checking the site and posted this information for the students to manage expectations for turn around time. MK stated:

> In my F2F class I typically collect an assignment from students all at once, and then I have until the next class to return them. In this way, the work is bundled and organized based on the structure of the class meeting itself. But online, the cyberspace shop is open 24/7, and students who are posting at 2am seem to think that you are reading it at the same time so you should write back to them.

Mentors openly shared course management techniques to save time. As an example, MH noted:

> Writing feedback to each student usually takes most of my time when grading. Although I want to give specific and personal comments, when I find myself repeating statements, I create a folder of "feedback comments" and just cut and paste them where it makes sense.

MI added her suggestions for reducing the time spent in grading assignment:

> I've learned to work smarter. For example, I don't read the assignments as they come in, but instead I sit and read them all at once. Then I spend a few minutes typing out comments that apply to the group in general that I cut and paste. I add personal comments on top of that, but it's saving me hours from last semester when I kept repeating myself.

Virtual communication issues. Mentors noted the skillfulness needed to construct messages online. As MG discussed, it was difficult to change the perception of one of her students that she had intentionally "flamed" him. MG stated, "There is no room for sarcasm, and humor is hard to convey. Sometimes you have to hold back from responding and sort of 'sit on it' for awhile." MM expressed it this way:

> Email can become public record and can be saved forever or forwarded to others. In many cases, communicating virtually is more time-consuming and often cumbersome, although the impression most people have is that it's very fast. Sometimes you have to go back and forth several times and sometimes include others who get involved and make it more complicated. The problem is that you are unable to determine if there will be follow-up needed to fix misperceptions until much later.

MH commented that effective communication required skills in providing feedback on assignments:

> It's very time-consuming because you don't have a friendly smile to accompany a good job, or a concerned look to go with those grades that need improvements. Also I've found that when I was trying

to explain something to one student, other students sometimes would get involved and make it even more complicated.

She gave an example in which a student posted a question about one of the problems they were working on. Another student, thinking he was helping the mentor, replied with the wrong information. Then the mentor had to carefully construct a message that explained the right procedure without offending the person who posted the wrong information and make sure anyone who read the wrong information read the corrected solution. The skills centered on clear technical writing presented in a caring manner.

Another technique that was incorporated by several mentors was to provide samples of exemplary work and to post it in common areas on the website. In one case, MB held live chats in which she led students through textbook problems in real time. She revealed her approach, "It's so slow to try to type everything synchronously, so I spend time writing the steps up ahead of time. Then I cut and paste large chunks of text into the chat rather than take the time to type it while they read. I also have to think of better examples that they can relate to."

Online discussion groups were designed into the courses in which students needed to have virtual conversations with each other. In some classes, mentors were required to assess participation based on the number of comments an individual posted because it was believed that this participation would improve the learning and simulate F2F classroom discussions. MO expressed her concern with evaluating her students in this manner:

> I had one student challenge me on this issue, and I really couldn't argue with him. He told me he would post as many comments as I required, but that he felt it was an obnoxious intrusion on his time and had no impact on his learning. All I could use to judge participation was what they posted on the website, but they could have been working directly with each other by email, or even calling each other on the telephone. Just because we don't see it doesn't mean it doesn't happen. I didn't know what to say because I also had the same feeling when I was taking an online class myself.

The mentors themselves were expected to use a common website to stay current on program information, to share best practices, and to build an online community that reflected the model of interaction that they expected of their students. However, most mentors did not see a need to participate with each other, and it required the mentor co-ordinator to continually follow up and use personal influence to elicit their participation. It seemed ironic that even those mentors who required their students to actively participate in their courses were reluctant to participate in the common website although they evaluated it as very useful.

Shifting attitudes toward learners. A pattern emerged over the two semesters for several mentors. In contrast to some of their comments in the fall semester that students were "annoying, manipulative, and disrespectful," the same mentors referred to their students in the spring in more empathic and respectful terms. For example, in the fall, there were several comments about the potential problems of testing online, and there was a general sense that students could not be trusted. Many expressed concerns regarding potential plagiarism. By the end of the spring semester, comments had changed. Ironically, the students were the same.

MN stated: "These students are so mature and conscientious. I have really self-motivated people in our classes. Some write about their work experiences, and I've learned a lot from reading their papers." I also noted more humanistic changes

in the conversations about the teaching philosophy of individual mentors. Even MG, who had stated her need to "let them know who's the boss" in our fall focus group meeting, seemed to soften in her approach and stated, "They know when I'm on their case that I'm doing it because I really care about them. I'm tough, but they also know I'm fair." The tone of her comments was even more significant than the content might indicate. In the fall, her tone edged toward challenging her students, keeping her guard up so that they would not take advantage of her. The tone and content of her spring comments reflected a more nurturing attitude. When MO shared the following in the focus group, many other mentors concurred:

> If one finds that students really do learn successfully in this environment, then I must question what my classroom teaching means to me. Personally, I love being a classroom instructor. I like seeing the smiles on my students' faces and hearing their voices. I like to hear their laughter in small groups that sometimes get rowdy. I'm not sure I want to give that up, and yet I have to ask myself, is this about my needs or theirs?

