

**The shifting landscape in distance learning:
Perspectives of an online discourse.**

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Abstract

This paper describes the shifting landscape of distance learning as viewed through the asynchronous environment of online teaching. While it is well documented about the separation of students from professors in both distance and time, little is known about closing that gap by re-examining the professor's role in course delivery, provisions made to access learning materials and the interaction there-in. This paper documents the experiences of two professors and an education librarian. The data include content analysis from students' work and interactions during discussions, responses to specific questionnaires and the course evaluation information.

Distance Learning

Distance learning has increased tremendously in the last decade or so. Recent improvements in Internet features and instructional design to allow for interactive components make courses accessible to populations that could have otherwise found this difficult. Students are now able to connect with teachers from distant places as well as connecting with real world functions, providing unique opportunities and making learning meaningful (Read et al, in progress). Keating et al (2001) also reminds us that "things are changing rapidly and schools are not the educational locations in the 21st century America". People today can use Web-based learning to learn, teach, share and challenge ideas from different places. A study done by Swan et al (undated) found that in asynchronous learning, "professors are separated from one another by both space and time" (p.3). While this way of teaching and learning makes the courses accessible to a range of students for whom they might be otherwise unavailable such as professionals with familial responsibilities, there are certain constraints that have the potential of making it less attractive. Students in this environment miss the face to face communication enjoyed by their in class counterparts. They rely too much on the written,

making it difficult to negotiate ideas. Everything that might be included in a lecture must be explicitly spelled out and directions must be overwritten (Swan et al, (undated). The loss of face-to-face communication also means a loss of the personal. Students feel isolated and uncared for. Sherry (1996) argues that effective distance learning is characterized by sustained interactivity between teacher and students, between students and the learning environment, and among students themselves, as well as active learning in the classroom. Without sustained interaction or feeling of connectivity, “distance learning degenerates into the old correspondence course model of independent study. The student become autonomous and isolated, procrastinates, and eventually drops out” (p.6).

Another consideration in our study is the importance of librarian support in reducing the feelings of isolation and enhancing the learning environment. Donald Beagle, Library Director at Belmont Abbey College, identifies some common themes in his literature review entitled “Web-based learning environments: do libraries matter?” (2000). One theme is the importance of “active collaboration between librarians and teaching faculty on a pedagogical design for better integration of library resources with course content.” A second is the trend “to refocus library instruction on the needs of individual students rather than classroom groups”, clearly a learner-centered approach (p. 6). He also considers the selection of course resources, and differentiates between courses for which only pre-selected materials are used, and those that follow the “expansionist” viewpoint that recommend supplementary resources be located and used by the students (p. 4).

The Association of College & Research Libraries (2000) has also recognized the importance of meeting the needs of distance learners in their “Guidelines for Distance

Learning Library Services ”. They state that library resources for distance learners should “facilitate the acquisition of lifelong learning skills” and that an “essential” service to be provided is, “a program of library user instruction designed to instill independent and effective information literacy skills while specifically meeting the learner-support needs of the distance learning community” (p. 6).

Effective distance education should not be an independent and isolated form of learning and as Malcolm (2000) states, “isolation should not be a barrier to excellence in education” (p.5). While technological advancement and improvement of instructional designs provide extensive opportunities for interactivity and student connectivity, the heart of effectiveness lies in the changing role of the distance teacher. According to Prawat and Floden (1994) as cited in Sherry (1996), the distance teacher must shift focus away from the traditional transmission model to one which is much more complex, interactive, and evolving. The distance teacher becomes a facilitator of learning, rather than a communicator of a fixed body of information. The learning process proceeds as knowledge building between teacher and students (Sherry, 1996). The distance teacher must be able to develop appropriate methods of feedback and reinforcement, optimizing content and pace, adapting to different student learning styles, using case studies and examples which are relevant to the target audience, being concise, supplementing courseware with print information, and personalizing instruction (Sherry, 1996).

This way of conducting distance learning has been found to be effective by a number of researchers. Yang (2001a) found that indeed his students in an online course had realized that distance learning provided an opportunity to change conventional roles

and leadership responsibilities for (distance) teachers. One student and a participant of the study had the following to say about the changing role of a distance teacher:

[Distance] teachers no longer need to be the person holding all the pieces of the puzzle and allowing the student to learn a little at a time. The web can allow teachers to be guides and helpers in their student's learning. Students can take more of the responsibility towards their own learning and look into areas of more personal interests. This is a big change from the teachers' role in the past. Sometimes called the 'sage on the stage' the typical traditional style teacher never admitted to not knowing certain topics. Now teachers can say 'that's a new topic for me – let's look into that together. (Yang, 2001a, p.5).