> I begin to ask myself, "What is at my core purpose in teaching?" Is it their learning, or my need to be a part of their learning? To dazzle them with my enthusiasm and personal experiences or to sit back and watch them learn? It's become a soul-searching issue for me. If I really believe they have deeper learning experiences when they have greater freedom and control, then what does that say about the value I've placed on being an outstanding classroom teacher my whole life? I don't want to end up feeling less essential.

Discussion

The findings of this current case study confirm much prior research; it appears that many skills for ODL mentors and lead faculty are similar to those of effective F2F teachings (Berge & Collins, 1995; Coppola et al., 2002; Gunawardena, 1992; Harasim et al., 1996; Palloff & Pratt, 1999). The present study, however, also provides a new understanding of two discrete roles of the ODL instructor: (1) instructional designer and (2) interaction facilitator.

For those considering teaching a course online for the first time, the description of the ODL instructor role often sounds contradictory and sometimes shifting in focus. The role of the lead faculty as observed in this study resembled that of instructional designer and subject matter expert. Once the class began, the activities shifted to look more like those described by the mentors in this study, that is, drawing more upon the interactive facilitator aspect of the role.

There are many current models of ODL in which the instructor is either the course designer/content expert like the lead faculty in this case, or in which the instructor steps into a course that is already developed, and then the role becomes one similar to the mentor's. A third model is the one in which the professor is both the course designer and the facilitator, and in these scenarios, a combination of roles is required.

In this case study, LF2 expressed a sense of ambiguity and used a "relay race" metaphor to describe his experiences and suggested that once there was a handoff, his job was finished. Fortunately in this case there was a mentor to handoff to, who would perform the facilitative responsibilities. Regrettably, some ODL instructors (often those enamored with the technology) underestimate the amount of interaction required throughout the entire course (Coppola et al., 2002; Lane & Shelton, 2001). They sit back and wait for the students to participate, yet as the mentors observed, student participation online requires instigation on the part of the instructor. In the physical classroom, the presentation of material and subsequent

student feedback are transactional. The instructor often modifies the content based on class interaction and in this way cycles between the role of instructional designer and facilitator throughout the course. However, the ODL instructor often feels the role change in a more linear fashion, and the transition from instructional design to facilitation may feel abrupt. Once the interactive teaching begins online, the process of sending and receiving mediated messages is unfamiliar for many, and the absence of immediate feedback often results in increased role ambiguity. The experience is frequently described as MH expressed it in the first semester, "I feel like I'm flying blind."At a basic level, three important themes emerged for both the mentors and lead faculty that suggest challenges for the virtual instructor: (1) incorporating alternative course management practices; (2) addressing issues specific to virtual communication; and (3) considering new paradigms for thinking about time and space for teaching. At another level, many of these instructors faced even more complex issues regarding their core assumptions about teaching.

Course Management Techniques

The ODL instructor needs to develop new course management techniques for teaching virtually. This element includes organizing, engaging, monitoring, and evaluating. The participants discussed the value of having a strategic plan for monitoring activity that included a structured communication plan. Many found it important to create a systematic process for reading and responding to students' papers, and for checking participation levels to circumvent potential problems. They found that a proactive strategy evolved and was refined each semester, but it was critical to articulate their communication plan to students to manage expectations about turn around time on grading. In this study, the first few weeks of the course were reported to be overwhelming and chaotic. Although F2F classes often have a similar pattern, the classroom instructor can contain the majority of problem-solving to a class meeting to address questions and resolve problems. For example, both students and instructors who meet F2F establish an explicit pattern in which papers will be returned, general questions will be answered, and additional instructions given during the formal class meeting time. Online, the instructor needs to establish a similar protocol, or recognize that the communication pattern will be very sporadic and unstructured.

In the same way, ODL instructors need to define the virtual "time and place" and ensure that students are notified. After grappling with this issue, mentors agreed to create an area on each course website called "Ask the Professor." Here students could post common questions, and the reply would be available for the entire class. In order for this to work, the mentor needed to be prompt in responding and redirect email questions to this area. As several mentors indicated, it was harder to know in a virtual class if someone had temporary technical problems or was more seriously "missing in action." By the end of the second semester, most mentors agreed that tracking delinquent students quickly was essential, and they became very proactive. As MR said: "I call them up and ride herd during the first two weeks. I don't want to lose any strays because they had problems and didn't know where to go. I've learned to go the extra mile in the beginning, then transfer responsibility to them once I see they are OK."

In an ODL environment, traditional teacher-learner power structures seem to erode, and this may require a paradigm shift for some instructors. Several researchers in self-directed learning (Brookfield, 1985; Hiemstra, 1992; Mezirow,

1997) suggest that traditional methods for assessing performance, such as grades and tests, need to be reconsidered. They suggest that educators consider an environment of greater collaboration between student and teacher, learning contracts, and strategies and evaluation criteria negotiated between instructor and learner.

Virtual Communication Issues
A second theme emerging from this study involved learning how to communicate effectively in a virtual classroom. The data in this study revealed that ODL instructors need to determine when it is appropriate to use various forms of mediated communication, such as email or discussion boards. Participants recognized that using the telephone was sometimes a better choice than online communication when relationships were frustrating or topics potentially sensitive, yet many still continued to use email almost exclusively.

In the present study, students and mentors experienced problems regarding general information that had already been presented, but was not retained or acknowledged. They noted that online reading of text often results in looking for sound bites, and that students tended to skip over key chunks of information while making invalid assumptions about the content. The resulting problems were often hard to discover because mentors believed that information was read and understood. The complexity of communicating or teaching in a virtual environment is exacerbated by the ambiguity created when feedback loops are slow or non-existent. Students and mentors alike discovered that it was often essential to ask specific questions or follow-up to see if information had been read or received. Mentors and lead faculty learned that they had to develop prose styles that made rhetorical intent transparent.

Redefining Class Time
Instead of thinking of classes as meeting at a scheduled time, participants found that the teaching time was often distributed over the entire week. Most found that it was necessary to check email or websites at least daily. The amount of work required to teach an online class is often cited as a primary concern for instructors. In this study, lead faculty worked with instructional designers for several months to prepare classes for the Internet. Mentors reported devoting an average of 50 minutes per student per week during the first semester, spending approximately 12 to 15 hours per week on their classes. In the spring, this was reduced to an average of 20 minutes per student per week, and approximately 8 to 10 hours per week for each class.

Most mentors reported that the required hours followed two trends. One, they had a more extensive workload at the start of each semester, and once students understood the process of working online, the pace slowed. The second trend was that hours varied by how much follow-up was required to get an appropriate response from students. All agreed that it took more time to work with those students who were slow to respond compared to those who responded more immediately.

Reassessing Personal Pedagogy
On a more complex level, teaching online seemed to trigger an opportunity for some to reassess teaching philosophies. In their research, Coppola et al. (2002)

found that faculty reported discernible shifts in their teaching persona (p. 186). In particular, online instructors expressed a growing sense of collaboration with their students. For many instructors, teaching successfully online led them to question their taken-for-granted assumptions regarding control, student learning, and evaluation. In the present study, several mentors articulated this self-reflective experience, yet it did not emerge as a pattern for the lead faculty. While successful online courses may lead students to a deeper level of cognitive complexity through extensive praxis (Coppola et al., 2002), it may likewise lead some instructors to a sense of cognitive dissonance and resultant professional growth.

Limitations and Strengths of Research

These findings must be viewed within the limitations of this study. Generalizability is generally not a goal of qualitative research, and yet the organizational structure of the particular courses which I studied may make it difficult for some practitioners to draw analogies with their own teaching situations. Moreover, as a single researcher, who was also an active participant observer, my positioning within this research situation inevitably influenced my interpretive frame. My positioning is an integral part of the data reported here.

The strength of this study lies in the extensive amount of detail collected through the interviews and focus groups, and as a participant observer within the program. Another strength is the use of multiple methods for triangulation. The role of active participant observer allows a level of trust to develop in the relationships with the lead faculty and mentors, resulting in rich data collection and thick description.

Conclusion

Many people believe that ODL courses are alienating, mass-produced products (Peters, 1983). A frequently invoked metaphor implies that distance education is a huge machine with students marching in one side and FTE flowing out the other. Additionally, faculty have often bemoaned the approach of filling the classes to unrealistic class sizes, with the false implications that the process of teaching online is a simplified, time-efficient teaching assignment. On the contrary, instructors find that online courses are labor intensive for both the student and the instructor (Smith et al., 2002).

High risks and questionable rewards are the reality for most complex organizations experiencing rapid change. Work, even in higher education, is shifting toward greater interdependence among individuals to create collective and synergistic products and services using advanced technology. As the boundaries between traditional positions blur, role clarification becomes increasingly important. In this learning environment, the role of the ODL instructor requires the merging of multiple roles. The convergence of advances in computer technology, rapidly growing enrollment needs, and cost cutting measures for higher education suggest that innovative solutions are required. The findings of this study illustrate the complexity of the role of the online instructor through a unique perspective in which two types of roles were examined in great detail.

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