This study shows that distance learning through online courses is enabling the teachers to step aside from their traditional roles of being the wealth of information to being a facilitator and a learner. This new approach to teaching concurs with recent trends towards a student-centered approach. A study done to gauge students level of satisfaction in distance learning through an asynchronous environment found that those students who reported high levels of satisfaction are also the ones who reported the "highest levels and quality interaction with the instructor and other students" (Shea et al, 2000). Distance teachers who have embraced this changing role reported high levels of satisfaction too. One distance teacher reported that being a facilitator has impacted his classroom experience by turning it "into a more active learning environment. Students are challenged with tasks that must be completed using their own creativity and resourcefulness" (Fredericksen, 1999, p.39). Another teacher reported that the discussion on line is more passionate and vibrant, "I have learned some "hot button" that will touch off great discussions" (Fredericksen, 1999, p. 39).

According to Alessi and Trollip (2001), research on distance learning is primarily logistic: concerned with making the learning environment more convenient, inexpensive, efficient, accessible, reproducible, and/or maintainable. While recent efforts have been

made to increase interactivity and connectivity of students with their teachers, little is known about improving connecting students to materials that support their learning. Connecting students to resources has the potential of lessening the feeling of isolation. While this study may not claim to provide answers to this compelling question, the experience documented by two professors teaching two different courses, Education Research & Multimedia Education, provides a glimpse of how teacher role, accessing learning materials and efforts to build a classroom community can make a modest difference. The following section describes the experiences of a professor teaching an Education Action Research course in collaboration with an education librarian.

Teaching Education Action Research Online

This research course is designed to introduce the students to action research, a form of systematic inquiry by practitioners on their own practice. The fundamental goals of action research are the improvement of practice, a better understanding of that practice, a transformation of the setting in which the practice is carried out and formal/informal sharing with others involved with that practice. It is supposed to assist students in evaluating the appropriateness of action research as a framework for their research and formulating projects if appropriate. Topics include an analysis of collaborative forms of research, identification of educational/ classroom problems, methods of collecting and analyzing data and drawing conclusions from the research.

The instructor enlisted to teach this course on line because of the perceived need in the department of Curriculum and Instruction for practicing teachers and other professionals to gain the skills necessary for reflecting on their practice. Because of the familial and professional responsibilities associated with this group, an online course was

seen to be a viable option. The first semester of this course enrolled five students: 3 classroom teachers, an administrator in an institution of higher learning, and a chemist working for an environmental company. This population of students is not concerned about accumulating information and regurgitating it back through a formal exam. Instead, the course is designed to encourage active learning, helping students to have ownership about their learning while at the same time increasing their skills of conducting research. One student commented, “I like the open-ended way that you have structured it [course]. It allows us to pursue avenues particularly meaningful to us” (student feedback). Another student commented that the “format is the right balance of challenge and freedom” (student feedback).

It appears that the students had realized right at the onset that the teacher role was a little different from what they had experienced in more of their traditional classrooms and they seemed to appreciate the new role. One student reported that the “guide on the side approach (as opposed to the “sage on the stage”) that you are employing is evident and appropriate for a graduate class. I like that you don’t lecture for too long or present research methods as “one size fits all” because they are not” (student feedback). Another student felt that the online course had placed much more responsibility for learning on the student. Accordingly, the teacher does not have much control on what students do and how they perform. All they can do is to ensure that the work is done in a timely fashion. Another student reported that the teacher plays the role of a facilitator more than instructor. “Even though we have had a couple of mini-lectures in the different modules for the most part, we are just being directed around reading assignments to discussion areas” (student feedback).

This is not to say that every student felt comfortable in this role. One student felt that the course was by its nature impersonal and felt like:

I don't have a teacher, but in a sense, I feel like I don't have classmates. For all I know, the same person could be each and every other person in the class and although you write the lectures, it is not like you are delivering them. So it seems just like text... I love it. I love learning at my own pace and I learn much better by reading than listening but the role of the prof[essors] has certainly changed. (student feedback)

As a research course, a fundamental objective is to help the students become not just producers of knowledge but critical consumers. The students had to move beyond the given text and explore other sources. A long-range goal for this instruction is to teach students research skills that will be helpful long after their course is complete. To these ends, the instructor invited Barbara Shaffer, the Education Librarian, to design library instruction within a module and stay in the classroom to answer any questions that might arise from the students. One objective of this instruction was to provide reassurance to the students, that quality information resources were plentiful and accessible. The content delivered was similar to that which is taught in the traditional classroom setting, introducing library resources specifically relevant to the course content. A major component of this instruction is on search strategies and techniques, specifically as applied to the ERIC education database. Acknowledging the opportunity for, and complexity of, finding quality Internet information, another critical element of this instruction was an Internet evaluation lesson and practice. Library services for distance students, now comparable to those for on-campus students, were also introduced. Document delivery, online databases, and referrals to local libraries are a few examples of these services.

Integrating this instruction with students' research topics and step-by-step assignments provided for meaningful active learning. The instructor and education librarian have worked to adapt the course materials to include contact with the students and personal feedback, and to allow each student to progress at his/her individual pace. The module is also available throughout the research process for "just in time" review.

This arrangement seemed to have worked very well. The students reported that they were provided the "necessary resources for the course. I had no trouble finding resources that I needed for the course. If there is information that we need to read, or look for, the instructor alerts us in advance and is very clear where we can find them" (student feedback). Another student reported that she "liked being able to access the Penfield library right on line. That was cool!"(student feedback). Other students felt that more relevant articles should be downloaded for them to read.

What seems to have excited the students more was the interaction with their peers. While more desired the presence of the teacher during the discussion, they reported that a lot of learning had taken place from the postings of their peers. One student reported:

I really liked the discussion – it is very different from anything I've ever experienced (I took another online course, but it was chemistry and there weren't many discussions) being a very timid person, I don't say much in the traditional classroom setting. I liked how "vocal" I could be in this sort of context. (student feedback)

Another student reported "I liked the opportunity I had to converse with other students in the class. I feel this is how I learn best, through hearing experiences others have had" (student feedback). Another said that the discussion "was the most beneficial" (student feedback).

In summary, we can safely say that the students enrolled in the Education Action Research course had a good experience as they engaged with the professor, peers and the librarian. They were able to locate the resources in a timely manner, which ultimately lessened their anxieties and feelings of isolation. The section that follows describes the experiences of a professor teaching a Multimedia and Internet for Educators course and the strategies employed to make it less isolating.

Multimedia and Internet for Educators: STEP on Facilitating Asynchronous Learning

Multimedia and Internet for Educators is a graduate course providing an introduction and guide to pre- and in-service teachers to current and emerging technology. It is intended to help PK-12 educators not only use multimedia and Internet resources in their own education, but also to integrate them into their work as teachers. The course has been designed and delivered through the SUNY Learning Network since spring 2001. Sixty (n=60) graduate students have participated in this course in three semesters. They majored in elementary education, secondary education, reading education, special education, technology education, vocational technical education, and educational administration.

Unlike the traditional classroom learning, the previous study (Yang, 2001A) and continuous practices of this course indicate that it is important for the instructor to play a role of “facilitator” or “moderator” in the asynchronous learning environment. In order to break the isolation among students and the instructor, ensure the meaningfulness of Web-based communication, and establish effectiveness of learning community, a methodical

approach – STEP has been developed. This approach includes four interrelated components (see Figure 1).

The S in STEP

The S in STEP stands for scaffolds before initiating class and starting new learning modules. Most students participated in the course either with little experience in asynchronous learning or with limited skills and understandings on contents. To reduce the “community anxiety” among students, the instructor constructs an open discussion on the bulletin board by sharing his own experience on distance learning and background on computer technology, and invites students to participate this activity. Since this activity is hosted at the beginning of learning modules, it lends a hand in establishing a non-threatening atmosphere. To decrease the “computer anxiety” among students, one of Lev Vygotsky’s ideas – the instructor has used "scaffolding". The basic idea of scaffolding is “to gradually ease students into what are likely to be challenging tasks by creating a supportive structure to guide their work. In other words, as the educators we would initially do some of the work for students” (Grabe and Grabe, 1998, p. 217). On each “Mini-Lecture” in learning modules, the instructor shares the related concepts/knowledge and particular technological skill that students need to prepare their undertaking actual assignments/projects, provides resources links and examples, and encourages students to reflect and discuss the possibilities for extending the ideas and technologies into real world situations.

The T in STEP

The T in STEP stands for transitions during the learning process. Some big challenges in asynchronous learning are the lack of personal touches, no-verbal cues, and

delayed responses (Yang, 2001a). To meet these challenges and to keep students actively participating in learning activities, it is key for the instructor to use individualized “On-line Office Hours” to promptly respond to students’ questions, and acknowledge those students whose ideas are posted without many or any responses and feedback.

The E in STEP

The E in STEP stands for the evaluations during and after each learning module. Periodically evaluating students’ performances serves two ends: to remind inactive students to contribute ideas and/or react to others’ contributions, and to reinforce interactive students continuing their journey on their knowledge and skills from emergent to mastery (Jonassen, 2000).

The P in STEP

The P in STEP stands for the presentations on outcomes. There are a variety of ways to launch active, reflective learning. Providing opportunities for students to present their ideas, methods, and products is one of the most powerful ways. This is essential not only at the conclusion of a project, but also as the project grows. Presenting projects is an authentic activity that provides an enormous motivation for students (Wheatley, 1991; Grabe and Grabe, 1998; Yang, 2001b). “Presentations, coupled with authentic outcomes and fairly explicit criteria for what counts as a good plan, can provide a strong incentive to prepare and revise” (Barron and the Cognition and Technology Group at Vanderbilt, 1998, p. 286). Due to the nature of asynchronous learning, instead of the face-to-face presentation, a supplement Web site hosting students’ projects has been developed:

<http://www.oswego.edu/~hyang2/edu/studentproject.htm>.

Through this Web site, students share and compare their projects with projects generated by their classmates, which inspires them to revise and communicate further.

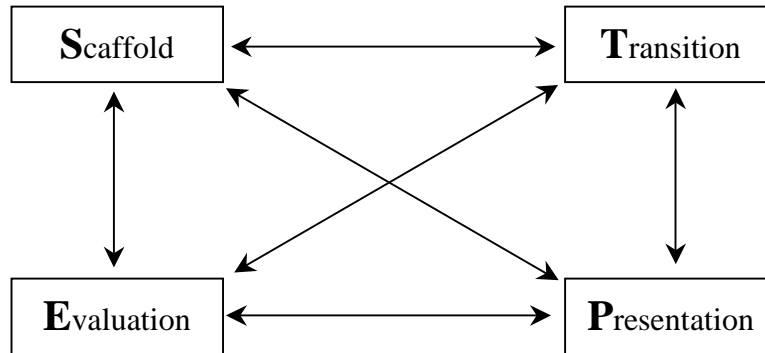


FIGURE 1. STEP Approach

Discussion

One study may not be able to capture the dynamics that happen within the courses. And it should also be noted that in describing the positive responses of the students to the course, students value a good grade. Further, drawing conclusions about the effectiveness of a course based on self-reports has the potential limitations of having the students report what they think the professors want to hear. With that caution in mind, it appears that the way these courses are designed helps students to interact freely and learn a lot from those interactions making them feel less isolated. The instructors are well aware of the potential danger of isolation and have employed innovative strategies to combat those feelings. The Education Research course instructor collaborated with the librarian to ease the tension that may arise if students are unable to access resources. The Multimedia course instructor has developed a step-by-step program that helps the students to feel comfortable as they engage with the course material. Students' responses show that they are happy to have been given access to the materials so that completing

the required tasks was less challenging. They understood the changing role of the teacher and seemed to appreciate it.

However, there are those who felt more interaction with the instructor was needed. While this was a smaller group that could be more accustomed to learning through direction, attention must be paid to helping the students make the transition between a teacher directed instruction to a learner centered active inquiry.

Conclusion

The future and success of online teaching depends on how distance providers are able to provide quality learning experiences by improving effectiveness of learning, showing genuine concerns for student motivation and creating room for teachers to try out innovative methods. The students must feel less isolated by being provided with space to be self-sufficient and reflective, and a conducive environment to share personal opinions and experiences. An understanding of the shifting role of the teacher in an asynchronous environment, an effort to provide resource materials and “personalized” interaction make possible meeting that goal.

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